

# MacArthur Station – Modified 2016 Project CEQA ANALYSIS

*Prepared for:*

City of Oakland  
Bureau of Planning  
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Oakland, CA 94612

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URBAN  
PLANNING  
PARTNERS  
INC.



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- E. Air Quality and Greenhouse Gas Emissions Data
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## I. GENERAL PROJECT INFORMATION

1. **Project Title:** MacArthur Station – Modified 2016 Project
2. **Lead Agency Name and Address:**  
City of Oakland  
Bureau of Planning  
250 Frank H. Ogawa Plaza, Suite 2114  
Oakland, CA 94612
3. **Contact Person and Phone Number:**  
Catherine Payne, Planner IV  
City of Oakland, Bureau of Planning  
250 Frank H. Ogawa Plaza, Suite 2114  
Oakland, CA 94612  
(510) 238-6168  
cpayne@oaklandnet.com
4. **Project Location:**  
532 39<sup>th</sup> Street (parcel located southwest of the 39<sup>th</sup> Street/Turquoise Way intersection)  
Assessor Parcel Number: 012-102501100; 012-102501200
5. **Project Sponsor's Name and Address:**  
Boston Properties, LP and MPI MacArthur, LLC  
1001 42<sup>nd</sup> Street, Suite 200,  
Oakland, CA 94608
6. **Existing General Plan Designations:**  
Neighborhood Center Mixed Use
7. **Existing Zoning:**  
Transit-Oriented Development Zones (S-15)
8. **Requested Permits:**  
Revisions to the approved Planned Unit Development Permit including the Preliminary Development Plan (PDP); Approval of a Final Development Plan (FDP) for Phase 5 Parcel B; Tree Removal Permits; Environmental Review Application; (Possible) Development Agreement Amendment; and Tentative Parcel Map Revision.

## II. EXECUTIVE SUMMARY

The proposed MacArthur Station (previously referred to as the MacArthur Transit Village) – 2016 Modified Project (“proposed project” or “2016 Modified Project”) considers the already constructed development on Parcels D and E, the development approved in a Final Development Plan (FDP) for Parcels A and C (but not yet constructed), as well as the development proposed for Parcel B of the MacArthur Station. Parcel B is located on the 51,218-square-foot site southwest of the 39<sup>th</sup> Street/Turquoise Way intersection (APNs 012-102501100; 012-102501200). The 2016 Modified Project includes a modified Planned Unit Development including the Preliminary Development Plan applicable to the entire MacArthur Station site and a FDP for Parcel B.

The City certified an Environmental Impact Report (EIR) for the MacArthur Station Project (“2008 Project”) on June 4, 2008, pursuant to the California Environmental Quality Act (CEQA). The project evaluated in the 2008 Project EIR included the following components: five buildings with up to 675 units of high-density multi-family housing (113 units [20 percent of the total number of market rate units] would be below market-rate and 562 units would be market-rate); up to 44,000 square feet of neighborhood-serving commercial; 5,000 square feet of community or childcare facility space; 700 residential, commercial and community use parking spaces; 300 BART parking spaces; and several public infrastructure upgrades, including two new streets in the project site, improvements to the existing access road that connects 40<sup>th</sup> Street with MacArthur Boulevard, the renovation of the existing BART entry plaza, intermodal improvements, and a new public plaza adjacent to the commercial space.

Various components of the MacArthur Station Project have been constructed since approval of the project. Site demolition, construction of the BART parking garage (which provides 483 parking spaces and 5,200 square feet of retail) on Parcel E, and installation of site infrastructure has been completed. Additionally, a building which includes 90 affordable housing rental units has been constructed on Parcel D. A FDP has been approved for Parcels A and C and construction is anticipated to begin before the end of 2017. Parcel A includes 287 dwelling unit and 22,287 square feet of commercial uses, and Parcel C includes 96 dwelling units, 1,202 square feet of commercial uses, and 5,000 square feet of community center uses. Table 1 shows the level and type of development associated with each parcel in the MacArthur Station Project.

**TABLE 1 MACARTHUR STATION LAND USE SUMMARY**

Use	2016 Modified Project by Parcel					2016 Modified Total	2008 EIR Certified Project Total <sup>d</sup>	Difference between 2016 Modified and 2008 Projects
	FDP Approved or Constructed							
	Proposed Parcel B	Parcel A <sup>a</sup>	Parcel C <sup>a</sup>	Parcel D <sup>b</sup>	Parcel E <sup>c</sup>			
Residential	402 DU <sup>e</sup>	287 DU	96 DU	90 DU	0	875 DU	675 DU	+200 DU
Commercial	13,000 SF	22,287 SF <sup>f</sup>	1,202 SF <sup>f</sup>	0	5,200 SF	41,689 SF	44,000SF	-2,311 SF
Community	0	0	5,000 SF <sup>f</sup>	0	0	5.0 KSF	5,000 SF	0

Notes: DU = Dwelling Units, KSF = 1,000 square feet.

Construction of buildings on Parcel D and E have been completed.

<sup>a</sup> *City of Oakland Resolution*, Filed April 30, 2015. It should be noted that the resolution also included approval of an alternative development alternative for Parcel A that included 292 dwelling units and 33,983 square feet of commercial (which includes a 22,287-square-foot grocery store).

<sup>b</sup> City of Oakland Resolution, Filed April 27, 2011.

<sup>c</sup> City of Oakland Agenda Report, Public Hearing and Resolution Approving the MacArthur Transit Village (a) Stage One (1) Final Development Plan Permit, December 14, 2010.

<sup>d</sup> *MacArthur Transit Village Project Draft EIR*, January 2008.

<sup>e</sup> Please note that transportation, air quality, and greenhouse gas analyses completed for this CEQA analysis considered up to 502 units and 10,000 square feet of retail as the analyses were completed prior to the project sponsor making a final determination regarding how many units the FDP for Parcel B would include. To be conservative and to provide a worst case analysis that assessed the maximum number of vehicle trips that could be potentially accommodated on the site without resulting in any new or more significant impacts than those identified in the MacArthur BART EIR, a maximum of 502 units was analyzed. In addition, the air quality and greenhouse gas analysis included an additional 137 parking spaces than are currently proposed for the MacArthur Station site. The proposed FDP for Parcel B includes up to 402 units and up to 13,000 square feet of retail (the proposed building for Parcel B and its components are herein referred to as the Parcel B Project). Given this is 100 units less and only 3,000 square feet more of retail than what was analyzed in the transportation, air quality, and greenhouse gas analyses, these studies provide a worst case analysis and a revised analysis is not needed.

<sup>f</sup> This CEQA analysis evaluates the FDPs for Parcel A and Parcel C-1 that were approved by the Oakland City Council on May 19, 2015. In 2016, the City approved a revision to the Parcel A and Parcel C-1 FDPs in regard to the amount of and flexibility in the use of the approved retail space. The revision included a net reduction of 2,055 square feet of retail. It also relocated the community space to Parcel A, totaling 3,886 square feet. CEQA compliance of the FDP revisions was assessed, and no new or more severe CEQA impacts were identified based on these minor changes, given they represent reductions in square footage of land uses already evaluated.

For the 2016 Modified Project, the applicant is proposing to develop up to 402 dwelling units and 13,000 square feet of commercial space on Parcel B.<sup>1</sup> The required approvals include revisions to the Planned Unit Development including the Preliminary Development Plan (PDP) that is applicable to the entire MacArthur Station site, a FDP for Phase 5/ Parcel B, Tree Removal Permits, Environmental Review Application, and a Tentative Parcel Map revision.

While this Addendum considers the potential development envelope total of all parcels, it should be noted that the proposed development for Parcels A, C, D, and E were specifically evaluated within Addendum #1, #2, and #3 to the 2008 Project EIR (described below). As noted below, the revised development described and evaluated in Addendum #1, #2, and #3 would not result in impacts not previously identified in the 2008 Project EIR. This Addendum considers the entire development envelope associated with the MacArthur Station, but specifically looks at the development proposed for Parcel B.

The Parcel B Project, in addition to the development completed or approved for construction on Parcels A, C, D and E, would provide approximately 200 more residential units and approximately 2,311 fewer square feet of commercial space than the project evaluated in the 2008 Project EIR. Additionally, the proposed development on Parcel B would include a 260-foot-tall (25-story) tower, which would be 19 stories taller than the structure originally proposed and evaluated within the 2008 Project EIR. It should be noted, however, that a 240-foot (23-story) Tower alternative was evaluated within the 2008 Project EIR. Table 2 provides a summary of the development details for Parcel B evaluated in the 2008 Project EIR and proposed in the Modified 2016 Project, as well as provides development details for the 2008 Project EIR Tower alternative.

It should be noted that the Surgery Center parcel (APN 012-0968-003-01) was included as Parcel C in the original MacArthur Transit Village site evaluated in the 2008 Project EIR. This site ultimately was not acquired for the MacArthur Station development, but remains part of the approved PUD/PDP. The development contemplated for that parcel in the PDP (and approved FDPs) will not be built. As a result, the net difference between the total development approved in 2008 (PUD/PDP approvals and what was included in the certified EIR) is smaller than it would otherwise be had the Surgery Center parcel been developed. While the unit count for Parcel B is increasing by 252 units, overall, the MacArthur Station

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<sup>1</sup> Please note that transportation, air quality, and greenhouse gas analyses completed for this CEQA analysis considered up to 502 units and 10,000 square feet of retail as the analyses were completed prior to the project sponsor making a final determination regarding how many units the FDP for Parcel B would include. To be conservative and to provide a worst case analysis that assessed the maximum number of vehicle trips that could be potentially accommodated on the site without resulting in any new or more significant impacts than those identified in the MacArthur BART EIR, a maximum of 502 units was analyzed. The proposed FDP for Parcel B includes up to 402 units and up to 13,000 square feet of retail (the proposed building for Parcel B and its components are herein referred to as the Parcel B Project). Given this is 100 units less and only 3,000 square feet more of retail than what was analyzed in the transportation, air quality, and greenhouse gas analyses, these studies provide a worst case analysis and a revised analysis is not needed.

**TABLE 2 PARCEL B DEVELOPMENT DETAILS**

	Parcel B – 2008 EIR Project	2008 Project EIR Tower Alternative <sup>a</sup>	Parcel B – 2008 Approved Project	Parcel B – 2016 Proposed Modified Project	Parcel B – Difference between 2016 Proposed Modified and 2008 EIR Projects
Residential Total Units/ Affordable Units	150/5	311/37	132/5	402/45	+252/+40
Commercial	5,500 SF	5,500 SF	3,500 SF	13,000 SF	+7,500 SF
Community Use	--	--	--	--	--
Height	85 FT	240 FT	50-85 FT	260 FT	+175 FT
Number of Stories	6	23	6	25	+19
Parking Spaces	150	250	134	260	+110

<sup>a</sup> While not explicitly stated in the 2008 Project EIR, it is assumed that all additional residential units and parking spaces associated with Tower alternative are located within the parcel containing the Tower.  
 Source: MacArthur Transit Village Project Final EIR, July 2008, pp. 63 (Table III-2) and 491, certified via *Oakland City Council Resolution No. 81422*; Oakland City Planning Commission Staff Report, 2008. Case File Number: ER06-0004, RZ06-0059, PUD06-0058. June 4.

Project’s final unit count will only increase by 200 units, due to the exclusion of the Surgery Center parcel, as shown in Table 3.

The 2008 Project EIR, and three previous addenda to the EIR, analyzed the environmental impacts of adoption and implementation of the original project. The analysis in the 2008 Project EIR directly applies to the 2016 Modified Project, and provides the basis for use of an Addendum. Separately and independently, qualified planning level documents, specifically program-level EIRs, that can be used as a basis to provide additional CEQA clearance of the 2016 Modified Project under specific CEQA provisions include Oakland’s 1998 General Plan Land Use and Transportation Element EIR, the 2010 General Plan Housing Element Update EIR and 2014 Addendum, and the Redevelopment Plan for the Broadway/MacArthur/San Pablo Redevelopment Project.

**TABLE 3 MACARTHUR STATION PROJECT APPROVALS**

	PDP Approval per COAs	2010 through 2015 FDPs	Difference between PDP and Approved FDPs	2016 FDP	Difference between PDP and Approved FDPs + 2016 FDP	2008 EIR	Difference between 2008 EIR and Approved FDPs + 2016 FDP
<b>Parking Garage and Infrastructure/VTTM/Stage 1</b>							
Residential	0	0	0	0	0		
Commercial	5,000	5,200	200	5,200	200		
Community		0	0	0	0		
Parking	324	480	156	480	156		
<b>Parcel D/Stage 2</b>							
Residential	90	90	0	90	0		
Commercial	0	0	0	0	0		
Community	0	0	0	0	0		
<b>Parcel A/Stage 3</b>							
Residential	240	287	47	287	47		
Commercial <sup>d</sup>	26,000	22,287	-3,713	22,287	-3,713		
Community <sup>a</sup>	0	0	0	0	0		
<b>Parcel B/Stage 5</b>							
Residential	150	151	1	402	252 <sup>c</sup>		
Commercial	5,500	3,000	-2,500	13,000	7,500		
Community	0	0	0	0	0		
<b>Parcel C-1/Stage 4</b>							
Residential		96		96			
Commercial <sup>d</sup>		1,202		1,202			
Community <sup>a</sup>		0		0			
<b>Parcel C-2 (Surgery Center)<sup>b</sup></b>							
Residential		51		Not Built			
Commercial		17,311		Not Built			
Community <sup>a</sup>		0		Not Built			



**TABLE 3 MACARTHUR STATION PROJECT APPROVALS**

	PDP Approval per COAs	2010 through 2015 FDPs	Difference between PDP and Approved FDPs	2016 FDP	Difference between PDP and Approved FDPs + 2016 FDP	2008 EIR	Difference between 2008 EIR and Approved FDPs + 2016 FDP
<b>Parcel C-1 and C-2 Total</b>							
Residential	195	147	-48	96	-99		
Commercial	12,500	18,513	6,013	1,202	-11,298		
Community <sup>a</sup>	5,000	5,000	0	0	-5,000		
<b>Totals</b>							
Residential	675	675	0	875	+200	675	+200 <sup>c</sup>
Commercial	49,000	49,000	0	41,689	-7,311	44,000	-2,311
Community <sup>a</sup>	5,000	5,000	0	5,000	0	5,000	0

<sup>a</sup>The community space was originally located in Parcel C-2. As this parcel was not acquired, the applicant has committed to providing the community space in internal and external space in Parcel A and C-1 and is working with City staff to finalize approach and location. The 2016 revision to the Parcel A and C-1 FDPs included 3,886 square feet of community space in the Parcel A building.

<sup>b</sup>The Surgery Center site, Parcel C-2, was not included in the Stage 1 VTTM, but remained part of the approved PUD/PDP. Given that the site was ultimately not acquired for the MacArthur Station development, the development contemplated for that parcel in the PDP (and approved FDPs) will not be built. As a result, the net difference between the total development approved in 2008 (PUD/PDP approvals and what was included in the certified EIR) is smaller than it would otherwise be had the Surgery Center parcel been developed.

<sup>c</sup>While the unit count for Parcel B is increasing by 252 units, overall, the MacArthur Station Project’s final unit count will only increase by 200 units, due to the exclusion of Parcel C-2 from the project due to the inability of the master developer to acquire that parcel.

Sources: MacArthur Transit Village Project Final EIR, July 2008, certified via *Oakland City Council Resolution No. 81422*; Oakland City Council Resolutions for Stage 1/Parcel E FDP (No. 83292), Stage 2/Parcel D FDP (No. 83365), Stage 3 and 4/Parcels A and C-1 (No. 85603).

<sup>d</sup>In 2016, the City approved a revision to the Parcel A and Parcel C-1 FDPs in regard to the amount of and flexibility in the use of the approved retail space. The revision included a net reduction of 2,055 square feet of retail. CEQA compliance of the FDP revisions was assessed, and no new or more severe CEQA impacts were identified based on these minor changes, given they represent reductions in square footage of land uses already evaluated.

### III. BACKGROUND

#### Original 2008 Project EIR

On June 4, 2008, the Oakland Planning Commission certified the 2008 Project EIR and recommended approval of the following for the project: a text amendment to the S-15 Zone; a rezoning of the project area from C-28/S-18 and R-70/S-18 Zones to the S-15 Zone; Planned Unit Development Permit; Major Conditional Use Permit; Preliminary Design Review; and Development Agreement. The City Council adopted the Planning Commission recommendation on July 1, 2008. The project evaluated in the 2008 Project EIR included the following components: five buildings with up to 675 units of high-density multi-family housing (113 units [20 percent of the total number of market rate units] would be below market-rate and 562 units would be market-rate); up to 44,000 square feet of neighborhood-serving commercial; 5,000 square feet of community or childcare facility space; 700 residential, commercial and community use parking spaces; 300 BART parking spaces; and several public infrastructure upgrades, including two new streets in the project site, improvements to the existing access road that connects 40<sup>th</sup> Street with MacArthur Boulevard, the renovation of the existing BART entry plaza, intermodal improvements, and a new public plaza adjacent to the commercial space. A conceptual site plan for the 2008 Project is shown in Figure 1. Table 4 shows the proposed development program of the 2008 Project.

**TABLE 4 SUMMARY OF 2008 PROJECT APPROVED DEVELOPMENT**

<b>Building</b>	<b>Square Footage<sup>a</sup></b>	<b>Number of Stories</b>	<b>Building Height (Feet)</b>	<b>Residential Units/ Affordable Units</b>	<b>Commercial SF<sup>b</sup></b>	<b>Community SF</b>
A	255,500	4/6	50-85	240/10	26,000	--
B	163,100	6	60-85	150/5	5,500	--
C	218,100	5/6	50-75	195/8	12,500	--
D	124,300	5	60	90/90	0	--
E	127,000	7	65	--	--	5,000
<b>Total</b>	<b>888,000</b>	--		<b>675/113</b>	<b>44,000</b>	<b>5,000</b>

Note: SF = square feet

<sup>a</sup> Square footage does not include underground parking.

<sup>b</sup> Square footage includes "flex space."

Source: MacArthur Transit Community Partners, LLC, 2007.



Source: MacArthur Transit Community Partners, LLC, 2007, and approved via Oakland City Council Resolution No. 81422 C.M.S.

**MacArthur Station - Modified 2016 Project**

Figure 1  
2008 Project EIR - Conceptual Site Plan



The 2008 Project EIR determined that the MacArthur Station Project's impacts to the following resources would be reduced to a less-than-significant level with implementation of the City's Standard Conditions of Approval (SCAs): air quality; noise and vibration; hydrology and water quality; geology, soils and seismicity; public health and hazards; public services; utilities and infrastructure; cultural and paleontological resources; and aesthetic resources. Less-than-significant impacts were identified for the following resources: land use and public policy.

The 2008 Project EIR determined that the 2008 Project would have a significant unavoidable effect on transportation. Specifically, the 2008 EIR concluded that the traffic associated with the 2008 Project would cause a significant impact at the Telegraph Avenue/51<sup>st</sup> Street intersection (Intersection #3) under Cumulative Year 2030 Baseline Plus Project conditions. The project would contribute to LOS F operations during both AM and PM peak hours; would increase critical movement average delay by more than 4 seconds during the AM peak hour; and would increase intersection average delay by more than 2 seconds during the PM peak hour. Additionally, the addition of project traffic would cause a significant impact at the Broadway/MacArthur Boulevard intersection (Intersection #22) under Cumulative Year 2030 Baseline Plus Project conditions. The project would contribute to LOS F operations and would increase intersection average delay by more than 2 seconds during the AM peak hour. Due to the potential for significant and unavoidable impacts, a Statement of Overriding Considerations was adopted as part of the City approvals.

The 2008 Project EIR and previous addenda are hereby incorporated by reference and can be obtained from the City of Oakland Bureau of Planning at 250 Frank H. Ogawa Plaza, Suite 2114, Oakland, California 94612, and/or at:  
<http://www2.oaklandnet.com/government/o/PBN/OurOrganization/PlanningZoning/DOWD008406>

### **Previous Addenda and “Approved Project”**

Three addenda to the 2008 Project EIR were completed to consider modifications to the 2008 Project. The development programs for each addendum are summarized in Table 5.

An Addendum for Stage 1 of the FDP (Addendum #1) was completed for the BART garage (Parcel E) and horizontal infrastructure and is dated October 25, 2010; an Addendum for Stage 2 of the FDP (Addendum #2) was completed for the 90-unit affordable rental development (Parcel D) and is dated March 29, 2011; an Addendum for Stage 3 of the FDP (Addendum #3) was completed for 292 residential units/33,983 square feet of commercial (Parcel A) and 96 residential units/1,202 square feet of commercial (Parcel C-1) and is dated April 10, 2015. As described below, each of the addenda determined that no further review was required, in terms of a subsequent or supplemental EIR, pursuant to CEQA Guidelines Sections 15162 and 15164 (Subsequent EIRs, Supplements and Addenda

**TABLE 5 DEVELOPMENT CHARACTERISTICS OF APPROVED MODIFIED PROJECT THROUGH ADDENDUM #3, 2014**

	Parcel E, (Addendum #1)	Parcel D, (Addendum #2)	Parcel A and C, (Addendum #3)	Approved Modified Project through Addendum #3	Original Project (2008 EIR)
	As Constructed	As Constructed	Approved, Not Constructed		
Residential	0	90 DU	383 DU	675 DU	675 DU
Commercial	5,200 SF	0	23,489 SF	49,000 SF	44,000 SF
Community	0	0	5,000 SF	5,000 SF	5,000 SF
Height (Max. Stories)	6	5	5	6	7
Height (Feet)	68	55	85	85	85

Note: SF = square feet Please note that an alternative development for Alternative A was also approved which included 292 dwelling units and 33,983 square feet of commercial (which includes a 22,287-square-foot grocery store).

Sources: MacArthur Transit Village Project Final EIR, July 2008, certified via *Oakland City Council Resolution No. 81422*; Oakland City Council Resolutions for Stage 1/Parcel E FDP (*No. 83292*), Stage 2/Parcel D FDP (*No. 83365*), Stage 3 and 4/Parcels A and C-1 (*No. 85603*).

to an EIR or Negative Declaration). Development on Parcels E and D is completed and operational; a FDP has been approved for Parcels A and C and construction is anticipated to begin before the end of 2017.

The 2010 Addendum #1 for Stage 1 (Parcel E and horizontal infrastructure) evaluated project refinements that included: increasing the parking capacity of the BART garage and associated site plan changes; internal street changes including shifting alignment 40 feet to west, widening the street from 20 feet to 26 feet, eliminating on-street parking, widening pedestrian walkway, and adding an EVA connection to West MacArthur Boulevard; and realigning Village Drive to line up with 39<sup>th</sup> Street. The Addendum found that the refinements incorporated into the applications represented no change in development intensity or significant physical changes on the MacArthur Station site from the project analyzed in the 2008 Project EIR. Therefore, the addendum concluded that these changes would not result in new or more significant impacts (or require new or significantly altered mitigation measures) beyond those already identified in the 2008 Project EIR.

The 2011 Addendum #2 for Stage 2 (Parcel D) evaluated project refinements that included: an approximately 10,000-square-foot larger building than considered in the 2008 Project EIR, a shift in the location of Building D (due to the minor changes to Parcel E), and other minor refinements. The Addendum concluded that these refinements would not result in new significant environmental impacts or a substantial increase in the

severity of impacts already Identified in the 2008 Project EIR. Therefore, the addendum found that the proposed changes to the project were considered minor refinements, not substantial changes and this minimal increase in the building size would not result in any new or substantially greater impacts than what was considered in the 2008 Project EIR.

The 2015 Addendum #3 evaluated project refinements for Parcel A and C that included: (1) the increase in residential units from 240 to 287 or 292—a net increase of 47 or 52 units for Parcel A; and (2) the potential increase in commercial space on Parcel A by up to 7,983 square feet as part of the alternate grocery store plan. The analysis considered that the proposed refinements to Parcel A would not result in any net changes to the approved PUD/PDP buildout of up to 675 units and 49,000 square feet of commercial. The Parcel C-1 portion of the FDP proposed 96 apartment residential units and 1,202 square feet of ground floor retail. Approval of this FDP resulted in a total of 51 or 46 units and 17,311 or 5,615 square feet of commercial remaining for Parcel C-2 which if developed would result in a total on Parcel C of up to 148 or 142 (with Stage 3 Alternate Plan) residential units and 18,513 or 6,817 (with Stage 3 Alternate Plan) square feet of commercial. The Parcel A/C-1 FDP does not include C-2. The 2008 PUD/PDP allows, and the 2008 Project EIR evaluated up to 195 (47 or 53 units more than proposed) for-sale residential units and 12,500 (6,013 square feet more or 5,683 square feet less than proposed) square feet of commercial space on the entirety of Parcel C. The 2008 PUD/PDP COAs and the EIR support development of up to 675 units and 49,000 square feet of commercial. The 2015 Addendum #3 found that the modified distribution of uses between blocks did not constitute a substantial change to the project evaluated in the EIR that would require major revisions of the certified 2008 Project EIR.

The 2008 Project EIR and previous addenda are hereby incorporated by reference and can be obtained from the City of Oakland Bureau of Planning at 250 Frank H. Ogawa Plaza, Suite 2114, Oakland, California 94612, and/or at:  
<http://www2.oaklandnet.com/government/o/PBN/OurOrganization/PlanningZoning/DOWD008406>

### **Applicable Previous CEQA Documents and Program EIRs**

The analysis in the 2008 Project EIR and its three addenda applies directly to the 2016 Modified Project, providing the basis for use of an Addendum. The following describes the Program EIRs that constitute the Previous CEQA Documents considered in this CEQA Analysis, which are collectively referred to as the “the Program EIRs” or “Previous CEQA Documents.” Each of the following documents is hereby incorporated by reference and can be obtained from the City of Oakland Bureau of Planning at 250 Frank H. Ogawa Plaza, Suite 3315, Oakland, California 94612, and/or located on the City of Oakland Planning and Zoning website: <http://www2.oaklandnet.com/government/o/PBN/index.htm>. They include the following:

- Oakland’s 1998 General Plan Land Use and Transportation Element EIR;

- The 2010 General Plan Housing Element Update EIR and its 2014 Addendum;
- The Redevelopment Plan for the Broadway/MacArthur/San Pablo Redevelopment Project.

The following is a brief discussion of each document.

### **Land Use and Transportation Element EIR**

The City certified the EIR for its General Plan Land Use and Transportation Element (LUTE) in 1998 (“1998 LUTE EIR”). The LUTE identifies policies for utilizing Oakland’s land as change takes place and sets forth an action program to implement the land use policy through development controls and other strategies. The LUTE identifies eight Transit-Oriented Districts within the City and provides a policy framework specific to Transit-Oriented Development (TOD). The MacArthur BART Station is identified as a TOD.

The 1998 LUTE EIR is designated a “Program EIR” under CEQA Guidelines Sections 15183 and 15183.3. As such, subsequent activities under the LUTE are subject to requirements under each of the aforementioned CEQA sections, which are described further in Section IV. While approved after certification of the 1998 LUTE EIR, growth and potential effects of the development of MacArthur Station Project would have been considered in the cumulative growth projections factored into the 1998 LUTE EIR analysis.

Applicable mitigation measures identified in the 1998 LUTE EIR are largely the same as those identified in the other Program EIRs prepared *after* the 1998 LUTE EIR, either as mitigation measures or newer standard conditions of approval, the latter of which are described below.

#### *Environmental Effects Summary*

The 1998 LUTE EIR determined that development consistent with the LUTE would result in the impacts that would be reduced to a less-than-significant level with the implementation of mitigation measures and/or standard conditions of approval: aesthetics (views, architectural compatibility and shadow only); air quality (construction dust [including PM<sub>10</sub>], and emissions Downtown, odors); cultural resources (except as noted below as less than significant); hazards and hazardous materials; land use (use and density incompatibilities); noise (use and density incompatibilities, including from transit/transportation improvements); population and housing (induced growth, policy consistency/clean air plan); public services (except as noted below as significant);<sup>2</sup> and transportation/circulation (intersection operations Downtown).

Less-than-significant impacts were identified for the following resources in the 1998 LUTE EIR: aesthetics (scenic resources, light and glare); air quality (clean air plan consistency,

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<sup>2</sup> The 1998 LUTE EIR addressed effects on solid waste demand and infrastructure facilities for water, sanitary sewer and stormwater drainage under *Public Services*.

roadway emissions in Downtown, energy use emissions, local/regional climate change); biological resources; cultural resources (historic context/settings, architectural compatibility); energy; geology and seismicity; hydrology and water quality; land use (conflicts in mixed use projects and near transit); noise (roadway noise Downtown and citywide, multifamily near transportation/transit improvements); population and housing (exceeding household projections, housing displacement from industrial encroachment); public services (water demand, wastewater flows, stormwater quality, parks services); and transportation/circulation (transit demand). No impacts were identified for agricultural or forestry resources, and mineral resources.

Significant unavoidable impacts were identified for the following environmental resources in the 1998 LUTE EIR: air quality (regional emissions, roadway emissions Downtown); noise (construction noise and vibration in Downtown); public services (fire safety); transportation/circulation (roadway segment operations); wind hazards, and policy consistency (clean air plan). Due to the potential for significant unavoidable impacts, a Statement of Overriding Considerations was adopted as part of the City's approvals.

### **Oakland Housing Element Update EIR and Addendum**

Since the 2008 Project EIR, the City has twice amended its General Plan to adopt updates to its Housing Element. It certified a 2010 EIR for the 2007-2014 Housing Element and a 2014 Addendum to the 2010 EIR for the 2015-2023 Housing Element. The General Plan identifies the City's current and projected housing needs, and sets goals, policies, and programs to address those needs, as specified by the state's *Regional Housing Needs Allocation* (RHNA) process. The affordable housing development included in the MacArthur Station Project is identified within the Housing Element. In addition to the identified affordable housing units, the MacArthur Station project contributes to the total number of housing units needed in the City of Oakland to meet its RHNA target. Applicable mitigation measures and Standard Conditions of Approval (SCAs) identified in the 2014 Addendum to the 2010 EIR are considered in the analysis of the residential components in this document. The 2010 Housing Element Update EIR was designated a "Program EIR" under CEQA Guidelines Sections 15183 and 15183.3. As such, subsequent activities under the Housing Element that involve housing, are subject to requirements under each of the aforementioned CEQA sections, which are described further in Section IV.

Applicable mitigation measures and standard conditions of approval (also described in Section IV) identified in the 2010 Housing Element Update EIR are considered in the analysis in this document and are largely the same as those identified in the other Program EIR documents described in this section.

### *Environmental Effects Summary*

The 2010 Housing Element Update EIR, including its Initial Study Checklist, and 2014 Addendum (collectively referred to as the "Housing Element Update EIR") determined that



housing developed pursuant to the Housing Element, which would include the MacArthur Station Project, would result in impacts that would be reduced to a less-than-significant level with the implementation of mitigation measures and/or standard conditions of approval (described in Section IV): aesthetics (visual character/quality and light/glare only); air quality (except as noted below); biological resources; cultural resources; geology and soils; greenhouse gas emissions; hazards and hazardous materials (except as noted below, and no impacts regarding airport/airstrip hazards and emergency routes); hydrology and water quality (except as noted below); noise; public services (police and fire only); and utilities and service systems (except as noted below).

Less-than-significant impacts were identified for the following resources in the Housing Element Update EIR: hazards and hazardous materials (emergency plans and risk via transport/disposal); hydrology and water quality (flooding/flood flows, and inundation by seiche, tsunami or mudflow); land use (except no impact regarding community division or conservation plans); population and housing (except no impact regarding growth inducement); public services and recreation (except as noted above, and no impact regarding new recreation facilities); and utilities and service systems (landfill, solid waste, and energy capacity only, and no impact regarding energy standards). No impacts were identified for agricultural or forestry resources, and mineral resources.

Significant unavoidable impacts were identified for the following environmental resources in the Housing Element Update EIR: air quality (toxic air contaminant exposure) and traffic delays. Due to the potential for significant unavoidable impacts, a Statement of Overriding Considerations was adopted as part of the City's approvals.

### **The Broadway/MacArthur/San Pablo Redevelopment Plan**

The Redevelopment Plan for the Broadway/MacArthur/San Pablo Redevelopment Project (Redevelopment Plan), which was adopted in 2000 and amended in 2007, provides the Oakland Redevelopment Agency<sup>3</sup> with powers, duties, and obligations towards the redevelopment, rehabilitation and revitalization of the Broadway/MacArthur/San Pablo Redevelopment Project Area. The Redevelopment Plan does not present a precise plan or establish specific projects; instead, the Redevelopment Plan presents a process and basic framework within which specific plans will be presented, specific projects will be established and specific solutions will be proposed. The MacArthur Station project site falls within this Redevelopment Plan area.

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<sup>3</sup> On June 29, 2011 Governor Jerry Brown signed legislation eliminating redevelopment agencies (RDAs) and directing the resolution of their activities while simultaneously creating an alternative voluntary redevelopment program. As of February 1, 2012, the City of Oakland Redevelopment Agency ceased to exist.

*Environmental Effects Summary*

The Redevelopment Plan EIR assessed the potential environmental impacts of the Redevelopment Plan and assumed a variety of development activities, including transit-oriented development at the MacArthur BART Station, identified the following impacts would be reduced to a less-than-significant level with implementation of mitigation measures: land use (the Redevelopment Plan could result in land use conflicts in Subarea 3, particularly along San Pablo Avenue and Stanford Avenue because of the proximity of schools and parks; the Redevelopment Plan could potentially conflict with the General Plan Historic Preservation Element; the Redevelopment Plan could result in land use conflicts between the City of Berkeley, the City of Emeryville and the City of Oakland in Subarea 3); transportation and circulation (the addition of project traffic would result in unacceptable level of service at three intersections during the PM peak hour under existing conditions; the addition of project traffic would results in unacceptable level of service at three intersections during the PM peak hour under cumulative Year 2020 conditions); air quality (construction activities associated with development projects within the Project area would generate dust (including the respirable fraction known as  $PM_{10}$ ) and combustion emissions); noise (development of the future projects within the Broadway/MacArthur/San Pablo Redevelopment Project area would generate short-term increases in noise and vibration due to construction; the proposed Broadway/MacArthur/San Pablo Redevelopment Plan would encourage new residential uses as part of mixed-use retail areas within the Project Area and future noise levels in some areas could be incompatible with these new residential uses); public services and utilities (the proposed project could result in a lack of adequate open space and recreational opportunities for residents of new housing developments; together with other existing and reasonably foreseeable future development in the vicinity in Oakland, the project would contribute to cumulative demand for increased fire protection services).

Less-than-significant impacts were identified for the following resources: land use (except as noted above); transportation and circulation (except as noted above); air quality (except as noted above and below); noise (except as noted above); public services and utilities (except as noted above).

Significant unavoidable impacts were identified for the following environmental resource: air quality (the proposed Plan would not be consistent with the population and vehicle miles travelled [VMT] assumptions used in air quality planning since growth resulting from the proposed Plan would be consistent with growth projections under the General Plan and the General Plan was determine to be not consistent with the same population and VMT assumptions).

## IV. PURPOSE AND SUMMARY OF THIS CEQA DOCUMENT

The purpose of this CEQA document is to evaluate the potential environmental effects of the 2016 Modified Project and whether such impacts were adequately covered under the 2008 Project EIR, previous addenda, or Program EIRs to allow the 2016 Modified Project certain CEQA streamlining and/or tiering provisions and CEQA exemptions to apply. The analysis conducted incorporates by reference the information contained in the 2008 Project EIR, previous addenda, and Program EIRs and includes a CEQA Checklist and supporting documentation to provide comprehensive review and public information for the basis of any determination. Based on the evaluation conducted and as the Checklist demonstrates, the 2016 Modified Project qualifies for several CEQA streamlining and/or tiering provisions and CEQA exemptions as summarized below, each of which separately and independently provide a basis for CEQA compliance.

### **Addendum**

Public Resources Code Section 21166 and CEQA Guidelines Section 15164 (Subsequent EIRs, Supplements and Addenda to an EIR or Negative Declaration), state that an addendum to a certified EIR is allowed when minor changes or additions are necessary and none of the conditions for preparation of a subsequent EIR or Negative Declaration pursuant to Section 15162 and 15164 are satisfied.

The analysis in the 2008 Project EIR and previous addenda directly applies to the 2016 Modified Project, providing the basis for the use of an Addendum.

### **Community Plan Exemption**

Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183 (Projects Consistent with a Community Plan or Zoning) allow streamlined environmental review for projects that are “consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. Section 15183(c) specifies that “if an impact is not peculiar to the parcel or to the proposed project, has been addressed as a significant effect in the prior EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards..., then an EIR need not be prepared for the project solely on the basis of that impact.” The analysis in the Program EIRs - the 1998 LUTE EIR and, for only the residential components proposed project, the 2010 Housing Element Update EIR and its 2014 Addendum, and Redevelopment Plan EIR - are applicable to the 2016 Modified Project and are the Previous CEQA Documents providing the basis for use of the Community Plan Exemption.

### **Qualified Infill Exemption**

Public Resources Code Section 21094.5 and CEQA Guidelines Section 15183.3 (Streamlining for Infill Projects) allow streamlining for certain qualified infill projects by limiting the topics subject to review at the project level, if the effects of infill development have been addressed in a planning level decision, or by uniformly applicable development policies. Infill projects are eligible if they are located in an urban area on a site that either has been previously developed or that adjoins existing qualified urban uses on at least 75 percent of the site's perimeter; satisfy the performance standards provided in CEQA Guidelines Appendix M; and are consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy. No additional environmental review is required if the infill project would not cause any new specific effects or more significant effects, or if uniformly applicable development policies or standards would substantially mitigate such effects. The analysis in the Program EIRs - the 1998 LUTE EIR and, for the residential components of the 2016 Modified Project only, the 2010 Housing Element Update EIR and its 2014 Addendum - are applicable to the 2016 Modified Project and are the Previous CEQA Documents providing the basis for use of the Streamlining for Infill Projects under CEQA Guidelines Section 15183.3.

### **Program EIRs and Redevelopment Projects**

CEQA Guidelines Section 15168 (Program EIRs) and Section 15180 (Redevelopment Projects) provide that the Redevelopment Plan EIR can be used as a Program EIR in support of streamlining and/or tiering provisions under CEQA. The Redevelopment Plan EIR is a Program EIR for streamlining and/or tiering provisions by CEQA Section 15168. The section defines the "program EIR" as one prepared on a series of actions that can be characterized as one large project and are related geographically and by other shared characteristics. Section 15168 continues that "subsequent activities in the program EIR must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared." If the agency finds that pursuant to CEQA Guidelines Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR and no new environmental document would be required.

Further, CEQA Guidelines Section 15180 specifies that "if a certified Redevelopment Plan EIR is prepared, no subsequent EIRs are required for individual components of the Redevelopment Plan unless a subsequent EIR or supplement to the EIR would be required by Section 15162 or 15163."

## **Previous Mitigation Measures and Current Standard Conditions of Approval (SCAs)**

The CEQA Checklist provided in Section VII of this document evaluates the potential environmental effects of the 2016 Modified Project, and evaluates whether such impacts were adequately analyzed and addressed in the 2008 Project EIR and previous addenda (as well as the Program EIRs previously described in Section III) to allow the CEQA streamlining provisions to apply. The analysis conducted incorporates by reference the information contained in the 2008 Project EIR, previous addenda, and each of the previous Program EIRs. The 2016 Modified Project is legally required to incorporate and/or comply with any applicable requirements and mitigation measures identified in the 2008 Project EIR. Therefore, the measures are herein assumed to be included as part of the proposed Project, including those that have been modified to reflect the City's current standard language and requirements, as discussed below.

### **SCA Application in General**

The City of Oakland established *Standard Conditions of Approval and Uniformly Applied Development Standards* (SCAs) after certification of the 2008 Project EIR and the 1998 LUTE EIR. The City also has recently adopted an updated version of the SCAs from those included in the Housing Element Update EIR. The City's SCAs are incorporated into and applied to new and changed projects as conditions of approval, regardless of a project's environmental determination. The SCAs incorporate policies and standards from various adopted plans, policies, and ordinances (such as the Oakland Planning Code and Municipal Code, Creek Protection Ordinance, Stormwater Water Management and Discharge Control Ordinance, Tree Protection Ordinance, Grading Regulations, National Pollutant Discharge Elimination System (NPDES) permit requirements, Housing Element-related mitigation measures, California Building Code and Uniform Fire Code, among others). These policies and standards have been found to substantially mitigate environmental effects. The SCAs are adopted as requirements of an individual project when it is approved by the City and are designed to, and will, substantially mitigate environmental effects.

Consistent with the requirements of CEQA, a determination of whether the project would have a significant impact has occurred prior to the approval of the proposed project and, where applicable, standard conditions of approval (and/or mitigation measures in the 2008 EIR) have been identified that will mitigate them. In some instances, exactly how the measures/conditions identified will be achieved awaits completion of future studies, an approach that is legally permissible where measures/conditions are known to be feasible for the impact identified, where subsequent compliance with identified federal, state or local regulations or requirements apply, where specific performance criteria is specified and required, and where the proposed project commits to developing measures that comply with the requirements and criteria identified.

## SCA Application in this CEQA Document

Several SCAs would apply to the 2016 Modified Project because of its characteristics and proposed changes to the 2008 Project; they are triggered by the fact that the City is considering renewed discretionary actions for the 2016 Modified Project. Because the SCAs are mandatory City requirements, the impact analyses for new and modified projects assumes that all applicable SCAs will be imposed and implemented by the project in question.

Mitigation measures and conditions of approval (“COAs” in the 2008 Project EIR) were identified in the 2008 Project EIR and would apply to the 2016 Modified Project. They are listed in Attachment A to this document. Revisions to the PDP allow the City to apply new COAs to the proposed project. Additionally, the City’s most current SCAs identified in this CEQA analysis are included in Attachment A, some of which are analogous with 2008 Project EIR COAs, and some of which were not covered by 2008 COAs but are applicable to the Parcel B Project. All mitigation measures and SCAs that are applicable to the 2016 Modified Project are listed in Attachment A. Most of the SCAs applicable to the Project were also identified in the 2010 Oakland Housing Element Update EIR and 2014 Addendum. The 1998 LUTE EIR was developed prior to the City’s application of SCAs.

## Aesthetics and Parking Analysis

CEQA Section 21099(d) states, “Aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site located within a transit priority area shall not be considered significant impacts on the environment.”<sup>4</sup> Accordingly, aesthetics and parking are no longer to be considered in determining if a project has the potential to result in significant environmental effects for projects that meet all three of the following criteria:

- a) The project is in a transit priority area.<sup>5</sup>
- b) The project is on an infill site.<sup>6</sup>
- c) The project is residential, mixed-use residential, or an employment center.<sup>7</sup>

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<sup>4</sup> CEQA Section 21099(d)(1).

<sup>5</sup> CEQA Section 21099(a)(7) defines a “transit priority area” as an area within one-half mile of an existing or planned major transit stop. A “major transit stop” is defined in CEQA Section 21064.3 as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

<sup>6</sup> CEQA Section 21099(a)(4) defines an “infill site” as a lot located within an urban area that has been previously developed, or a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses

<sup>7</sup> CEQA Section 21099(a)(1) defines an “employment center” as a project located on property zoned for commercial uses with a floor area ratio of no less than 0.75 and located within a transit priority area.

The proposed project meets each of the above three criteria because it: (1) is located immediately adjacent to the MacArthur BART Station; (2) is located on a project site that was previously developed as a BART parking lot and within a developed urban area of Oakland that includes commercial, office and residential uses; and (3) would be a residential project with ground-floor commercial space. Thus, this CEQA Analysis does not consider aesthetics and the adequacy of parking in determining the significance of project impacts under CEQA. The City of Oakland recognizes that the public and decision makers nonetheless may be interested in information pertaining to the aesthetic effects of a proposed project and may desire that such information be provided as part of the environmental review process. Therefore, some of this information not necessary for CEQA has been provided in an Aesthetics section of this CEQA Analysis document for informational purposes.

However, this information is provided solely for informational purposes and is not used to determine the significance of the environmental impacts of the project, pursuant to CEQA.

### **2016 Modified Project CEQA Compliance**

The 2016 Modified Project satisfies each of the CEQA streamlining provisions relied upon, as summarized below.

- **Addendum.** The analysis conducted in this document indicates that an addendum to the 2008 Project EIR directly applies; therefore, this CEQA Analysis is considered to be the addendum. As discussed under Project Description below, the 2016 Modified Project represents a minor change to the project analyzed in the 2008 Project EIR, and is similar to the Tower Alternative examined in the 2008 Project EIR. The 2008 Project anticipated a six-story height for the original Parcel B building. The Tower alternative within the 2008 Project EIR evaluated a 240-foot (23-story) tower on Parcel D, which is similar to the 260-foot (25-story) structure proposed in the 2016 Modified Project. The Tower alternative also anticipated an increase in residential units (868 units) as does the 2016 Modified Project (875 units). However, as described in the Transportation and Circulation discussion in Section VII, if the overall MacArthur Station site provides about 38,689 square feet of commercial space, the overall project site can provide up to 875 residential units without exceeding the overall project trip generation in the 2008 Project EIR. With the 2016 Modified Project, the MacArthur Station would provide about 200 more residential units than the previous proposals and would have a reduction in commercial space of 2,311 square feet. As described in the 2008 Project EIR, the potential impacts associated with aesthetic resources, shade and shadow, and wind would be greater with the Tower alternative than the proposed project due to the increased height, but they would not result in any new significant unavoidable impacts. Similar impacts would be anticipated with the 2016 Modified Project. Additionally, given the increase in population with the 2016 Modified Project, there could be an increase in public services and utilities demand; however, no new significant impacts are anticipated. The 2016 Modified Project therefore meets the

requirements for preparation of an Addendum, as evidenced in Attachment B to this document.

- **Community Plan Exemption.** Based on the analysis conducted in this document, the 2016 Modified Project also qualifies for a community plan exemption. While revisions to the Planned Unit Development are required, the 2016 Modified Project is permitted in the zoning district where the project site is located, and is consistent with the bulk, density, and land uses envisioned for the site. The analysis herein considers the analysis in the 2010 Oakland Housing Element Update EIR and 2014 Addendum for the evaluation of the housing components of the 2016 Modified Project, and further reconsiders the analysis in the 1998 LUTE EIR for the overall project. This CEQA Analysis concludes that the proposed project would not result in significant impacts that: (1) are peculiar to the project or project site; (2) were not identified as significant project-level, cumulative, or offsite effects in the 2008 Project EIR; or (3) were previously identified as significant effects, but are determined to have a more severe adverse impact than discussed in the EIR. Findings regarding the proposed project’s consistency with the zoning are included as Attachment C to this document.
- **Qualified Infill Exemption.** The analysis conducted indicates that the 2016 Modified Project qualifies for a qualified infill exemption and is generally consistent with the required performance standards provided in CEQA Guidelines Appendix M, as evaluated in Table D-1 in Attachment D to this document. This CEQA Analysis supports that the 2016 Modified Project would not cause any new specific effects or more significant effects than previously identified in applicable planning level EIRs and uniformly applicable development policies or standards (SCAs) would substantially mitigate the project’s effects. The 2016 Modified Project is proposed on a previously developed site in an urbanized area of Oakland and is surrounded by urban uses. While revisions to the Planned Unit Development are required, the 2016 Modified Project is consistent with the land use, density, building intensity, and applicable policies for the site. The analysis herein considers the analysis in the 2008 Project EIR; the 1998 LUTE EIR; and for the residential components of the 2016 Modified Project only, the 2010 Housing Element Update EIR and its 2014 Addendum.
- **Program EIRs and Redevelopment Plan.** Overall, based on an examination of the analysis, findings, and conclusions of the 2008 Project EIR, as well as those of the 1998 LUTE EIR, the Redevelopment Plan EIR and the Housing Element Update EIR—all of which are as summarized in the CEQA Checklist in Section VII of this document—the potential environmental impacts associated with the 2016 Modified Project have been adequately analyzed and covered in prior Program EIRs. Therefore, no further review or analysis under CEQA is required.



## V. PROJECT DESCRIPTION

### Project Location

The Parcel B Project site is located at 532 39<sup>th</sup> Street on the parcels located southwest of the 39<sup>th</sup> Street/Turquoise Way intersection. The site is approximately 51,218 square feet and includes the following APNs: 012-102501100 and 012-102501200. The location of the Parcel B Project is shown in relation to the MacArthur Station project site and adjacent areas in Figure 2.

### Existing Site Conditions

While previously used as surface parking lot, the pavement has been removed and the Parcel B project site is currently rough graded with fill from Parcels A and C. No permanent structures are located on the site, and the site is not open to the public. The site is currently used for staging vehicles and equipment associated with construction on Parcel A and Parcel C of the MacArthur Station project site.

### Surrounding Context

The Parcel B project site is immediately adjacent to the MacArthur BART Station and is within the MacArthur Station Project site, as described below.

- To the west of Parcel B, across from Frontage Road, is Highway 24 and part of the MacArthur BART Station.
- To the north of Parcel B, across from 39<sup>th</sup> Street, is MacArthur Station Parcel A. Parcel A, expected to commence construction soon, will include residential and commercial uses.
- To the east of Parcel B, across from Turquoise Way, is MacArthur Station Parcel C and Parcel D. Parcel C is expected to commence construction soon and will include commercial, residential and community uses. Parcel D contains a residential building.
- To the south of Parcel B is a BART parking garage.

The MacArthur Station Project site is located within an urban area and is surrounded by many different uses. Immediately east of the MacArthur Station Project site are a variety of buildings containing office and commercial uses. A church, commercial, and residential uses are located to the east across Telegraph Avenue. To the north of the project site, across 40<sup>th</sup> Street, are residential and commercial uses. Residential and commercial uses extend further north of the project site. State Route 24 and the BART tracks are located to the west of the project site. A residential neighborhood that includes a mix of densities is located further west. The State Route 24/Interstate 580 interchange is located southwest of the project site. Commercial uses are located to the south of the project site.



Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 2  
2016 Modified Project Site - Site Plan

## Project Characteristics

In this CEQA analysis, the proposed Parcel B development, in addition to the approved or constructed development on Parcels A, C, D, and E, is collectively referred to as the 2016 Modified Project. While this Addendum does evaluate the potential development envelope total of all parcels, it should be noted that the proposed development for Parcels A, C, D, and E were specifically evaluated within Addenda #1, #2, and #3 to the 2008 Project EIR. As described above, the revised development described in Addenda #1, #2, and #3 would not result in impacts not previously identified in the 2008 Project EIR. This Addendum evaluates the entire development envelope associated with the MacArthur Station, but specifically looks at the development proposed for Parcel B.

The 2016 Modified Project development details, and a comparison of how the modified project compares to the 2008 Project and 2008 Tower Alternative, are included in Table 6. The required approvals include revisions to the Planned Unit Development including the modification to the existing Preliminary Development Plan (PDP) that is applicable to the entire MacArthur Station site; approval of a new Final Development Plan (FDP); Tree Removal Permits; Environmental Review Application; and a Tentative Parcel Map.

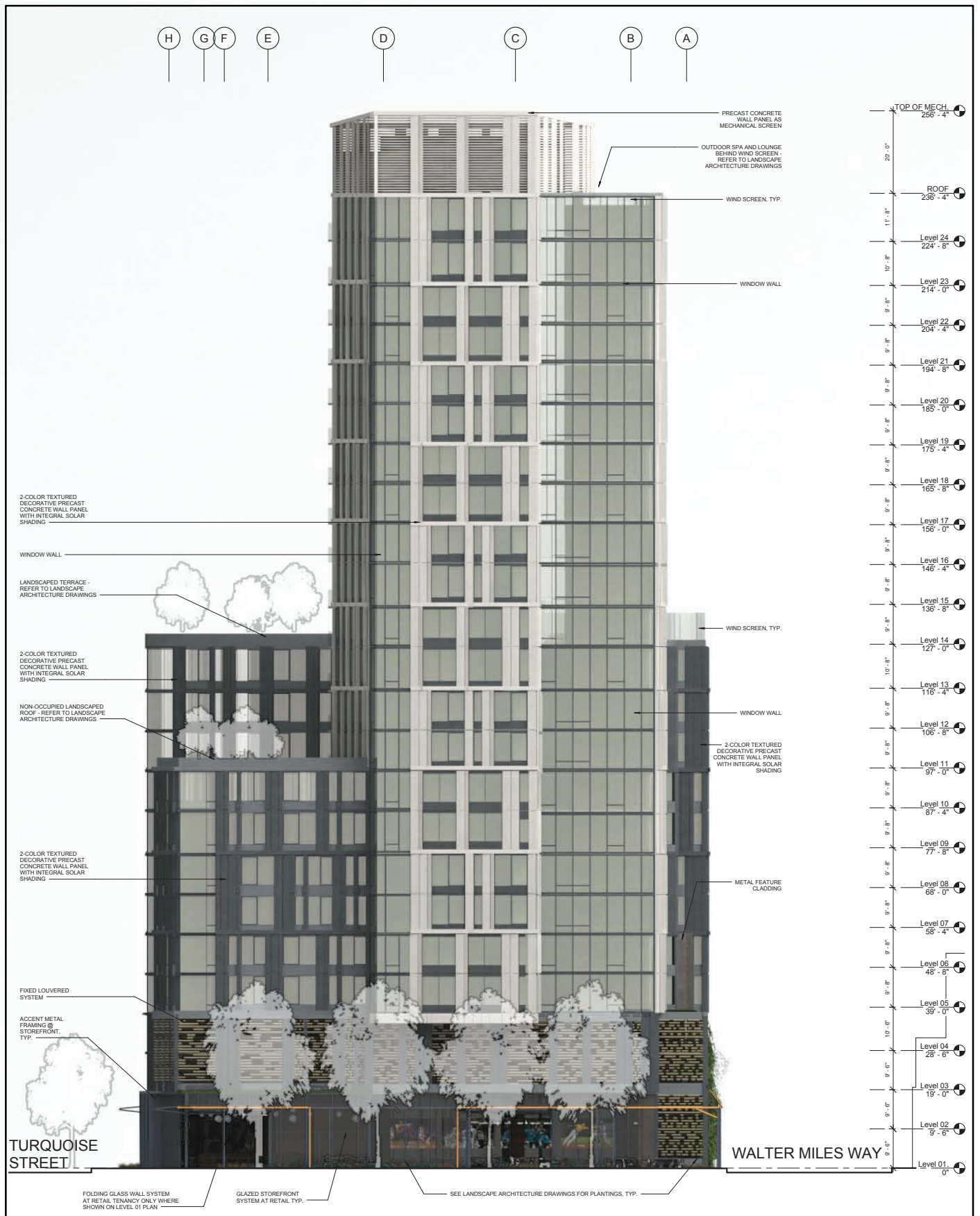
Development on Parcel B, in addition to the development completed or under construction on Parcels A, C, D and E, would provide approximately 200 more residential units and about 2,311 fewer square feet of commercial space than the project evaluated in the 2008 Project EIR.

Development on Parcel B would include 402 dwelling units and up to 13,000 square feet of commercial space. The dwelling units would be as follows: 55 studio units; 175 one-bedroom units; 164 two-bedroom units; and 8 three-bedroom units. Approximately 45 of these units would be below market rate.

The Parcel B building would have a varied height. The tallest component would be approximately 260 feet and 25-stories tall, which would be 19 stories taller than originally proposed with the 2008 Project EIR. It should be noted, however, that a Tower alternative was evaluated within the 2008 Project EIR that included a 240-foot (23-story) tower. Conceptual elevations and sections of the proposed Parcel B building are shown in Figures 3a, 3b, 3c, 3d and Figures 4a and 4b. Note that the design shown in these figures has been slightly refined as part of the City's design review process, but represents the proposed project as assessed for CEQA purposes. None of the design refinements (i.e., change in building materials) would change the CEQA findings.

As shown in the conceptual illustrations, the Parcel B building would not have one uniform height. The residential tower component of the structure would be along the eastern and northern portion of the site. The exterior of this residential tower component would

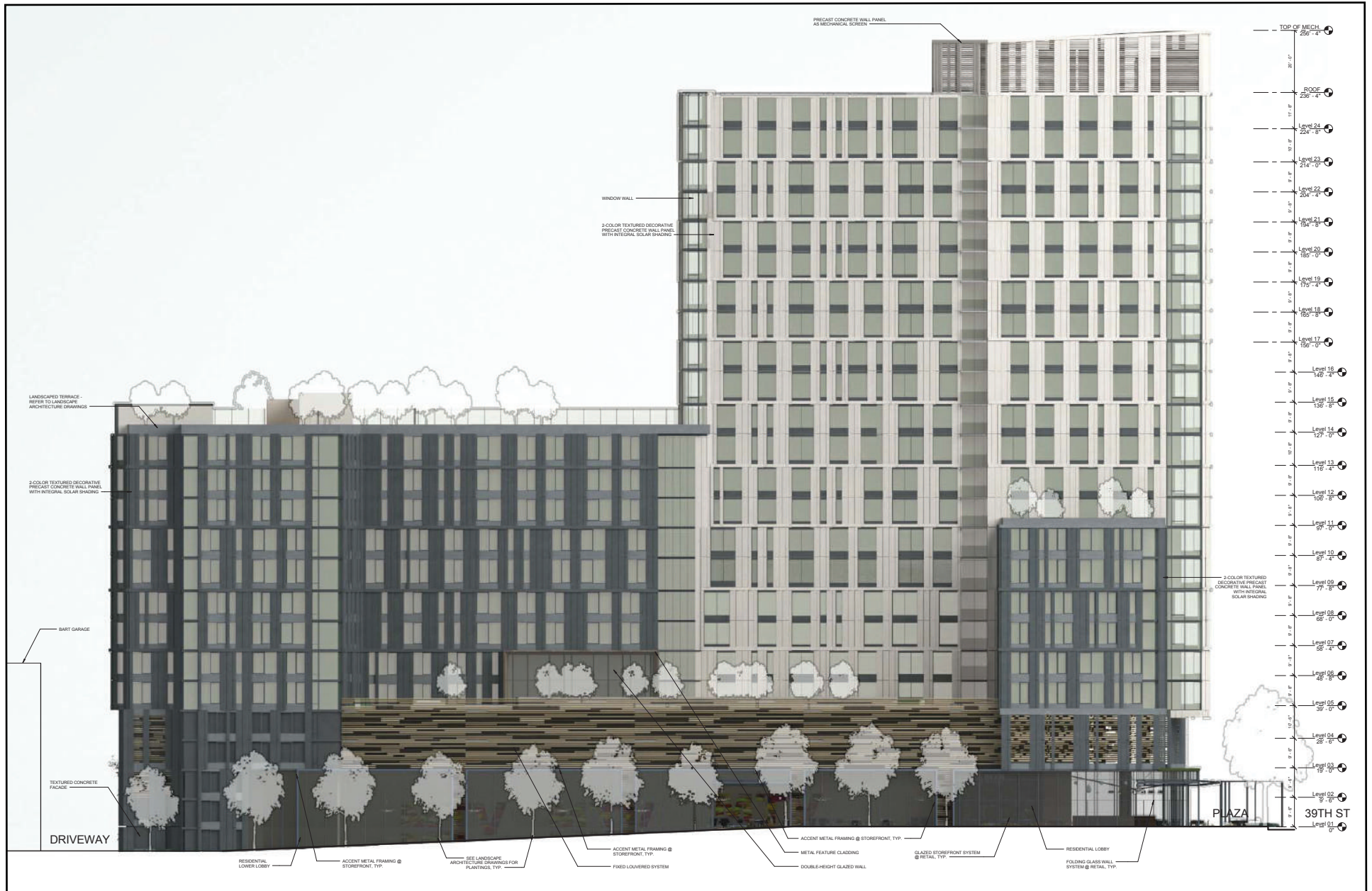




Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

**Figure 3a**  
Conceptual Elevation (North)

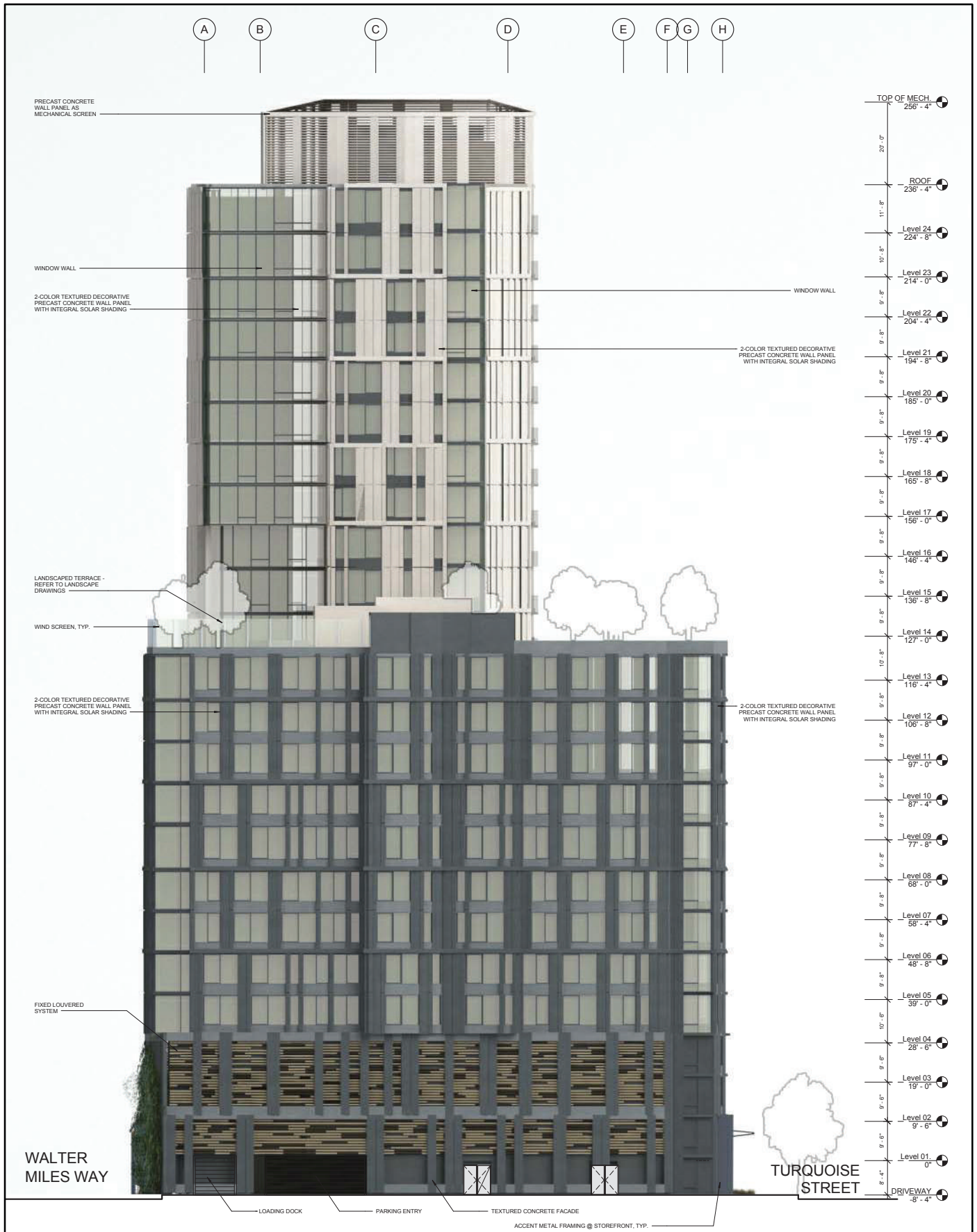


Source: Solomon Cordwell Buenz, 2016

## MacArthur Station - Modified 2016 Project

Figure 3b  
Conceptual Elevation (East)





Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

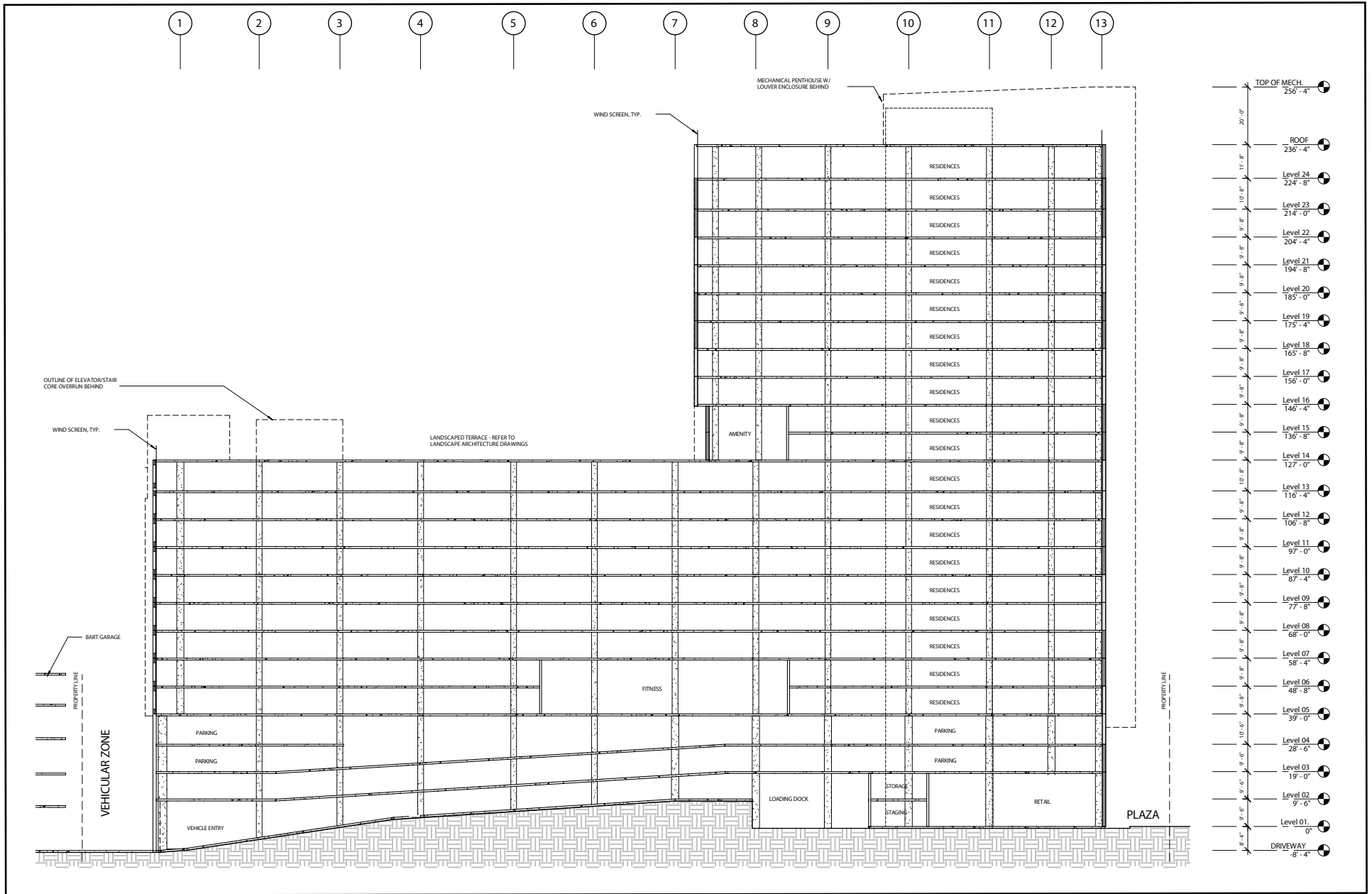
Figure 3c  
Conceptual Elevation (South)



Source: Solomon Cordwell Buenz, 2016

## MacArthur Station - Modified 2016 Project

Figure 3d  
Conceptual Elevation (West)

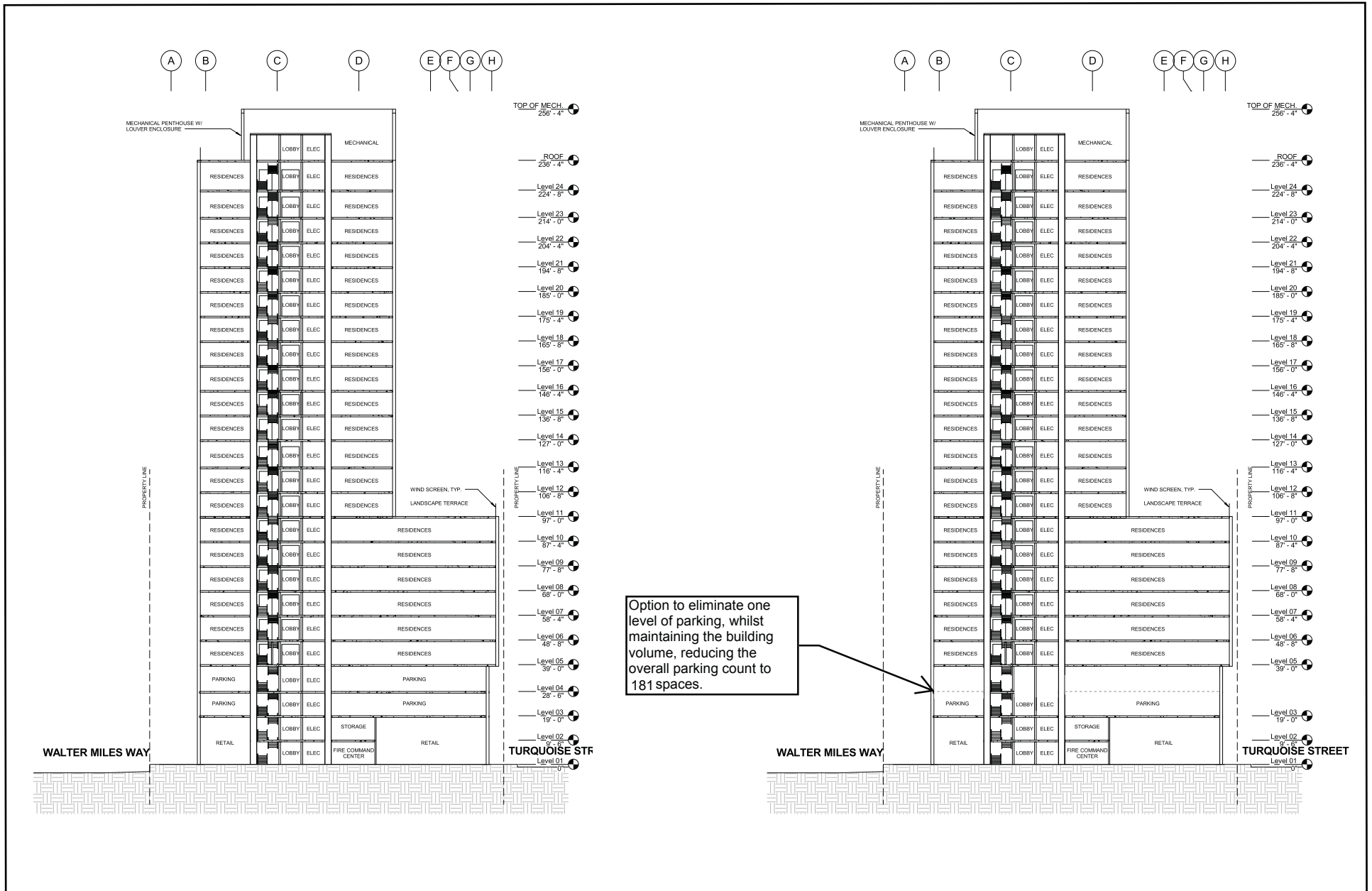


Source: Solomon Cordwell Buenz, 2016

## MacArthur Station - Modified 2016 Project

Figure 4a  
Building Section (North/South)





Source: Solomon Cordwell Buenz, 2016

MacArthur Station - Modified 2016 Project

Figure 4b  
Building Section (East/West)

**TABLE 6 PROJECT DEVELOPMENT DETAILS**

Use	2008 Certified Project Total	2008 Tower Alternative	Project by Parcel (Built or FDP)					2016 Modified Total	Difference between 2016 Modified and 2008 Projects	Difference between 2016 Modified Project and 2008 Tower Alternative
			Parcel A	2016 Modified Parcel B	Parcel C	Parcel D	Parcel E			
Residential	675 DU	868 DU	287 DU	402 DU	96 DU	90 DU	0	875 DU	+200 DU	7 DU
Commercial	44,000 SF	44,000 SF	22,287 SF	13,000SF	1,202 SF	0	5,200 SF	41,689 SF	-2,311 SF	-2,311 SF
Community Center	5,000 SF	7,500 SF	0	0	5,000 SF	0	0	5,000 SF	0	-2.5K KSF
Parking	1,000	1,100	254	260	69	90	483	1,156	+156	+56

Notes: DU = Dwelling Units, KSF = 1,000 square feet. Please note that an alternative development for Alternative A was also approved which included 292 dwelling units and 33,983 square feet of commercial (which includes a 22,287-square-foot grocery store). Also note that this CEQA analysis evaluates the FDPs for Parcel A and Parcel C-1 that were approved by the Oakland City Council on May 19, 2015. In 2016, the City approved a revision to the Parcel A and Parcel C-1 FDPs in regard to the amount of and flexibility in the use of the approved retail space. The revision included a net reduction of 2,055 square feet of retail. It also relocated the community space to Parcel A, totaling 3,886 square feet. CEQA compliance of the FDP revisions was assessed, and no new or more severe CEQA impacts were identified based on these minor changes, given they represent reductions in square footage of land uses already evaluated.

Sources: MacArthur Transit Village Project Final EIR, July 2008, certified via *Oakland City Council Resolution No. 81422*; Oakland City Council Resolutions for Stage 1/Parcel E FDP (*No. 83292*), Stage 2/Parcel D FDP (*No. 83365*), Stage 3 and 4/Parcels A and C-1 (*No. 85603*).

include concrete, textured concrete, weathered metal cladding, and glass windows. This component would be a total of 260 feet tall, which includes screening for mechanical equipment located on the roof. The roof height would be 240 feet. The 25<sup>th</sup> story would include an approximately 4,500-square-foot common open space landscaped terrace. A portion of the building located on the southern part of Parcel B would be stepped down to approximately 14 stories tall. The roof area of this portion would include an approximately 11,000-square-foot common landscaped terrace.

The southwestern and northwestern corners of the Parcel B building portion of the structure would be stepped down to approximately 11 stories and would include a rooftop terrace. A significant portion of the eastern side of the structure would be stepped down to five stories and would also include an approximately 8,500-square-foot common rooftop terrace.

Approximately 13,000 square feet of ground floor commercial would be incorporated into the project design. Approximately 260 parking spaces would be located on the first four floors of the structure. The exterior of the retail and parking podium component of the building would include textured concrete, metal parking screening elements, weathered metal retail accents, and glass windows. A 3,625-square-foot landscaped public open space plaza would be located along the northern side of Parcel B.

### **Project Approvals**

The 2016 Modified Project would require a number of discretionary actions and approvals, including without limitation:

#### **Actions by the City of Oakland**

- Revisions to the Planned Unit Development
- Final Development Plan
- (Possible) Development Agreement amendment for increased height
- Tree Removal Permits
- Environmental Review
- Tentative Parcel Map
- Other City Permits – Grading permit and other related on-site and off-site work permits and minor encroachment permit

#### **Actions by Other Agencies**

- Bay Area Rapid Transit District – Issuance of any encroachment permits for BART property, if necessary; Reciprocal Easement Agreement to address City of Oakland and BART responsibilities for maintenance of sidewalks and streets within the project.
- California Regional Water Quality Control Board – National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharge.

- California Department of Transportation (Caltrans) – Approval of plans and encroachment permit for improvements located within the State right-of-way; improvements to public right-of-way.
- Regional Water Quality Control Board – Issuance of “no further action” status for Parcel B.
- East Bay Municipal Utility District (EBMUD)—Approval of water lines, water hookups and review of water needs.

## VI. SUMMARY OF FINDINGS

An evaluation of the proposed project is provided in the CEQA Checklist in Section VII that follows. This evaluation concludes that the Parcel B Project qualifies for an addendum as well as an exemption from additional environmental review. The project would comply with the underlying zoning regulations (including the Planned Unit Development Regulations) and is consistent with the development density and land use characteristics established by the City of Oakland General Plan, and any potential environmental impacts associated with its development were adequately analyzed and covered by the analysis in the 2008 Project EIR and its three previous addenda, and in the applicable Program EIRs: the 1998 LUTE EIR, the Redevelopment Plan EIR, and for the housing components of the proposed project, the 2010 General Plan Housing Element Update EIR and 2014 Addendum.

The 2016 Modified Project would be required to comply with the applicable mitigation measures identified in the 2008 Project EIR, as updated and amended, and any applicable City of Oakland SCAs presented in Attachment A to this document. With the implementation of the applicable mitigation measures and SCAs, the proposed project would not result in a substantial increase in the severity of previously identified significant impacts in the 2008 Project EIR, the Program EIRs, or in any new significant impacts that were not previously identified in any of those CEQA documents.

In accordance with Public Resources Code Sections 21083.3, 21094.5, and 21166; and CEQA Guidelines Sections 15162, 15164, 15183, 15183.33, 15168, and 15180, and as set forth in the CEQA Checklist below, the proposed Project qualifies for an addendum and one or more exemptions because the following findings can be made:

- **Addendum.** The analyses conducted and the conclusions reached in the 2008 Project EIR certified by the Planning Commission on June 4, 2008 remain valid, and last affirmed by the City Council in 2015 (EIR Addendum #3). The 2016 Modified Project would not cause new significant impacts not previously identified in the 2008 Project EIR, or result in a substantial increase in the severity of previously identified significant impacts. No new mitigation measures would be necessary to reduce significant impacts. No changes have occurred with respect to circumstances surrounding the 2008 Project that would cause significant environmental impacts to which the proposed project would contribute considerably, and no new information has been put forward that shows that the proposed project would cause significant environmental impacts. Therefore, no supplemental environmental review is required in accordance with Public Resources Code Section 21166, and CEQA Guidelines Sections 15162, 15164, as well as 15168 and 15180.
- **Community Plan Exemption.** Based on the analysis conducted in this document, the 2016 Modified Project also qualifies for a community plan exemption. While revisions to the Planned Unit Development are required, the 2016 Modified Project is permitted in the zoning district where the project site is located, and is consistent with the bulk,

density, and land uses envisioned for the site. The analysis herein considers the analysis in the 2010 Oakland Housing Element Update EIR and 2014 Addendum for the evaluation of the housing components of the 2016 Modified Project, and further reconsiders the analysis in the 1998 LUTE EIR for the overall project. This CEQA Analysis concludes that the proposed project would not result in significant impacts that: (1) are peculiar to the project or project site; (2) were not identified as significant project-level, cumulative, or offsite effects in the 2008 Project EIR; or (3) were previously identified as significant effects, but are determined to have a more severe adverse impact than discussed in the EIR. Findings regarding the proposed project's consistency with the zoning are included as Attachment C to this document.

- **Qualified Infill Exemption.** The analysis conducted indicates that the 2016 Modified Project qualifies for a qualified infill exemption and is generally consistent with the required performance standards provided in CEQA Guidelines Appendix M, as evaluated in Table D-1 in Attachment D to this document. This CEQA Analysis supports that the 2016 Modified Project would not cause any new specific effects or more significant effects than previously identified in applicable planning level EIRs, and uniformly applicable development policies or standards (SCAs) would substantially mitigate the project's effects. The 2016 Modified Project is proposed on a previously developed site in downtown Oakland and is surrounded by urban uses. While revisions to the Planned Unit Development are required, the proposed project is consistent with the land use, density, building intensity, and applicable policies for the site. The analysis herein considers the analysis in the 2008 Project EIR; the 1998 LUTE EIR; and for the residential components of the 2016 Modified Project only, the 2010 Housing Element Update EIR and its 2014 Addendum.
- **Previous Program EIRs.** Overall, based on an examination of the analysis, findings, and conclusions of the 2008 Project EIR, as well as those of the 1998 LUTE EIR, the Redevelopment Plan EIR and the Housing Element Update EIR—all of which are as summarized in the CEQA Checklist in Section VII of this document—the potential environmental impacts associated with the Parcel B Project have been adequately analyzed and covered in prior Program EIRs. Therefore, no further review or analysis under CEQA is required.

Each of the above findings provides a separate and independent basis for CEQA compliance.

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Signature

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Date

## VII. CEQA CHECKLIST

### Overview

The analysis in this CEQA Checklist provides a summary of the potential environmental impacts that may result from approval and implementation of the MacArthur Station Project, specifically the Parcel B Project, as evaluated in the certified 2008 Project EIR.<sup>8</sup> The analysis in this CEQA Checklist also summarizes the impacts and findings of Program EIRs that covered, specifically or as part of the cumulative analyses, the environmental effects of the MacArthur Station Project encompassing the Parcel B Project and that are still applicable for the proposed project. As previously indicated, the Program EIRs are referred to collectively throughout this CEQA Analysis as “Previous CEQA Documents” and include the 1998 Land Use and Transportation Element EIR, the Redevelopment Plan for the Broadway/MacArthur/San Pablo Redevelopment Project EIR (Redevelopment Plan EIR) and for the housing components of the proposed project, the 2010 General Plan Housing Element Update EIR and 2014 Addendum. Given the timespan between the preparations of these EIRs, there are variations in the specific environmental topics addressed and significance criteria, however, as discussed above in Section III and throughout this Checklist, the overall environmental effects identified in each are largely the same; any notable differences are noted.

All mitigation measures, as modified herein, and SCAs identified for the 2016 Modified Project are presented in Attachment A to this document, which is incorporated by reference into this CEQA Analysis. Because SCAs are mandatory City requirements, the impact analysis for the proposed project assumes they will be imposed and implemented, which the Project Sponsor has agreed to, or ensure that, they will be complied with as part of the proposed Project. If this CEQA Checklist or its attachments inaccurately identifies or fails to list a mitigation measure or SCA, the applicability of that mitigation measure or SCA to the proposed project is not affected.

This CEQA Checklist hereby incorporates by reference the discussion and analysis of all potential environmental impact topics as presented in the certified 2008 Project EIR and the Program EIRs. The significance criteria from the 2008 Project EIR have been consolidated and abbreviated in this CEQA Checklist for administrative purposes; where appropriate, the significance criteria have been updated to reflect current City of Oakland significance criteria established after the 2008 Project EIR and that now apply to the proposed project.

This CEQA Checklist provides a determination of whether the proposed project would result in:

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<sup>8</sup> Reference to the “MacArthur Transit Village EIR” or the “2008 Project EIR” encompasses the Initial Study, Draft EIR, Final EIR, and each of three subsequent addendum for the MacArthur Station Project.

- Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents;
- Substantial Increase in Severity of Previously Identified Significant Impact in the Previous CEQA Documents; or
- New Significant Impact(s).

Where the severity of the impacts of the proposed project would be the same as or less than the severity of the impacts described in the Previous CEQA Documents, the checkbox for “Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents” is checked. If the checkbox for “Substantial Increase in Severity of Previously Identified Significant Impact in the Previous CEQA Documents” or “New Significant Impact” were to be checked, such a check box would indicate that there are significant impacts that are either:

- Peculiar to project or project site (pursuant to CEQA Guidelines Sections 15183 or 15183.3);
- Not identified in the previous 1998 LUTE EIR or Housing Element Update EIR (per CEQA Guidelines Sections 15183 or 15183.3), including off-site and cumulative impacts (per CEQA Guidelines Section 15183);
- Due to substantial changes in the project (per CEQA Guidelines Section 15162 and 15168);
- Due to substantial changes in circumstances under which the project will be undertaken (per CEQA Guidelines Sections 15162 and 15168); or
- Due to substantial new information not known at the time the Previous CEQA Documents were certified (per CEQA Guidelines Sections 15162, 15168, 15183, or 15183.3).

None of the aforementioned conditions were found for the proposed project, as demonstrated throughout the following CEQA Checklist and in its supporting attachments (Attachments B through D) that specifically describe how the proposed project meets the criteria and standards specified in the CEQA Guidelines sections identified above.



**AESTHETICS, SHADOW, AND WIND**

Would the project:	Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Have a substantial adverse effect on a public scenic vista; substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, located within a state or locally designated scenic highway; substantially degrade the existing visual character or quality of the site and its surroundings; or create a new source of substantial light or glare which would substantially and adversely affect day or nighttime views in the area;	■	□	□
b. Introduce landscape that would now or in the future cast substantial shadows on existing solar collectors (in conflict with California Public Resource Code sections 25980-25986); or cast shadow that substantially impairs the function of a building using passive solar heat collection, solar collectors for hot water heating, or photovoltaic solar collectors;	■	□	□
c. Cast shadow that substantially impairs the beneficial use of any public or quasi-public park, lawn, garden, or open space; or, cast shadow on an historical resource, as defined by CEQA Guidelines Section 15064.5(a), such that the shadow would materially impair the resource’s historic significance;	■	□	□
d. Require an exception (variance) to the policies and regulations in the General Plan, Planning Code, or Uniform Building Code, and the exception causes a fundamental conflict with policies and regulations in the General Plan, Planning Code, and Uniform Building Code addressing the provision of adequate light related to appropriate uses; or	■	□	□
e. Create winds that exceed 36 mph for more than one hour during daylight hours during the year. The wind analysis only needs to be done if the project’s height is 100 feet or greater (measured to the roof) and one of the following conditions exist: (a) the project is located adjacent to a substantial water body (i.e., Oakland Estuary, Lake Merritt or San Francisco Bay); or (b) the project is located in Downtown.	■	□	□

As described in Section IV, this CEQA Analysis does not consider aesthetics in determining the significance of project impacts under CEQA pursuant to CEQA Guidelines Section 21099(d). The City of Oakland recognizes that the public and decision makers nonetheless may be interested in information pertaining to the aesthetic effects of the proposed project and may desire that such information be provided as part of the environmental review process. Therefore, discussion regarding aesthetics effects of the 2016 Modified Project's is provided below, solely for informational purposes.

### **Project Analysis**

#### *Scenic Vistas, Scenic Resources, and Visual Character (Criterion 1.a)*

Visual quality (scenic vistas, scenic resources, visual character, and light and glare), was analyzed in each of the Program EIRs considered throughout this CEQA Analysis. The 1998 LUTE EIR, the 2010 Housing Element Update EIR and 2014 Addendum, and the Redevelopment Plan EIR found that the effects to visual quality would be less than significant. The Housing Element EIR cited applicable SCAs that would ensure the less-than-significant visual quality effects. The LUTE EIR identified mitigation measures that would reduce the potential effects to less than significant.

The 2008 Project EIR determined that potential impacts of the 2008 Project to visual quality would be less than significant; no mitigation measures were necessary. The 2008 Project EIR analysis was based on the 2008 Project which included buildings ranging from four to seven stories and 50 to 85 feet tall. Two of the parcels within the MacArthur Station site have been developed: the building on Parcel E (BART Garage) is 68 feet tall and the building on Parcel D (affordable housing) is 55 feet tall (plus mechanical). Parcel A and C are currently vacant and construction on these parcels is anticipated to begin before the end of 2017. While development has been completed on some parcels within the MacArthur Station project site, the conditions surrounding the site are similar to those identified in the 2008 Project EIR.

Development on Parcel B would include up to 402 dwelling units and up to 13,000 square feet of commercial space. The exterior of this residential tower component would include concrete, textured concrete, weathered metal cladding, and glass windows. The structure would also include terraces on stories 5, 15 and 25. Conceptual elevations have been included in this Addendum for informational purposes (see Figures 3a, 3b, 3c, 3d).

As described in the Project Description above, the Parcel B structure would have varied height. The tallest component would be approximately 25 stories: 240 feet tall at the highest occupied floor and 260 feet tall inclusive of mechanical structures. This would be 19 stories (and 175 feet) taller than the 2008 approved project. It should be noted, however, that a Tower alternative was evaluated in the 2008 Project EIR that included a 240-foot (23-story) tower. Table 7 shows the maximum height within the MacArthur Station project site between the 2008 Project, the 2008 Project Tower alternative, and the Modified 2016 Project.

**TABLE 7 PROPOSED PROJECT MAXIMUM HEIGHT**

	2008 Approved Project	2008 EIR Tower Alternative	2016 Proposed Modified Project	Difference between 2016 Proposed Modified and 2008 Approved Project
Maximum Height	85 feet	240 feet	260 feet <sup>a</sup>	175 feet

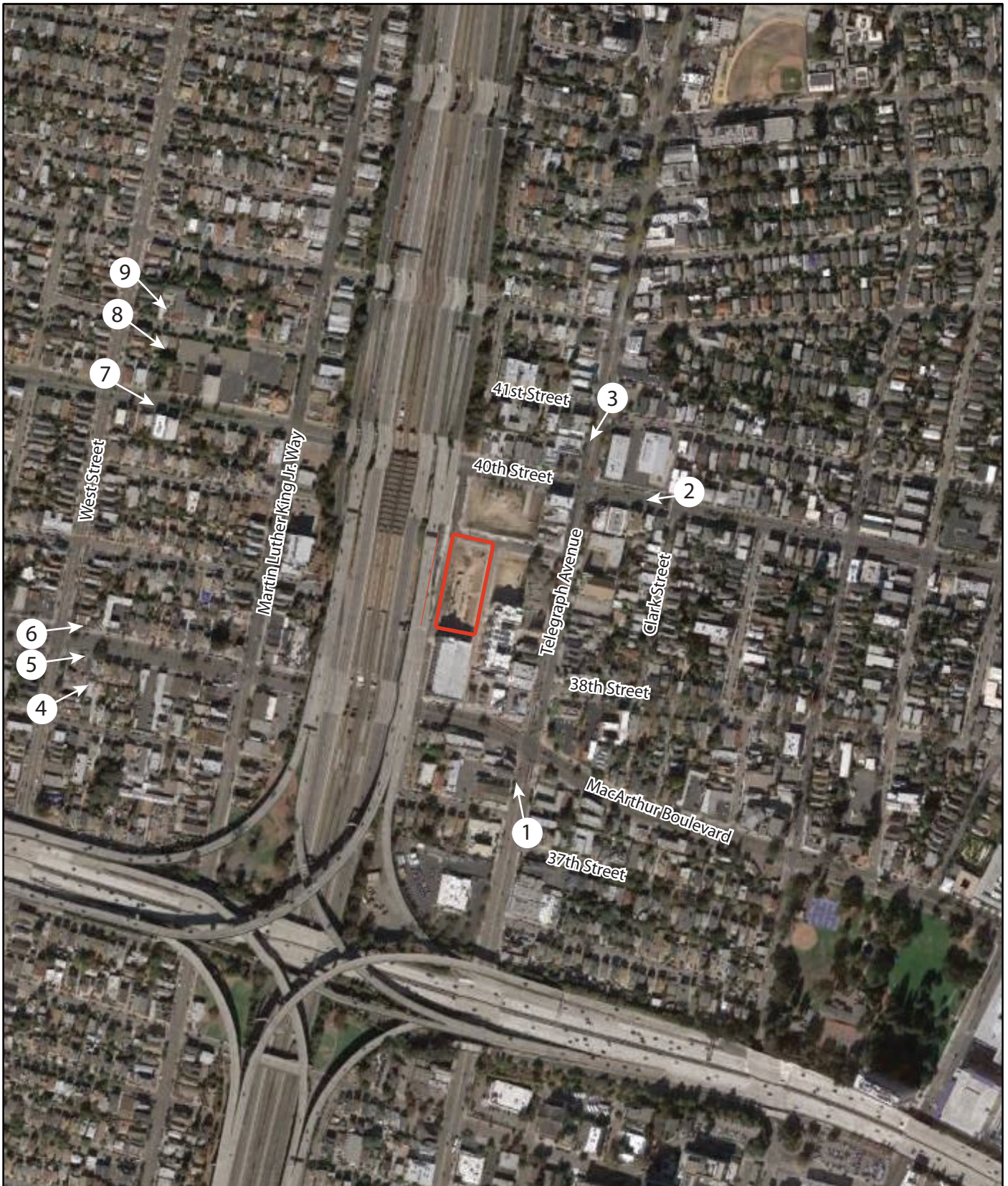
<sup>a</sup> 240 feet at the highest occupied floor.

The 2008 EIR Tower alternative included a 23-story tower on Parcel D and assumed that the entire MacArthur Station site would be developed with up to 868 residential units, 34,000 square feet of commercial space, and 7,500 square feet of community space. It was determined that this alternative would incrementally increase the magnitude of the project impacts, but would not result in any new significant impacts, beyond those identified for the 2008 project. This alternative also included analysis of two variants, one with full BART replacement parking and one with a Residential Parking Permit Program. The alternative and the two variants would not reduce or avoid any of the potentially significant or significant and unavoidable impacts of the Project. At the time the 2008 Project EIR was certified, this alternative was neither rejected nor approved. It was noted in the Findings document that in the future, the project sponsor may apply to the City to incorporate the alternative into the Project and the City would consider and process this revised application in accordance with standard procedures, with appropriate public notice before the City Planning Commission.

While the Parcel B Project would be significantly taller (175 feet taller) than the Parcel B building evaluated as part of the PUD/PDP in the original 2008 Project EIR, and thus more visible than the original 2008 Project, the Parcel B Project would not block significant portions of the views from adjacent vantage points, as is shown in the visual simulations included in Figures 5b through 5s; Figure 5a shows the visual simulation viewpoint locations. The structure would be taller than other structures in the immediate area, but would not block any vantage points to scenic features.

While the new affordable housing building and BART garage have been constructed on the MacArthur Station site, the visual conditions surrounding the project site are similar to those identified in the 2008 Project EIR. Further, the project site is located within an urban area of Oakland. Existing structures immediately adjacent to the Parcel B site include the BART Parking Garage (Parcel E) which is six stories, and the Affordable Housing Structure (Parcel D) which is five stories.





Source: Google Earth, Accessed July 2016, and Urban Planning Partners

Figure 5a

**MacArthur Station - Modified 2016 Project**

**Visual Simulation Viewpoint Map**

Viewpoint Legend	
1. View from 37th St & Telegraph Ave	6. View from West St & MacArthur Blvd
2. View from 40th St & Clarke St	7. View from 40th St & West St
3. View from 41st St & Telegraph Ave	8. View From 41st St & West St
4. View from 37th St & West St	9. View from West St between 41st St & 42nd St
5. View from West St between MacArthur Blvd & 37th St	





Source: Solomon Cordwell Buenz, 2016

## MacArthur Station - Modified 2016 Project

Figure 5b  
View 1 - Existing View from 37th Street and Telegraph Avenue



Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 5c  
View 1 - Simulated View of Project from 37th Street & Telegraph Avenue





Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 5d  
View 2 - Existing View from 40th Street & Clarke Street



Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 5e  
View 2 - Simulated View of Project from 40th Street & Clarke Street





Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 5f  
View 3 - Existing View from 41st Street & Telegraph Avenue





Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 5g  
View 3 - Simulated View of Project from 41st Street & Telegraph Avenue





Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 5h  
View 4 - Existing View from 37th Street & West Street





Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 5i  
View 4 - Simulated View of Project from 37th Street & West Street





Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

View 5 - Simulated View of Project from West Street between MacArthur Boulevard & 37th Street

Figure 5j





Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

View 5 - Simulated View of Project from West Street between MacArthur Boulevard & 37th Street

Figure 5k





Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 51  
View 6 - Existing View from West Street & MacArthur Boulevard





Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 5m  
View 6 - Simulated View of Project from West Street & MacArthur Boulevard





Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 5n

View 7 - Existing View of Project from 40th Street & West Street





Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 5o  
View 7 - Simulated View of Project from 40th Street & West Street





Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 5p

View 8 - Existing View of Project from 41st Street & West Street





Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 5q

View 8 - Simulated View of Project from 41st Street & West Street





Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 5r  
View 9 - Existing View of Project from West Street between 41st Street & 42nd Street





Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

View 9 - Simulated View of Project from West Street between 41st Street & 42nd Street

Figure 5s

A prominent visual element of the area is the Highway 24, which is elevated within this area of Oakland. This elevated portion of Highway 24 is of a similar height to the BART Parking Garage (5 to 6 stories).

Additionally, development on Parcel A and Parcel C, which has been approved by the City: the structure on Parcel A would be 3 to 5 stories, and the structure on Parcel C would be 5 stories. Other development within the immediate area is generally between 1 to 5 stories.

The General Plan designation for the project site and the area surrounding the MacArthur BART Station is Neighborhood Center Mixed Use and does not specify a height limit. The zoning of the site, S-15 Transit-Oriented Development Zones, includes a Commercial Corridor height limit of 90 feet.

While the Parcel B building would be taller than buildings in the immediate surrounding area of the project site, a multi-story residential structure would not be out of place near downtown Oakland or Emeryville, or within an area identified by the General Plan as a TOD. The project site was previously a BART surface parking lot and is currently a rough graded lot with no permanent structures or landscaping; implementation of MacArthur Station would allow for development in an urban area identified as an area for transit-oriented development and would not substantially degrade the visual character of the project site or surrounding area.

The 2016 Modified Project would be consistent with development anticipated in the General Plan and would meet the density identified for the project site.

While the 2008 Project EIR did identify that although views from the site extend to Downtown Oakland and surrounding urban development, these views are not identified as vistas or scenic resources in the General Plan, or by regulatory agencies with jurisdiction over the project site. Additionally, the 2008 Project EIR noted that views of the project site would be available from adjacent scenic highways.

The Parcel B Project would be substantially taller than the existing development in the area. However, the site is adjacent to the MacArthur BART station and State Route 24, which are elevated and the tallest portion of the Parcel B Project would be adjacent to these transportation facilities. Further, the project site is located within an urban area of Oakland. Development of the 2016 Modified Project would be required to comply with City of Oakland SCAs related to landscaping, street frontages, landscape maintenance, utility undergrounding, public right-of-way improvements, and lighting plans.

#### *Shadow (Criteria 1.b through 1.d)*

Except for the LUTE EIR, each of the Program EIRs found less-than-significant shadow effects, assuming incorporation of applicable SCAs. The LUTE EIR identified mitigation measures to reduce potential shadow effects to less-than-significant levels.

The 2008 Project EIR included a shadow analysis of the proposed project, and found the impact would be less than significant. The shadow analysis for the Tower alternative in the 2008 Project EIR found that the implementation of this alternative would minimally increase shade and shadow and wind impacts over those anticipated from the proposed project. Overall the shadow impacts on adjacent properties from this alternative would not be substantial as the majority of the shadows will be cast towards the freeway and onto the project site. Shadows created by the 2008 Project on December 22, winter solstice, would be the most extensive that would occur as a result this alternative. Because the existing shadow condition within and around the project site on this day is already significant, new shadows created by the project would minimally contribute to the existing shadow condition on this day and, as a result, would not be considered significant.

Shadow simulations were created for the 2016 Modified Project (see Figures 6a through 6i). The simulations show how the shadow cast by the proposed project would move throughout the day during three different times of the year (June 22, September 22, and December 22). The shadows simulations show both existing shadows, as well as cumulative shadow impacts.<sup>9</sup>

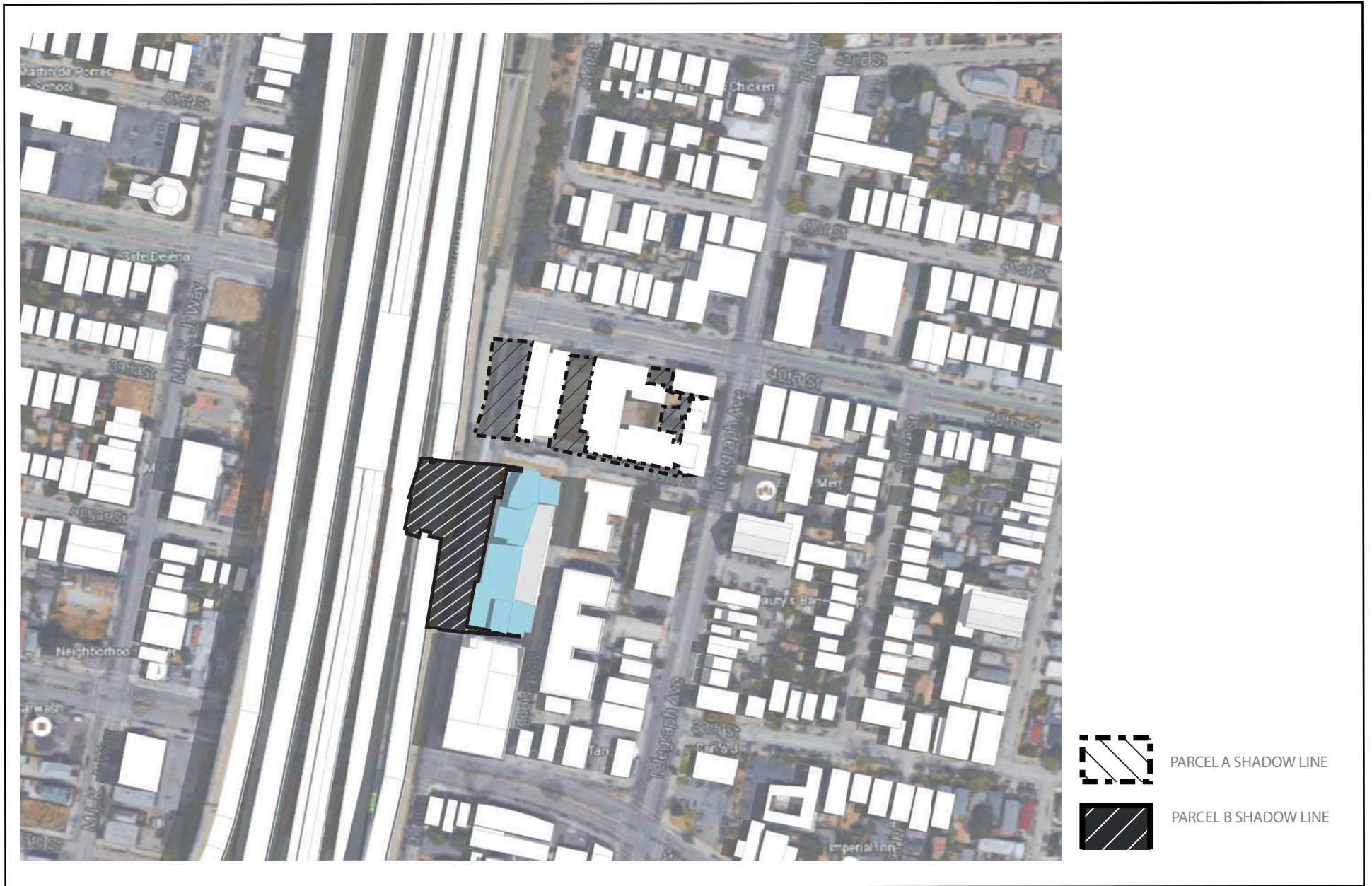
As shown in the shadow simulations, for the June 22 simulations, new shadows generated by the Parcel B building would fall on either Highway 24 or other buildings within the MacArthur Station site. The September 22 simulations would also cast new shadows on Highway 24 or other buildings within the MacArthur Station site. The December 22 simulations show new shadows cast by the Parcel B project would fall on adjacent Highway 24 or on the other buildings within the MacArthur Station project site, as well on buildings outside of the project site.

The December 22 shadow simulations show longer shadows cast by the Parcel B project. In the 9:00 AM shadow simulations, shadows would be cast to the northwest of the project site onto both Highway 24 and on structures located west of highway (north and east of the Martin Luther King Jr. Way and 40<sup>th</sup> Street intersection). While these shadows would be new shadows, they would be limited to the morning hours (the Noon simulations

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<sup>9</sup> Please note that one development, which has been approved but not developed, was not included in the cumulative shadow analysis. An application to develop 3884 Martin Luther King Jr. Way with two 6-story buildings was approved in 2006. This location is west of the project site and Highway 24, is of a similar height as the Highway 24 overpass, and is not expected to result in a significant cumulative shadow impact given its proposed height, distance from the project site, and its location adjacent to Highway 24.





Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 6a  
Shadow Simulations - June 22 - 9:00AM





Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 6b  
Shadow Simulations - June 22- 12:00PM



Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 6c  
Shadow Simulations - June 22- 3:00PM





Source: Solomon Cordwell Buenz, 2016

### MacArthur Station - Modified 2016 Project

Figure 6d  
Shadow Simulations - September 22- 9:00AM



Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 6e  
Shadow Simulations - September 22- 12:00PM



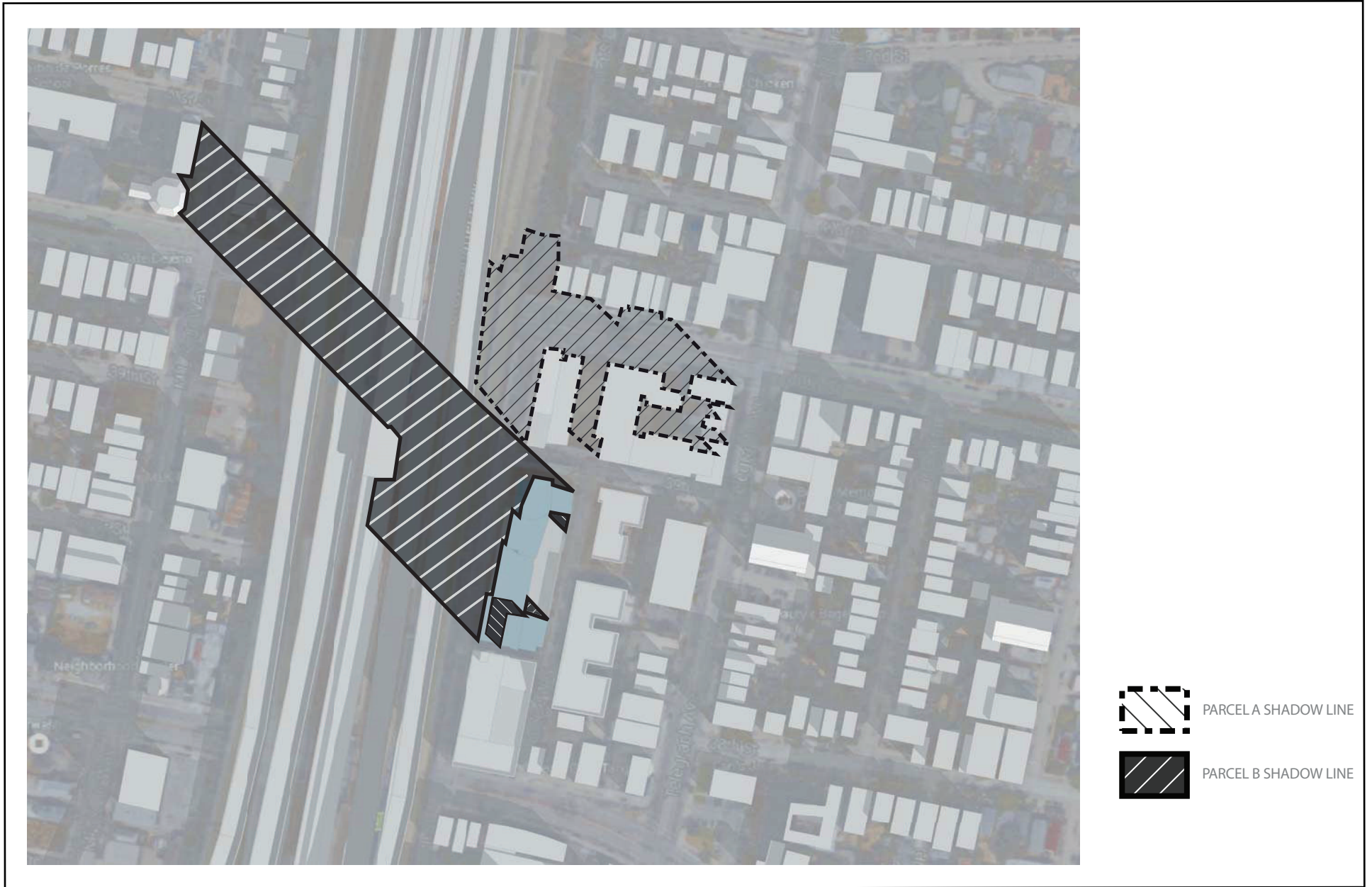


Source: Solomon Cordwell Buenz, 2016

**MacArthur Station - Modified 2016 Project**

Figure 6f  
Shadow Simulations - September 22- 3:00PM





Source: Solomon Cordwell Buenz, 2016

### MacArthur Station - Modified 2016 Project

Figure 6g  
Shadow Simulations - December 22- 9:00AM

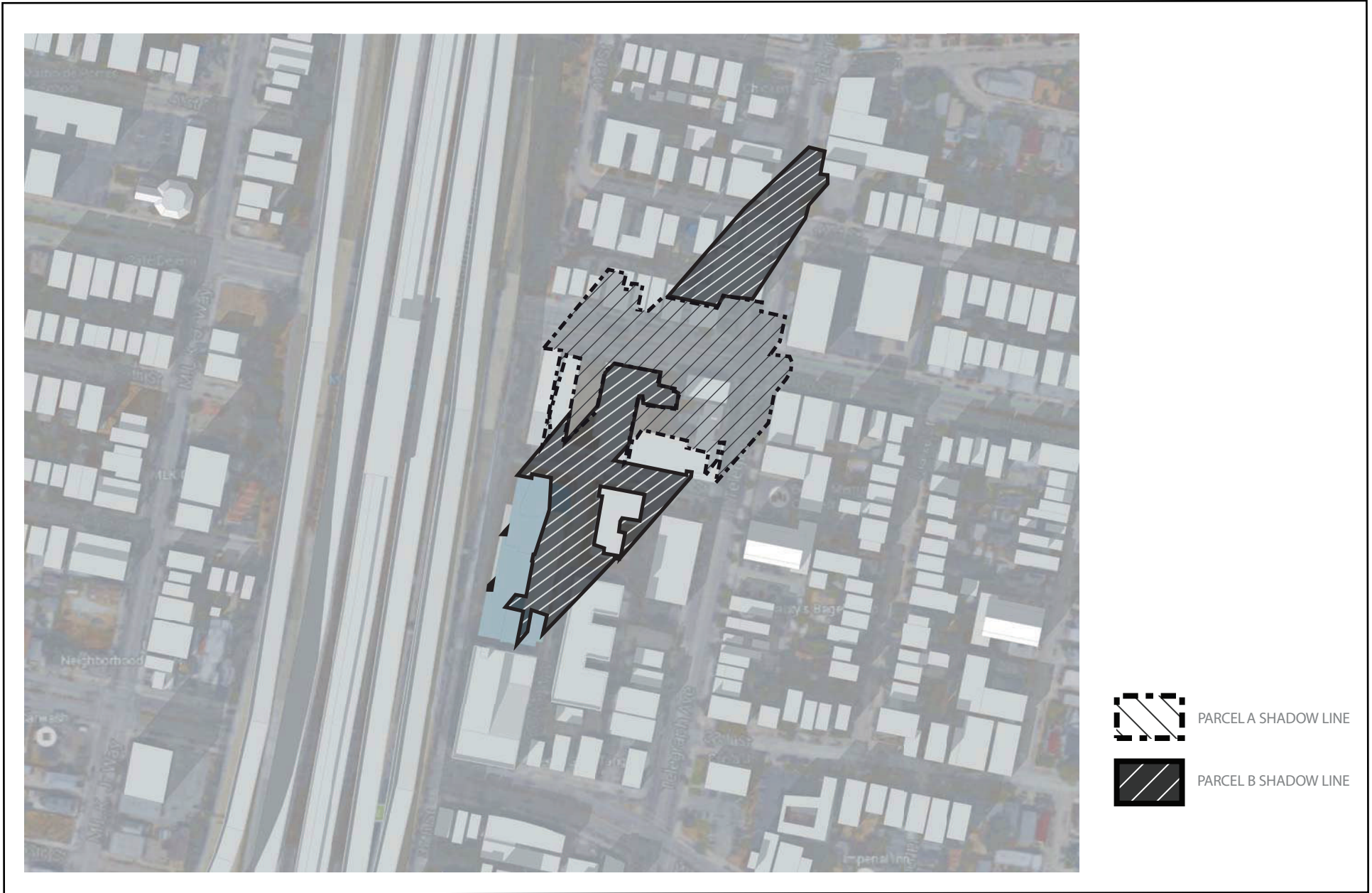


Source: Solomon Cordwell Buenz, 2016

### MacArthur Station - Modified 2016 Project

Figure 6h  
Shadow Simulations - December 22- 12:00PM





show the shadow no longer on these structures having moved to local streets) and during this time of the year. The 3:00 PM shadow simulations show that the shadow cast by the tower would fall on the MacArthur Station project site and on uses northeast of the site (Telegraph Avenue north of 40<sup>th</sup> Street). As with the December 9:00 AM simulation, these shadows would be limited to the afternoon hours during this time of the year.

Overall the shadow impacts on adjacent properties from the 2016 Modified Project would not be that substantial as the majority of the shadows would be cast towards the freeway and onto the project site. While the 2016 Modified Project would be significantly taller than the proposed Parcel B Building evaluated within the 2008 Project EIR, it should be noted that Parcel B is located within the center of the site (over 250 feet from 40<sup>th</sup> Street, Telegraph Avenue, or West MacArthur Boulevard), and much of the additional shadow cast by the additional height would fall on the freeway or on other parcels within the MacArthur Station site. Shadows created by the proposed project on December 22 (the day after the winter solstice) would be the most extensive; however, the winter solstice shadows would not be significant because the new shadows created by the project would minimally contribute to the existing shadow condition on this day and, as a result, would not be considered significant.

Additionally, while the proposed project would require revisions to the PUD, development on the 2016 Modified Project would not cause a fundamental conflict with policies and regulations in the General Plan, Planning Code, and Uniform Building Code addressing the provision of adequate light related to appropriate uses. The project site is not located adjacent to open space or other similar uses. The project site is located adjacent to a freeway, BART station, and other types of urban development in an area identified for transit oriented development.

#### *Wind (Criterion 1.e)*

Per the City of Oakland's CEQA Thresholds of Significance (2013), wind analysis need be done only for projects with height of 100 feet or greater (measured to the roof) and for which one of the following conditions exist: (a) the project is located adjacent to a substantial water body (i.e., Oakland Estuary, Lake Merritt or San Francisco Bay); or (b) the project is located in Downtown.<sup>10</sup> The proposed Parcel B project would exceed 100 feet in height, but is not located in the Downtown, and as a result, does not require wind analysis per the City's current CEQA Thresholds of Significance. However, a wind analysis has been prepared and its findings are summarized here as a non-CEQA informational item.

For the purposes of the wind study, past, present, and reasonably foreseeable future projects considered in this analysis include any proposed or approved development

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<sup>10</sup> Downtown is defined in the Land Use and Transportation Element of the General Plan (page 67) as the area generally bounded by West Grand Avenue to the north, Lake Merritt and Channel Park to the east, the Oakland Estuary to the south and I-980/Brush Street to the west.

projects within an approximately 0.3-mile radius of the project site, because these projects may have the potential to affect wind conditions at the project site. Projects approved or under construction within this radius considered in the cumulative analysis include: Parcels A and C-1, and a project approved at 3884 Martin Luther King Jr. Way.

As shown in Attachment H, the wind study evaluated 18 ground-level location points located along sidewalks and public rights-of-way in the vicinity of the proposed project. Under existing conditions, none of these locations exceeded the City's CEQA hazard wind threshold of winds exceeding 36 miles per hour for more than one hour during daylight hours during the year. The study initially evaluated wind conditions with implementation of the project with no landscaping under both existing conditions (Existing plus Proposed) and in the cumulative setting (Cumulative plus Proposed).

The study found that with implementation of the project under existing conditions, landscaping is needed to ensure that pedestrian wind levels do not exceed the hazard threshold at two points (points 3 and 15—see Figures 3b and 3e of Attachment H) at the corner of 39<sup>th</sup> Street and Walter Miles Way and at a third point (point 7) on the southwest corner of the project site. To evaluate the effectiveness of two landscape options being considered for the proposed project, the wind study evaluated two scenarios that each included a different landscape design (Landscape Option 1 + Canopy and Landscape Option 2) combined with the proposed project. Schematics of these two landscape options are included in Attachment H.

Wind speeds at points 3 and 15 in the public plaza area on the northwest side of the proposed project would be reduced below the threshold of significance with Landscape Option 2. At point 7 on the southwest corner, wind speeds remained above the threshold; however, this was because the implemented wind reduction measures were not incorporated near this location. Point 7 is located in the loading accessway at the south end of the site, a location where few if any pedestrians are expected to travel and where similar wind reduction measures would be difficult to implement due to the limited size of the area and the necessity for vehicular access at this location. For these reasons, installation of landscaping to reduce wind speeds in this area is not feasible or necessary.

Under cumulative conditions with nearby proposed projects, including the build out of the approved projects for Parcels A and C-1, implementation of either Landscape Option 1+ Canopy or Landscape Option 2 would ensure the wind speeds at all points except point 7, for reasons described above, are below the City's wind hazard threshold.

The following is a non-CEQA recommended condition of approval:

COA-WIND-1: Landscaping shall be installed with the proposed project per Landscape Option 2 prior to issuance of certificate of occupancy.

In addition to evaluating the project in regard to the CEQA wind threshold, Attachment H also evaluates the project against the Lawson Criteria, one of the most widely accepted sets of criteria for assessing the usability and comfort level, with respect to the wind environment, of different locations for various purposes (e.g., a walkway, an outdoor café). Location points 1-18 were assessed as comfortable for uses ranging from pedestrian sitting to business walking in all testing scenarios that included the proposed project (i.e., Existing plus Proposed, Cumulative plus Proposed, and both Existing plus Proposed and Cumulative plus Proposed with either Landscape Option 1 + Canopy or Landscape Option 2), except for point 7, which was rated uncomfortable. Detailed results of this evaluation can be found in Attachment H.

### **Conclusion**

Based on an examination of the analysis, findings, and conclusions of the 2008 Project EIR and the Program EIRs, implementation of the 2016 Modified Project would not substantially increase the severity of significant aesthetic impacts identified in the 2008 Project EIR or the Program EIRs, nor would it result in new significant impacts related to aesthetics, shadow or wind that were not identified in the 2008 Project EIR or the Program EIRs. The proposed project would be required to implement City of Oakland SCAs related to landscaping, street frontages, landscape maintenance, utility undergrounding, public right-of-way improvements, and lighting plans, as identified in Attachment A. For reference, these are: SCA-AES-1: Public Improvements (#11); SCA-AES-2: Graffiti Control (#16); SCA-AES-3: Landscape Plan (#17); SCA-AES-4: Lighting (#18); and SCA-UTIL-2: Underground Utilities (#75). Additionally, the project would be required to implement COA-WIND-1.



**AIR QUALITY**

Would the project:	Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. During project construction result in average daily emissions of 54 pounds per day of ROG, NOX, or PM <sub>2.5</sub> or 82 pounds per day of PM <sub>10</sub> ; during project operation result in average daily emissions of 54 pounds per day of ROG, NOX, or PM <sub>2.5</sub> , or 82 pounds per day of PM <sub>10</sub> ; result in maximum annual emissions of 10 tons per year of ROG, NOX, or PM <sub>2.5</sub> , or 15 tons per year of PM <sub>10</sub> .	■	□	□
b. For new sources of Toxic Air Contaminants (TACs), during either project construction or project operation expose sensitive receptors to substantial levels of TACs under project conditions resulting in an increase in cancer risk level greater than 10 in one million, (b) a noncancer risk (chronic or acute) hazard index greater than 1.0, or (c) an increase of annual average PM <sub>2.5</sub> of greater than 0.3 microgram per cubic meter; or, under cumulative conditions, resulting in (a) a cancer risk level greater than 100 in a million, (b) a noncancer risk (chronic or acute) hazard index greater than 10.0, or (c) annual average PM <sub>2.5</sub> of greater than 0.8 microgram per cubic meter; or expose new sensitive receptors to substantial ambient levels of Toxic Air Contaminants (TACs) resulting in (a) a cancer risk level greater than 100 in a million, (b) a noncancer risk (chronic or acute) hazard index greater than 10.0, or (c) annual average PM <sub>2.5</sub> of greater than 0.8 microgram per cubic meter.	■	□	□

For purposes of the quantitative modeling within this section, a larger number of units (502 units) was evaluated than is currently proposed by the project applicant (402 units) for the Parcel B project.<sup>11</sup>

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<sup>11</sup> Please note that transportation, air quality, and greenhouse gas analyses completed for this CEQA analysis considered up to 502 units and 10,000 square feet of retail as the analyses were completed prior to the project sponsor making a final determination regarding how many units the FDP for Parcel B would include. To be conservative and to provide a worst case analysis that assessed the maximum number of vehicle trips that could be potentially accommodated on the site without resulting in any new or more significant impacts than those identified in the MacArthur BART EIR, a maximum of 502 units was analyzed. In addition, the air quality

The 2008 Project EIR for the MacArthur Station project used thresholds of significance recommended by the Bay Area Air Quality Management District (BAAQMD) in the 1999 *BAAQMD CEQA Guidelines*.<sup>12</sup> Since information on the above mentioned air quality issues was known, or could have been known, when the 2008 EIR and other addenda were being prepared, it is not “new information” as specifically defined under CEQA. To analyze if the 2016 Modified Project would result in a new significant impact and/or a substantial increase in the severity of previously identified significant impacts, the current thresholds of significance adopted by the City of Oakland and the BAAQMD’s updated 2012 *CEQA Air Quality Guidelines*<sup>13</sup> were used to analyze air quality impacts.

### Project Analysis

#### *Criteria Pollutant Emissions (Criteria 2.a)*

The Redevelopment Plan EIR and the Housing Element EIR found that proposed development would be consistent with the BAAQMD’s *Bay Area Clean Air Plan*, which includes measures to reduce criteria pollutant emissions. The LUTE EIR identified mitigation measures to reduce the impact of criteria pollutant emissions from construction equipment and stationary sources to a less-than-significant level; however, the LUTE EIR found that increased criteria pollutant emissions from increased traffic, including reduced emissions after implementation of identified mitigation measures, would result in a significant and unavoidable impact.

The 2008 Project EIR quantified emissions of ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> during operation using the URBEMIS model, which has since be superseded by the California Emissions Estimator Model (CalEEMod). The emissions were below the BAAQMD’s 1999 thresholds of significance. Therefore, the 2008 Project EIR found that emissions of criteria pollutants from operations would have a less-than-significant impact on air quality standards. The 2008 Project EIR also found that construction emissions of criteria pollutants would be temporary and that implementation of the City’s SCAs for dust and exhaust control measures would reduce potential impacts to air quality standards to a less-than-significant level.

To be conservative, emissions of ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> were estimated for the maximum development scenario of the 2016 Modified Project that can be accommodated without exceeding the vehicle trip generation estimated in the 2008 Project EIR (see

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and greenhouse gas analysis included an additional 137 parking spaces than are currently proposed for the MacArthur Station site. The proposed FDP for Parcel B includes up to 402 units and up to 13,000 square feet of retail (the proposed building for Parcel B and its components are herein referred to as the Parcel B Project). Given this is 100 units less and only 3,000 square feet more of retail than what was analyzed in the transportation, air quality, and greenhouse gas analyses, these studies provide a worst case analysis and a revised analysis is not needed.

<sup>12</sup> BAAQMD, 1999. *BAAQMD CEQA Guidelines; Assessing the Air Quality Impacts of Project and Plans*. December.

<sup>13</sup> BAAQMD, 2012a. *California Environmental Quality Act Air Quality Guidelines*. May.

Section 13, *Transportation and Circulation*). The BAAQMD recommends using the most current version of CalEEMod to estimate construction and operational emissions of pollutants for a proposed project.

Table 8 summarizes the currently proposed land uses for the proposed project by parcel. The primary data inputs used to estimate emissions associated with the proposed project in CalEEMod are summarized in Table 9. A copy of the CalEEMod report for the proposed project, which summarizes the input parameters, assumptions, and findings, is included in Attachment E.

**TABLE 8 SUMMARY OF THE 2016 MODIFIED PROJECT LAND USES BY PARCEL**

Land-Use Type	Units	Parcel A	Parcel B	Parcel C	Affordable Housing (Parcel D)	BART Parking Garage (Parcel E)	Total
Residential	Dwelling Units	287	402	96	90	0	875
Retail	Square Feet	22,300	13,000	1,200	0	5,200	41,700
Community Center	Square Feet	0	0	5,000	0	0	5,000
Parking Garage	Spaces	254	260	69	90	483	1,156

Sources: MacArthur Transit Village Project Final EIR, July 2008, certified via *Oakland City Council Resolution No. 81422*; Oakland City Council Resolutions for Stage 1/Parcel E FDP (*No. 83292*), Stage 2/Parcel D FDP (*No. 83365*), Stage 3 and 4/Parcels A and C-1 (*No. 85603*).

**TABLE 9 SUMMARY OF LAND-USE INPUT PARAMETERS FOR CALEEMOD**

Land-Use Type	CalEEMod Land-Use Type	Units	Unit Amount <sup>a</sup>
Residential	Apartments High Rise	Dwelling Units	980
Retail	Regional Shopping Center	Square Feet	33,500
Community Center	Library	Square Feet	5,000
Parking Garage	Enclosed Parking with Elevator	Spaces	1,293

<sup>a</sup> To be conservative, emissions of ROG, NOx, PM<sub>10</sub>, and PM<sub>2.5</sub> were estimated for the maximum development scenario of the 2016 Modified Project that can be accommodated without exceeding the vehicle trip generation estimated in the 2008 Project EIR (see Section 13, *Transportation and Circulation*). The BAAQMD recommends using the most current version of CalEEMod to estimate construction and operational emissions of pollutants for a proposed project.  
 Source: CalEEMod (Attachment E).



### Construction-Phase Criteria Pollutant Emissions

To determine if the changes proposed under the 2016 Modified Project would result in a substantial increase in the severity of impacts previously identified by the 2008 Project EIR, the general site conditions that were present at the time of preparation of the 2008 Project EIR analysis (e.g., existing buildings, parking lots, and vegetation) were used to evaluate criteria pollutant emissions during construction of the 2016 Modified Project.

Construction activities that would generate criteria pollutant emissions of concern include demolition, site preparation, grading, building construction, paving, and applications of architectural coatings. The primary criteria pollutant emissions of concern during construction activities are fugitive dust ( $PM_{10}$  and  $PM_{2.5}$ ) from earth-moving activities and ROG, NOx,  $PM_{10}$ , and  $PM_{2.5}$  from the exhaust of off-road construction equipment and on-road vehicles. While emissions of fugitive dust  $PM_{2.5}$  and  $PM_{10}$  are a common concern, these emissions would be controlled by implementation of the dust control measures required under SCA-AIR-1: Construction-Related Air Pollution Controls (Dust and Equipment Emissions) (#19). Emissions of ROG, NOx, and exhaust  $PM_{10}$  and  $PM_{2.5}$  during construction of the proposed project were estimated using the CalEEMod input parameters summarized in Table 9 and the following assumptions regarding hauling trips:

- To estimate emissions from off-site hauling trips during demolition activities, it was conservatively assumed that up to 8,225 tons of debris would be exported from the entire MacArthur Station site.
- To estimate emissions from off-site hauling trips during grading activities, it was conservatively assumed that up to 100,000 cubic yards of soils would be exported from the entire MacArthur Station site.

Since development of the 2016 Modified Project would include more than 240 multi-family units, demolition permits, extensive soil transport (more than 10,000 cubic yards), and/or simultaneous occurrence of more than two construction phases (e.g., grading and building construction occurring simultaneously), the City's enhanced control measures for construction emissions described under SCA-AIR-1: Construction-Related Air Pollution Controls (Dust and Equipment Emissions) (#19), would apply. In accordance with SCA-AIR-1, the evaluation assumed that all off-road diesel equipment would be equipped with Tier 4 engines, which have incorporated best available control technologies into the engine design to reduce ROG, NOx,  $PM_{10}$ , and  $PM_{2.5}$  emissions.

Based on the size and type of development at the entire MacArthur Station site, CalEEMod estimated a hypothetical construction scenario for the entire 2016 Modified Project that would require 605 working days over a construction period of about 2.3 years. The total emissions estimated during construction were averaged over the total working days and compared to the City's thresholds of significance in Table 10. The estimated unmitigated emissions for ROG, NOx, and exhaust  $PM_{2.5}$  and  $PM_{10}$  both before and after applying the required best available control technologies under SCA-AIR-1: Construction-Related Air

**TABLE 10 CRITERIA POLLUTANT EMISSIONS DURING CONSTRUCTION OF THE 2016 MODIFIED PROJECT**

Emissions Scenario	ROG	NOx	Exhaust PM <sub>10</sub>	Exhaust PM <sub>2.5</sub>	
	Units	lb/day	lb/day	lb/day	
Emissions without SCA-19		40	49	2.0	1.8
Emissions with SCA-19		37	23	0.3	0.3
City of Oakland’s Thresholds		54	54	82	54
Threshold Exceedance?		No	No	No	No

Notes: lb/day = pounds per day  
 Source: CalEEMod (Attachment E).

Pollution Controls (Dust and Equipment Emissions) (#19) were below the applicable thresholds and, therefore, would have a less-than-significant impact on air quality standards.

In addition to SCA-AIR-1:-Construction-Related Air Pollution Controls (Dust and Equipment Emissions) (#19), the 2016 Modified Project must comply with all applicable laws and regulations regarding demolition of existing structures on the project site that could potentially contain asbestos materials as described under SCA-AIR-4: Asbestos in Structures (#23). Since naturally-occurring asbestos has not been mapped in the vicinity of the proposed project, the dust mitigation measures for asbestos described under the City’s Naturally-Occurring Asbestos SCA (#24), would not apply to the project. With implementation of SCA-AIR-1 and SCA-AIR-4: Asbestos in Structures (#23), construction of the 2016 Modified Project would not substantially increase the severity of significant impacts identified in the 2008 Project EIR, nor would it result in new significant impacts related to criteria pollutant emissions that were not identified in the 2008 Project EIR.

Operation-Phase Criteria Pollutant Emissions

Common criteria pollutant emissions of concern during the operational phase of the 2016 Modified Project would include ROG, NOx, and exhaust PM<sub>10</sub> and PM<sub>2.5</sub>. These emissions would primarily be from mobile sources (i.e., vehicle trips). Other common sources of emissions include energy (e.g., electricity and natural gas) and area sources (e.g., consumer products, architectural coatings, and landscape maintenance equipment). Emissions from mobile, energy, and area sources during operation of the 2016 Modified Project were estimated using the CalEEMod input parameters summarized in Table 9 and the following assumptions regarding vehicle trip rates:

- The average weekday vehicle trip rates were adjusted for each land used based on the findings of a Preliminary Transportation Assessment for the proposed project (see Section 13, *Transportation and Circulation*).
- The average weekend vehicle trip rates for each land use that were calculated by CalEEMod using default trip generation rates from the *Institute of Transportation Engineers Trip Generation Handbook* were reduced by 43 percent in accordance with the City of Oakland *Transportation Impact Study Guidelines* (see Section 13, *Transportation and Circulation*).

The 2013 California Building Energy Efficiency Standards (Title 24, Part 6) adopted by the City of Oakland use 25 percent less energy for lighting, heating, cooling, ventilation, and water heating than the default 2008 Standards used in CalEEMod. This energy use reduction was included in the analysis to estimate unmitigated emissions of criteria pollutants for the 2016 Mitigated Project. The City of Oakland has also adopted Green Building Ordinance for private development projects. In accordance with the Green Building Ordinance, the 2016 Mitigated Project must implement mandatory measures from the statewide CALGreen Code and complete a Green Building Compliance Checklist (e.g., LEED or GreenPoint Rater).<sup>14</sup> While implementation of the CALGreen Code could potentially result in additional reductions in energy use, these potential reductions are not known at this time and therefore were not included in the analysis to estimate unmitigated emissions of criteria pollutants for the 2016 Mitigated Project.

The California Building Code requires a backup generator for elevators in buildings that are five or more stories in height (about 70 feet). The proposed apartment building on Parcels A, B, and C would be required to install a backup generator. Emissions from three new Tier 4 diesel generators were estimated in accordance with methodologies presented in the CARB's (2010) *Off-road Simulation Model and Summary of Off-Road Emissions Inventory Update* and using data derived from the CARB's *Off-Road Emissions Inventory Model* (OFFROAD2011). It was assumed that a maximum 1,000 horsepower diesel generator would be used for non-emergency operation up to 50 hours per year (for routine testing and maintenance) at each parcel. The total ROG, NO<sub>x</sub>, and exhaust PM<sub>10</sub> and PM<sub>2.5</sub> emissions from the backup generators were calculated using the following equation:

$$\text{Emissions in pounds} = (\text{Pop})(\text{HP}_{\text{Ave}})(\text{LF})(\text{Hr})(\text{EF}) \left( \frac{1 \text{ pound}}{454 \text{ grams}} \right)$$

Where:

Pop = Population of equipment

$\text{HP}_{\text{Ave}}$  = Maximum-rated average horse power (hp)

<sup>14</sup> Rating system and checklist determined by City of Oakland Planning Department based on square footage of each land use.



LF = Load factor  
 Hr = total operating hours (per equipment)  
 EF = Emissions factor (grams/hp-hour)

The input parameters and assumptions used for estimated emissions from the new backup diesel generators are included in Attachment E.

The estimated average annual and daily emissions during the operational phase of the 2016 Modified Project are compared to the City’s thresholds of significance in Table 11. The estimated unmitigated emissions for ROG, NOx, and exhaust PM<sub>10</sub> and PM<sub>2.5</sub> were below the City’s thresholds of significance and, therefore, would have a less-than-significant impact on air quality standards. As a result, operation of the 2016 Modified Project would not substantially increase the severity of significant impacts identified in the 2008 Project EIR, nor would it result in new significant impacts related to criteria pollutant emissions during construction that were not identified in the 2008 Project EIR.

**TABLE 11 CRITERIA POLLUTANT EMISSIONS DURING OPERATION OF THE 2016 MODIFIED PROJECT**

Emissions Scenario	ROG		Exhaust NOx		Exhaust PM <sub>10</sub>		Exhaust PM <sub>2.5</sub>		
	Units	ton/yr	ton/yr	ton/yr	ton/yr	lb/day	lb/day	lb/day	
Area		7.20	0.08	0.04	0.04	39.46	0.46	0.22	0.22
Energy		0.04	0.33	0.03	0.03	0.21	1.81	0.15	0.15
Mobile		2.03	5.32	0.08	0.07	11.12	29.16	0.43	0.40
Generators		0.01	0.37	<0.01	<0.01	0.05	2.03	0.01	0.01
Total Project Emissions		9.3	6.1	0.1	0.1	50.8	33.5	0.8	0.8
City of Oakland’s Thresholds		10	10	15	10	54	54	82	54
Threshold Exceedance?		No	No	No	No	No	No	No	No

Notes: ton/yr = tons per year; lb/day = pounds per day  
 Source: CalEEMod and manual calculations (Attachment E).

*Toxic Air Contaminants (Criteria II.b)*

The Redevelopment Plan EIR and the Housing Element EIR found that proposed development would be consistent with the BAAQMD’s Bay Area Clean Air Plan, which includes measures to reduce TAC emissions; however, the exposure of new receptors to existing sources of gaseous TACs would result in a significant and unavoidable impact

because no measures or techniques are available to reduce this impact. The LUTE EIR didn't analyze potential impacts from TAC emissions during construction and operation.

The 2008 Project EIR found that health risk impacts to nearby sensitive receptors would be less than significant because operations would not generate substantial TAC emissions and construction emissions are temporary and would be reduced with implementation of the City's SCAs for dust and exhaust control measures. The 2011 Addendum included a health risk assessment (HRA) to further evaluate potential impacts from construction exhaust emissions to workers and patients at the Surgery Center located at 3875 Telegraph Avenue. The HRA determined that excess cancer risk would be less than 10 in one million and the acute and chronic non-cancer hazard index (HI) would be less than 1.0; therefore, the construction emissions would also have a less than significant impact on nearby sensitive receptors.

The 2008 Project EIR prepared a risk assessment to evaluate potential impacts to future site receptors from exposure to vehicle exhaust from Interstate 580, State Route 24, and Telegraph Avenue. The risk assessment determined that the future residents would not be exposed to significant levels of TACs and, therefore, the impact would be less than significant.

#### Generation of Toxic Air Contaminants

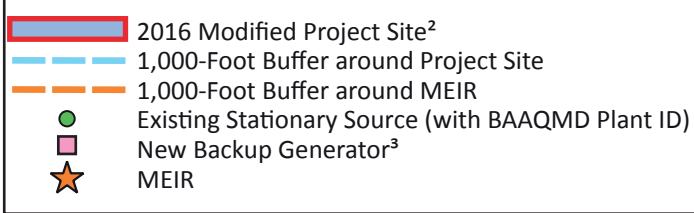
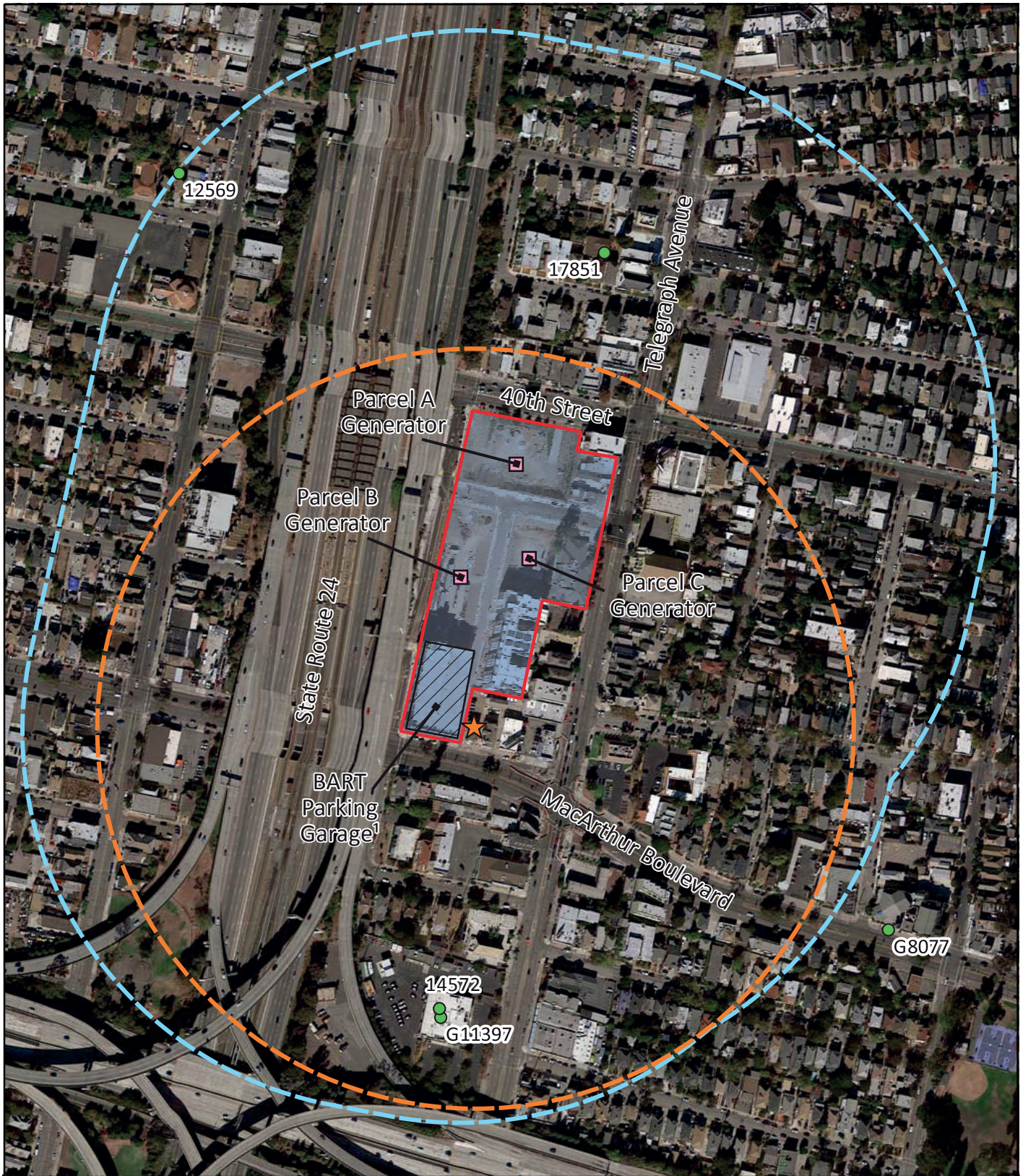
The BAAQMD recommends evaluating the potential impacts of project TAC emissions to sensitive receptors located within 1,000 feet of the project. Based on the City's thresholds, significant impacts to sensitive receptors from TAC emissions would result under project conditions resulting in an increase in cancer risk level greater than 10 in one million, an acute or chronic non-cancer HI greater than 1.0, or an ambient  $PM_{2.5}$  concentration greater than an annual average of 0.3 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ). Under cumulative conditions, significant impacts to sensitive receptors include a cancer risk level greater than 100 in 1 million, an acute or chronic HI greater than 10.0, or an ambient  $PM_{2.5}$  concentration greater than an annual average of 0.8  $\mu\text{g}/\text{m}^3$ .

The closest sensitive receptors to the 2016 Modified Project are residential homes and apartments located to the southeast as shown in Figure 7. Based on current conditions, sensitive receptors on the 2016 Modified Project site include the affordable housing development located at Parcel D and the Surgery Center located at 3875 Telegraph Avenue. Additionally, construction of residential uses on Parcel A and Parcel C are anticipated to begin soon.

#### Construction-Phase TAC Emissions

TAC emissions during construction are primarily diesel particulate matter (DPM) from off-road construction equipment, worker vehicles, vendor trucks, and hauling trucks. To conservatively analyze potential health risks to existing and future sensitive receptors on and/or near the 2016 Modified Project site for DPM emissions during construction, the





Base: Google Earth Pro, 2016.  
 Notes: BAAQMD = Bay Area Air Quality Management District  
 MEIR = maximum exposed individual resident  
<sup>1</sup> No residential receptors located at BART Parking Garage.  
<sup>2</sup> 2016 Modified Project Site boundary is approximate and excludes the BART Plaza.  
<sup>3</sup> Potential backup generators assumed to be located near the center roof of future high-rise buildings on Parcels A, B, and C.

Source: BASELINE Environmental Consulting, 2016

**MacArthur Station - Modified 2016 Project**

Figure 7  
TAC Sources and Sensitive Receptors



health risks to the maximally exposed receptor were used for DPM emissions under the maximum construction scenario, which would be construction of the entire 2016 Modified Project site. Furthermore, some of the sensitive receptors phased into portions of the 2016 Modified Project over time will be required to incorporate high-efficiency filtration into the building design in accordance with COA 24, Air Filtration/Ventilation System, (included in Conditions of Approval for the Final PDP approvals) which will substantially reduce potential health risks associated with DPM emissions from construction.

In accordance with the Office of Environmental Health Hazard Assessment (OEHHA),<sup>15</sup> concentrations of PM<sub>10</sub> were used as a basis for calculating health risks associated with DPM. The annual average concentrations of DPM and PM<sub>2.5</sub> concentrations were estimated within 1,000 feet of the proposed project using the U.S. Environmental Protection Agency's Industrial Source Complex Short Term (ISCST3) air dispersion model. The input parameters and assumptions used for estimating on-site emission rates are included in Attachment E.

The dispersion of DPM emissions from worker vehicles, vendor trucks, and hauling trucks travelling along roadways on or adjacent to the project site was performed in accordance with guidance from the BAAQMD.<sup>16</sup> The DPM emissions from these mobile sources primarily occur off-site during round trips that range between about 14.6 to 40 miles on average; therefore, it was conservatively assumed that 5 percent of the total DPM emissions estimated in CalEEMod from mobile sources would occur on or adjacent the project site as vehicles travel about 0.2 miles between the intersection of 40<sup>th</sup> Street and MacArthur BART Access Road and the intersection of Turquoise Way and MacArthur Boulevard (see Attachment E). Since the BAAQMD does not have guidance for modeling the dispersion of DPM emissions from off-road construction equipment, dispersion modeling of off-road equipment was performed in accordance with guidance from the Sacramento Metropolitan Air Quality Management District.<sup>17</sup> Daily emissions from off-road construction equipment and on-road vehicles were assumed to occur over an 8-hour period between 8:00 a.m. and 4:00 p.m. between Monday and Friday.

A uniform grid of receptors spaced 10 meters (32.8 feet) apart with receptor heights of 1.5 meters (4.9 feet) was encompassed around the construction area as a means of developing isopleths (i.e., concentration contours) that illustrate the dispersion pattern of the source emissions. The ISCST3 model input parameters included one year of BAAQMD meteorological data from the Oakland STP station located about 3.5 miles west of the

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<sup>15</sup> OEHHA, 2015. *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. February.

<sup>16</sup> BAAQMD, 2012b. *Recommended Methods for Screening and Modeling Local Risks and Hazards*. May.

<sup>17</sup> Sacramento Metropolitan Air Quality Management District, 2009. *Guide to Air Quality Assessment in Sacramento County*. Revised June 2015.

project site. The input parameters and results of the ISCST3 model are included in Attachment E.

In accordance with guidance from the BAAQMD<sup>18</sup> and OEHHA,<sup>19</sup> a HRA was conducted to calculate the incremental increase in cancer risk and chronic HI to sensitive receptors from on-site DPM emissions during construction. The acute HI for DPM was not calculated because an acute reference exposure level has not been approved by OEHHA and the California Air Resources Board, and the BAAQMD does not recommend analysis of acute non-cancer health hazards from construction activity. The annual average concentration of DPM at the maximally exposed individual resident (MEIR) was used to conservatively assess potential health risks to nearby sensitive receptors (Figure 7).

The incremental increase in cancer risk from on-site DPM emissions during construction was assessed for a child exposed to DPM at the MEIR location beginning from the third trimester of pregnancy until about the age of 2. This exposure scenario represents the most sensitive individual who could be exposed to adverse air quality conditions in the vicinity of the project site. It was conservatively assumed that the child would be continuously exposed to annual average concentrations of DPM over the entire duration of project construction (about 2.3 years). The input parameters and results of the HRA are included in Attachment E.

Estimates of the health risks from DPM and PM<sub>2.5</sub> concentrations posed by the 2016 Modified Project to the MEIR during construction, both before and after applying best available control technologies required under SCA-AIR-1:-Construction-Related Air Pollution Controls (Dust and Equipment Emissions) (#19), are summarized and compared to the City's thresholds in Table 12. Without implementation of SCA-AIR-1, the estimated chronic HI for DPM and annual average PM<sub>2.5</sub> concentration from unmitigated construction emissions were below the City's thresholds; however, the estimated excess cancer risk from unmitigated DPM emissions were above the City's threshold. With implementation of SCA-AIR-1, the estimated excess cancer risk for DPM from construction was reduced below the City's thresholds of significance. Therefore, the project's emissions of DPM and PM<sub>2.5</sub> during construction would have a less-than-significant impact on nearby sensitive receptors. Overall, construction of the 2016 Modified Project would not substantially increase the severity of significant impacts identified in the 2008 Project EIR, nor would it result in new significant impacts related to the generation of TAC emissions that were not identified in the 2008 Project EIR.

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<sup>18</sup> BAAQMD, 2012b. *Recommended Methods for Screening and Modeling Local Risks and Hazards*. May.

<sup>19</sup> OEHHA, 2015. *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. February.

**TABLE 12 HEALTH RISKS TO MEIR FROM TAC EMISSIONS DURING CONSTRUCTION OF THE 2016 MODIFIED PROJECT**

Emissions Scenario	Diesel Particulate Matter		Exhaust PM <sub>2.5</sub>
	Cancer Risk (per million)	Chronic Hazard Index	Annual Average Concentration (µg/m <sup>3</sup> )
MEIR without SCA-AIR-1	<b>21.5</b>	0.01	0.07
MEIR with SCA-AIR-1	3.8	<0.01	0.01
City of Oakland's Thresholds	10	1.0	0.3

Notes: µg/m<sup>3</sup> = micrograms per cubic meter

**Bold font and shading** indicates that the value exceeds the City's threshold of significance.

Source: See Attachment E.

#### Operation-Phase TAC Emissions

As discussed above, backup generators would potentially be needed for the buildings on Parcels A, B, and C. The primary TAC of concern associated with generators is DPM. To operate a backup generator, a project would be required to comply with the BAAQMD's permit requirements for a stationary source. In accordance with BAAQMD's Regulation 2-5 (New Source Review of Toxic Air Contaminants), the BAAQMD does not issue permits for stationary sources that would result in an excess cancer risk greater than 10 in one million or an acute or chronic HI greater than 1.0. These health standards are also enforced through SCA-AIR-3: Stationary Sources of Air Pollution (Toxic Air Contaminants) (#21).

Based on the estimated emissions from new backup generators (Table 11 and Attachment E), the BAAQMD's *Risk and Hazards Emissions Screening Calculator (Beta Version)*<sup>20</sup> was used to estimate the screening-level health risks values for cancer risk, chronic HI, and annual average PM<sub>2.5</sub> concentrations from each generator. The calculator applies similar methods used to establish emission threshold levels for TACs in the BAAQMD's Regulation 2-5. The conservative screening-level health risks to sensitive receptors associated with operation of one backup generator for the Parcel B Project is summarized in Table 13.

Since a backup generator would not be introduced by the Parcel B Project, or any other development included in the 2016 Modified Project, that poses a health risk greater than the City's project-level thresholds of significance, this impact would be less-than-significant. As a result, operation of the 2016 Modified Project would not substantially

<sup>20</sup> BAAQMD, 2016. *Risk and Hazards Emissions Screening Calculator (Beta Version)*.



**TABLE 13 SCREENING-LEVEL HEALTH RISKS TO SENSITIVE RECEPTORS FROM DPM EMISSIONS DURING OPERATION OF A NEW BACKUP GENERATOR AT THE PARCEL B PROJECT**

Emissions Scenario	Diesel Particulate Matter		Exhaust PM <sub>2.5</sub>
	Cancer Risk (per million)	Chronic Hazard Index	Annual Average Concentration (µg/m <sup>3</sup> )
New Backup Generator	5.1	<0.01	<0.01
City of Oakland's Thresholds	10	1.0	0.3
Threshold Exceedance?	No	No	No

Notes: µg/m<sup>3</sup> = micrograms per cubic meter

Source: BAAQMD, 2016. *Risk and Hazards Emissions Screening Calculator (Beta Version)*.

increase the severity of significant impacts identified in the 2008 Project EIR, nor would it result in new significant impacts related to the generation of TAC emissions that were not identified in the 2008 Project EIR.

**Cumulative TAC Emissions**

The City of Oakland has adopted cumulative thresholds of significance to evaluate the cumulative health risks to nearby sensitive receptors from a proposed project and existing sources of TACs. The 2016 Modified Project would generate TAC emissions during construction and during the operation of potential backup diesel generators for buildings on Parcels A, B, and C. The BAAQMD’s *Diesel Internal Combustion Engine Distance Multiplier Tool*<sup>21</sup> was used to estimate health risks at the MEIR to the southeast from operation of the backup generators (Table 14 and Figure 7).

The BAAQMD recommends using their online screening tools to evaluate existing TAC emissions from stationary and mobile sources within 1,000 feet of the site. The screening tools provide conservative estimates of how much existing TAC sources would contribute to cancer risk, HI, and/or PM<sub>2.5</sub> concentrations in a community. Existing sources of TAC emissions within 1,000 feet of the MEIR include two stationary sources and four mobile sources (Table 14 and Figure 7). Health risk screening values at the MEIR from the stationary sources were determined using the BAAQMD’s *Stationary Source Screening Analysis Tool*<sup>22</sup> and *Diesel Internal Combustion Engine Distance Multiplier Tool*.<sup>23</sup> The screening values for one of the stationary sources was updated based on information provided by BAAQMD (BAAQMD Plant G11397 on Table 14 and Figure 7). The health risk

<sup>21</sup> BAAQMD, 2012c. *Diesel Internal Combustion Engine Distance Multiplier Tool*. June 13.

<sup>22</sup> BAAQMD, 2012d. *Stationary Source Screening Analysis Tool*. May 30.

<sup>23</sup> BAAQMD, 2012c. *Diesel Internal Combustion Engine Distance Multiplier Tool*. June 13.

**TABLE 14 SUMMARY OF CUMULATIVE HEALTH RISKS TO MEIR**

Source	Distance from MEIR (Feet)	Cancer Risk (per million)	Chronic Hazard Index	PM <sub>2.5</sub> Concentration (µg/m <sup>3</sup> )
<b>Proposed Project Construction</b>				
Emissions without SCA-AIR-1	30	21.5	0.01	0.07
Emissions with SCA-AIR-1	30	3.8	<0.01	0.01
<b>New Backup Generators<sup>a</sup></b>				
Parcel A	700	0.4	<0.01	<0.01
Parcel B	400	0.8	<0.01	<0.01
Parcel C	465	0.7	<0.01	<0.01
<b>Existing Stationary Sources</b>				
California Highway Patrol (BAAQMD Plant 14572)	722	<0.1	<0.01	<0.01
California Highway Patrol (BAAQMD Plant G11397)	755	1.13	0.01	<0.01
<b>Existing Mobile Sources</b>				
State Route 24	330	22.4	0.02	0.22
MacArthur Boulevard (15,520 AADT)	65	9.1	NA	0.18
Telegraph Avenue (28,130 AADT)	225	4.9	NA	0.09
40 <sup>th</sup> Street (16,005 AADT)	845	0.8	NA	0.01
<b>Cumulative Health Risks Without SCA-AIR-1</b>		61.8	0.04	0.57
<b>Cumulative Health Risks With SCA-AIR-1</b>		44.1	0.03	0.51
<b>City of Oakland's Cumulative Thresholds</b>		100	10.0	0.8
<b>Threshold Exceedance?</b>		No	No	No

Notes: µg/m<sup>3</sup> = micrograms per cubic meter; NA = not available

<sup>a</sup> Screening-level health risk values for potential generators estimated using BAAQMD's *Risk and Hazards Emissions Screening Calculator (Beta Version)* and adjusted at the MEIR using the BAAQMD's *Diesel Internal Combustion Engine Distance Multiplier Tool*.

Sources: Health risk screening values derived from the BAAQMD's online Tools and Methodologies. <http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools>. Accessed May 2016. Average annual daily traffic (AADT) volumes reported by Kalibrate Technologies (2016).

screening values at the MEIR from the mobile sources, which include State Route 24 and three major roadways,<sup>24</sup> were estimated using the BAAQMD's *Highway Screening Analysis Tool*<sup>25</sup> and *Roadway Screening Analysis Calculator*.<sup>26</sup> The major roadways were identified using 2015 traffic counts forecasted in Alameda County by Kalibrate Technologies.<sup>27</sup>

Estimates of the cumulative health risks from TAC emissions posed by construction of the 2016 Modified Project, operation of potential backup generators, and existing stationary and mobile sources to the MEIR are summarized and compared to the City's cumulative thresholds in Table 14. The excess cancer risk and chronic HI from DPM emissions and annual average PM<sub>2.5</sub> concentrations at the MEIR were below the City's cumulative thresholds both before and after applying best available control technologies during construction under SCA-AIR-1:-Construction-Related Air Pollution Controls (Dust and Equipment Emissions) (#19). Therefore, the cumulative impact to nearby sensitive receptors from TAC emissions during construction and operation of the 2016 Modified Project would be less than significant. Overall, construction and operation of the 2016 Modified Project would not substantially increase the cumulative severity of significant impacts identified in the 2008 Project EIR, nor would it result in new significant impacts related to the generation of TAC emissions that were not identified in the 2008 Project EIR.

#### *Exposure to Toxic Air Contaminants*

Future residents on the project site could be exposed to existing and reasonably foreseeable future sources of TAC emissions. While CEQA does not require the analysis or mitigation of potential effects the existing environment may have on a project (with certain exceptions), an analysis of the potential effects existing TAC sources may have on the future receptors at the project site was performed to provide information to the public and decision-makers. The health risks posed to the closest residential receptor on the project site to each TAC source were considered to conservatively analyze cumulative health risks to all future receptors on the site. The City of Oakland has adopted cumulative thresholds of significance for evaluating potential impacts to future receptors.

The approach for assessing the cumulative health risks to future sensitive receptors on the project site was the same as the methods described above to determine potential health risks to existing sensitive receptors. Existing sources of TAC emissions identified within 1,000 feet of the proposed project included four stationary sources and four mobile sources (Table 15 and Figure 7). The screening values for one of the stationary sources (BAAQMD Plant G11397 on Table 15 and Figure 7), which wasn't previously

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<sup>24</sup> "Major roadways" have an average annual daily traffic volume greater than 10,000 vehicles per day.

<sup>25</sup> BAAQMD, 2011b. *Highway Screening Analysis Tool*. 6-foot elevation reference. April 29.

<sup>26</sup> BAAQMD, 2015. *Roadway Screening Analysis Calculator*. April 16.

<sup>27</sup> Kalibrate Technologies, 2016. *Current Year Estimates TrafficMetrix Data*. Comma-separated value file of 2015 average annual daily traffic counts estimated in Alameda County.



**TABLE 15 SUMMARY OF CUMULATIVE HEALTH RISKS TO THE 2016 MODIFIED PROJECT**

Source	Distance from Project (Feet)	Cancer Risk (per million)	Chronic Hazard Index	PM <sub>2.5</sub> Concentration (µg/m <sup>3</sup> )
<b>New Backup Generators<sup>a</sup></b>				
Parcel A	0	5.1	<0.01	0.01
Parcel B	0	5.1	<0.01	0.01
Parcel C	0	5.1	<0.01	0.01
<b>Existing Stationary Sources</b>				
California Highway Patrol (BAAQMD Plant 14572)	700	<0.1	<0.01	<0.01
California Highway Patrol (BAAQMD Plant G11397)	725	1.1	0.01	<0.01
Lithograph Reproductions, Inc. (BAAQMD Plant 12569)	980	<0.1	<0.01	<0.01
Magic Touch Cleaners (BAAQMD Plant 17851)	470	18.7	0.05	<0.01
<b>Existing Mobile Sources</b>				
State Route 24	140	19.0	0.02	0.16
MacArthur Boulevard (15,520 AADT)	170	5.5	NA	0.11
Telegraph Avenue (28,130 AADT)	30	16.4	NA	0.29
40 <sup>th</sup> Street (16,005 AADT)	20	10.4	NA	0.21
<b>Cumulative Health Risks</b>		86.6	0.08	0.79
<b>City of Oakland's Cumulative Thresholds</b>		100	10.0	0.8
<b>Threshold Exceedance?</b>		No	No	No

Notes: µg/m<sup>3</sup> = micrograms per cubic meter; NA = not available

<sup>a</sup> Screening-level health risk values for potential generators estimated using BAAQMD's *Risk and Hazards Emissions Screening Calculator (Beta Version)*.

Sources: Health risk screening values derived from the BAAQMD's online Tools and Methodologies.

<http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools>. Accessed May 2016. Average annual daily traffic (AADT) volumes reported by Kalibrate Technologies, 2016.

identified within 1,000 feet of the MEIR, was updated based on information provided by BAAQMD. In addition to existing TAC sources, potential backup diesel generators for buildings on Parcels A, B, and C were included in the analysis.

As shown in Table 15, the estimated excess cancer risk and chronic HI from DPM emissions and annual average PM<sub>2.5</sub> concentrations at the project site from operation of potential backup generators on the project site and existing stationary and mobile sources of TACs within 1,000 feet of the proposed project would be less than the City's cumulative threshold of significance. Therefore, the 2016 Modified Project would not be required to implement health risk reduction measures under SCA-AIR-2: Exposure to Air Pollution (Toxic Air Contaminants) (#20) and the potential health impacts to new receptors at the project site would be less than significant. Furthermore, proposed truck loading docks for commercial land uses are required to be located as far from nearby sensitive receptors as feasible under SCA-AIR-3: Stationary Sources of Air Pollution (Toxic Air Contaminants) (#21). Overall, siting new receptors on the project site would not substantially increase the severity of significant impacts identified in the 2008 Project EIR, nor would it result in new significant impacts related to TAC exposures that were not identified in the 2008 Project EIR.

### **Conclusions**

Based on an examination of the analysis and the findings and conclusions of the 2008 Project EIR, implementation of the 2016 Modified Project (including the Parcel B Project) would not substantially increase the severity of significant impacts identified in the 2008 Project EIR, nor would it result in new significant impacts related to construction and operational air pollutant emissions that were not identified in the 2008 Project EIR. No Mitigation Measures are required. Several SCA would be applicable including: SCA-AIR-1:- Construction-Related Air Pollution Controls (Dust and Equipment Emissions) (#19); SCA-AIR-2: Exposure to Air Pollution (Toxic Air Contaminants) (#20), SCA-AIR-3: Stationary Sources of Air Pollution (Toxic Air Contaminants) (#21), and SCA-AIR-4: Asbestos in Structures (#23), and SCA-AIR-5: Truck-Related Risk Reduction Measures (Toxic Air Contaminants) (#22). These SCAs are included in Attachment A.

**BIOLOGICAL RESOURCES**

	Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
<p>Would the project:</p>			
<p>a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;</p>	■	□	□
<p>Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;</p>	■	□	□
<p>Have a substantial adverse effect on federally protected wetlands (as defined by Section 404 of the Clean Water Act) or state protected wetlands, through direct removal, filling, hydrological interruption, or other means;</p>	■	□	□
<p>Substantially interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;</p>	■	□	□
<p>b. Fundamentally conflict with the City of Oakland Tree Protection Ordinance (Oakland Municipal Code [OMC] Chapter 12.36) by removal of protected trees under certain circumstances; or</p>	■	□	□
<p>Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect biological resources.</p>	■	□	□

**Project Analysis**

As noted in the 2008 Project EIR, the project site is located within a developed area, the majority of which is covered with impervious surfaces. Wildlife and botanical resources present within the project site are adapted to disturbed, urban conditions and would not be adversely affected by implementation of the proposed project.

**Conclusion**

Based on an examination of the analysis, findings, and conclusions of the 2008 Project EIR and the Program EIRs considered in this analysis, implementation of the 2016 Modified Project would not substantially increase the severity of significant impacts identified in the

2008 Project EIR or the previously mentioned Program EIRs. Nor would the 2016 Modified Project result in new significant impacts related to biological resources that were not identified in other Program EIRs. The 2008 Project EIR did not identify any mitigation measures related to biological resources, and none would be needed for the implementation of the 2016 Modified Project. Several SCA would be applicable including: SCA-BIO-1: Tree Removal During Bird Breeding Season (#26); and SCA-BIO-2: Tree Permit (#27).



**CULTURAL RESOURCES**

Would the project:	Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents	Substantial Increase in Severity of Impact Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Cause a substantial adverse change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5. Specifically, a substantial adverse change includes physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be “materially impaired.” The significance of an historical resource is “materially impaired” when a project demolishes or materially alters, in an adverse manner, those physical characteristics of the resource that convey its historical significance <u>and</u> that justify its inclusion on, or eligibility for inclusion on an historical resource list (including the California Register of Historical Resources, the National Register of Historic Places, Local Register, or historical resources survey form (DPR Form 523) with a rating of 1-5);	■	□	□
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5;	■	□	□
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or	■	□	□
d. Disturb any human remains, including those interred outside of formal cemeteries.	■	□	□

**Project Analysis**

*Historical Resources (Criterion 4.a)*

The Initial Study for the Redevelopment Plan EIR noted that the Redevelopment Plan will not result in the direct alteration of significant historic and architectural resources. However, subsequent development projects proposed within the Redevelopment area could result in these types of impacts. The Plan encourages the redevelopment and rehabilitation of existing buildings within the Plan area, many of which may have historic, cultural or architectural Significance. However, mitigation of any potential impacts would be provided through implementation of existing policies contained within the Historic Preservation Element of the General Plan, the LUTE, the design review processes utilized by the City and through other existing City codes and regulations. In addition, subsequent development projects proposed within the project area will need to ensure that any prehistoric or historic resources discovered during development or excavation for a subsequent project are processed in compliance with existing standard regulations

regarding preservation or documentation of such remains. Thus, the Redevelopment Plan would result in less-than-significant impacts on archaeological, historic or cultural resources and no mitigation measures were identified.

The LUTE EIR also identified mitigation measures to address the potentially significant impacts to historic resources; however, the identified mitigation measures, which included amending the Zoning Regulations to incorporate new preservation regulations and incentives, as well as developing and adopting design guidelines for Landmarks and Preservation Districts, would reduce the impact to less than significant. The Housing Element EIR identifies City of Oakland SCAs pertaining to historic resources, and finds a less-than-significant impact.

The 2008 Project EIR found that no historical resources exist on the project site. While the 2016 Modified Project will change the overall setting and configuration of the neighborhood adjacent to the historical building, these effects will not result in significant new alterations to the historical values of the existing urban streetscape.

The Parcel B project site does not have existing permanent structures. Development of the 2016 Modified Project, like the 2008 Project, would not result in significant alterations to the historical values of the existing urban streetscape. Changes in land use and design of the 2016 Modified Project, compared to those discussed in the 2008 Project EIR or the Program EIRs considered in this analysis, would not result in new, or new or substantially more severe impacts than were identified in the 2008 Project EIR or the Program EIRs.

*Archaeological and Paleontological Resources and Human Remains (Criteria 4.b through 4.d)*

Each of the Program EIRs considered in this analysis found that the effects to archaeological and paleontological resources and human remains would be less than significant. The LUTE EIR identified mitigation measures would reduce the effects to archaeological resources to less than significant.

The 2008 Project EIR identified City SCAs that would ensure that potential paleontological and human remains impacts would be reduced to a less-than-significant level. The Pleistocene sediments that underlie the project area are sensitive for the occurrence of significant, nonrenewable paleontological resources. Additionally, while the 2016 Modified Project is not anticipated to disturb human remains, the possibility of encountering human remains during ground disturbing activities cannot be ruled out.

The previous analysis included in the 2008 Project EIR acknowledged the potential for discovery of archaeological and paleontological resources and/or human remains during construction and excavation on the project site. The applicable City of Oakland SCAs would ensure that archaeological resources are recovered and that appropriate procedures are followed in the event of accidental discovery; would require a qualified paleontologist to document a discovery and that procedures be followed in the event of a

discovery, and would ensure that the appropriate procedures for handling and identifying human remains are followed. Adherence to the applicable City of Oakland SCAs would reduce potential risks of impact to these resources to less than significant.

### **Conclusion**

Based on an examination of the analysis, findings, and conclusions of the 2008 Project EIR and the Program EIRs considered throughout this analysis, implementation of the 2016 Modified Project would not substantially increase the severity of significant impacts identified in the 2008 Project EIR or the other Program EIRs, nor would it result in new significant impacts related to cultural resources that were not identified in the 2008 EIR or the other Program EIRs. The 2016 Modified Project would not result in impacts to historical resources. Further, the 2016 Modified Project would implement City of Oakland SCAs to address the accidental discovery of archeological and paleontological resources and human remains, identified in Attachment A to this document. For reference, these are SCA-CUL-1: Archeological and Paleontological Resources – Discovery During Construction (#29) and SCA-CUL-2: Human Remains – Discovery During Construction (#31).

**GEOLOGY, SOILS, AND GEOHAZARDS**

Would the project:	Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Expose people or structures to substantial risk of loss, injury, or death involving: <ul style="list-style-type: none"> <li>▪ Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map or Seismic Hazards Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;</li> <li>▪ Strong seismic ground shaking;</li> <li>▪ Seismic-related ground failure, including liquefaction, lateral spreading, subsidence, collapse; or</li> <li>▪ Landslides.</li> </ul>	■	□	□
b. Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007, as it may be revised), creating substantial risks to life or property; result in substantial soil erosion or loss of topsoil, creating substantial risks to life, property, or creeks/waterways.	■	□	□

**Project Analysis**

Each of the Program EIRs considered in this analysis found that the effects to geology, soils, and geohazards would be less than significant. No mitigation measures were necessary with adherence to goals, policies and actions identified in the LUTE.

The 2008 Project EIR found that the potential geology, soils and geohazards impacts would be less than significant with implementation of the applicable SCAs. The 2016 Modified Project would not be expected to expose people or structures to substantial risk of loss, injury or death from rupture of a known earthquake fault as delineated by the State Geologist, as the site is not located within an active or potentially active fault zone as defined by the Alquist-Priolo Earthquake Fault Zoning Act. Compliance with the City SCAs reduces the potential hazards associated with seismic activity to a less-than-significant level. Seismic hazards cannot be completely eliminated even with site-specific geotechnical investigation and advanced building practices; however, the level of exposure to seismic hazards is not anticipated to be so great as to pose people or structures to substantial risk of loss, injury, or death as a result it is not considered significant.

As noted in the 2008 Project EIR, the possible presence of fill and the required mitigations for project design must be included as part of the discussion of settlement and



differential settlement in the required soils investigation and design-level geotechnical investigation, in accordance with the requirements of the City's Geology and Soils SCAs. Under the 2016 Modified Project, surface soils at the site may be removed as part of the foundation excavation for the proposed multi-story structures. Outside the perimeter of the major area of excavation, the native soils underlying portions of the project site may exhibit high shrink/swell characteristics. These materials could experience expansion and contraction in response to the amount of moisture present. Structural damage, warping, and cracking of pavements and other infrastructure, and rupture of utility lines may occur; however, these conditions and recommended geotechnical precautionary measures must be incorporated into the design-level geotechnical investigation in accordance with the requirements of the City's SCAs requiring that the investigation determine final design parameters for the walls, foundations, foundation slabs, surrounding related improvements, and infrastructure (utilities, roadways, parking lots, and sidewalks).

Regional mapping by ABAG and the State of California indicates moderate susceptibility to liquefaction within the project site. In addition, the preliminary geotechnical evaluation notes that the site subsurface has lenses of sandy soil that may be subject to liquefaction. As noted in the 2008 Project EIR, these conditions must be addressed and adequate geotechnical solutions incorporated in the site-specific design-level geotechnical investigation as required under the City's SCAs requiring that the investigation include a site-specific, design level, landslide or liquefaction geotechnical investigation for each construction site.

The current City of Oakland SCAs require the project applicant's preparation and submittal of an erosion control plan and landscaping plans to address erosion during and after construction. In addition to the requirements of the grading permit, adherence to existing City of Oakland SCAs would ensure that development of the 2016 Modified Project would minimize erosion and sedimentation during all phases of the project through installation of project landscaping and storm drainage facilities, both of which shall be designed to meet applicable regulations.

### **Conclusion**

Based on an examination of the analysis, findings, and conclusions of the 2008 Project EIR and the Program EIRs considered in this analysis, implementation of the 2016 Modified Project would not substantially increase the severity of significant impacts identified in the 2008 Project EIR or the other Program EIRs, nor would it result in new significant impacts related to geology, soils, and geohazards that were not identified in the 2008 Project EIR or the other Program EIRs. The 2016 Modified Project would implement City of Oakland SCAs that incorporate the regulatory requirements to address soil erosion and sedimentation control in particular, as well as City of Oakland SCAs to address other potential seismic and geotechnical hazards, as identified in Attachment A to this document. For reference, these are: SCA-GEO-1: Construction-Related Permit(s) (#33); SCA-

GEO-2: Soils Report (#34); SCA-GEO-3: Seismic Hazards Zone (Landslide/Liquefaction) (#36).

**GREENHOUSE GAS AND CLIMATE CHANGE**

Would the project:	Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, specifically: <ul style="list-style-type: none"> <li data-bbox="297 632 771 716">▪ For a project involving a stationary source, produce total emissions of more than 10,000 metric tons of CO<sub>2</sub>e annually.</li> <li data-bbox="297 722 771 1123">▪ For a project involving a land use development, produce total emissions of more than 1,100 metric tons of CO<sub>2</sub>e annually AND more than 4.6 metric tons of CO<sub>2</sub>e per service population annually. The service population includes both the residents and the employees of the project. The project’s impact would be considered significant if the emissions exceed BOTH the 1,100 metric tons threshold and the 4.6 metric tons threshold. Accordingly, the impact would be considered less than significant if the project’s emissions are below EITHER of these thresholds.</li> </ul>	■	□	□
b. Fundamentally conflict with applicable plan, policy, or regulation adopted for the purposes of reducing greenhouse gas emissions.	■	□	□

For purposes of the quantitative modeling within this section, a larger number of units (502 units) was evaluated than is currently proposed by the project applicant (402 units) for the Parcel B project.<sup>28</sup>

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<sup>28</sup> Please note that transportation, air quality, and greenhouse gas analyses completed for this CEQA analysis considered up to 502 units and 10,000 square feet of retail as the analyses were completed prior to the project sponsor making a final determination regarding how many units the FDP for Parcel B would include. To be conservative and to provide a worst case analysis that assessed the maximum number of vehicle trips that could be potentially accommodated on the site without resulting in any new or more significant impacts than those identified in the MacArthur BART EIR, a maximum of 502 units was analyzed. In addition, the air quality and greenhouse gas analysis included an additional 137 parking spaces than are currently proposed for the MacArthur Station site. The proposed FDP for Parcel B includes up to 402 units and up to 13,000 square feet of retail (the proposed building for Parcel B and its components are herein referred to as the Parcel B Project). Given this is 100 units less and only 3,000 square feet more of retail than what was analyzed in the transportation, air quality, and greenhouse gas analyses, these studies provide a worst case analysis and a revised analysis is not needed.

## Project Analysis

Since the certification of the 2008 Project EIR, BAAQMD has revised its CEQA thresholds with respect to air quality and greenhouse gas. Due to a legal challenge to these thresholds, BAAQMD in 2014 withdrew its recommendation that lead agencies use these thresholds for project level greenhouse gas CEQA analysis, and they are therefore no longer appropriate to apply to the analysis of greenhouse gas emissions caused by the 2016 Modified Project. Further, even if the BAAQMD CEQA thresholds for greenhouse gas were still in effect, they were expressly not retroactive, as BAAQMD's policy was to only apply the new thresholds to projects for which a notice of preparation is published, or environmental analysis begins, after June 2, 2010 (the effective date of the thresholds). So at no point did the BAAQMD CEQA thresholds regarding greenhouse gas apply to the MacArthur Station Project.

As described under Section 2, *Air Quality*, the City of Oakland has adopted quantitative thresholds of significance recommended in the BAAQMD's 2011 *CEQA Air Quality Guidelines*<sup>29</sup> to evaluate potential environmental impacts from GHG emissions. These thresholds were designed to ensure compliance with the State's AB 32 GHG reduction goals. The 2008 Project EIR did not use thresholds of significance because neither the BAAQMD nor the City of Oakland had adopted thresholds to analyze potential impacts from GHG emissions at that time.

The BAAQMD and City of Oakland CEQA thresholds regarding greenhouse gas, and the information used to help develop these thresholds, do not represent "new information" as specifically defined under CEQA. The potential environmental impacts of greenhouse gas were known or could have been known when the 2008 Project EIR was prepared and certified. As a result, application of the BAAQMD and City of Oakland CEQA Guidelines and Thresholds for greenhouse gas to the 2016 Modified Project is not required. This is consistent with the First District Court of Appeal's ruling in *Concerned Dublin Citizens v. City of Dublin*, 214 Cal.App.4th 1301 (2013).

However, an analysis of the 2016 Modified Project has been conducted to provide more information to the public and decision-makers, and in the interest of being conservative. The recent thresholds of significance adopted by the City of Oakland were used. Thus, although the analysis in this CEQA Checklist evaluates climate change and greenhouse gas emissions, there is no resulting significant CEQA impact. Nevertheless, the City will impose its SCAs, as applicable.

### *Previous EIR Conclusions*

The Redevelopment Plan EIR, certified in 2000, did not evaluate Greenhouse Gas Emissions. The 2010 Housing Element EIR and 2014 Addendum included GHG emissions

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<sup>29</sup> BAAQMD, 2011. *California Environmental Quality Act Air Quality Guidelines*. May.



and impacts analyses, as the EIR was prepared after both former Governor Schwarzenegger's 2005 Executive Order S-3-05 that sets forth a series of target dates by which statewide emissions of GHGs need to be progressively reduced as well as California's landmark Assembly Bill 32 in 2006. The Housing Element EIR identified less-than-significant impacts with the incorporation of numerous applicable City of Oakland SCAs. No mitigation measures were necessary.

The 2008 Project EIR quantified emissions of CO<sub>2</sub>e during operation using the URBEMIS model, which has since been superseded by the California Emissions Estimator Model (CalEEMod). While quantified thresholds of significance had not been adopted for comparison at the time of the 2008 Project EIR analysis, the 2008 Project EIR determined that there would be no significant impacts related to GHG emissions and climate change because the project's characteristics and design features would help implement GHG reduction strategies identified under AB 32.

*Greenhouse Gas Emissions Generation (Criteria 6.a)*

The BAAQMD recommends using the most current version of CalEEMod to estimate construction and operational emissions of GHGs for a proposed project. CalEEMod utilizes widely accepted models for emission estimates combined with appropriate default data for a variety of land-use projects that can be used if site-specific information is not available. To be conservative, GHG emissions were estimated for the maximum development scenario of the 2016 Modified Project that can be accommodated without exceeding the vehicle trip generation estimated in the 2008 Project EIR (see Section 13, *Transportation and Circulation*).

Table 16 summarizes the currently proposed land uses for the 2016 Modified Project by parcel. The primary data inputs used to estimate emissions associated with the 2016 Modified Project in CalEEMod are summarized in Table 16. A copy of the CalEEMod report for the proposed project, which summarizes the input parameters, assumptions, and findings, is included in Attachment E.

The general site conditions that were present at the time of preparation of the 2008 Project EIR analysis (e.g., existing buildings, parking lots, and vegetation) were used to evaluate GHG emissions during construction of the proposed project. Emissions of GHGs during project construction and operation were estimated using the CalEEMod input parameters summarized in Table 17 and the following information:

- To estimate emissions from off-site hauling trips during demolition activities, it was assumed that up to 8,225 tons of debris would be exported from the entire MacArthur Station site.
- To estimate emissions from off-site hauling trips during grading activities, it was assumed that up to 100,000 cubic yards of soils would be exported from the entire MacArthur Station site.

**TABLE 16 SUMMARY OF THE 2016 MODIFIED PROJECT LAND USES BY PARCEL**

Land-Use Type	Units	Parcel A	Parcel B	Parcel C	Affordable Housing (Parcel D)	BART Parking Garage (Parcel E)	Total
Residential	Dwelling Units	287	402	96	90	0	875
Retail	Square Feet	22,300	13,000	1,200	0	5,200	41,700
Community Center	Square Feet	0	0	5,000	0	0	5,000
Parking Garage	Spaces	254	260	69	90	483	1,156

Sources: MacArthur Transit Village Project Final EIR, July 2008, certified via *Oakland City Council Resolution No. 81422*; Oakland City Council Resolutions for Stage 1/Parcel E FDP (No. 83292), Stage 2/Parcel D FDP (No. 83365), Stage 3 and 4/Parcels A and C-1 (No. 85603).

**TABLE 17 SUMMARY OF LAND-USE INPUT PARAMETERS FOR CALEEMOD**

Land-Use Type	CalEEMod Land-Use Type	Units	Unit Amount <sup>a</sup>
Residential	Apartments High Rise	Dwelling Units	980
Retail	Regional Shopping Center	Square Feet	33,500
Community Center	Library	Square Feet	5,000
Parking Garage	Enclosed Parking with Elevator	Spaces	1,156

<sup>a</sup> To be conservative, emissions of ROG, NOx, PM<sub>10</sub>, and PM<sub>2.5</sub> were estimated for the maximum development scenario of the 2016 Modified Project that can be accommodated without exceeding the vehicle trip generation estimated in the 2008 Project EIR (see Section 13, *Transportation and Circulation*). The BAAQMD recommends using the most current version of CalEEMod to estimate construction and operational emissions of pollutants for a proposed project.  
Source: CalEEMod (Attachment E).

- The average weekday vehicle trip rates were adjusted for each land used based on the findings of a transportation assessment for the 2016 Modified Project (see Section 13, *Transportation and Circulation*).
- The average weekend vehicle trip rates for each land use that were calculated by CalEEMod using default trip generation rates from the *Institute of Transportation Engineers Trip Generation Handbook* were reduced by 43 percent in accordance with the City of Oakland *Transportation Impact Study Guidelines*(see Section 13, *Transportation and Circulation*).

- Based on the design of the East Bay Municipal Utility District’s wastewater treatment plant, emissions estimated from wastewater treatment assumed a process with 100 percent aerobic biodegradation and 100 percent anaerobic digestion with cogeneration.
- It was assumed that no fireplaces or woodstoves would be included in the 2016 Modified Project.
- Sequestration from landscaping was assumed to be negligible and, therefore, was not included in the analysis.

The 2013 California Building Energy Efficiency Standards (Title 24, Part 6) adopted by the City of Oakland use 25 percent less energy for lighting, heating, cooling, ventilation, and water heating than the default 2008 Standards used in CalEEMod. This energy use reduction was included in the analysis to estimate unmitigated emissions of criteria pollutants for the 2016 Modified Project. The City of Oakland has also adopted Green Building Ordinance for private development projects. In accordance with the Green Building Ordinance, the 2016 Modified Project must implement mandatory measures from the statewide CALGreen Code and complete a Green Building Compliance Checklist (e.g., LEED or GreenPoint Rater).<sup>30</sup> Compliance with the mandatory measures described under the current CALGreen Code would reduce indoor water use by approximately 20 percent. These GHG reductions were included in the GHG analysis for the 2016 Modified Project.

In accordance with the City of Oakland’s CEQA guidance for evaluating the GHG thresholds of significance, the construction CO<sub>2</sub>e emissions were annualized over a period of 40 years and then added to the expected CO<sub>2</sub>e emissions during operation. The average annual CO<sub>2</sub>e emissions per service population (2,508 people) was determined based on the forecasted population of residents and employees.

The total average annual CO<sub>2</sub>e emissions and the total average annual CO<sub>2</sub>e emissions per service population for the 2016 Modified Project are compared to the City’s thresholds in Table 18. The estimated unmitigated CO<sub>2</sub>e emissions were above the City’s annual emissions threshold, but below the City’s efficiency-based threshold in terms of annual emissions per service population and, therefore, operation of the 2016 Modified Project would have a less-than-significant impact on global climate change. Further, it should be noted that given the project’s proximity to BART, it may be considered a qualified infill project that would result in decrease in GHG emissions from cars and light-duty trucks. As these GHG emission reductions were not accounted for in the total emissions estimated, the analysis may be considered conservative because the actual net increase in GHG emissions generated by the 2016 Modified Project are overestimated. Based on the gross floor areas or total dwelling units for proposed residential, retail, and/or community

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<sup>30</sup> Rating system and checklist determined by City of Oakland Planning Department based on square footage of each land use.

**TABLE 18 SUMMARY OF AVERAGE GHG EMISSIONS FROM OPERATION OF THE 2016 MODIFIED PROJECT**

<b>Emissions Scenario</b>	<b>CO<sub>2</sub>e (Metric Tons/Year)</b>	<b>CO<sub>2</sub>e (Metric Tons/Year/ Service Population)</b>
Construction <sup>a</sup>	95	0.038
Operation – Area	12	0.005
Operation – Energy	1718	0.685
Operation – Mobile	3,408	1.359
Operation – Waste	223	0.089
Operation – Water	118	0.047
<b>Total Project Emissions</b>	<b>5,574</b>	<b>2.223</b>
<b>City of Oakland's Thresholds</b>	<b>1,100</b>	<b>4.6</b>
<b>Threshold Exceedance?<sup>b</sup></b>	<b>Yes</b>	<b>No</b>

<sup>a</sup> In accordance with CEQA guidance from the City of Oakland, GHG emissions during construction are amortized over 40 years.

<sup>b</sup> Per the City's CEQA significance thresholds, a significant impact would occur only if both thresholds are exceeded, which is not the case here.

Source: CalEEMod (Attachment E).

center land uses at each parcel for the maximum development scenario (Table 16), the Modified Parcel B project would be expected to generate up to about 47 percent of the total GHG emissions.

The BAAQMD recommends analyzing GHG emissions from permitted stationary sources separately from a project's operational emissions. Since the California Building Code requires a backup generator for elevators in buildings that are five or more stories in height (about 70 feet), the proposed apartment building on Parcels A, B, and C would be required to install a backup generator. Emissions from three new Tier 4 diesel generators were estimated in accordance with methodologies presented in the CARB's (2010) *Off-road Simulation Model and Summary of Off-Road Emissions Inventory Update* and using data derived from the CARB's *Off-Road Emissions Inventory Model (OFFROAD2011)*. It was assumed that a maximum 1,000 horsepower diesel generator would be used for non-emergency operation up to 50 hours per year (for routine testing and maintenance) at each parcel. The CO<sub>2</sub>e emissions from the backup generators were calculated using the following equation:



$$\text{Emissions in pounds} = (Pop)(HP_{Ave})(LF)(Hr)(EF) \left( \frac{1 \text{ pound}}{454 \text{ grams}} \right)$$

Where:

Pop = Population of equipment

HP<sub>Ave</sub> = Maximum-rated average horse power (hp)

LF = Load factor

Hr = total operating hours (per equipment)

EF = Emissions factor (grams/hp-hour)

The input parameters and assumptions used for estimated emissions from the new backup diesel generators are included in Attachment E. The total average annual emissions of CO<sub>2</sub>e from potential backup generators on Parcels A, B, and C would be below the City’s stationary source threshold (Table 19) and, therefore, have a less-than-significant impact on global climate change. Overall, the land-based and stationary source operations of the 2016 Modified Project would not substantially increase the severity of significant impacts identified in the 2008 Project EIR, nor would they result in new significant impacts related to the GHG emissions that were not identified in the 2008 Project EIR.

**TABLE 19 SUMMARY OF AVERAGE GHG EMISSIONS FROM STATIONARY SOURCES**

Source	CO <sub>2</sub> e (Metric Tons/Year)
<b>New Backup Generators</b>	
Parcel A	28.6
Parcel B	28.6
Parcel C	28.6
Total Stationary Source Emissions	86
City of Oakland's Thresholds	10,000
Threshold Exceedance?	No

Notes: Assumes backup generators with up to 1,000 horsepower that are maintained and tested up to 50 hours per year.

Source: See Attachment E.

*Consistency with GHG Emissions Plans and Policies (Criteria 6.b)*Previous EIR Conclusions

As discussed above, the 2008 Project EIR determined that there would be no significant impacts related to GHG emissions and climate change. Furthermore, the project would be consistent with GHG reduction strategies identified under AB 32 and the Governor's Executive Order S-3-05.

2016 Modified Project Assessment

The City's GHG quantitative thresholds were designed to ensure compliance with the State's AB 32 GHG reduction goals, as set forth in the California Air Resources Board's (CARB's) Climate Change Scoping Plan. Since the GHG emissions from the 2016 Modified Project would be below the City's efficiency-based threshold (Table 18), it can be assumed that the project is consistent, and not in fundamental conflict, with the Scoping Plan. Moreover, the MacArthur Station is a Priority Development Area designated by *Plan Bay Area*,<sup>31</sup> the Senate Bill 375 Sustainable Community Strategy adopted for the purpose of achieving the GHG reduction target established by CARB for the region's transportation and land use sector pursuant to the Scoping Plan. As stated by *Plan Bay Area*, a Priority Development Area is a geographic area "where new development will support the day-to-day needs of residents and workers in a pedestrian-friendly environment served by transit." By focusing new development within Priority Development Area, *Plan Bay Area* establishes a preferred development scenario, build-out of which will achieve the plan's GHG reduction targets. Since the 2016 Modified Project will be constructed within a Priority Development Area with land uses at a density and intensity that meets or exceeds *Plan Bay Area* recommendations (i.e., >20 dwelling units per acre; 0.75 FAR), the project furthers, and is not in conflict with, *Plan Bay Area's* GHG reduction targets.

In December 2012, the City adopted the *Energy and Climate Action Plan* (ECAP). The purpose of the ECAP is to identify and prioritize actions the City can take to reduce energy consumption and GHG emissions associated with the City. The ECAP outlines a 10-year plan including more than 150 actions that will enable the City to achieve a 36 percent reduction in GHG emissions below 2005 level by 2020.<sup>32</sup> These measures support implementation of the green planning policies in the City of Oakland's General Plan by promoting energy efficiency and minimizing vehicle emissions. The 2016 Modified Project is consistent with, and would not frustrate, the GHG reduction goals set forth in the ECAP and the green planning policies of the General Plan because the proposed project would promote land use patterns and densities that help improve regional air quality conditions, as demonstrated by its compliance with *Plan Bay Area's* preferred development scenario. The 2016 Modified Project would also be required to comply with the City's Green

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<sup>31</sup> Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG), 2013. *Plan Bay Area, Strategy for a Sustainable Region*. Adopted July 18, 2013.

<sup>32</sup> City of Oakland, 2012. *Energy and Climate Action Plan*. December 4.

Building Ordinance, which supports the goals, policies, and actions of the ECAP and General Plan.

The 2016 Modified Project is subject to the City's applicable SCAs, some of which reduce GHG emissions. These include but are not limited to preparation and implementation of a Transportation and Parking Demand Management (TDM) Plan included in SCA-TRANS-4: Transportation and Parking Demand Management (#71) and a Construction and Demolition Waste Reduction and Recycling Plan under SCA-UTIL-1: Construction and Demolition Waste Reduction and Recycling (#74).

### **Conclusions**

Based on the GHG analysis for the 2016 Modified Project and the findings and conclusions of the 2008 Project EIR, implementation of the 2016 Modified Project (including the Parcel B Project) would not substantially increase the severity of significant impacts identified in the 2008 Project EIR, nor would it result in new significant impacts related to construction and operational GHG emissions that were not identified in the 2008 Project EIR. Several SCA would be applicable including: SCA-TRANS-4: Transportation and Parking Demand Management (#71) and SCA-UTIL-1: Construction and Demolition Waste Reduction and Recycling (#74). These SCAs are included in Attachment A.

**HAZARDS AND HAZARDOUS MATERIALS**

Would the project:	Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; Create a significant hazard to the public through the storage or use of acutely hazardous materials near sensitive receptors; Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (i.e., the "Cortese List") and, as a result, would create a significant hazard to the public or the environment.	■	□	□
b. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	■	□	□
c. Result in less than two emergency access routes for streets exceeding 600 feet in length unless otherwise determined to be acceptable by the Fire Chief, or his/her designee, in specific instances due to climatic, geographic, topographic, or other conditions; or Fundamentally impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	■	□	□

**Project Analysis**

*Exposure to Hazards, Hazardous Materials Use, Storage and Disposal (Criterion 7.a)*

Each of the Program EIRs considered in this analysis found less-than-significant effects regarding hazards and hazardous materials. Furthermore, specific hazard related City of Oakland SCAs would be applicable. No mitigation measures were identified by the Redevelopment Plan EIR or the Housing Element. However, the LUTE EIR included mitigation measures specifically to address exposure to workers and the public during construction.



The 2008 EIR determined that development of the 2008 Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

After the 2005 Phase II investigation for the project site was completed, the 3875 Telegraph Avenue property (medical offices adjacent to the project site) was listed on the State Leaking Underground Storage Tank database, one of the databases referenced in Government Code Section 65962.5. In addition to petroleum-related contaminants near 3875 Telegraph Avenue, the 2005 Phase II investigation identified heavy metals and solvents in soils and groundwater above screening thresholds. SCA-HAZ-3: Site Contamination (#40), addresses site contamination and SCA-HAZ-2: Hazardous Materials Related to Construction (#39), addressed hazardous materials related to construction.

On September 9, 2013, the San Francisco Bay Regional Water Quality Control Board (Regional Water Board) issued a “Notice of Intent to Issue No Further Action Status – MacArthur BART Transit Village” letter for the entire MacArthur Station site. The letter noted that Regional Water Board staff had reviewed the July 2013 Remedial Action Completion Report (RACR) for the MacArthur Transit Village, which also included a Soil Management Plan (SMP). The letter noted that based on the proper implementation of the SMP during construction, together with construction of buildings with ground floor parking, all components of the remedy would be completed, The Regional Water Board intends to grant the Site “no further action” status, upon recordation of an appropriate deed restriction which: 1) incorporates the SMP; 2) requires that structures for habitation include ground floor parking or another adequate vapor mitigation measure; and 3) prohibits use of underlying groundwater. The letter also noted that the MacArthur Station site is being divided into new parcels, and that the new owner(s) would be responsible for recording the deed restriction on their individual parcel and complying with its requirements in order to obtain “no further action” status for that parcel. Once all of the parcels have been granted “no further action” the regulatory file for the case will be closed.

A Phase I Environmental Site Assessment<sup>33</sup> (Phase I) was prepared for Parcel B in 2016 by Langan Treadwell Rollo (Langan). The Phase I identified one recognized environmental condition (REC) on the Parcel B site, associated with historic use of the site. This REC had been identified in previous environmental documents prepared for the site:

**REC 1** – Presence of elevated concentrations of petroleum hydrocarbons, volatile organic compounds (VOCs), and heavy metals within soil and/or groundwater. Based on the historic use of the site and both adjacent and surrounding

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<sup>33</sup> Langan Treadwell Rollo, 2016. *DRAFT Phase I Environmental Site Assessment, MacArthur BART Parcels B1 and B2, Oakland, California*, March 16.

properties, and the analytical results of recent subsurface investigations (conducted by others), elevated concentrations of petroleum hydrocarbons and VOCs are present within the site's subsurface, and is therefore considered a REC associated with the site. Additionally, elevated concentrations of arsenic, a heavy metal, have been identified within the Site's soil subsurface. Despite documented remediation efforts, residual concentrations of petroleum hydrocarbons, VOCs, and heavy metals remain on-site.

Based on the findings of this Phase I ESA, Langan is recommending the preparation of a Soil and Groundwater Management Plan (SGMP) prior to any development activities that would involve excavation and/or handling of the soil and groundwater at Parcel B based on the previous detected contaminants. A SGMP will provide recommended measures to mitigate the long-term environmental or health and safety risks caused by the presence of contaminants at the site. The SGMP will also contain contingency plans to be implemented during soil excavation if unanticipated hazardous materials are encountered, including former USTs. Langan recommends the implementation of a SGMP which will mitigate potential risks associated with the handling of impacted site materials which will be encountered during construction activities.

The 2016 Modified Project would involve similar activities as evaluated in the 2008 EIR. No permanent buildings currently exist on Parcel B (the previous parking lot on the Parcel B site was removed at part of Phase I of the proposed project). The transportation, use, and storage of all hazardous materials involved with the proposed project would be required to follow the applicable laws and regulations adopted to safeguard workers and the general public. In addition, development of the 2016 Modified Project would be subject to the City of Oakland's SCAs pertaining to best management practices for hazardous materials; removal of asbestos and lead-based paint; and other hazardous materials and wastes, including those found in the soil and groundwater, which would reduce impacts to less-than-significant levels.

Consistent with the requirements of CEQA, a determination of whether the project would have a significant impact has occurred prior to the approval of the proposed project and, where applicable, standard conditions of approval and/or mitigation measures in the 2008 EIR have been identified that will mitigate them. In some instances, exactly how the measures/conditions identified will be achieved awaits completion of future studies, an approach that is legally permissible where measures/conditions are known to be feasible for the impact identified, where subsequent compliance with identified federal, state or local regulations or requirements apply, where specific performance criteria is specified and required, and where the proposed project commits to developing measures that comply with the requirements and criteria identified.

*Hazardous Materials within a Quarter Mile of a School (Criterion 7.b)*

Several schools are located in the project vicinity. Campuses for St. Martin De Porres Catholic School, at 675 41<sup>st</sup> Street, and Park Day School, at 370 43<sup>rd</sup> Street, are located approximately ¼-mile from the project site. However, as the 2016 Modified Project would not emit hazardous emissions of significant risk or handle significant quantities of hazardous materials, substances, or waste, there would be no significant impact to existing or proposed school facilities.

*Emergency Access Routes (Criteria 7.c)*

The City of Oakland has adopted the Standard Emergency Management System (SEMS), a framework for standardizing emergency response procedures in California. The Oakland Office of Emergency Services' SEMS emergency plan describes how City agencies would respond to declared emergencies in the City. The Plan must be routinely updated in accordance with Action PS-1.2 of the City General Plan. Designated evacuation routes in the project vicinity include Telegraph Avenue, MacArthur Boulevard, and Martin Luther King Jr. Way. Development of the project would not impede vehicular or pedestrian traffic on these evacuation routes. Regular updating of the City of Oakland's SEMS emergency plan, as required by the General Plan, would also ensure that the project would not impair implementation or physically impair the City's emergency response and evacuation plans.

**Conclusion**

Based on an examination of the analysis, findings, and conclusions of the 2008 Project EIR and the other applicable Program EIRs, implementation of the 2016 Modified Project would not substantially increase the severity of significant impacts identified in the 2008 Project EIR and the other Program EIRs, nor would it result in new significant impacts related to hazards and hazardous materials that were not identified in the 2008 Project EIR or the other Program EIRs. The 2016 Modified Project will adhere to the City of Oakland SCAs which relate to asbestos removal, lead-based paint/coatings, PCBs, Environmental Site Assessment reports and remediation, health and safety plans, groundwater and soil contamination, hazardous materials business plans, and site review by the Fire Services Division, as identified in Attachment A to this document. For reference, these are: SCA-HAZ-1: Asbestos in Structures (#23); SCA-HAZ-2: Hazardous Materials Related to Construction (#39); SCA-HAZ-3: Site Contamination (#40); and SCA-HAZ-4: Hazardous Materials Business Plan (#41).

**HYDROLOGY AND WATER QUALITY**

Would the project:	Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Violate any water quality standards or waste discharge requirements; Result in substantial erosion or siltation on- or off- site that would affect the quality of receiving waters; Create or contribute substantial runoff which would be an additional source of polluted runoff; Otherwise substantially degrade water quality; Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect hydrologic resources.	■	□	□
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or proposed uses for which permits have been granted).	■	□	□
c. Create or contribute substantial runoff which would exceed the capacity of existing or planned stormwater drainage systems; Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course, or increasing the rate or amount of flow, of a creek, river, or stream in a manner that would result in substantial erosion, siltation, or flooding, both on- or off-site.	■	□	□
d. Result in substantial flooding on- or off-site; Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, that would impede or redirect flood flows; Place within a 100-year flood hazard area structures which would impede or redirect flood flows; or Expose people or structures to a substantial risk of loss, injury, or death involving flooding.	■	□	□



## Project Analysis

### *Water Quality, Stormwater, and Drainages and Drainage Patterns (Criteria 8.a and 8.c)*

The Program EIRs considered in this analysis all found less-than-significant impacts related to hydrology or water quality, primarily given required adherence to existing regulatory requirements, many of which are incorporated in the City of Oakland's SCAs. No mitigation measures were warranted.

The 2008 Project EIR also determined that development of the 2008 Project would not result in any significant impacts related to hydrology or water quality given mandatory adherence to existing regulatory requirements. Development of the 2016 Modified Project would include ground disturbance. The project site, prior to any construction activity, was largely covered with impervious surfaces and a significant change in the amount of runoff to the City's stormwater drainage system was not anticipated. The EIR identified SCAs that pertained to erosion and sedimentation control, the preparation of storm water pollution prevention plans (SWPPP), post construction stormwater management and treatment measures and associated maintenance agreements. These SCAs would ensure impacts to a less-than-significant level by minimizing runoff and erosion, as well as sedimentation and contamination to stormwater and surface water during and after construction activities. The 2016 Modified Project would involve the same construction activities described in the 2008 Project EIR and the Program EIRs and would adhere to the existing City of Oakland SCAs.

### *Use of Groundwater (Criterion 8.b)*

The Program EIRs identified less-than-significant impacts regarding use of groundwater, and recognized that subsequent development could involve dewatering. Compliance with existing City requirements and the City of Oakland SCAs ensure such activities do not substantially deplete groundwater resources, which is not anticipated since groundwater in the area is not a potable water source. No mitigation measures were warranted.

As described in the 2008 Project EIR, some dewatering may be required for construction of the proposed project, but removal of groundwater resources associated with the 2016 Modified Project would be transitory and not expected to significantly impact the local or regional use or availability of groundwater. Potable water is supplied to the project area through imported surface water by EBMUD, and groundwater is not used as a water supply source. The 2008 Project EIR also assumed project compliance with existing City practices, including Oakland SCAs that address all applicable regulatory standards and regulations pertaining to remediation and grading and excavation activities.

### *Flooding and Substantial Risks from Flooding (Criteria 8.d)*

According to the most recent FEMA mapping for the project site, the proposed project is not located within the 100- or 500-year flood hazard zone, and therefore, no placement of

housing or other structures in a flood hazard zone would occur at the site. Additionally, the project site is not located within a mapped dam failure inundation zone.

### **Conclusion**

Based on an examination of the analysis, findings, and conclusions of the 2008 Project EIR and the Program EIRs, implementation of the 2016 Modified Project would not substantially increase the severity of significant impacts identified in the 2008 Project EIR or the Program EIRs, nor would it result in new significant impacts related to hydrology and water quality that were not identified in the 2008 Project EIR or those other Program EIRs. The proposed project would be required to implement SCAs related to stormwater, drainages and drainage patterns, and water quality, as identified in the Attachment A to this document. For reference, these include: SCA-HYD-1: State Construction General Permit (#46); SCA-HYD-2: Site Design Measures to Reduce Stormwater Runoff (#48); SCA-HYD-3: Source Control Measures to Limit Stormwater Pollution (#49); and SCA-HYD-4: NPDES C.3 Stormwater Requirements for Regulated Projects (#50).

**LAND USE, PLANS, AND POLICIES**

Would the project:	Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Physically divide an established community;	■	☐	☐
b. Result in a fundamental conflict between adjacent or nearby land uses; or	■	☐	☐
c. Fundamentally conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect and actually result in a physical change in the environment.	■	☐	☐

**Project Analysis**

*Division of Existing Community, Conflict with Land Uses, or Land Use Plans (Criteria 9a through 9c)*

The Program EIRs considered in this analysis all found less-than-significant impacts related to land use, plans, and policies, and no mitigation measures were warranted. The LUTE EIR, however, identified a significant and unavoidable effect associated with inconsistencies with policies in the Clean Air Plan (resulting from significant and unavoidable increases in criteria pollutants from increased traffic regionally). It identified mitigation measures, which largely align with current City of Oakland SCAs involving TDM and which apply to all projects within the City of Oakland.

The 2008 Project EIR determined that the 2008 Project would have less-than-significant land use impacts related to the division of an established community, or potential conflicts with nearby land uses or applicable land use plans, policies, and regulations. Development of the 2016 Modified Project, including the Parcel B Project, would not result in the development of a barrier within the project site that would impede access to and in the proximity of the MacArthur BART station. The 2016 Modified Project would result in the development of five buildings that would include a mix of uses, including high density residential, commercial, parking, and community uses. Although the 2016 Modified Project proposes a taller building than contemplated for Parcel B in the 2008 EIR, the increased height of the building would not result in the physical division of an established community. The proposed land uses are consistent with the land uses in the surrounding neighborhood, and the proposed density supports existing commercial and mass transit uses in the project vicinity. The design and height of the project facilitate the incorporation of these complementary uses and density that would activate ground floor

uses within the Parcel B Project, promoting the connection of these active uses with other adjacent ground floor uses within the 2016 Modified Project site. The Parcel B Project thus supports an integrated site plan and the use of Planning Code section 17.142.100(G). Further, the Tower Alternative of the 2008 EIR analyzed a structure of similar height and found no significant land use impacts. New roadways are proposed within the project site that would facilitate traffic movement from Telegraph Avenue, 40<sup>th</sup> Street, and West MacArthur Boulevard into and through the project site. The project is designed to facilitate access to the project site for all travel modes, including pedestrian, bicycle, transit, and vehicular modes.

Implementation of the 2016 Modified Project would not result in the development of uses that would be intrinsically incompatible with surrounding and uses (e.g., a power plant, factory, or other noise, air pollution, or hazard-generating land use). The 2016 Modified Project would be consistent with the General Plan designation for the site, Neighborhood Center Mixed Use, given that it would provide commercial or mixed uses that are pedestrian-oriented and serve nearby neighborhoods as well as urban residential with ground floor commercial. The mixed-use development would not permanently (or temporarily) interfere with the daily operations of surrounding land uses, including the MacArthur BART Station to the west, and residential, commercial, and public uses surrounding the project site. On the contrary, it is evident that the proposed transit village, with its mix of residential and commercial uses, and the proposed infrastructure improvements would promote BART's goals for TOD and would be compatible with surrounding land uses.

While the proposed height of the Parcel B building would be require a revision to the PUD to allow the proposed height of 260 feet and to allow an increase in the number of units, the 2016 Modified Project would not conflict with any land use policies adopted for the purpose of avoiding or mitigating an environmental effect. As noted in other sections of the addendum, the development of the Parcel B Project at the proposed height of 260 feet would not result in any new impacts not already identified in the 2008 Project EIR. As a result, no significant land use impacts related to the project's consistency with land use policies would occur.

### **Conclusion**

Based on an examination of the analysis, findings, and conclusions of the 2008 Project EIR and Program EIRs, implementation of the 2016 Modified Project would not substantially increase the severity of significant impacts identified in the 2008 Project EIR or those Program EIRs, nor would it result in new significant impacts related to land use, plans, and policies that were not identified in the 2008 Project EIR or the other Program EIRs. The 2008 Project EIR did not identify any mitigation measures related to land use, and no City of Oakland SCAs directly addressing land use and planning apply to the 2016 Modified Project. As discussed above and further discussed in the City's staff report(s), the 2016 Modified Project supports the use of Planning Code section 17.142.100(G).



**NOISE**

	Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
<p>Would the project:</p>			
<p>a. Generate noise in violation of the City of Oakland Noise Ordinance (Oakland Planning Code Section 17.120.050) regarding construction noise, except if an acoustical analysis is performed that identifies recommend measures to reduce potential impacts. During the hours of 7 p.m. to 7 a.m. on weekdays and 8 p.m. to 9a.m. on weekends and federal holidays, noise levels received by any land use from construction or demolition shall not exceed the applicable nighttime operational noise level standard; Generate noise in violation of the City of Oakland nuisance standards (Oakland Municipal Code Section 8.18.020) regarding persistent construction-related noise.</p>	■	□	□
<p>b. Generate noise in violation of the City of Oakland Noise Ordinance (Oakland Planning Code Section 17.120.050) regarding operational noise.</p>	■	□	□
<p>c. Generate noise resulting in a 5 dBA permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or, if under a cumulative scenario where the cumulative increase results in a 5 dBA permanent increase in ambient noise levels in the project vicinity without the project (i.e., the cumulative condition including the project compared to the existing conditions) and a 3-dBA permanent increase is attributable to the project (i.e., the cumulative condition including the project compared to the cumulative baseline condition without the project);</p>	■	□	□
<p>d. Expose persons to interior <math>L_{dn}</math> or CNEL greater than 45 dBA for multi-family dwellings, hotels, motels, dormitories and long-term care facilities (and may be extended by local legislative action to include single-family dwellings) per California Noise Insulation Standards (CCR Part 2, Title 24); Expose the project to community noise in conflict with the land use compatibility guidelines of the Oakland General Plan after incorporation of all applicable Standard Conditions of Approval; Expose persons to or generate noise levels in excess of applicable standards established by a regulatory agency (e.g., occupational noise standards of the Occupational Safety and Health</p>	■	□	□

Would the project: Administration [OSHA]).	Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
e. During either project construction or project operation expose persons to or generate groundborne vibration that exceeds the criteria established by the Federal Transit Administration (FTA).	■	□	□

**Project Analysis**

*Construction and Operational Noise and Vibration, Exposure of Receptors to Noise (Criteria 10.a, 10.b, 10.d, and 10.e)*

Regarding construction noise, most of the Program EIRs found less-than-significant impacts, primarily with adherence to City regulations. The Redevelopment Plan EIR identified additional measures that would reduce construction related noise.

The Program EIRs considered in this analysis all found less-than-significant impacts related to operational noise. The Redevelopment Plan EIR identified a potentially significant impact related to noise compatibility with future residential development, and included a mitigation measure requiring an analysis of noise reduction requirements and incorporation of recommendations into residential development in the vicinity of the MacArthur BART Station. This mitigation measure reduced the impact to a less-than-significant level. The LUTE EIR identified mitigation measures to address potential noise conflicts between different land uses.

Construction Noise and Vibration

The 2008 Project EIR determined impacts from construction noise, including pile driving, would be reduced to less-than significant levels with implementation of the City’s Days/Hours of Construction Operation, and Noise Control Noise Complaint Procedures, and Pile Driving and Other Extreme Noise Generators COAs for construction noise. These COAs from the 2008 Project EIR would be applicable to the 2016 Modified Project, and are not superseded by the City’s current SCAs.

Additionally, in association with the Stage 2 approvals and associated Addendum #2, a detailed noise and vibration study was completed for the project consistent with the SCAs. The supplemental studies considered both Phase/Stage 1 and Phase/Stage 2 of the MacArthur Station Project and the associated construction equipment schedules provided by the project sponsor and specifically consider the project’s proximity to the Surgery Center and adjacent residential sensitive receptors. The complete studies are provided as Attachment F.

As part of these analyses and the City's review of the studies, the project sponsor voluntarily agreed to additional conditions of approval to ensure all construction related impacts related to noise and vibration would be reduced to the greatest extent feasible. The additional conditions are also applicable to Parcel B as outlined below and included in the SCAMMRP.

*The following Project Specific Conditions of Approval shall apply to each Final Development Plan for the MacArthur Village Project:*

1) The project applicant shall implement all of the plans and recommendations described in the following reports prepared for the project attached as Attachment C (CEQA Memo) to the City Council's Agenda Report dated April 5, 2011, copies of which are on file with the City Planning Department: (i) LSA Associates, Inc. dated March 11, 2011 regarding air quality, (ii) LSA Associates, Inc. dated March 11, 2011 regarding noise, and (iii) Wilson Ihrig & Associates dated March 10, 2011 regarding vibration. To the extent this section B.1 conflicts with section B.4 below, the provisions of section B.4 shall be controlling. The recommendations in these reports include without limitation:

#### Vibration

(a) The contractors shall implement the Construction Equipment Schedule elements described in the March 10, 2011 letter report prepared by Wilson Ihrig & Associates, attached as Exhibit H to the March 14, 2011 Memorandum from Urban Planning Partners to Eric Angstadt and Catherine Payne and included in the Agenda Report for the April 5, 2011 City Council hearing on the Stage 1 FDP (PUDF10097) and VTTM (8047).

(b) Vibration monitoring shall be conducted at the Surgery Center to document the baseline conditions during operations prior to construction and to monitor the vibration at the facilities during the key periods of construction that are subject to vibration to verify that construction-related vibration is not exceeding the FTA category 1 criterion. The key periods of construction would occur when the vibrating roller compactors, vibrating plate compactors, jumping jack, or other equipment that generates vibration are in operation adjacent to the Surgery Center.

#### Noise

(c) Prior to initiation of on-site construction-related earthwork activities, a minimum 8-foot-high temporary sound barrier shall be erected along the project property line abutting the residential sensitive land uses that are adjacent to the construction site on MacArthur Boulevard and Telegraph Avenue.

(d) Prior to initiation of on-site construction-related earthwork activities, a minimum 8-foot-high temporary sound barrier shall be erected along the project property line abutting the Surgery Center that is adjacent to the construction site on Telegraph Avenue.

(e) The temporary sound barriers shall be constructed with a minimum surface weight of 4 pounds per square foot and shall be constructed so that vertical or horizontal gaps are eliminated; these temporary barriers shall remain in place through the construction phase in

which heavy equipment, such as excavators, dozers, scrapers, loaders, rollers, pavers, and dump trucks are operating within 150 feet of the edge of the construction site by adjacent sensitive land uses.

(f) Whenever feasible, the project contractor shall encourage implementation of the following strategies throughout all phases of construction: use of smaller or quieter equipment; use of electric equipment in lieu of gasoline or diesel powered equipment; turn off all idling equipment when anticipated to not be in use for more than 5 minutes; minimize drop height when loading excavated materials onto trucks; minimize drop height when unloading or moving materials on-site; and sequence noisy activities to coincide with noisiest ambient hours.

(g) Noise monitoring is required for all construction activities that would be considered extreme noise generators, activities that would result in noise levels in excess of 90 dBA  $L_{max}$  as measured at the receiving property. Construction activities could exceed these levels at the residential land uses that border the construction site on MacArthur Boulevard and Telegraph Avenue. Pursuant to SCA NOI-5(e), noise monitoring to measure the effectiveness of noise attenuation measures shall be conducted as follows:

Noise measurements shall be conducted on a weekly basis during the phases associated with the anticipated activities for the months of May, June, and September and shall be conducted by a qualified acoustical consultant.

These measurements shall be taken during mid-morning and mid-afternoon hours when background noise levels are anticipated to be lowest so as to try to capture noise from only construction noise sources.

These measurements shall be taken at distances greater than 10 feet from the temporary sound barriers on the receptor property in order to determine the effectiveness of the sound barrier.

If exceedances are identified, then the on-site construction manager shall be notified and the equipment use shall be adjusted so that noise levels are reduced.

2) The temporary sound barrier to be erected by the project applicant along the project property line abutting the adjacent surgery center property shall be a minimum of 8 feet high.

3) *Prior to issuance of a demolition, grading or building permit.* The project applicant shall retain a structural engineer or other appropriate professional to determine threshold levels of vibration and cracking that could damage buildings adjacent to the project site and design means and methods of construction that shall be utilized to not exceed the thresholds.

4) The noise and vibration reduction plan for each phase of the project prepared pursuant to SCA NOI-5 shall also:

(i) include documentation of the following:

- existing baseline conditions at the anticipated construction monitoring locations near the adjacent surgery center, supported by measurements of ambient noise and

vibration levels near the adjacent surgery center over a 6-day continuous period (Monday-Saturday);

- characterization of the existing vibration environment within representative vibration sensitive spaces at the adjacent surgery center to confirm whether the FTA Category 1 criterion is applicable for these interior spaces, or whether a higher threshold is more appropriate. This characterization will be supported by measurements of the existing ambient vibration levels over a 48-hour continuous period measured during the work week (M-F). If the existing environment is comparable or less than the FTA Category 1 threshold, then the construction work will be limited by the FTA Category 1 criterion. If it is determined that the existing ambient environment exceeds the FTA Category 1 criterion, then site specific criteria will be developed based on the characteristics of the measured environment, including the maximum vibration levels and the measured frequency of occurrence of vibration levels;
- vibration testing to determine how groundborne vibration will propagate from the construction area (based upon simulated construction activities testing) to the surgery center building and anticipated construction monitoring locations. This information will be used to determine the vibration level offset between outdoor construction monitoring locations and the vibration experienced at the interior of the building, to refine the calculations previously done to determine the site-specific vibration from construction, to determine the types of construction activity for which monitoring is required and to determine applicable distances for monitoring purposes pursuant to item (v) below; and All such noise and vibration testing and determinations of baselines and monitoring locations near the adjacent surgery center shall be coordinated with the surgery center or its designee.

(ii) include appropriate measures to ensure that the project construction and operations comply with the City's noise and vibration performance standards in Section 17.120.050 of the Oakland Planning Code, the City's vibration performance standards in Section 17.120.060 of the Oakland Planning Code, and the vibration criteria confirmed above, as measured at the monitoring locations specified in (v);

(iii) provide that all noise and vibration compliance monitoring be performed by one or more qualified consultants;

(iv) prohibit the use of pile driving as part of the construction of the BART Parking Garage and construction on Parcel D;

(v) require noise and vibration measurements, for compliance purposes, to be performed for a minimum of 48 hours during a continuous period each week during the conduct of construction activities for which monitoring is required as identified pursuant to the pre-vibration testing protocol under item (i) above within applicable distances from the façade of the surgery center building nearest to the construction activity as such distances are identified as part of such testing protocol. Such measurements shall be made at the nearest façade or at an equivalent distance from the construction activity to the nearest façade as determined appropriate by the qualified acoustical consultant in order to accurately determine noise and vibration levels at the nearest façade of the surgery center from project-related construction activities; and



(vi) require a copy of the City approved noise and vibration plan to be provided to the designated representative of the adjacent surgery center.

5) The special inspection deposit required pursuant to SCA Noise-5 shall also include an amount sufficient to ensure compliance with project conditions of approval governing air quality.

6) Prior to the start of construction activities, the project applicant shall designate an on-site complaint and enforcement manager, with supervisory authority with respect to construction activity, who shall immediately respond to any complaints or concerns raised by the designated representative of the adjacent surgery center related to air quality, noise, vibration, or any other aspect of project construction activities, and provide to the surgery center representative the contact information for such complaint and enforcement manager.

7) Project applicant shall promptly provide to the designated representative of the adjacent surgery center copies of all noise, vibration and air quality monitoring reports required by all project conditions of approval, including, without limitation, all monitoring reports required pursuant to project specific condition 4 above, and the recommendations in the following reports: (i) LSA Associates, Inc. dated March 11, 2011 regarding air quality, (ii) LSA Associates, Inc. dated March 11, 2011 regarding noise, and (iii) Wilson Ihrig & Associates dated March 10, 2011 regarding vibration. If any such report indicates that the project is not in compliance with any such mitigation measures or conditions of approval or if the project is otherwise not in compliance therewith, the project applicant shall immediately cease the activity causing such non-compliance and take such other measures that may be necessary to prevent the recurrence of such non-compliance.

8) The project applicant shall not restrict, block, relocate, modify, or otherwise hinder vehicular and pedestrian access (ingress and egress) to the adjacent surgery center property from its existing driveways and sidewalks access points on Apgar Street and 39th Street both during and after construction of the project without 48 hours advance notice to the surgery center. In no event shall such access be disrupted for more than two days in any M-F period, except for improvements to Apgar Street or 39th Street. For any period during which the 39th Street parking areas in the Surgery Center property are rendered inaccessible, project applicant shall provide an equal number of substitute parking spaces in the BART parking lot area, and/or the new BART parking garage, as close as feasible to the Surgery Center and at no cost to the Surgery Center. The applicant shall coordinate temporary disruptions to the surgery center's vehicular and pedestrian access points and shall maintain one point of access via Apgar Street or Telegraph Street at all times.

9) The applicant's contractors will limit idling, loading or staging on Apgar Street, 39th Street, and Telegraph Avenue adjacent to the property and provide the surgery center at least 48 hours notice of such planned activity included revisions to SCAs (as approved by Planning Commission on April 6, 2011, and affirmed by City Council on May 10, 2011) that apply to each FDP for the MacArthur Station Project. In addition to standard requirements of the Operational Noise SCA (SCA-NOI-7: Operational Noise (#64)), the approvals require the applicant to implement all the plans and recommendations described in the following reports prepared for and included as Attachment C (CEQA Memo) to the City Council's Agenda Report dated April 5, 2011 (copies of which are on file with the City Planning Department): (i) LSA

Associates, Inc. dated March 11, 2011 regarding air quality, (ii) LSA Associates, Inc. dated March 11, 2011 regarding noise, and (iii) Wilson Ihrig & Associates dated March 10, 2011 regarding vibration. The full text of this SCA amendment is included in Attachment A to this document, and would be applicable to the 2016 Modified Project.

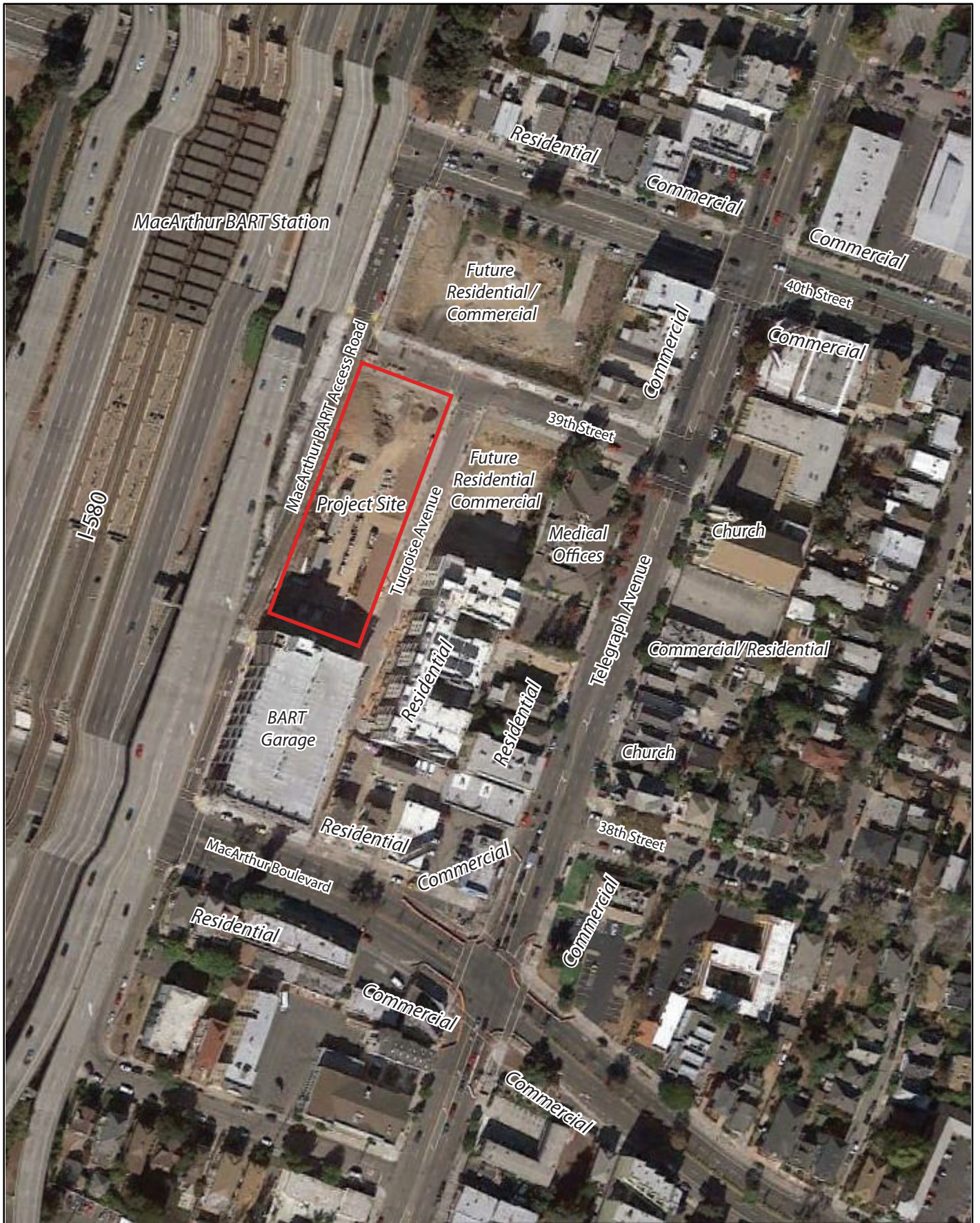
The conditions of the project site for the 2016 Project related to construction related vibration and noise are very similar. Parcels E and D (adjacent to Parcel B) have been developed, and there are now residential uses on Parcel D. The distance from Parcel B to the sensitive receptors now occupying Parcel D is greater than the distance between Parcel D when it was developed and existing residential receptors and the surgery center. Residential development is also approved on Parcels C and A and it is possible that it may be constructed prior to Parcel B. These residential uses will also be a greater distance from construction than the residential that immediately abuts the greater project site (near Telegraph) and the surgery center. The distance from Parcel B to the building on Parcel D is approximately 50 feet; it is anticipated that the that the building on Parcel C would have a similar setback distance from Parcel B. As 39<sup>th</sup> Street is wider than Turquoise Way, the building constructed on Parcel A would be even further from Parcel B. Surrounding land uses are shown in Figure 8.

There the noise analysis and recommendations completed for Phases 1 and 2 adequately address the level of noise that is likely to be associated with construction of the project. The duration of the overall construction may be longer than what would have occurred with the 2008 project, which did not include a high rise, but the same measures would ensure such impact are not significant and reduced to the greatest extent feasible.

The project applicant has prepared a Parcel B construction schedule, which identifies the anticipated construction equipment to be used, as well as the expected noise level at 50 feet. This schedule is summarized in Table 20; please see Attachment F for the more detailed construction equipment schedule. It should be noted that the project would include drill displacement piles; it is anticipated that this construction equipment would have a 84 dBA 50-foot  $L_{max}$ .

Implementation of applicable SCAs, which require implementation of each of the measures listed above, would minimize construction noise impacts by limiting hours of construction activities; requiring best available noise control technology; requiring notification of any local residents of construction activities, and to track and respond to noise complaints. As a result, the construction noise impacts of the 2016 Modified Project would less than significant, as identified for the 2008 Project EIR.





Source: Google Earth and Urban Planning Partners, 2016

**MacArthur Station - Modified 2016 Project**

Figure 8  
Land Uses and Sensitive Receptors Near Parcel B

**TABLE 20      PARCEL B CONSTRUCTION EQUIPMENT**

<b>Equipment</b>	<b>dba 50-Foot L<sub>max</sub></b>
Air Compressors	85
Generator for Welding	69
Backhoes	88
Concrete Boom Pumps	84
Concrete Trailer Pumps	82
Dozers	88
Excavators	81
Fork Lifts	75
Generators	70
Loaders	88
Misc. Handtools	N/A
Mobile Crane	N/A
Personnel Hoist (manlift)	N/A
Dewatering Pumps	N/A
Reach Fork Lift	N/A
Rollers	80
Scissor Lift	75
Drill Displacement Piles	84
Tower Crane	N/A
Welding Machine	73

Note: N/A indicates minimal associated noise level.  
 Source: Boston Properties, 2016.

Operational Noise and Vibration

The 2008 Project EIR disclosed that during operations of the proposed project mechanical equipment would generate noise; however, equipment would be standardized and would be required to comply with the City of Oakland Noise Ordinance. The City of Oakland has several SCAs that would reduce operational noise impacts to a less-than-significant level



through project designs that would achieve acceptable interior noise levels for buildings and requiring mechanical equipment compliance with applicable noise performance standards. Development of the 2016 Modified Project would incorporate all applicable SCAs to ensure the less-than-significant impact identified in the 2008 Project EIR. Additionally, as stated under the Construction Noise and Vibration section above, the implementation of the amendment to the Operational Noise SCA (SCA-NOI-7: Operational Noise (#64)), as approved by Planning Commission on April 6, 2011, and affirmed by City Council on May 10, 2011, is required for all MacArthur Station FDPs. The full text of this SCA amendment is included in Attachment A to this document and would apply to the 2016 Modified Project.

#### *Traffic Noise (Criterion 10.c)*

The 2008 Project EIR noted that traffic generated by the proposed project would not be significant enough to result in any perceptible changes in noise. A transportation analysis was completed to identify potential transportation impacts associated with implementation of the 2016 Modified Project. As noted in Section 13, Transportation and Circulation, the 2016 Modified Project (with the Parcel B Project) would generate fewer trips than the previously analyzed 2008 Project. As such, traffic noise associated with implementation of 2016 Modified Project would be considered a less than significant impact as was identified in the 2008 Project EIR.

Anticipated cumulative traffic and BART train noise sources could result in noise levels that would impact the proposed project. However, as noted in the 2008 Project EIR, this impact would be less-than-significant with implementation of the City's SCAs.

#### **Conclusion**

Based on an examination of the analysis, findings, and conclusions of the 2008 Project EIR and the Program EIRs, implementation of the 2016 Modified Project would not substantially increase the severity of significant impacts identified in the 2008 Project EIR or the other Program EIRs, nor would it result in new significant impacts related to noise that were not identified in the 2008 Project EIR or in the other Program EIRs. The 2016 Modified Project would be required to implement the City of Oakland SCAs to reduce construction noise, as well as SCAs to achieve interior noise standards, and require mechanical equipment to meet applicable noise performance standards. All of the applicable City of Oakland SCAs are identified in Attachment A to this document. For reference, these are: SCA-NOI-1: Construction Days/Hours (#58); SCA-NOI-2: Construction Noise (#59); SCA-NOI-3: Extreme Construction Noise (#60); SCA-NOI-4: Project-Specific Construction Noise Reduction Measures (#61); SCA-NOI-5: Construction Noise Complaints (#62); SCA-NOI-6: Exposure to Community Noise (#63); SCA-NOI-7: Operational Noise (#64); SCA-NOI-8: Exposure to Vibration (#65); and SCA-NOI-9: Vibration Impacts on Adjacent Historic Structures or Vibration-Sensitive Activities (#66).



**POPULATION AND HOUSING**

Would the project:	Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Induce substantial population growth in a manner not contemplated in the General Plan, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extensions of roads or other infrastructure), such that additional infrastructure is required but the impacts of such were not previously considered or analyzed.	■	□	□
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere in excess of that contained in the City’s Housing Element; or Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere in excess of that contained in the City’s Housing Element.	■	□	□

**Project Analysis**

*Population Growth and Displacement of Housing and People (Criteria 11.a and 11.b)*

The Program EIRs considered in this analysis all found less-than-significant impacts related to population and housing. The impact identified in the LUTE EIR addressed unanticipated employment growth (compared to regional ABAG projections) which would create an increased demand for new housing. The effect was reduced to less than significant with identified mitigation measures.

The project site does not include any residential units, and construction of the 2016 Modified Project would not displace any existing housing or people.

**Conclusion**

Based on an examination of the analysis, findings, and conclusions of the 2008 Project EIR and the Program EIRs, implementation of the 2016 Modified Project would not substantially increase the severity of significant impacts identified in the 2008 Project EIR and the other Program EIRs, nor would it result in new significant impacts related to population and housing that were not identified in the 2008 Project EIR and those Program EIRs. The 2008 EIR did not identify any mitigation measures related to population and housing, and none would be required for the 2016 Modified Project. Also no SCAs would apply.

**PUBLIC SERVICES, PARKS, AND RECREATION FACILITIES**

	Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
<p>Would the project:</p> <p>a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:</p> <ul style="list-style-type: none"> <li>▪ Fire protection;</li> <li>▪ Police protection;</li> <li>▪ Schools; or</li> <li>▪ Other public facilities.</li> </ul>	■	□	□
<p>b. Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or Include recreational facilities or require the construction or expansion of recreational facilities that might have a substantial adverse physical effect on the environment.</p>	■	□	□

**Project Analysis**

*Public Services and Parks and Recreation (Criteria 12.a and 12.b)*

The Redevelopment Plan identified a mitigation measure to reduce potential fire protection service impacts to a less-than-significant level; the mitigation measure states that proponents of each specific project should include fire protection systems such as fire sprinklers and automatic fire alarm systems in projects even when not required by the applicable building code, if deemed appropriate or necessary by the Oakland Fire Services Agency, on a case-by-case basis. The LUTE EIR identified a police service impact, school service impact, and library service impact; mitigation measures were identified to reduce these impact to a less than significant level. The Redevelopment Plan EIR identified a mitigation requiring residential development to provide minimum open space required by City regulations. The Housing Element EIR did not identify any public services impacts.

The 2008 Project EIR determined that the 2008 Project impacts related to fire and police protection, schools, and other public facilities would be less than significant. As discussed for the 2008 Project, although development would increase density and population in the area, this growth has been anticipated and factored into Oakland’s General Plan, as previously discussed (see Section 11, Population and Housing). While the 2016 Modified

Project would have slightly different development program than analyzed within the 2008 Project EIR (approximately 200 more residential units and approximately 2,311 fewer square feet of commercial space) the development would occur in an urban area already served by public services and recreation facilities. The additional students generate by the increase in development over the 2008 Project (20 students) could be accommodated within the OUSD school system. The increase in development associated with the 2016 Modified Project would result in an incremental increase in demand for fire and police services; however, the project site is located in an urban area already served by police and fire services, and would not require the construction of new facilities to serve the project site. Furthermore, compliance with standard City practices would further ensure the less-than-significant impact. These included City practices and requirements, such as the Oakland Fire Services' review of proposed project plans, and project applicants' required contribution amount to school impact fees to offset any impacts to school facilities from the proposed project.

As noted in the 2008 Project EIR, the proposed project would increase the resident population and does not include new publicly-accessible park and recreation space (except for the proposed the public plaza). Within the densely-populated North Oakland Planning Area, the 2016 Modified Project is not expected to result in substantial or accelerated physical deterioration of existing parks and open space. Though no new public parkland is included within the project area, the 2016 Modified Project does comply with the relevant OSCAR Element recommendations for North Oakland by incorporating a public plaza and attractive pedestrian environment (the proposed east/west street connecting Telegraph Avenue and Entry Drive) and new landscaping and other streetscape improvements along Telegraph Avenue.

Any increases in need for police protection, fire protection, schools, or other public facilities would be mitigated by adherence to General Plan policies N.12.1, N.12.2, and N.12.5. The 2016 Modified Project would result in a less-than-significant public services, parks and recreation impact, as was identified in the 2008 Project EIR.

### **Conclusion**

Based on an examination of the analysis, findings, and conclusions of the 2008 Project EIR and the other Program EIRs, implementation of the 2016 Modified Project would not substantially increase the severity of significant impacts identified in the 2008 Project EIR or the other Program EIRs, nor would it result in new significant impacts related to the provision of public services and parks and recreation facilities that were not identified in the 2008 Project EIR or the other Program EIRs. The 2008 Project EIR did not identify any mitigation measures related to public services, parks and recreation facilities, and none would be required for the 2016 Modified Project. The 2016 Modified Project would be required to implement SCAs related to fire safety and compliance with building, fire, and public works code requirements, as identified in the Attachment A to this document. For

reference, these are: SCA-PSR-1: Construction Management Plan (#13) and SCA-PSR-2: Fire Safety Phasing Plan (#42).

**TRANSPORTATION AND CIRCULATION**

	Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
<p>Would the project:                      Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit, specifically</p>			
<p><b>Traffic Load and Capacity Thresholds</b></p>			
<p>a. At a study, signalized intersection which is located outside the Downtown area and that does not provide direct access to Downtown, the project would cause the motor vehicle level of service (LOS) to degrade to worse than LOS D (i.e., LOS E or F) and cause the total intersection average vehicle delay to increase by four (4) or more seconds.</p>	■	□	□
<p>b. At a study, signalized intersection which is located <b>within the Downtown area or that provides direct access to Downtown</b>, the project would cause the motor vehicle LOS to degrade to worse than LOS E (i.e., LOS F) and cause the total intersection average vehicle delay to increase by four (4) or more seconds;</p>	■	□	□
<p>c. At a study, signalized intersection <b>outside the Downtown area and that does not provide direct access to Downtown</b> where the motor vehicle level of service is LOS E, the project would cause the total intersection average vehicle delay to increase by four (4) or more seconds.</p>	■	□	□
<p>d. At a study, signalized intersection <b>outside the Downtown area and that does not provide direct access to Downtown</b> where the motor vehicle level of service is LOS E, the project would cause an increase in the average delay for any of the critical movements of six (6) seconds or more.</p>	■	□	□
<p>e. At a study, signalized intersection for all areas where the level of service is LOS F, the project would cause (a) the overall volume-to-capacity (“v/c”) ratio to increase 0.03 or more or (b) the critical movement v/c ratio to increase 0.05 or more.</p>	■	□	□
<p>f. At a study, unsignalized intersection the project would add ten (10) or more vehicles to the</p>	■	□	□



	Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
Would the project: critical movement and after project completion satisfy the California Manual on Uniform Traffic Control Devices (MUTCD) peak hour volume traffic signal warrant.			
g. For a roadway segment of the Congestion Management Program (CMP) Network, the project would cause (a) the LOS to degrade from LOS E or better to LOS F or (b) the V/C ratio to increase 0.03 or more for a roadway segment that would operate at LOS F without the project.	■	□	□
h. Cause congestion of regional significance on a roadway segment on the Metropolitan Transportation System (MTS) evaluated per the requirements of the Land Use Analysis Program of the CMP.	■	□	□

For the analysis provided in this section, a larger number of units (502 units) was evaluated than is currently proposed by the project applicant (402 units) for the Parcel B project.<sup>34</sup>

**Project Analysis**

*Criteria 13.a through 13.h*

The Program EIRs considered for this analysis identified significant and unavoidable impacts regarding intersection and roadway segment operations in the LUTE and the Housing Element EIR. The Redevelopment Plan EIR identified transportation impacts which could be reduced to a less-than-significant impact with implementation of the identified mitigation measures.

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<sup>34</sup> Please note that transportation, air quality, and greenhouse gas analyses completed for this CEQA analysis considered up to 502 units and 10,000 square feet of retail as the analyses were completed prior to the project sponsor making a final determination regarding how many units the FDP for Parcel B would include. To be conservative and to provide a worst case analysis that assessed the maximum number of vehicle trips that could be potentially accommodated on the site without resulting in any new or more significant impacts than those identified in the MacArthur BART EIR, a maximum of 502 units was analyzed. In addition, the air quality and greenhouse gas analysis included an additional 137 parking spaces than are currently proposed for the MacArthur Station site. The proposed FDP for Parcel B includes up to 402 units and up to 13,000 square feet of retail (the proposed building for Parcel B and its components are herein referred to as the Parcel B Project). Given this is 100 units less and only 3,000 square feet more of retail than what was analyzed in the transportation, air quality, and greenhouse gas analyses, these studies provide a worst case analysis and a revised analysis is not needed.

The 2008 Project EIR identified impacts for degraded intersection operations, and mitigation measures to reduce the impact to a less-than-significant level, for the following: (1) Telegraph Avenue/51<sup>st</sup> Street intersection (#3) under Cumulative Year 2015 Baseline Plus Project conditions; (2) Market Street/MacArthur Boulevard intersection (#16) under Cumulative Year 2015 Baseline Plus Project conditions; (3) Telegraph Avenue/52<sup>nd</sup> Street and Claremont Avenue intersection (#2) under Cumulative 2030 Baseline Plus Project conditions; (4) West Street/40<sup>th</sup> Street intersection (#8) under Cumulative Year 2030 Baseline Plus Project conditions; (5) Telegraph Avenue/40<sup>th</sup> Street intersection (#13) under Cumulative Year 2030 Baseline Plus Project conditions; (6) Market Street/MacArthur Boulevard intersection (#16) under Cumulative Year 2030 Baseline Plus Project conditions; (7) Telegraph Avenue/MacArthur Boulevard intersection (#20) under Cumulative Year 2030 Baseline Plus Project conditions.

The 2008 Project EIR identified impacts for degraded intersection operations, and mitigation measures, but the impact is still considered significant and unavoidable for the following: (1) Telegraph Avenue/51<sup>st</sup> Street intersection (#3) under Cumulative Year 2030 Baseline Plus Project conditions; and (2) Broadway/MacArthur Boulevard intersection (#22) under Cumulative Year 2030 Baseline Plus Project conditions.

#### *Proposed Project Trip Generation*

Table 21 summarizes the automobile trip generation for the 2016 Modified Project based on the methodology and assumptions used for the 2014 Modified Project (Addendum #3) and summarized in a memorandum dated April 9, 2015. The estimates are based on rates and equations published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual* (9th Edition) with the following adjustments:

- *Non-Automobile Reduction* – Research has shown that ITE Trip Generation often over-estimates motor vehicle trips when applied to dense, urban environments such as many Oakland neighborhoods. In fact, ITE Trip Generation acknowledges that most of the underlying data for the Trip Generation Manual were collected in suburban settings with few, if any, alternatives to driving. In 2013, the City of Oakland updated its Transportation Impact Study Guidelines to incorporate trip generation adjustment factors that better reflect local trip patterns, using observed travel data from the Metropolitan Transportation Commission’s 2000 Bay Area Travel Survey (BATS). This survey found that the non-automobile mode share within one-half mile of BART Station and Amtrak Stations in Alameda County is approximately 43 percent. As such, Oakland’s TIS Guidelines advise the incorporation of reductions in automobile trip generation estimates based on proximity to BART/Amtrak Stations to better account for local observations of non-automobile trip-making rates. These adjustment factors reflect a methodology evaluated by independent researchers in 2011<sup>35</sup> that was found

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<sup>35</sup> *Evaluation of the Operation and Accuracy of Five Available Smart Growth Trip Generation Methodologies*. Institute of Transportation Studies, UC Davis, 2011.

TABLE 21 TRIP GENERATION SUMMARY

Land Use	Units <sup>a</sup>	ITE Code	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Residential	980 DU	230	4,690	55	266	321	262	129	391
Retail	33.5 KSF	820 <sup>c</sup>	1,430	20	12	32	60	64	124
Community Center	5.0 KSF	565 <sup>d</sup>	370	32	29	61	29	33	62
<i>Subtotal</i>			<i>6,490</i>	<i>107</i>	<i>307</i>	<i>414</i>	<i>351</i>	<i>226</i>	<i>577</i>
Non-Auto Reduction (-43%) <sup>c</sup>			-2,790	-46	-132	-178	-151	-97	-248
<b>Net New Project Trips</b>			<b>3,700</b>	<b>61</b>	<b>175</b>	<b>236</b>	<b>200</b>	<b>129</b>	<b>329</b>
Approved Project <sup>f</sup>			4,886	123	201	324	200	158	358
Net Difference			-1,186	-62	-26	-88	0	-29	-29

<sup>a</sup> DU = Dwelling Units, KSF = 1,000 square feet.

<sup>b</sup> ITE Trip Generation (9th Edition) land use category 230 (Residential Condominium/Townhouse):

Daily:  $\text{Ln}(T) = 0.87 * \text{Ln}(X) + 2.46$

AM Peak Hour:  $\text{Ln}(T) = 0.80 * \text{Ln}(X) + 0.26$  (17% in, 83% out)

PM Peak Hour:  $\text{Ln}(T) = 0.82 * \text{Ln}(X) + 0.32$  (67% in, 33% out)

<sup>c</sup> ITE Trip Generation (9th Edition) land use category 820 (Shopping Center):

Daily:  $(T) = 42.70 * (X)$

AM Peak Hour:  $(T) = 0.96 * (X)$  (62% in, 38% out)

PM Peak Hour:  $(T) = 3.71 * (X)$  (48% in, 52% out)

<sup>d</sup> ITE Trip Generation (9th Edition) land use category 565 (Day Care Center):

Daily:  $(T) = 74.06 * (X)$

AM Peak Hour:  $(T) = 12.18 * (X)$  (53% in, 47% out)

PM Peak Hour:  $(T) = 12.34 * (X)$  (47% in, 53% out)

<sup>e</sup> City of Oakland Transportation Impact Study Guidelines based on BATS 2000 data for developments in an urban environment within 0.5 miles of a BART station.

<sup>f</sup> MacArthur Transit Village Project Draft EIR, January 2008.

Source: Fehr & Peers, 2016.

to significantly out-perform the traditional ITE methodology. Since 2013, all transportation impact analyses for land use developments in Oakland have used this methodology.

- The project site is adjacent to the MacArthur BART Station and is located in a mixed-use urban environment with robust regional and local transit available and where many trips are made by walking, biking, and taking transit. Consistent with the TIS Guidelines, this analysis reduces the ITE-based trip generation by 43 percent to account for expected non-automobile trips. The primary difference between this methodology and the methodology used in the 2008 EIR is that this methodology reduces the ITE-based trip generation estimate for all uses by 43 percent, while the

2008 EIR only reduced the residential trips by 19 percent and retail trips by five percent.

As summarized in Table 21, the 2016 Modified Project would generate approximately 3,700 daily, 236 AM peak hour, and 329 PM peak hour trips. Table 21 also compares the project trip generation estimate with the project trip generation in the 2008 Project EIR. The 2016 Modified Project would generate about 1,186 fewer daily trips, 88 fewer AM peak hour trips (62 fewer inbound and 26 fewer outbound trips), and 29 fewer PM peak hour (the same inbound trips and 29 fewer outbound trips) than estimated in the 2008 Project EIR.

Although the currently proposed project would include more residential dwelling units than the project analyzed in the 2008 EIR, the currently proposed development is estimated to generate fewer trips primarily due to the change in City of Oakland's methodology in reducing the ITE-based automobile trip generation to account for non-automobile trips. As described above, this analysis reduces the ITE-based trip generation estimate for all project uses by 43 percent, while the 2008 EIR reduced the residential trips by 19 percent and retail trips by five percent. In addition, the current project proposes less retail than the 2008 EIR project.

#### *Existing Traffic Volume Comparison*

The traffic impact analysis completed for the 2014 Modified Project (Addendum #3) was based on existing traffic data collected between 2008 and 2012 and used in the Broadway Valdez Specific Plan EIR (published September 2013). To determine if existing conditions have changed, Fehr & Peers collected new vehicle counts at the following three intersections:

1. Telegraph Avenue/40<sup>th</sup> Street
2. Telegraph Avenue/MacArthur Boulevard
3. Telegraph Avenue/27<sup>th</sup> Street

The count data were collected from 7:00 AM to 9:00 AM (AM peak period) and from 4:00 PM to 6:00 PM (PM peak period) in March 2016 on a clear weekday when local schools were in regular session. Table 22 compares the total AM and PM peak hour intersection volumes collected in 2016 with the previous volume data used in the 2014 Modified Project analyzed.

The 2016 AM peak hour volumes are about 11 percent higher and the PM peak hour volumes are about 12 percent lower than the previously used data. In general, a 10 to 15 percent fluctuation in traffic volumes is within the typical fluctuation expected in day-to-day traffic volumes. The 2016 traffic volume data shows changes within this range, indicating that existing conditions in the vicinity of the project has generally remained the same since the completion of the previous analysis.

**TABLE 22 EXISTING INTERSECTION VOLUME COMPARISON WITH 2014 MODIFIED PROJECT ANALYSIS**

#	Intersection	Peak Hour	2014 Modified Project		Difference	% Difference
			Volumes <sup>a</sup>	Volumes <sup>b</sup>		
1	Telegraph Avenue/ 40 <sup>th</sup> Street	AM	1,766	2,090	324	18%
		PM	3,549	2,818	-731	-21%
2	Telegraph Avenue/ MacArthur Boulevard	AM	1,751	1,896	145	8%
		PM	2,613	2,553	-60	-2%
3	Telegraph Avenue/ 27 <sup>th</sup> Street	AM	1,930	2,064	134	7%
		PM	2,872	2,540	-332	-12%
<b>Total</b>		<b>AM</b>	<b>5,447</b>	<b>6,050</b>	<b>603</b>	<b>11%</b>
		<b>PM</b>	<b>9,034</b>	<b>7,911</b>	<b>-1,123</b>	<b>-12%</b>

<sup>a</sup> Based on existing intersection volumes used in MacArthur Transit Village, 2014 Modified Project – Transportation Impact Analysis Memorandum (April 2015) and collected between 2008 and 2012.

<sup>b</sup> Based on intersection volumes collected in March 2016.

### *Future Volume Comparison*

The future traffic impact analysis completed for the 2014 Modified Project (Addendum #3) was based on forecasts developed for the Broadway Valdez Specific Plan EIR (published September 2013), which were based on the Alameda CTC Model released in June 2011 for the year 2040. The most recent version of the Model was released in May 2015 and includes forecasts for the year 2040. Table 23 compares the raw model forecasts between the two models. Note that the values shown in Table 23 are the raw model forecasts and do not account for the Furnessing process used to develop the final forecasted volumes used in the analysis; however, they are an indicator of magnitude of change in forecasted volumes.

As shown in Table 23, the most recent version of the Alameda CTC Model forecasts lower future traffic volumes at the three study intersections during both AM and PM peak hours. Thus, the 2035 traffic analysis completed for the 2014 Modified Project (Addendum #3) is expected to continue to conservatively represent the future traffic conditions and a new future conditions analysis based on the most recent version of the Alameda CTC Model is not expected to result in new off-site transportation impacts or substantially increase the magnitude of already identified impacts.



**TABLE 23 FORECAST INTERSECTION VOLUME COMPARISON**

#	Intersection	Peak Hour	2014 Modified		Difference	% Difference
			Project Model (Year 2035) <sup>a</sup>	2016 Model (Year 2040) <sup>a</sup>		
1	Telegraph Avenue/ 40 <sup>th</sup> Street	AM	4,240	3,150	-1,090	-26%
		PM	5,610	4,780	-830	-15%
2	Telegraph Avenue/ MacArthur Boulevard	AM	4,950	2,840	-2,110	-43%
		PM	5,770	4,610	-1,160	-20%
3	Telegraph Avenue/ 27 <sup>th</sup> Street	AM	2,890	1,440	-1,450	-50%
		PM	4,520	2,770	-1,750	-39%

<sup>a</sup> Raw Model volumes for the year 2035 as forecasted by the Alameda CTC Model released in June 2011 and used for the Broadway Valdez Specific Plan EIR and the MacArthur Transit Village 2014 Modified Project analyses.

<sup>b</sup> Raw Model volumes for the year 2040 as forecasted by the Alameda CTC Model released in May 2015.

### VMT Analysis

On September 21, 2016, the City of Oakland’s Planning Commission directed staff to update the City of Oakland’s California Environmental Quality Act (CEQA) Thresholds of Significance Guidelines related to transportation impacts in order to implement the directive from Senate Bill 743 (Steinberg 2013) to modify local environmental review processes by removing automobile delay, as described solely by level of service (LOS) or similar measures of vehicular capacity or traffic congestion, as a significant impact on the environment pursuant to CEQA. This action aligns with proposed guidance from the Governor’s Office of Planning and Research and the City’s approach to transportation impact analysis with adopted plans and policies related to transportation, which promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. As a result, City staff prepared an interim *Update to CEQA Thresholds of Significance and Transportation Impact Study Guidelines*, dated October 17, 2016, which replaced LOS-based CEQA Thresholds of Significance with thresholds based on VMT.

The interim *Update to CEQA Thresholds of Significance and Transportation Impact Study Guidelines* identified that a project would have less-than-significant VMT impacts if any one of the following identified screening criteria are met:

1. Small Projects: The project generates fewer than 100 vehicle trips per day.
2. Low-VMT Areas: The project meets map-based screening criteria by being located in an area that exhibits below threshold VMT, or 15 percent or more below the regional average, as illustrated on maps provided by MTC.
3. Near Transit Stations: The project is located in a Transit Priority Area or within a one-half mile of a Major Transit Corridor or Stop<sup>36</sup> and satisfies the following:
  - Has a Floor Area Ratio (FAR) of more than 0.75.
  - Does not includes more parking for use by residents, customers, or employees of the project than other typical nearby uses, or more than required by the City in areas where there is a parking minimum.
  - Is consistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Transportation Commission).

In response to the City's newly established VMT thresholds, a VMT assessment was prepared for the Modified Parcel B project, which is included as Attachment G to this CEQA Analysis. As shown in Table 1 of Attachment G, the 2020 and 2040 average daily VMT per capita and VMT per worker in the project traffic analysis zone (TAZ) is more than 15 percent below the regional averages. The proposed project would thus satisfy the Low-VMT Area Criterion (#2). It is therefore presumed that the proposed project would not result in substantial additional VMT and project impacts with respect to VMT would not be significant.

### Conclusion

The 2016 Modified Project is not expected to result in new off-site transportation impacts or substantially increase the magnitude of already identified impacts, for the following reasons:

1. The 2016 Modified Project would generate fewer trips than the previously analyzed project.
2. Existing conditions have remained generally the same since the analysis for the 2014 Modified Project (Addendum #3) was completed. Based on data collected in 2016, existing traffic volumes are similar to the existing volumes used in the previous analysis.
3. Future conditions are not expected to change since the analysis for the 2014 Modified Project (Addendum #3) was completed which accounted for the planned bicycle

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<sup>36</sup> Major transit stop is defined in CEQA Section 21064.3 as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

facilities on Telegraph Avenue and MacArthur Boulevard.<sup>37</sup> Considering that the analysis completed for Addendum #3 did not identify any additional significant impacts beyond the ones identified in the 2008 EIR due to the implementation of the planned bicycle facilities, the 2016 Modified Project would continue to have similar significant impacts as the 2014 Modified Project, which would be mitigated by the mitigation measures identified in the 2008 EIR. No other changes to the transportation network in the vicinity of the project are expected. In addition, based on the most recent version of the Alameda Transportation Commission (Alameda CTC) Travel Demand Model, future traffic volume forecasts in the project vicinity would be same or less than the ones in the previous analysis.

The impact of the 2016 Modified Project is considered equal to or less severe than that previously identified in the 2008 Project EIR. The 2016 Modified Project would not result in any other transportation related significant impacts. The 2016 Modified Project would implement recommended improvement measures identified in the transportation analysis completed for the proposed project. Since the 2016 Modified Project would generate less trips than the 2008 Project, the 2016 Modified Project would have similar effects on cut-through traffic in the nearby residential streets as the 2008 Project. It should be noted that there is a recommendation in the 2008 Project EIR for the project applicant to monitor traffic volumes on the nearby residential streets after project completion and to implement traffic calming measures if excessive traffic volumes/speeds are observed. In addition, the 2016 Modified Project will be required to implement all mitigation measures identified in the 2008 Project EIR and adhere to SCAs related to City review and approval of all improvements proposed in the public right-of-way, reduction of vehicle traffic and parking demand generated by development projects, and construction traffic and parking management, as identified in Appendix A, at the end of the CEQA Checklist. For reference, these are: SCA-TRANS-1: Construction Activity in the Public Right-of-Way (#68); SCA-TRANS-2: Bicycle Parking (#69); SCA-TRANS-3: Transportation Improvements (#70); and SCA-TRANS-4: Transportation and Parking Demand Management (#71).

The strategies in the approved Transportation and Parking Demand Management (TDM) program, which are consistent with SCA-TRANS-4, continue to be reasonable and applicable to the site because the currently proposed uses at the site would be consistent with the uses assumed in the TDM program and the approved strategies would continue to be effective in reducing the traffic and parking generated by the project.

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<sup>37</sup> Addendum #3 assumed the implementation of the following for the 2035 analysis:

- Telegraph Avenue Complete Street Project, which would will provide buffered bicycle lanes along both directions of Telegraph Avenue between 20<sup>th</sup> and 41<sup>st</sup> Streets by eliminating one travel lane in each direction (the segment south of 28<sup>th</sup> Street has since been completed),
- MacArthur Boulevard Bikeway project which would provide Class 2 bicycle lanes along both directions of MacArthur Boulevard by generally eliminating one travel lane in each direction.

**UTILITIES AND SERVICE SYSTEMS**

	Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
<p>Would the project:</p>			
<p>a. Exceed wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board;                      Require or result in construction of new storm water drainage facilities or expansion of existing facilities, construction of which could cause significant environmental effects;                      Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments and require or result in construction of new wastewater treatment facilities or expansion of existing facilities, construction of which could cause significant environmental effects.</p>	■	□	□
<p>b. Exceed water supplies available to serve the project from existing entitlements and resources, and require or result in construction of water facilities or expansion of existing facilities, construction of which could cause significant environmental effects.</p>	■	□	□
<p>c. Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs and require or result in construction of landfill facilities or expansion of existing facilities, construction of which could cause significant environmental effects;</p>	■	□	□
<p>Violate applicable federal, state, and local statutes and regulations related to solid waste.</p>			
<p>d. Violate applicable federal, state, and local statutes and regulations relating to energy standards; or                      Result in a determination by the energy provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments and require or result in construction of new energy facilities or expansion of existing facilities, construction of which could cause significant environmental effects.</p>	■	□	□

## Project Analysis

### *Water, Wastewater, and Stormwater (Criteria 14.a and 14.b)*

Most of the Program EIRs considered in this analysis all found less-than-significant impacts related to water, wastewater, or stormwater facilities, finding no mitigation measures warranted but adhering to certain City of Oakland SCAs. The LUTE EIR identified a significant effect regarding these topics and identified mitigation measures that reduced the effects to less than significant. The Redevelopment Plan EIR and the Housing Element EIR did not identify any utility impacts.

The East Bay Municipal Utility District (EBMUD) provided a Water Supply Assessment (WSA) of the MacArthur Station Project.<sup>38</sup> The letter noted that the water demand for the project is accounted for in the EBMUD's water demand projections as published in the Urban Water Management Plan (UWMP) 2015, which includes projections of anticipated future water demands within the EBMUD's service boundaries. The projected water demand is estimated to be approximately 191,600 gallons per day (gpd) at buildout. The proposed project's future development and operations will not change EBMUD's 2040 demand projection.

As described in the WSA letter, the UWMP 2015 concluded that EBMUD has, and will have, adequate water supplies to serve existing and projected demand within the Ultimate Service Boundary during normal and wet years but that deficits are projected for multi-year droughts. During multi-year droughts, EBMUD may require significant customer water reductions and may also need to acquire supplemental supplies to meet customer demand. Despite water savings from EBMUD's aggressive conservation and recycling projects, water supplies are still needed in significant, severe, and critical droughts. The proposed project will be subject to the same drought restrictions that apply to all EBMUD customers. In addition, the proposed project will be subject to regulations aimed at encouraging efficient water use.

The UWMP 2015 identifies a mix of projects which will allow EBMUD to pursue the necessary supplemental supplies. In addition to pursuing supplemental water supply sources, EBMUD will maximize resources through continuous improvements in the delivery and transmission of available water supplies and investments in ensuring the safety of its existing water supply facilities. These programs, in addition to emergency interties and planned water recycling and conservation efforts, would ensure a reliable water supply to meet projected demands for current and future EBMUD customers within the service area.

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<sup>38</sup> Rehnstorm, David, J, 2016. *Letter to the City of Oakland, Water Supply Assessment – MacArhtur Station Project*, October 25.



No changes with respect to the environmental issues listed above have occurred. The 2016 Modified Project would not result in new significant impacts regarding the provision of or need for new or substantially expanded utilities and service systems, the construction of which could cause significant environmental effects. Therefore, the 2016 Modified Project would not result in any new or more substantial effect on water and sewer services. The impact would remain less than significant. The 2008 EIR also determined that development of the 2008 Project would have less-than-significant impacts related to stormwater and wastewater facilities. As previously discussed (Hydrology and Water Quality), the proposed project would have a similar amount of impervious surface and storm water runoff as compared to the pre-project conditions. Implementation of SCAs requiring stormwater control during and after construction would address potential impacts on stormwater treatment and sanitary sewer infrastructure. The impact of the 2016 Modified Project regarding stormwater and sanitary sewer infrastructure would remain less than significant as identified in the 2008 Project EIR.

*Solid Waste Services (Criterion 14.c)*

Most of the Program EIRs considered in this analysis all found less-than-significant impacts related to solid waste, adhering to City of Oakland SCAs; no mitigation measures were identified. The LUTE EIR identified a significant effect regarding solid waste and identified a mitigation measure that reduced the effect to less than significant. The Redevelopment Plan EIR and the Housing Element EIR did not identify solid waste impacts.

As described in the 2008 Project EIR, impacts associated with solid waste would be less than significant. The 2016 Modified Project would comply with existing solid waste reduction requirements and would not violate applicable federal, State, and local solid waste statutes and regulations. In addition, the 2016 Modified Project will comply with a City of Oakland SCA pertaining to waste reduction and recycling and thereby reduce waste through compliance with the City of Oakland regulations. The impact regarding solid waste services would remain less than significant as identified in the 2008 Project EIR.

*Energy (Criterion 14.d)*

The Program EIRs considered in this analysis all found less-than-significant impacts related to energy. As discussed in the 2008 Project EIR, the proposed project would be subject to Title 24, California's Energy Efficiency Standards for Residential and Nonresidential Buildings and would not violate applicable regulations related to energy standards. The 2016 Modified Project components would not require or result in construction of new energy facilities or expansion of existing facilities, construction of which could cause significant environmental effects. Given the increase in size, the 2016 Modified Project would have an incremental increase in energy demand, but would result in a similar less-than-significant impact and would comply with the standards of Title 24 of the California Code of Regulations. City of Oakland SCAs pertaining to compliance with the green building ordinance would require construction projects to incorporate energy-

conserving design measures. The proposed project's impact regarding energy would remain less than significant as identified in the 2008 Project EIR.

### **Conclusion**

Based on an examination of the analysis, findings, and conclusions of the 2008 Project EIR and the other Program EIRs, implementation of the 2016 Modified Project would not substantially increase the severity of significant impacts identified in the 2008 Project EIR or other Program EIRs, nor would it result in new significant impacts related to utilities and service systems that were not identified in the 2008 Project EIR or the other Program EIRs. The 2008 EIR did not identify any mitigation measures related to utilities and service systems, and none would be required for the 2016 Modified Project. The proposed project would be required to implement SCAs related to sewer capacity, stormwater drainage facilities, solid waste services, and energy, as identified in Attachment A to this document. For reference, these are: SCA-UTIL-1: Construction and Demolition Waste Reduction and Recycling (#74); SCA-UTIL-2: Underground Utilities (#75); SCA-UTIL-3: Recycling Collection and Storage Space (#76); SCA-UTIL-4: Green Building Requirements (#77); SCA-UTIL-5: Sanitary Sewer System (#79); SCA-UTIL-6: Storm Drain System (#80); and SCA-UTIL-7: Recycled Water (#81).

## VIII. REFERENCES

All references cited below are available at the Oakland Bureau of Planning, Agency, 250 Frank Ogawa Plaza, Suite 3330, Oakland, California, unless specified otherwise.

### Housing Element Update

City of Oakland, *Draft EIR for the 2007-2015 Housing Element Update*, 2009. City of Oakland, *Final EIR for the 2007-2015 Housing Element Update*, 2010.

City of Oakland, *2015-2023 Housing Element Addendum to the 2010 Housing Element EIR*, 2014.

### Redevelopment Plan for the Broadway/MacArthur/San Pablo Redevelopment Project (Redevelopment Plan)

Oakland Redevelopment Agency, *Redevelopment Plan for the Broadway/MacArthur/San Pablo Redevelopment Project*, Adopted on July 25, 2000, Amended on March 6, 2007.

City of Oakland Community and Economic Development Agency, *Broadway/MacArthur/San Pablo Redevelopment Plan Draft Environmental Impact Report*, April 2000.

City of Oakland Community and Economic Development Agency, *Broadway/MacArthur/San Pablo Redevelopment Plan Final Environmental Impact Report*, June 2, 2000.

### General Plan Land Use and Transportation Element

City of Oakland, *1998 LUTE Draft EIR*, 1997.

City of Oakland, *1998 LUTE Final EIR*, February 1998.

City of Oakland, 2007. *Land Use and Transportation Element of the Oakland General Plan*, March 24, 1998, amended to June 21, 2007.

### Plan Bay Area

Metropolitan Transportation Commission and Association of Bay Area Governments, 2013. *Plan Bay Area, Strategy for a Sustainable Region*. Adopted July 18, 2013.

### Oakland Planning Code

City of Oakland, 2013. *City of Oakland Planning Code. CEDA: Planning and Zoning*. <http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak032032.pdf>, accessed June 2016.

### **MacArthur Station Reports**

City of Oakland, January 2008, *MacArthur Transit Village Project Draft Environmental Impact Report*.

City of Oakland, May 2008, *MacArthur Transit Village Project Response to Comment Document*.

City of Oakland, *Certification of the EIR, CEQA Findings, and Statement of Overriding Considerations for the Approval of the MacArthur Transit Village Project Planning Commission Hearing* June 4, 2008

City of Oakland, *Agenda Report, Final Development Plan (FDP) MacArthur Station Phases 3 & 4, April 20, 2015*.

City of Oakland, *Agenda Report, Public Hearing and Upon Conclusion Adopt A Resolution Approving the MacArthur Transit Village Stage Two (2) Final Development Plan Permit and Variances, May 10, 2011*.

City of Oakland, *Agenda Report, Public Hearing and Resolution Approving the MacArthur Transit Village (a) Stage One (1) Final Development Plan Permit, December 14, 2010*.

## Attachment A: Standard Conditions of Approval and Mitigation Monitoring and Reporting Program

This Standard Conditions of Approval and Mitigation Monitoring and Reporting Program (SCAMMRP) is based on the CEQA Analysis prepared for the Modified Project.

This SCAMMRP is in compliance with Section 15097 of the CEQA Guidelines, which requires that the Lead Agency “adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects.” The SCAMMRP is based on the original MMRP included in the 2008 Project EIR, and thus lists mitigation measures recommended in and Conditions of Approval (COAs) required by the 2008 Project EIR. The SCAMMRP also includes the City’s Standard Conditions of Approval (“SCAs”) imposed by the City on all projects with locational or other characteristics shared by the 2016 Modified Project; the City’s intent in imposing these SCAs is to minimize potential adverse effects that could result from implementation of the 2016 Modified Project and to ensure the conditions are implemented and monitored. The SCAMMRP also identifies the mitigation monitoring requirements for each mitigation measure and SCA.

This CEQA Analysis is also based on the analysis in the following Program EIRs that apply to the Modified Project: Oakland’s 1998 General Plan Land Use and Transportation Element (LUTE) EIR, the 2010 General Plan Housing Element Update EIR and 2014 Addendum, and the Broadway/MacArthur/San Pablo Redevelopment Plan EIR (or “Redevelopment Plan EIR”). However, none of the mitigation measures or SCAs from these are included in this SCAMMRP because an updated and equally effective mitigation measure or SCA, is identified in the 2008 Project EIR or in this CEQA Analysis for the 2016 Modified Project. Thus, the revised/current SCAs are designed to and will reduce impacts to less-than-significant levels. To the extent that there is any inconsistency between any mitigation measures and/or SCAs, the more restrictive conditions shall govern; to the extent any mitigation measure and/or SCA identified in the CEQA Analysis were inadvertently omitted, they are automatically incorporated herein by reference.

- The first column of the SCAMMRP table identifies the mitigation measure from the 2008 Project EIR and the Standard Condition of Approval (SCA) applicable to the 2016 Modified Project pursuant to City of Oakland policy. While a mitigation measure or SCA can apply to more than one topic, it is listed in its entirety only under its primary topic where it first appears. Each of the mitigation measures included in the 2008 Project EIR are listed; those that have been completed and as such are no longer necessary are noted. The SCAs listed are the City’s most current SCAs (July 2016). The SCAs were updated by the City and determined to be equally as effective and comprehensive, if not more, in reducing potential impacts to a less-than-significant level than those included in the 2008 EIR and MMRP. The SCAs are identified by a number that is



consistent with the most recent update or revision to the City's *Standard Conditions of Approval and Uniformly Applied Development Standards* document<sup>1</sup> as provided in parentheses.

- The second column identifies the monitoring schedule or timing applicable the Project.
- The third column names the party responsible for monitoring the required action for the Project.
- The fourth column summarizes the monitoring procedure.

The Project sponsor is responsible for compliance with any recommendations identified in City approved technical reports and with all SCAs set forth herein at its sole cost and expense, unless otherwise expressly provided in a specific mitigation measure or condition of approval, and subject to the review and approval of the City of Oakland. Overall monitoring and compliance with the mitigation measures will be the responsibility of the Bureau of Planning or the Bureau of Building. Prior to the issuance of a demolition, grading, and/or construction permit, the Project sponsor shall pay the applicable mitigation and monitoring fee to the City in accordance with the City's Master Fee Schedule.

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<sup>1</sup> Standard Conditions Of Approval, Department of Planning and Building, Bureau of Planning, Adopted by the Oakland City Council on November 3, 2008 (Ordinance No. 12899 C.M.S.) Revised July 2016.

STANDARD CONDITION OF APPROVALS AND MITIGATION MONITORING AND REPORTING PROGRAM			
Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/Inspection
<b>Biological Resources</b>			
<p><b>SCA-BIO-1: Tree Removal During Bird Breeding Season (#26) Completed:</b>  <i>Vegetation and trees were removed in association with the Phase 1 infrastructure improvements.</i></p> <p><u>Requirement:</u> To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of birds shall not occur during the bird breeding season of February 1 to August 15 (or during December 15 to August 15 for trees located in or near marsh, wetland, or aquatic habitats). If tree removal must occur during the bird breeding season, all trees to be removed shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to the start of work and shall be submitted to the City for review and approval. If the survey indicates the potential presence of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the California Department of Fish and Wildlife, and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.</p> <p><u>When Required:</u> Prior to removal of trees  <u>Initial Approval:</u> Bureau of Building  <u>Monitoring/Inspection:</u> Bureau of Building</p>	<p>Prior to the issuance of a tree removal permit</p>	<p>City of Oakland                      Bureau of Building</p>	<p>Verify that tree removal will not occur during the breeding season of March 15 and August 15. If tree removal must occur during the breeding season, verify that the required pre-removal surveys have been conducted, provided to the Planning and Zoning Division, and if necessary an adequate nest buffer is implemented.</p>
<p><b>SCA-BIO-2: Tree Permit (#27) Completed: A permit was obtained in association with the Phase 1 infrastructure improvements.</b></p> <p><i>a. Tree Permit Required</i></p> <p><u>Requirement:</u> Pursuant to the City’s Tree Protection Ordinance (OMC chapter 12.36), the project applicant shall obtain a tree permit and abide by the conditions of that permit.</p> <p><u>When Required:</u> Prior to approval of construction-related permit  <u>Initial Approval:</u> Permit approval by Public Works Department, Tree Division; evidence of approval submitted to Bureau of Building                      Monitoring/Inspection: Bureau of Building</p> <p><i>b. Tree Protection During Construction</i></p> <p><u>Requirement:</u> Adequate protection shall be provided during the construction period for</p>	<p>During construction related activities</p>	<p>Public Works                      Department, Tree                      Division</p>	<p>Verify that adequate tree protection is provided during construction</p>

<b>STANDARD CONDITION OF APPROVALS AND MITIGATION MONITORING AND REPORTING PROGRAM</b>			
<b>Standard Conditions of Approval/Mitigation Measures</b>	<b>Mitigation Implementation/Monitoring</b>		
	<b>When Required</b>	<b>Initial Approval</b>	<b>Monitoring/Inspection</b>
<p>any trees which are to remain standing, including the following, plus any recommendations of an arborist:</p> <p>i. Before the start of any clearing, excavation, construction, or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the project’s consulting arborist. Such fences shall remain in place for duration of all such work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree.</p> <p>ii. Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the project’s consulting arborist from the base of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree.</p> <p>iii. No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the project’s consulting arborist from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within a distance from the base of any protected trees to be determined by the project’s consulting arborist. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree.</p> <p>iv. Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration.</p> <p>v. If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Department and the project’s consulting arborist shall make a recommendation to the City Tree Reviewer as to whether the damaged tree can be preserved. If, in the professional opinion of the Tree Reviewer, such tree cannot be preserved in a healthy state, the Tree Reviewer shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed.</p>			

STANDARD CONDITION OF APPROVALS AND MITIGATION MONITORING AND REPORTING PROGRAM			
Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/Inspection
<p>vi. All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations.</p> <p><u>When Required:</u> During construction  <u>Initial Approval:</u> Public Works Department, Tree Division  <u>Monitoring/Inspection:</u> Bureau of Building</p> <p><i>c. Tree Replacement Plantings</i>                      Requirement: Replacement plantings shall be required for tree removals for the purposes of erosion control, groundwater replenishment, visual screening, wildlife habitat, and preventing excessive loss of shade, in accordance with the following criteria:</p> <p>i. No tree replacement shall be required for the removal of nonnative species, for the removal of trees which is required for the benefit of remaining trees, or where insufficient planting area exists for a mature tree of the species being considered.</p> <p>ii. Replacement tree species shall consist of Sequoia sempervirens (Coast Redwood), Quercus agrifolia (Coast Live Oak), Arbutus menziesii (Madrone), Aesculus californica (California Buckeye), Umbellularia californica (California Bay Laurel), or other tree species acceptable to the Tree Division.</p> <p>iii. Replacement trees shall be at least twenty-four (24) inch box size, unless a smaller size is recommended by the arborist, except that three fifteen (15) gallon size trees may be substituted for each twenty-four (24) inch box size tree where appropriate.</p> <p>iv. Minimum planting areas must be available on site as follows:</p> <ul style="list-style-type: none"> <li>• For Sequoia sempervirens, three hundred fifteen (315) square feet per tree;</li> <li>• For other species listed, seven hundred (700) square feet per tree.</li> </ul> <p>v. In the event that replacement trees are required but cannot be planted due to site constraints, an in lieu fee in accordance with the City’s Master Fee Schedule may be substituted for required replacement plantings, with all such revenues applied toward tree planting in city parks, streets and medians.</p> <p>vi. The project applicant shall install the plantings and maintain the plantings until established. The Tree Reviewer of the Tree Division of the Public Works Department may require a landscape plan showing the replacement plantings and the method of irrigation. Any replacement plantings which fail to become established within one year of planting shall be replanted at the project applicant’s expense.</p> <p><u>When Required:</u> Prior to building permit final  <u>Initial Approval:</u> Public Works Department, Tree Division</p>			

STANDARD CONDITION OF APPROVALS AND MITIGATION MONITORING AND REPORTING PROGRAM			
Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/Inspection
<u>Monitoring/Inspection</u> : Bureau of Building			
<b>C. TRANSPORTATION, CIRCULATION AND PARKING</b>			
<p><b>SCA-PSR-1: Construction Management Plan (#13)</b>                      Prior to the issuance of the first construction-related permit, the project applicant and his/her general contractor shall submit a Construction Management Plan (CMP) for review and approval by the Bureau of Planning, Bureau of Building, and other relevant City departments such as the Fire Department and the Public Works Department as directed. The CMP shall contain measures to minimize potential construction impacts including measures to comply with all construction related Conditions of Approval (and mitigation measures if applicable) such as dust control, construction emissions, hazardous materials, construction days/hours, construction traffic control, waste reduction and recycling, stormwater pollution prevention, noise control, complaint management, and cultural resource management (see applicable Conditions below). The CMP shall provide project-specific information including descriptive procedures, approval documentation, and drawings (such as a site logistics plan, fire safety plan, construction phasing plan, proposed truck routes, traffic control plan, complaint management plan, construction worker parking plan, and litter/debris clean-up plan) that specify how potential construction impacts will be minimized and how each construction-related requirement will be satisfied throughout construction of the project.</p>	Prior to the issuance of the first construction-related permit for each phase	City of Oakland Bureau of Planning, Bureau of Building, and other relevant City departments such as the Fire Department and the Public Works Department as directed	Verify that the Construction Management Plan has been prepared and that it meets the standards listed in the SCA.
<p><b>SCA-TRANS-1: Construction Activity in the Public Right-of-Way (#68)</b>  <i>a. Obstruction Permit Required</i>  <u>Requirement</u>: The project applicant shall obtain an obstruction permit from the City prior to placing any temporary construction-related obstruction in the public right-of-way, including City streets and sidewalks.  <u>When Required</u>: Prior to approval of construction-related permit  <u>Initial Approval</u>: Bureau of Building  <u>Monitoring/Inspection</u>: Bureau of Building  <i>b. Traffic Control Plan Required</i>  <u>Requirement</u>: In the event of obstructions to vehicle or bicycle travel lanes, the project applicant shall submit a Traffic Control Plan to the City for review and approval prior to obtaining an obstruction permit. The project applicant shall submit evidence of City approval of the Traffic Control Plan with the application for an obstruction permit. The Traffic Control Plan shall contain a set of comprehensive traffic control measures for auto, transit, bicycle, and pedestrian detours, including detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. The project applicant shall implement the approved Plan during construction.</p>	Prior to placing any temporary construction-related obstruction in the public right-of-way,	Bureau of Building	Verify permit has been acquired, Traffic Control Plan implemented (if required), and that necessary repairs are made to City street (if required) prior to approval of final inspection of construction related permits



<b>STANDARD CONDITION OF APPROVALS AND MITIGATION MONITORING AND REPORTING PROGRAM</b>			
<b>Standard Conditions of Approval/Mitigation Measures</b>	<b>Mitigation Implementation/Monitoring</b>		
	<b>When Required</b>	<b>Initial Approval</b>	<b>Monitoring/Inspection</b>
<p><u>When Required:</u> Prior to approval of construction-related permit  <u>Initial Approval:</u> Public Works Department, Transportation Services Division  <u>Monitoring/Inspection:</u> Bureau of Building</p> <p><b>c. Repair of City Streets</b>  <u>Requirement:</u> The project applicant shall repair any damage to the public right-of way, including streets and sidewalks caused by project construction at his/her expense within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to approval of the final inspection of the construction-related permit. All damage that is a threat to public health or safety shall be repaired immediately.  <u>When Required:</u> Prior to building permit final  <u>Initial Approval:</u> N/A  <u>Monitoring/Inspection:</u> Bureau of Building</p>			
<p><b>SCA-TRANS-2: Bicycle Parking (#69)</b>  <u>Requirement:</u> The project applicant shall comply with the City of Oakland Bicycle Parking Requirements (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall demonstrate compliance with the requirements.  <u>When Required:</u> Prior to approval of construction-related permit  <u>Initial Approval:</u> Bureau of Planning  <u>Monitoring/Inspection:</u> Bureau of Building</p>	Prior to approval of construction-related permit	Bureau of Planning	Verify that project applicant met City of Oakland Bicycle Parking Requirements
<p><b>SCA-TRANS-3: Transportation Improvements (#70)</b>  <u>Requirement:</u> The project applicant shall implement the recommended on- and off-site transportation-related improvements contained within the Transportation Impact Study for the project (e.g., signal timing adjustments, restriping, signalization, traffic control devices, roadway reconfigurations, and pedestrian and bicyclist amenities). The project applicant is responsible for funding and installing the improvements, and shall obtain all necessary permits and approvals from the City and/or other applicable regulatory agencies such as, but not limited to, Caltrans (for improvements related to Caltrans facilities) and the California Public Utilities Commission (for improvements related to railroad crossings), prior to installing the improvements. To implement this measure for intersection modifications, the project applicant shall submit Plans, Specifications, and Estimates (PS&amp;E) to the City for review and approval. All elements shall be designed to applicable City standards in effect at the time of construction and all new or upgraded signals shall include these enhancements as required by the City. All other facilities supporting vehicle travel and alternative modes through the intersection shall be brought up to both City standards and ADA standards (according</p>	Prior to building permit final	Bureau of Building; Public Works Department, Transportation Services Division	Verify that applicant has constructed recommended on- and off-site transportation related improvements

STANDARD CONDITION OF APPROVALS AND MITIGATION MONITORING AND REPORTING PROGRAM			
Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/Inspection
<p>to Federal and State Access Board guidelines) at the time of construction. Current City Standards call for, among other items, the elements listed below:</p> <ol style="list-style-type: none"> <li>a. 2070L Type Controller with cabinet accessory</li> <li>b. GPS communication (clock)</li> <li>c. Accessible pedestrian crosswalks according to Federal and State Access Board guidelines with signals (audible and tactile)</li> <li>d. Countdown pedestrian head module switch out</li> <li>e. City Standard ADA wheelchair ramps</li> <li>f. Video detection on existing (or new, if required)</li> <li>g. Mast arm poles, full activation (where applicable)</li> <li>h. Polara Push buttons (full activation)</li> <li>i. Bicycle detection (full activation)</li> <li>j. Pull boxes</li> <li>k. Signal interconnect and communication with trenching (where applicable), or through existing conduit (where applicable), 600 feet maximum</li> <li>l. Conduit replacement contingency</li> <li>m. Fiber switch</li> <li>n. PTZ camera (where applicable)</li> <li>o. Transit Signal Priority (TSP) equipment consistent with other signals along corridor</li> <li>p. Signal timing plans for the signals in the coordination group</li> </ol> <p><u>When Required</u>: Prior to building permit final or as otherwise specified  <u>Initial Approval</u>: Bureau of Building; Public Works Department, Transportation Services Division  <u>Monitoring/Inspection</u>: Bureau of Building</p>			
<p><b>Completed in association with the Phase 1 infrastructure improvements.</b>  <u>Mitigation Measure TRANS-1</u>: Optimize signal timing (i.e., adjust the allocation of green time for each intersection approach) at the Telegraph Avenue/51<sup>st</sup> Street intersection and coordinate signal phasing and timing with the adjacent Telegraph Avenue/52<sup>nd</sup> Street and Claremont Avenue intersection and other intersections in the same coordination group. To implement this measure, the project sponsor shall submit a signal optimization plan to City of Oakland Transportation Services Division for review and approval. The plan shall consist of signal timing parameters for the signals in the coordination group. The project sponsor shall fund the cost of preparing and implementing the plan.</p>	<p>Submit plan prior to the issuance of first building permit;</p> <p>Implement signal optimization measures according to timing outlined</p>	<p>City of Oakland, CEDA, Transportation Services Division</p>	<ul style="list-style-type: none"> <li>▪ Verify that the Signal Optimization Plan has been prepared and that it meets the standards listed in the mitigation measure.</li> <li>▪ Verify that the project sponsor funds the cost of preparing and implementing the Signal Optimization</li> </ul>

STANDARD CONDITION OF APPROVALS AND MITIGATION MONITORING AND REPORTING PROGRAM			
Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/Inspection
	in approved plan		Plan. <ul style="list-style-type: none"> <li>▪ Ensure plan measures are being implemented.</li> </ul>
<p><b>Completed in association with the Phase 1 infrastructure improvements.</b>                      Mitigation Measure TRANS-2: Change the signal cycle length to 90 seconds and optimize signal timing (i.e., adjust the allocation of green time for each intersection approach) at the Market Street/MacArthur Boulevard intersection. To implement this measure, the project sponsor shall submit a signal optimization plan to City of Oakland Transportation Services Division for review and approval. The plan shall consist of signal timing parameters for the Market Street/MacArthur Boulevard intersection. The project sponsor shall fund the cost of preparing and implementing the plan.</p>	Submit plan prior to the issuance of first building permit;  Implement signal optimization measures according to timing outlined in approved plan	City of Oakland, CEDA, Transportation Services Division	<ul style="list-style-type: none"> <li>▪ Verify that the Signal Optimization Plan has been prepared and that it meets the standards listed in the mitigation measure.</li> <li>▪ Verify that the project sponsor funds the cost of preparing and implementing the Signal Optimization Plan.</li> <li>▪ Ensure plan measures are being implemented.</li> </ul>
<p><b>Completed in association with the Phase 1 infrastructure improvements.</b>                      Mitigation Measure TRANS-3: Implement the following measures:</p> <ul style="list-style-type: none"> <li>• Prohibit left-turns from northbound Telegraph Avenue into westbound 52<sup>nd</sup> Street during the peak commute times (i.e., 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.). Currently, a small volume of traffic uses this movement (about 10 peak hour vehicles), which can be diverted to 51<sup>st</sup> Street. Thus, the peak hour prohibition on left-turns would not result in excessive and circuitous diversions.</li> <li>• Change signal cycle length to 120 seconds and optimizing signal timing (i.e., adjust the allocation of green time for each intersection approach) at the Telegraph Avenue/52<sup>nd</sup> Street and Claremont Avenue intersection; coordinate signal timing and phasing with the adjacent Telegraph Avenue/51<sup>st</sup> Street intersection and other intersections in the same coordination group.</li> </ul> <p>To implement these measures, the project sponsor shall submit the following to City of Oakland Transportation Services Division for review and approval:</p> <ul style="list-style-type: none"> <li>• Signing plans to prohibit left-turns from northbound Telegraph Avenue into westbound 52<sup>nd</sup> Street.</li> <li>• Signal timing plans for the signals in the coordination group.</li> </ul>	Submit plans prior to the issuance of first building permit;  Implement measures according to timing outlined in approved plan	City of Oakland, CEDA, Transportation Services Division	<ul style="list-style-type: none"> <li>▪ Verify that the signing plans to prohibit left-turns from northbound Telegraph Avenue into westbound 52<sup>nd</sup> Street have been adequately prepared.</li> <li>▪ Verify that the signal timing plans for the signals in the coordination group have been adequately prepared.</li> <li>▪ Ensure plan measures are being implemented.</li> </ul>

STANDARD CONDITION OF APPROVALS AND MITIGATION MONITORING AND REPORTING PROGRAM			
Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/Inspection
The project sponsor shall fund the cost of preparing and implementing these plans.			
<p><b><i>Completed in association with the Phase 1 infrastructure improvements.</i></b>  <b><u>Mitigation Measure TRANS-4:</u></b> Implement the following measures:</p> <ul style="list-style-type: none"> <li>• Change signal cycle length to 120 seconds and optimize signal timing (i.e., adjust the allocation of green time for each intersection approach) at the Telegraph Avenue/51<sup>st</sup> Street intersection and coordinate signal phasing and timing with the adjacent Telegraph Avenue/52<sup>nd</sup> Street and Claremont Avenue intersection and other intersections in the same coordination group. To implement this measure, the project sponsor shall submit a signal optimization plan to City of Oakland Transportation Services Division for review and approval. The plan shall consist of signal timing parameters for the signals in the coordination group. The project sponsor shall fund the cost of preparing and implementing the plan.</li> <li>• To help further minimize impacts at this intersection, a Transportation Demand Management (TDM) program shall be implemented at the project site to encourage more residents and employees to shift from driving alone to other modes of travel. Potential TDM measures may include, but are not limited to, transit ticket subsidies, awareness programs, direct transit sales, providing a guaranteed ride home program, and parking management strategies. The effectiveness of the TDM program shall be regularly monitored, and if necessary adjusted to meet its goals. The project applicant shall submit the TDM program to the City for its review and approval. The plan shall also be submitted to BART for review and comment. The project applicant shall also be responsible for funding and implementing the TDM program.</li> <li>• The components of the proposed TDM program have not been finalized. Additionally, it is difficult to accurately predict a TDM program’s effectiveness and to quantify the effects on reducing project trip generation. To present a conservative analysis, this study assumes that the intersection would continue to operate at LOS F with the implementation of this mitigation measure. Thus, these measures will partially mitigate the impact, but are not sufficient to mitigate the impact to a less-than-significant level.</li> </ul>	<p>Submit plan prior to the issuance of first building permit; implement signal optimization measures according to timing outlined in approved plan</p> <p>Submit TDM Plan prior to the issuance of first building permit;</p> <p>Implement measures according to timeframes outlined in approved plan</p>	<p>City of Oakland, CEDA, Transportation Services Division</p> <p>City of Oakland Transportation Services Division</p>	<ul style="list-style-type: none"> <li>▪ Verify that the Signal Optimization Plan has been prepared and that it meets the standards listed in the mitigation measure.</li> <li>▪ Review Transportation Demand Management Program for adequacy and review regular monitoring reports regarding program effectiveness.</li> <li>▪ Ensure plan and program measures are being implemented.</li> </ul>
<p><b><i>Completed in association with the Phase 1 infrastructure improvements.</i></b>  <b><u>Mitigation Measure TRANS-5:</u></b> Optimize signal timing (i.e., adjust the allocation of green time for each intersection approach) at the West Street/40<sup>th</sup> Street intersection. To implement this measure, the project sponsor shall submit a signal optimization plan to City of Oakland Transportation Services Division for review and approval. The</p>	<p>Submit plan prior to the issuance of first building permit;</p>	<p>City of Oakland, CEDA, Transportation Services Division</p>	<ul style="list-style-type: none"> <li>▪ Verify that the Signal Optimization Plan has been prepared and that it meets the standards listed in the mitigation</li> </ul>

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plan shall consist of signal timing parameters for the West Street/40 <sup>th</sup> Street intersection. The project sponsor shall fund the cost of preparing and implementing the plan.	Implement signal optimization measures according to timing outlined in approved plan		measure. <ul style="list-style-type: none"> <li>▪ Ensure plan and program measures are being implemented.</li> </ul>
<p><b><i>Completed in association with the Phase 1 infrastructure improvements.</i></b>  <b><u>Mitigation Measure TRANS-6:</u></b> Implement the following measures:</p> <ul style="list-style-type: none"> <li>• Provide protected/permitted left-turn phasing on eastbound and westbound 40<sup>th</sup> Street approaches.</li> <li>• Change signal cycle length to 120 seconds in the AM peak and 105 seconds during the PM peak hour, and optimize signal timing (i.e., adjust the allocation of green time for each intersection approach) at the Telegraph Avenue/40<sup>th</sup> Street intersection. The change in signal cycle length may also require coordination with other intersections in the same coordination group.</li> </ul> <p>To implement these measures, the project sponsor shall submit the following to City of Oakland Transportation Services Division for review and approval:</p> <ul style="list-style-type: none"> <li>• Plans, Specifications, and Estimates (PS&amp;E) to modify intersection to provide left-turn phasing on eastbound and westbound 40<sup>th</sup> Street approaches.</li> <li>• Signal timing plans for the signals in the coordination group.</li> </ul> <p>The project sponsor shall fund the cost of preparing and implementing these plans.</p>	Prior to the issuance of first building permit;  Modify intersection and signal timing in accordance with approved plan	City of Oakland, CEDA, Transportation Services Division	<ul style="list-style-type: none"> <li>▪ Verify that the Plans, Specifications, and Estimates (PS&amp;E) to modify intersection to provide left-turn phasing on eastbound and westbound 40<sup>th</sup> Street approaches have been adequately prepared.</li> <li>▪ Verify that signal timing plans for the signals in the coordination group have been adequately prepared.</li> <li>▪ Ensure plan measures are being implemented.</li> </ul>
<p><b><i>Completed in association with the Phase 1 infrastructure improvements.</i></b>  <b><u>Mitigation Measure TRANS-7:</u></b> The impact shall be mitigated by the following:</p> <ul style="list-style-type: none"> <li>• Stripe a left-turn lane on northbound Market Street at MacArthur Boulevard. The left-turn lane can be accommodated within the existing right-of-way, but may result in loss of a few on-street parking and relocation of an AC Transit bus stop on northbound Market Street.</li> <li>• Change signal cycle length to 110 seconds during the AM peak hour and 90 seconds during the PM peak hour, and optimize signal timing (i.e., adjust the allocation of green time for each intersection approach) at the Market Street/MacArthur Boulevard intersection.</li> </ul>	Submit plans prior to the issuance of first building permit;  Implement measures according to timeframes outlined in	City of Oakland, CEDA, Transportation Services Division	<ul style="list-style-type: none"> <li>▪ Verify that the Plans, Specifications, and Estimates (PS&amp;E) to stripe a left-turn lane on northbound Market Street at MacArthur Boulevard have been adequately prepared.</li> <li>▪ Verify that the signal timing plans for the</li> </ul>



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<p>To implement these measures, the project sponsor shall submit the following to City of Oakland Transportation Services Division for review and approval:</p> <ul style="list-style-type: none"> <li>Plans, Specifications, and Estimates (PS&amp;E) to stripe a left-turn lane on northbound Market Street at MacArthur Boulevard.</li> <li>Signal timing plans for the Market Street/MacArthur Boulevard intersection.</li> </ul> <p>The project sponsor shall fund the cost of preparing and implementing these plans.</p>	approved plan		<ul style="list-style-type: none"> <li>Market Street/MacArthur Boulevard intersection have been adequately prepared.</li> <li>Ensure plan measures are being implemented.</li> </ul>
<p><b><i>Completed in association with the Phase 1 infrastructure improvements.</i></b>  <u>Mitigation Measure TRANS-8:</u> Implement the following measures:</p> <ul style="list-style-type: none"> <li>Provide protected/permitted left-turn phasing on northbound and southbound Telegraph Avenue approaches.</li> <li>Change signal cycle length to 120 seconds and optimize signal timing (i.e., adjust the allocation of green time for each intersection approach) at the Telegraph Avenue/MacArthur Boulevard intersection. Signal phasing and timing shall also be coordinated with other intersections in the same coordination group.</li> </ul> <p>To implement this measure, the project sponsor shall submit the following to City of Oakland Transportation Services Division for review and approval:</p> <ul style="list-style-type: none"> <li>Plans, Specifications, and Estimates (PS&amp;E) to modify intersection to provide left-turn phasing on northbound and southbound Telegraph Avenue approaches.</li> <li>Signal timing parameters for the signals in the coordination group.</li> </ul> <p>The project sponsor shall fund the cost of preparing and implementing the plan.</p>	<p>Submit plans prior to the issuance of first building permit;</p> <p>Implement measures according to timeframes outlined in approved plan</p>	<p>City of Oakland, CEDA, Transportation Services Division</p>	<ul style="list-style-type: none"> <li>Verify that the Plans, Specifications, and Estimates (PS&amp;E) to modify intersection to provide left-turn phasing on northbound and southbound Telegraph Avenue approaches have been adequately prepared.</li> <li>Verify that the signal timing parameters for the signals in the coordination group have been adequately prepared.</li> <li>Ensure plan measures are being implemented.</li> </ul>
<p><b><i>Completed in association with the Phase 1 infrastructure improvements.</i></b>  <u>Mitigation Measure TRANS-9:</u> Implement the following measures:</p> <ul style="list-style-type: none"> <li>To help further minimize impacts at this intersection, a Transportation Demand Management (TDM) program shall be implemented at the project site to encourage more residents and employees to shift from driving alone to other modes of travel. Potential TDM measures may include, but are not limited to, transit ticket subsidies, awareness programs, direct transit sales, providing a guaranteed ride home program, and parking management strategies. The effectiveness of the TDM program shall be regularly monitored, and if necessary adjusted to meet its goal. The project applicant shall submit the TDM program to the City for its review and approval. The plan shall also be submitted to BART for review and comment. The</li> </ul>	See SCA-TRANS-4		

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<p>project applicant shall also be responsible for funding and implementing the TDM program.</p> <p>The components of the proposed TDM program have not been finalized. Additionally, it is difficult to accurately predict a TDM program’s effectiveness and to quantify the effects on reducing project trip generation.</p>			
<p><b>SCA-TRANS-4: Transportation and Parking Demand Management (#71)</b>  <i>Completed. Final TDM plan was approved in association with the Phase 1 infrastructure FDP approvals as required by Mitigation Measure TRANS-4.</i></p> <p><b>a. Transportation and Parking Demand Management (TDM) Plan Required Requirement:</b> The project applicant shall submit a Transportation and Parking Demand Management (TDM) Plan for review and approval by the City.</p> <p>i. The goals of the TDM Plan shall be the following:</p> <ul style="list-style-type: none"> <li>• Reduce vehicle traffic and parking demand generated by the project to the maximum extent practicable, consistent with the potential traffic and parking impacts of the project.</li> <li>• Achieve the following project vehicle trip reductions (VTR):                             <ul style="list-style-type: none"> <li>○ Projects generating 50-99 net new a.m. or p.m. peak hour vehicle trips: 10 percent VTR</li> <li>○ Projects generating 100 or more net new a.m. or p.m. peak hour vehicle trips: 20 percent VTR Increase pedestrian, bicycle, transit, and carpool/vanpool modes of travel. All four modes of travel shall be considered, as appropriate.</li> </ul> </li> <li>• Enhance the City’s transportation system, consistent with City policies and programs.</li> </ul> <p>ii. TDM strategies to consider include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Inclusion of additional long-term and short-term bicycle parking that meets the design standards set forth in chapter five of the Bicycle Master Plan and the Bicycle Parking Ordinance (chapter 17.117 of the Oakland Planning Code), and shower and locker facilities in commercial developments that exceed the requirement.</li> <li>• Construction of and/or access to bikeways per the Bicycle Master Plan; construction of priority bikeways, on-site signage and bike lane striping. • Installation of safety elements per the Pedestrian Master Plan (such as crosswalk striping, curb ramps, count down signals, bulb outs, etc.) to encourage convenient and safe crossing at arterials, in addition to safety elements required to address safety impacts of the project.</li> </ul>	<p>Prior to approval of construction-related permit</p>	<p>Bureau of Planning</p>	<ul style="list-style-type: none"> <li>▪ Review and approve the TDM Plan and that the TDM Plan complies with the requirements of the SCA.</li> </ul>

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<ul style="list-style-type: none"> <li>• Installation of amenities such as lighting, street trees, and trash receptacles per the Pedestrian Master Plan and any applicable streetscape plan.</li> <li>• Construction and development of transit stops/shelters, pedestrian access, way finding signage, and lighting around transit stops per transit agency plans or negotiated improvements.</li> <li>• Direct on-site sales of transit passes purchased and sold at a bulk group rate (through programs such as AC Transit Easy Pass or a similar program through another transit agency).</li> <li>• Provision of a transit subsidy to employees or residents, determined by the project applicant and subject to review by the City, if employees or residents use transit or commute by other alternative modes.</li> <li>• Provision of an ongoing contribution to transit service to the area between the project and nearest mass transit station prioritized as follows: 1) Contribution to AC Transit bus service; 2) Contribution to an existing area shuttle service; and 3) Establishment of new shuttle service. The amount of contribution (for any of the above scenarios) would be based upon the cost of establishing new shuttle service (Scenario 3).</li> <li>• Guaranteed ride home program for employees, either through 511.org or through separate program.</li> <li>• Pre-tax commuter benefits (commuter checks) for employees.</li> <li>• Free designated parking spaces for on-site car-sharing program (such as City Car Share, Zip Car, etc.) and/or car-share membership for employees or tenants.</li> <li>• On-site carpooling and/or vanpool program that includes preferential (discounted or free) parking for carpools and vanpools.</li> <li>• Distribution of information concerning alternative transportation options.</li> <li>• Parking spaces sold/leased separately for residential units. Charge employees for parking, or provide a cash incentive or transit pass alternative to a free parking space in commercial properties.</li> <li>• Parking management strategies including attendant/valet parking and shared parking spaces.</li> <li>• Requiring tenants to provide opportunities and the ability to work off-site.</li> <li>• Allow employees or residents to adjust their work schedule in order to complete the basic work requirement of five eight-hour workdays by adjusting their schedule to reduce vehicle trips to the worksite (e.g., working four, ten-hour days; allowing employees to work from home two days per week).</li> </ul>			

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<ul style="list-style-type: none"> <li>Provide or require tenants to provide employees with staggered work hours involving a shift in the set work hours of all employees at the workplace or flexible work hours involving individually determined work hours.</li> </ul> <p>The TDM Plan shall indicate the estimated VTR for each strategy, based on published research or guidelines where feasible. For TDM Plans containing ongoing operational VTR strategies, the Plan shall include an ongoing monitoring and enforcement program to ensure the Plan is implemented on an ongoing basis during project operation. If an annual compliance report is required, as explained below, the TDM Plan shall also specify the topics to be addressed in the annual report.  <u>When Required:</u> Prior to approval of construction-related permit  <u>Initial Approval:</u> Bureau of Planning  <u>Monitoring/Inspection:</u> N/A</p>			
<p><b>Completed. Final TDM plan was approved in association with the Phase 1 infrastructure FDP approvals as required by Mitigation Trans-4.</b>  <b>b. TDM Implementation – Physical Improvements</b>  <u>Requirement:</u> For VTR strategies involving physical improvements, the project applicant shall obtain the necessary permits/approvals from the City and install the improvements prior to the completion of the project.  <u>When Required:</u> Prior to building permit final  <u>Initial Approval:</u> Bureau of Building  <u>Monitoring/Inspection:</u> Bureau of Building</p>	Prior to building permit final	Bureau of Building	Review and approve VTR strategies involving physical improvements as part of TDM Plan.
<p><b>Completed. Final TDM plan was approved in association with the Phase 1 infrastructure FDP approvals as required by Mitigation Trans-4.</b>  <b>c. TDM Implementation – Operational Strategies</b>  <u>Requirement:</u> For projects that generate 100 or more net new a.m. or p.m. peak hour vehicle trips and contain ongoing operational VTR strategies, the project applicant shall submit an annual compliance report for the first five years following completion of the project (or completion of each phase for phased projects) for review and approval by the City. The annual report shall document the status and effectiveness of the TDM program, including the actual VTR achieved by the project during operation. If deemed necessary, the City may elect to have a peer review consultant, paid for by the project applicant, review the annual report. If timely reports are not submitted and/or the annual reports indicate that the project applicant has failed to implement the TDM Plan, the project will be considered in violation of the Conditions of Approval and the City may initiate enforcement action as provided for in these Conditions of Approval. The project shall not be considered in violation of this Condition if the TDM</p>	Ongoing	Bureau of Building	Review and approve annual compliance report for the first five years following completion of the project (or completion of each phase for phased projects).

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Plan is implemented but the VTR goal is not achieved. <u>When Required:</u> Ongoing <u>Initial Approval:</u> Bureau of Planning <u>Monitoring/Inspection:</u> Bureau of Planning			
<b>D. AIR QUALITY</b>			
<b>SCA-AIR-1:-Construction-Related Air Pollution Controls (Dust and Equipment Emissions) (#19)</b> <b>Requirement:</b> The project applicant shall implement all of the following applicable air pollution control measures during construction of the project: a. Water all exposed surfaces of active construction areas at least twice daily. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever feasible. b. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer). c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. d. Pave all roadways, driveways, sidewalks, etc. within one month of site grading or as soon as feasible. In addition, building pads should be laid within one month of grading or as soon as feasible unless seeding or soil binders are used. e. Enclose, cover, water twice daily, or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.). f. Limit vehicle speeds on unpaved roads to 15 miles per hour. g. Idling times on all diesel-fueled commercial vehicles over 10,000 lbs. shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations). Clear signage to this effect shall be provided for construction workers at all access points. h. Idling times on all diesel-fueled off-road vehicles over 25 horsepower shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes and fleet operators must develop a written policy as required by Title 23, Section 2449, of the California Code of Regulations (“California Air Resources Board Off-Road Diesel Regulations”).	Ongoing throughout demolition, grading, and/or construction	City of Oakland, CEDA, Building Services Division	Make regular visits to the project site to ensure that all dust-control mitigation measures are being implemented. Verify that a designated dust control coordinator is on-call during construction periods.



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i. All construction equipment shall be maintained and properly tuned in accordance with the manufacturer’s specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. j. Portable equipment shall be powered by electricity if available. If electricity is not available, propane or natural gas shall be used if feasible. Diesel engines shall only be used if electricity is not available and it is not feasible to use propane or natural gas. k. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe. l. All excavation, grading, and demolition activities shall be suspended when average wind speeds exceed 20 mph. m. Install sandbags or other erosion control measures to prevent silt runoff to public roadways. n. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more). o. Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. p. Install appropriate wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of the construction site to minimize wind blown dust. Wind breaks must have a maximum 50 percent air porosity. q. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established. r. Activities such as excavation, grading, and other ground-disturbing construction activities shall be phased to minimize the amount of disturbed surface area at any one time. s. All trucks and equipment, including tires, shall be washed off prior to leaving the site. t. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel. u. All equipment to be used on the construction site and subject to the requirements of Title 13, Section 2449, of the California Code of Regulations (“California Air Resources Board OffRoad Diesel Regulations”) must meet emissions and			

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<p>performance requirements one year in advance of any fleet deadlines. Upon request by the City, the project applicant shall provide written documentation that fleet requirements have been met.</p> <p>v. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., BAAQMD Regulation 8, Rule 3: Architectural Coatings).</p> <p>w. All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NOx and PM.</p> <p>x. Off-road heavy diesel engines shall meet the California Air Resources Board’s most recent certification standard.</p> <p>y. Post a publicly-visible large on-site sign that includes the contact name and phone number for the project complaint manager responsible for responding to dust complaints and the telephone numbers of the City’s Code Enforcement unit and the Bay Area Air Quality Management District. When contacted, the project complaint manager shall respond and take corrective action within 48 hours.</p> <p><u>When Required:</u> During construction  <u>Initial Approval:</u> N/A  <u>Monitoring/Inspection:</u> Bureau of Building</p>			
<p><b>SCA-AIR-2: Exposure to Air Pollution (Toxic Air Contaminants) (#20)</b></p> <p><b><i>a. Health Risk Reduction Measures</i></b></p> <p><u>Requirement:</u> The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to exposure to toxic air contaminants. The project applicant shall choose one of the following methods:</p> <p>i. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk of exposure of project residents/occupants/users to air pollutants. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes that the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City.</p> <p>- or -</p> <p>ii. The project applicant shall incorporate the following health risk reduction measures into the project. These features shall be submitted to the City for review and approval</p>	Prior to approval of construction-related permit	Bureau of Planning	Bureau of Building

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<p>and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City:</p> <ul style="list-style-type: none"> <li>• Installation of air filtration to reduce cancer risks and Particulate Matter (PM) exposure for residents and other sensitive populations in the project that are in close proximity to sources of air pollution. Air filter devices shall be rated MERV-13 [insert MERV-16 for projects located in the West Oakland Specific Plan area] or higher. As part of implementing this measure, an ongoing maintenance plan for the building’s HVAC air filtration system shall be required.</li> <li>• Where appropriate, install passive electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph). Phasing of residential developments when proposed within 500 feet of freeways such that homes nearest the freeway are built last, if feasible.</li> <li>• The project shall be designed to locate sensitive receptors as far away as feasible from the source(s) of air pollution. Operable windows, balconies, and building air intakes shall be located as far away from these sources as feasible. If near a distribution center, residents shall be located as far away as feasible from a loading dock or where trucks concentrate to deliver goods.</li> <li>• Sensitive receptors shall be located on the upper floors of buildings, if feasible.</li> <li>• Planting trees and/or vegetation between sensitive receptors and pollution source, if feasible. Trees that are best suited to trapping PM shall be planted, including one or more of the following: Pine (<i>Pinus nigra</i> var. <i>maritima</i>), Cypress (X <i>Cupressocyparis leylandii</i>), Hybrid poplar (<i>Populus deltoids</i> X <i>trichocarpa</i>), and Redwood (<i>Sequoia sempervirens</i>).</li> <li>• Sensitive receptors shall be located as far away from truck activity areas, such as loading docks and delivery areas, as feasible.</li> <li>• Existing and new diesel generators shall meet CARB’s Tier 4 emission standards, if feasible.</li> <li>• Emissions from diesel trucks shall be reduced through implementing the following measures, if feasible:                         <ul style="list-style-type: none"> <li>○ Installing electrical hook-ups for diesel trucks at loading docks.</li> <li>○ Requiring trucks to use Transportation Refrigeration Units (TRU) that meet Tier 4 emission standards.</li> <li>○ Requiring truck-intensive projects to use advanced exhaust technology (e.g., hybrid) or alternative fuels.</li> <li>○ Prohibiting trucks from idling for more than two minutes.</li> <li>○ Establishing truck routes to avoid sensitive receptors in the project. A truck route</li> </ul> </li> </ul>			

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<p>program, along with truck calming, parking, and delivery restrictions, shall be implemented.</p> <p><u>When Required</u>: Prior to approval of construction-related permit  <u>Initial Approval</u>: Bureau of Planning  <u>Monitoring/Inspection</u>: Bureau of Building</p>			
<p><b><i>b. Maintenance of Health Risk Reduction Measures Requirement</i></b>                      The project applicant shall maintain, repair, and/or replace installed health risk reduction measures, including but not limited to the HVAC system (if applicable), on an ongoing and as-needed basis. Prior to occupancy, the project applicant shall prepare and then distribute to the building manager/operator an operation and maintenance manual for the HVAC system and filter including the maintenance and replacement schedule for the filter.</p> <p><u>When Required</u>: Ongoing  <u>Initial Approval</u>: N/A  <u>Monitoring/Inspection</u>: Bureau of Building</p>	Ongoing	N/A	Bureau of Building
<p><b>SCA-AIR-3: Stationary Sources of Air Pollution (Toxic Air Contaminants)(#21)</b>  <u>Requirement</u>: The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to on-site stationary sources of toxic air contaminants. The project applicant shall choose one of the following methods: a. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk associated with proposed stationary sources of pollution in the project. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City. – or – b. The project applicant shall incorporate the following health risk reduction measures into the project. These features shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City: i. Installation of non-diesel fueled generators, if feasible, or; ii. Installation of diesel generators with an EPA-certified Tier 4 engine or engines that are retrofitted with a</p>	Prior to approval of construction-related permit	City of Oakland, CEDA, Building Services Division	Review plans submitted to the City to ensure that applicable health risk reduction measures are detailed in all plans submitted for the construction-related permit or on other documentation submitted to the City

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<p>CARB Level 3 Verified Diesel Emissions Control Strategy, if feasible.  <u>When Required:</u> Prior to approval of construction-related permit  <u>Initial Approval:</u> Bureau of Planning  <u>Monitoring/Inspection:</u> Bureau of Building</p>			
<p><b>Completed. The buildings that occupied the site in 2008 were demolished in association with the Phase 1 infrastructure improvements.</b>  <b>SCA-AIR-4: Asbestos in Structures (#23)</b>                      Requirement: The project applicant shall comply with all applicable laws and regulations regarding demolition and renovation of Asbestos Containing Materials (ACM), including but not limited to California Code of Regulations, Title 8; California Business and Professions Code, Division 3; California Health and Safety Code sections 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended. Evidence of compliance shall be submitted to the City upon request.  <u>When Required:</u> Prior to approval of construction-related permit  <u>Initial Approval:</u> Applicable regulatory agency with jurisdiction  <u>Monitoring/Inspection:</u> Applicable regulatory agency with jurisdiction</p>	Prior to approval of construction-related permit	City of Oakland, CEDA, Building Services Division  Bay Area Air Quality Management District	Evidence of compliance shall be submitted to the City upon request
<p><b>SCA-AIR-5:Truck-Related Risk Reduction Measures (Toxic Air Contaminants) (#22)</b>  <b>a. Truck Loading Docks</b>  <u>Requirement:</u> The project applicant shall locate proposed truck loading docks as far from nearby sensitive receptors as feasible. <u>When Required:</u> Prior to approval of construction-related permit <u>Initial Approval:</u> Bureau of Planning <u>Monitoring/Inspection:</u> Bureau of Building   <b>b. Truck Fleet Emission Standards</b>  <u>Requirement:</u> The project applicant shall comply with all applicable California Air Resources Board (CARB) requirements to control emissions from diesel engines and demonstrate compliance to the satisfaction of the City. Methods to comply include, but are not limited to, new clean diesel trucks, lower-tier diesel engine trucks with added Particulate Matter (PM) filters, hybrid trucks, alternative energy trucks, or other methods that achieve the applicable CARB emission standard. Compliance with this requirement shall be verified through CARB’s Verification Procedures for In-Use Strategies to Control Emissions from Diesel Engines.  <u>When Required:</u> Prior to building permit final; ongoing  <u>Initial Approval:</u> Bureau of Planning  <u>Monitoring/Inspection:</u> Bureau of Building</p>	Prior to approval of construction-related permit	City of Oakland, CEDA, Building Services Division          California Air Resources Board (CARB)	Compliance with this requirement shall be verified through CARB’s Verification Procedures for In-Use Strategies to Control Emissions from Diesel Engines

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<b>E. NOISE AND VIBRATION</b>			
<p><b>SCA-NOI-1: Construction Days/Hours (#58)</b>  <u>Requirement:</u> The project applicant shall comply with the following restrictions concerning construction days and hours:</p> <p>a. Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pier drilling and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m.</p> <p>b. Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. to 5:00 p.m. only within the interior of the building with the doors and windows closed. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed on Saturday.</p> <p>c. No construction is allowed on Sunday or federal holidays. Construction activities include, but are not limited to, truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non-enclosed area. Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The project applicant shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to distribution of the public notice.</p> <p><u>When Required:</u> During construction  <u>Initial Approval:</u> N/A  <u>Monitoring/Inspection:</u> Bureau of Building</p>	Ongoing throughout demolition, grading, and/or construction	City of Oakland, CEDA, Building Services Division	Make regular visits to the construction site to ensure that construction activities are restricted the hours designated in COA NOISE-1.
<p><b>SCA-NOI-2: Construction Noise (#59)</b>                      The project applicant shall implement noise reduction measures to reduce noise impacts due to construction. Noise reduction measures include, but are not limited to, the following:</p>	Ongoing throughout demolition, grading, and/or construction	City of Oakland, CEDA, Building Services Division	Verify that a site-specific noise reduction program has been prepared and implemented.



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<p>a. Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible.</p> <p>b. Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.</p> <p>c. Applicant shall use temporary power poles instead of generators where feasible.</p> <p>d. Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction.</p> <p>e. The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.</p> <p><u>When Required:</u> During construction  <u>Initial Approval:</u> N/A  <u>Monitoring/Inspection:</u> Bureau of Building</p>			<p>Make regular visits to the construction site to ensure that noise from construction activities is appropriately controlled.</p>
<p><b>SCA-NOI-3: Extreme Construction Noise (#60)</b></p> <p><b><i>a. Construction Noise Management Plan Required</i></b>  <u>Requirement:</u> Prior to any extreme noise generating construction activities (e.g., pier drilling, pile driving and other activities generating greater than 90dBA), the project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction impacts associated with extreme noise generating activities. The project applicant shall implement the approved Plan during construction. Potential attenuation measures include, but are not</p>	<p>Submit plan prior commencing construction activities involving pile driving or other extreme noise generators;</p>	<p>City of Oakland, CEDA, Building Services Division</p>	<ul style="list-style-type: none"> <li>▪ Verify that a plan for reducing extreme noise generating construction impacts has been prepared.</li> <li>▪ Verify that the plan will achieve the maximum feasible noise attenuation.</li> </ul>

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<p>limited to, the following:</p> <p>i. Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings;</p> <p>ii. Implement “quiet” pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions;</p> <p>iii. Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site;</p> <p>iv. Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and</p> <p>v. Monitor the effectiveness of noise attenuation measures by taking noise measurements.</p> <p><u>When Required</u>: Prior to approval of construction-related permit  <u>Initial Approval</u>: Bureau of Building  <u>Monitoring/Inspection</u>: Bureau of Building</p> <p><b><i>b. Public Notification Required</i></b>  <u>Requirement</u>: The project applicant shall notify property owners and occupants located within 300 feet of the construction activities at least 14 calendar days prior to commencing extreme noise generating activities. Prior to providing the notice, the project applicant shall submit to the City for review and approval the proposed type and duration of extreme noise generating activities and the proposed public notice. The public notice shall provide the estimated start and end dates of the extreme noise generating activities and describe noise attenuation measures to be implemented.  <u>When Required</u>: During construction  <u>Initial Approval</u>: Bureau of Building  <u>Monitoring/Inspection</u>: Bureau of Building</p>	<p>Implement measures according to timeframes outlined in the plan</p>		<ul style="list-style-type: none"> <li>▪ Verify that a special inspection deposit has been submitted.</li> </ul>
<p><b>SCA-NOI-4: Project-Specific Construction Noise Reduction Measures (#61)</b>  <u>Requirement</u>: The project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site specific noise attenuation measures to further reduce construction noise impacts. The project applicant shall implement the approved Plan</p>	<p>Submit updated plan, if warranted prior to the issuance of a building</p>	<p>City of Oakland, CEDA, Building Services Division</p>	<p>Verify the implementation of the list of measures to respond to and track complaints pertaining to construction noise.</p>

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during construction. <u>When Required:</u> Prior to approval of construction-related permit <u>Initial Approval:</u> Bureau of Building <u>Monitoring/Inspection:</u> Bureau of Building	permit; Ongoing throughout demolition, grading, and/or construction		
<b>SCA-NOI-5: Construction Noise Complaints (#62)</b> <u>Requirement:</u> The project applicant shall submit to the City for review and approval a set of procedures for responding to and tracking complaints received pertaining to construction noise, and shall implement the procedures during construction. At a minimum, the procedures shall include: a. Designation of an on-site construction complaint and enforcement manager for the project; b. A large on-site sign near the public right-of-way containing permitted construction days/hours, complaint procedures, and phone numbers for the project complaint manager and City Code Enforcement unit; c. Protocols for receiving, responding to, and tracking received complaints; and d. Maintenance of a complaint log that records received complaints and how complaints were addressed, which shall be submitted to the City for review upon the City’s request. <u>When Required:</u> Prior to approval of construction-related permit <u>Initial Approval:</u> Bureau of Building <u>Monitoring/Inspection:</u> Bureau of Building	Submit list prior to the issuance of a building permit; Ongoing throughout demolition, grading, and/or construction	City of Oakland, CEDA, Building Services Division	Verify the implementation of the list of measures to respond to and track complaints pertaining to construction noise.
<b>SCA-NOI-6: Exposure to Community Noise (#63)</b> <u>Requirement:</u> The project applicant shall submit a Noise Reduction Plan prepared by a qualified acoustical engineer for City review and approval that contains noise reduction measures (e.g., sound-rated window, wall, and door assemblies) to achieve an acceptable interior noise level in accordance with the land use compatibility guidelines of the Noise Element of the Oakland General Plan. The applicant shall implement the approved Plan during construction. To the maximum extent practicable, interior noise levels shall not exceed the following: a. 45 dBA: Residential activities, civic activities, hotels b. 50 dBA: Administrative offices; group assembly activities	Submit noise recommendations prior to the issuance of a building permit for each phase of construction containing residential units	City of Oakland, CEDA, Building Services Division	<ul style="list-style-type: none"> <li>▪ Verify that appropriate sound-rated assemblies to reduce noise levels have been incorporated into the project building design.</li> </ul>

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c. 55 dBA: Commercial activities d. 65 dBA: Industrial activities <u>When Required:</u> Prior to approval of construction-related permit <u>Initial Approval:</u> Bureau of Planning <u>Monitoring/Inspection:</u> Bureau of Building	Implement recommendations according to timeframes outlined in plan		
<b>SCA-NOI-7: Operational Noise (#64)</b> <u>Requirement:</u> Noise levels from the project site after completion of the project (i.e., during project operation) shall comply with the performance standards of chapter 17.120 of the Oakland Planning Code and chapter 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the City.	Prior to approval of construction-related permit	City of Oakland, CEDA, Building Services Division	Verify that appropriate sound-rated assemblies to reduce noise levels have been incorporated into the project building design.
<b><i>Completed. Vibration study was completed in association with the Phase 1 infrastructure improvements.</i></b> <b>SCA-NOI-8: Exposure to Vibration (#65):</b> The project applicant shall submit a Vibration Reduction Plan prepared by a qualified acoustical consultant for City review and approval that contains vibration reduction measures to reduce groundborne vibration to acceptable levels per Federal Transit Administration (FTA) standards. The applicant shall implement the approved Plan during construction. Potential vibration reduction measures include, but are not limited to, the following: a. Isolation of foundation and footings using resilient elements such as rubber bearing pads or springs, such as a “spring isolation” system that consists of resilient spring supports that can support the podium or residential foundations. The specific system shall be selected so that it can properly support the structural loads, and provide adequate filtering of groundborne vibration to the residences above. b. Trenching, which involves excavating soil between the railway and the project so that the vibration path is interrupted, thereby reducing the vibration levels before they enter the project’s structures. Since the reduction in vibration level is based on a ratio between trench depth and vibration wavelength, additional measurements shall be conducted to determine the vibration wavelengths affecting the project. Based on the resulting measurement findings, an adequate trench depth and, if required, suitable fill shall be identified (such as foamed styrene packing pellets [i.e., Styrofoam] or low-density polyethylene). <u>When Required:</u> Prior to approval of construction-related permit <u>Initial Approval:</u> Bureau of Planning <u>Monitoring/Inspection:</u> Bureau of Building	Prior to approval of construction-related permit	City of Oakland, CEDA, Building Services Division	Verify that appropriate vibration reduction measures have been incorporated into the project building design.

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<p><i>Not applicable.</i></p> <p><b>SCA-NOI-9: Vibration Impacts on Adjacent Historic Structures or Vibration-Sensitive Activities (#66)</b></p> <p><u>Requirement:</u> The project applicant shall submit a Vibration Analysis prepared by an acoustical and/or structural engineer or other appropriate qualified professional for City review and approval that establishes pre-construction baseline conditions and threshold levels of vibration that could damage the structure and/or substantially interfere with activities located adjacent to the affected structure. The Vibration Analysis shall identify design means and methods of construction that shall be utilized in order to not exceed the thresholds. The applicant shall implement the recommendations during construction.</p> <p><u>When Required:</u> Prior to construction</p> <p><u>Initial Approval:</u> Bureau of Building</p> <p><u>Monitoring/Inspection:</u> Bureau of Building</p>	<p>Prior to the issuance of a demolition, grading, or building permit for building A</p>	<p>City of Oakland, CEDA, Building Services Division</p>	<ul style="list-style-type: none"> <li>Verify that a structural engineer or other appropriate professional has determined the means and methods of construction will not exceed threshold levels of vibration that may damage buildings adjacent to the project site.</li> </ul>
<p><b>Project Specific Condition of Approval-NOI-10: The following Project Specific Conditions of Approval shall apply to each Final Development Plan for the MacArthur Village Project:</b></p> <p>1) The project applicant shall implement all of the plans and recommendations described in the reports prepared for the project attached as Attachment H (CEQA Memo) to the City Council's Agenda Report dated April 5, 2011, copies of which are on file with the City Planning Department. The recommendations in these reports include without limitation:</p> <p><i>Vibration</i></p> <p>(a) The contractors shall implement the Construction Equipment Schedule elements described in the March 10, 2011, letter report prepared by Wilson Ihrig &amp; Associates, attached as Exhibit H to the March 14, 2011 Memorandum from Urban Planning Partners to Eric Angstadt and Catherine Payne and included in the Agenda Report for the April 5, 2011 City Council hearing on the Stage 1 FDP (PUDF10097) and VTTM (8047).</p> <p>(b) Vibration monitoring shall be conducted at the Surgery Center to document the baseline conditions during operations prior to construction and to monitor the vibration at the facilities during the key periods of construction that are subject to vibration to verify that construction-related vibration is not exceeding the FTA category 1 criterion. The key periods of construction would occur when the vibrating roller compactors, vibrating plate compactors, jumping jack, or other equipment that generates vibration are in operation adjacent to the Surgery Center.</p>	<p>Prior to and during construction, as noted within each section of the condition</p>	<p>City of Oakland, CEDA, Building Services Division</p>	<ul style="list-style-type: none"> <li>Verify that each requirement identified in the condition of approval is met</li> </ul>

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<p><i>Noise</i></p> <p>(c) Prior to initiation of on-site construction-related earthwork activities, a minimum 8-foot-high temporary sound barrier shall be erected along the project property line abutting the residential sensitive land uses that are adjacent to the construction site on MacArthur Boulevard and Telegraph Avenue.</p> <p>(d) Prior to initiation of on-site construction-related earthwork activities, a minimum 8-foot-high temporary sound barrier shall be erected along the project property line abutting the Surgery Center that is adjacent to the construction site on Telegraph Avenue.</p> <p>(e) The temporary sound barriers shall be constructed with a minimum surface weight of 4 pounds per square foot and shall be constructed so that vertical or horizontal gaps are eliminated; these temporary barriers shall remain in place through the construction phase in which heavy equipment, such as excavators, dozers, scrapers, loaders, milers, pavers, and dump trucks are operating within 150 feet of the edge of the construction site or adjacent sensitive land uses.</p> <p>(f) Whenever feasible, the project contractor shall encourage implementation of the following strategies throughout all phases of construction: use of smaller or quieter equipment; use of electric equipment in lieu of gasoline or diesel powered equipment; turn off all idling equipment when anticipated to not be in use for more than 5 minutes; minimize drop height when loading excavated materials onto trucks; minimize drop height when unloading or moving materials on-site; and sequence noisy activities to coincide with noisiest ambient hours.</p> <p>(g) Noise monitoring is required for all construction activities that would be considered extreme noise generators, activities that would result in noise levels in excess of 90 dBA L<sub>max</sub> as measured at the receiving property. Construction activities could exceed these levels at the residential land uses that border the construction site on MacArthur Boulevard and Telegraph Avenue. Pursuant to SCA N01-5(e), noise monitoring to measure the effectiveness of noise attenuation measures shall be conducted as follows:</p> <ul style="list-style-type: none"> <li>▪ Noise measurements shall be conducted on a weekly basis during the phases associated with the anticipated activities for the months of May, June, and September and shall be conducted by a qualified acoustical consultant.</li> </ul>			



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<ul style="list-style-type: none"> <li>▪ These measurements shall be taken during mid-morning and mid-afternoon hours when background noise levels are anticipated to be lowest so as to try to capture, noise from only construction noise sources.</li> <li>▪ These measurements shall be taken at distances greater than 10 feet from the temporary sound barriers on the receptor property in order to determine the effectiveness of the sound barrier.</li> </ul> <p>If exceedances are identified, then the on-site construction manager shall be notified and the equipment use shall be adjusted so that noise levels are reduced.</p> <p>2) The temporary sound barrier to be erected by the project applicant along the project property line abutting the adjacent surgery center property shall be a minimum of 8 feet high.</p> <p>3) Prior to issuance of a demolition, grading or building permit. The project applicant shall retain a structural engineer or other appropriate professional to determine threshold levels of vibration and cracking that could damage buildings adjacent to the project site and design means and methods of construction that shall be utilized to not exceed the thresholds.</p> <p>4) The noise and vibration reduction plan for each phase of the project prepared pursuant to SCA NOI-5 shall also:</p> <p>(i) include documentation of the following:</p> <ul style="list-style-type: none"> <li>▪ Existing baseline conditions at the anticipated construction monitoring locations near the adjacent surgery center, supported by measurements of ambient noise and vibration levels near the adjacent surgery center over a 6-day continuous period (Monday-Saturday);</li> <li>▪ Characterization of the existing vibration environment within representative vibration sensitive spaces at the adjacent surgery center to confirm whether the FTA Category I criterion is applicable for these interior spaces, or whether a higher threshold is more appropriate. This characterization will be supported by measurements of the existing ambient vibration levels over a 48-hour continuous period measured during the work week (M-F). If the existing environment is comparable or less than the FTA Category I threshold, then the construction work will be limited by the FTA Category I criterion. If it is determined that the existing ambient environment exceeds the FTA Category I criterion, then site specific criteria will be developed based on the characteristics of the measured environment, including the maximum vibration levels and: the measured</li> </ul>			

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<p>frequency of occurrence of vibration levels;</p> <ul style="list-style-type: none"> <li>▪ Vibration testing to determine how groundborne vibration will propagate from the construction area (based upon simulated construction activities testing) to the surgery center building and anticipated construction monitoring locations. This information will be used to determine the vibration level offset between outdoor construction monitoring locations and the vibration experienced at the interior of the building, to refine the calculations previously done to determine the site-specific vibration from construction, to determine the types of construction activity for which monitoring is required and to determine applicable distances for monitoring purposes pursuant to item (v) below; and</li> <li>▪ All such noise and vibration testing and determinations of baselines and monitoring locations near the adjacent surgery center shall be coordinated with the surgery center or its designee.</li> </ul> <p>(ii) include appropriate measures to ensure that the project construction and operations comply with the City's noise and vibration performance standards in Section 17.120.050 of the Oakland Planning Code, the City's vibration performance standards in Section 17.120.060 of the Oakland Planning Code, and the vibration criteria confirmed above, as measured at the monitoring locations specified in (v);</p> <p>(iii) provide that all noise and vibration compliance monitoring be performed by one or more qualified consultants;</p> <p>(iv) prohibit the use of pile driving as part of the construction of the BART Parking Garage and construction on Parcel D;</p> <p>(v) require noise and vibration measurements, for compliance purposes, to be performed for a minimum of 48 hours during a continuous period each week during the conduct of construction activities for which monitoring is required as identified pursuant to the pre-vibration testing protocol under item (i) above within applicable distances from the facade of the surgery center building nearest to the construction activity as such distances are identified as part of such testing protocol. Such measurements shall be made at the nearest facade or at an equivalent distance from the construction activity to the nearest facade as determined appropriate by the qualified acoustical consultant in order to accurately determine noise and vibration levels at the nearest facade of the surgery center from project-related construction activities; and</p> <p>(vi) require a copy of the City approved noise and vibration plan to be provided to the designated representative of the adjacent surgery center.</p> <p>5) The special inspection deposit required pursuant to SCA Noise-5 shall also include</p>			

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<p>an amount sufficient to ensure compliance with project conditions of approval governing air quality.</p> <p>6) Prior to the start of construction activities, the project applicant shall designate an on-site complaint and enforcement manager, with supervisory authority with respect to construction activity, who shall immediately respond to any complaints or concerns raised by the designated representative of the adjacent surgery center related to air quality, noise, vibration, or any other aspect of project construction activities, and provide to the surgery center representative the contact information for such complaint and enforcement manager.</p> <p>7) Project applicant shall promptly provide to the designated representative of the adjacent surgery center copies of all noise, vibration and air quality monitoring reports required by all project conditions of approval, including, without limitation, all monitoring reports required pursuant to project specific condition 4 above, and the recommendations in the following reports: (i) LSA Associates, Inc. dated March 11, 2011 regarding air quality, (ii) LSA Associates, Inc. dated March 11, 2011 regarding noise, and (iii) Wilson Ihrig &amp; Associates dated March 10, 2011 regarding vibration. If any such report indicates that the project is not in compliance with any such mitigation measures or conditions of approval or if the project is otherwise not in compliance therewith, the project applicant shall immediately cease the activity causing such non-compliance and take such other measures that may be necessary to prevent the recurrence of such non-compliance.</p> <p>8) The project applicant shall not restrict, block, relocate, modify, or otherwise hinder vehicular and pedestrian access (ingress and egress) to the adjacent surgery center property from its existing driveways and sidewalks access points on Apgar Street and 39th Street both during and after construction of the project without 48 hours advance notice to the surgery center. In no event shall such access be disrupted for more than two days in any M-F period, except for improvements to Apgar Street or 39th Street. For any period during which the 39th Street parking areas in the Surgery Center property are rendered inaccessible, project applicant shall provide an equal number of substitute parking spaces in the BART parking lot area, and/or the new BART parking garage, as close as feasible to the Surgery Center and at no cost to the Surgery Center. The applicant shall coordinate temporary disruptions to the surgery center's vehicular and pedestrian access points and shall maintain one point of access via Apgar Street or Telegraph Street at all times.</p> <p>9) The applicant's contractors will limit idling, loading or staging on Apgar Street, 39th Street, and Telegraph Avenue adjacent to the property and provide the surgery center</p>			

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at least 48 hours' notice of such planned activity.			
<b>F. HYDROLOGY AND WATER QUALITY</b>			
<p><b>A SWPP was completed in association with the Phase I infrastructure improvements. The conditions of the SWPP will continue to apply to the 2016 Modified Project.</b></p> <p><b>SCA-HYD-1: State Construction General Permit (#46)</b>  <u>Requirement:</u> The project applicant shall comply with the requirements of the Construction General Permit issued by the State Water Resources Control Board (SWRCB). The project applicant shall submit a Notice of Intent (NOI), Stormwater Pollution Prevention Plan (SWPPP), and other required Permit Registration Documents to SWRCB. The project applicant shall submit evidence of compliance with Permit requirements to the City.  <u>When Required:</u> Prior to approval of construction-related permit  <u>Initial Approval:</u> State Water Resources Control Board; evidence of compliance submitted to Bureau of Building  <u>Monitoring/Inspection:</u> State Water Resources Control Board</p>	<p>Submit SWPP to SWRCB prior to applying for first building permit;</p> <p>Submit copy of approved SWPP prior to issuance of first building permit;</p> <p>Comply with measures in SWPP: ongoing throughout demolition, grading, and/or construction activities</p>	<p>City of Oakland, CEDA, Building Services Division; Planning and Zoning Division</p>	<ul style="list-style-type: none"> <li>▪ Verify the preparation and approval of the SWPPP.</li> <li>▪ Conduct regular site visits to ensure compliance with the SWPPP throughout the completion of the project.</li> </ul>
<p><b>SCA-HYD-2: Site Design Measures to Reduce Stormwater Runoff (#48)</b>  <u>Requirement:</u> Pursuant to Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES), the project applicant is encouraged to incorporate appropriate site design measures into the project to reduce the amount of stormwater runoff. These measures may include, but are not limited to, the following:                      a. Minimize impervious surfaces, especially directly connected impervious surfaces and surface parking areas;                      b. Utilize permeable paving in place of impervious paving where appropriate;                      c. Cluster structures;                      d. Direct roof runoff to vegetated areas;                      e. Preserve quality open space; and                      f. Establish vegetated buffer areas.  <u>When Required:</u> Ongoing</p>	<p>Prior to construction activities</p>	<p>City of Oakland, CEDA, Building Services Division; Planning and Zoning Division</p>	<p>N/A</p>

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<p><u>Initial Approval:</u> N/A  <u>Monitoring/Inspection:</u> N/A</p>			
<p><b>SCA-HYD-3: Source Control Measures to Limit Stormwater Pollution (#49)</b>  <u>Requirement:</u> Pursuant to Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES), the project applicant is encouraged to incorporate appropriate source control measures to limit pollution in stormwater runoff. These measures may include, but are not limited to, the following:</p> <ol style="list-style-type: none"> <li>a. Stencil storm drain inlets “No Dumping – Drains to Bay;”</li> <li>b. Minimize the use of pesticides and fertilizers;</li> <li>c. Cover outdoor material storage areas, loading docks, repair/maintenance bays and fueling areas;</li> <li>d. Cover trash, food waste, and compactor enclosures; and</li> <li>e. Plumb the following discharges to the sanitary sewer system, subject to City approval:</li> <li>f. Discharges from indoor floor mats, equipment, hood filter, wash racks, and, covered outdoor wash racks for restaurants;</li> <li>g. Dumpster drips from covered trash, food waste, and compactor enclosures;</li> <li>h. Discharges from outdoor covered wash areas for vehicles, equipment, and accessories;</li> <li>i. Swimming pool water, if discharge to on-site vegetated areas is not feasible; and</li> <li>j. Fire sprinkler test water, if discharge to on-site vegetated areas is not feasible.</li> </ol> <p><u>When Required:</u> Ongoing  <u>Initial Approval:</u> N/A  <u>Monitoring/Inspection:</u> N/A</p>	<p>Prior to construction activities</p>	<p>City of Oakland, CEDA, Building Services Division; Planning and Zoning Division</p>	<ul style="list-style-type: none"> <li>▪ N/A</li> </ul>
<p><b>SCA-HYD-4: NPDES C.3 Stormwater Requirements for Regulated Projects (#50)</b>  <b><i>a. Post-Construction Stormwater Management Plan Required Requirement</i></b>                      The project applicant shall comply with the requirements of Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES). The project applicant shall submit a Post-Construction Stormwater Management Plan to the City for review and approval with the project drawings submitted for site improvements, and shall implement the approved Plan during construction. The Post-Construction Stormwater Management Plan shall include and identify the following:</p>	<p>Submit plan prior to issuance of building permit (or other construction-related permit)</p>	<p>City of Oakland, CEDA, Building Services Division; Planning and Zoning Division</p>	<p>Verify that the applicant complies with the requirements of Provision C.3 of the NPDES permit issued to the Alameda Countywide Clean Water Program.                      Verify that a completed Stormwater</p>

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<p>i. Location and size of new and replaced impervious surface;                      ii. Directional surface flow of stormwater runoff;                      iii. Location of proposed on-site storm drain lines;                      iv. Site design measures to reduce the amount of impervious surface area;                      v. Source control measures to limit stormwater pollution;                      vi. Stormwater treatment measures to remove pollutants from stormwater runoff, including the method used to hydraulically size the treatment measures; and                      vii. Hydromodification management measures, if required by Provision C.3, so that post-project stormwater runoff flow and duration match pre-project runoff.</p> <p><u>When Required</u>: Prior to approval of construction-related permit  <u>Initial Approval</u>: Bureau of Planning; Bureau of Building  <u>Monitoring/Inspection</u>: Bureau of Building</p> <p><b><i>b. Maintenance Agreement Required Requirement</i></b>                      The project applicant shall enter into a maintenance agreement with the City, based on the Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement, in accordance with Provision C.3, which provides, in part, for the following:</p> <p>i. The project applicant accepting responsibility for the adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures being incorporated into the project until the responsibility is legally transferred to another entity; and</p> <p>ii. Legal access to the on-site stormwater treatment measures for representatives of the City, the local vector control district, and staff of the Regional Water Quality Control Board, San Francisco Region, for the purpose of verifying the implementation, operation, and maintenance of the on-site stormwater treatment measures and to take corrective action if necessary. The maintenance agreement shall be recorded at the County Recorder's Office at the applicant's expense.</p> <p><u>When Required</u>: Prior to building permit final  <u>Initial Approval</u>: Bureau of Building  <u>Monitoring/Inspection</u>: Bureau of Building</p>			<p>Supplemental Form and a stormwater pollution management plan have been adequately prepared.</p> <ul style="list-style-type: none"> <li>▪ Prior to final permit inspection, verify that the stormwater pollution management plan is implemented.</li> </ul>
<b>G. GEOLOGY, SOILS AND SEISMICITY</b>			
<b>SCA-GEO-2: Soils Report (#34) Requirement:</b> The project applicant shall submit a soils report prepared by a registered geotechnical engineer for City review and approval.	Required as part of the submittal	City of Oakland, CEDA, Building	Verify that a



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<p>The soils report shall contain, at a minimum, field test results and observations regarding the nature, distribution and strength of existing soils, and recommendations for appropriate grading practices and project design. The project applicant shall implement the recommendations contained in the approved report during project design and construction.</p> <p><u>When Required</u>: Prior to approval of construction-related permit  <u>Initial Approval</u>: Bureau of Building  <u>Monitoring/Inspection</u>: Bureau of Building</p>	<p>of a Tentative Tract or Tentative Parcel Map(s)</p>	<p>Services Division</p>	<p>preliminary soils report has been prepared for each construction site.</p>
<p><b>SCA-GEO-3. Seismic Hazards Zone (Landslide/Liquefaction)</b>  <u>Requirement</u>: The project applicant shall submit a site-specific geotechnical report, consistent with California Geological Survey Special Publication 117 (as amended), prepared by a registered geotechnical engineer for City review and approval containing at a minimum a description of the geological and geotechnical conditions at the site, an evaluation of site-specific seismic hazards based on geological and geotechnical conditions, and recommended measures to reduce potential impacts related to liquefaction and/or slope stability hazards. The project applicant shall implement the recommendations contained in the approved report during project design and construction.</p> <p><u>When Required</u>: Prior to approval of construction-related permit  <u>Initial Approval</u>: Bureau of Building <u>Monitoring/Inspection</u>: Bureau of Building</p>	<p>Required as part of the submittal of a Tentative Tract or Tentative Parcel Map(s)</p>	<p>City of Oakland, CEDA, Building Services Division</p>	<p>Verify that a site-specific, design level, Landslide or Liquefaction geotechnical investigation for each construction site has been conducted and that the recommendations are included in the final project design.</p>
<p><b>SCA-GEO-1: Construction-Related Permit(s) (#33)</b>  <u>Requirement</u>: The project applicant shall obtain all required construction-related permits/approvals from the City. The project shall comply with all standards, requirements and conditions contained in construction-related codes, including but not limited to the Oakland Building Code and the Oakland Grading Regulations, to ensure structural integrity and safe construction.</p> <p><u>When Required</u>: Prior to approval of construction-related permit  <u>Initial Approval</u>: Bureau of Building  <u>Monitoring/Inspection</u>: Bureau of Building</p>	<p>Ongoing through demolition, grading and construction activities</p>	<p>City of Oakland, CEDA, Building Services Division</p>	<p>Ongoing through demolition, grading and construction activities</p>

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<b>H. PUBLIC HEALTH AND HAZARDS</b>			
<p><b>Completed. The buildings that occupied the site in 2008 were demolished in association with the Phase 1 infrastructure improvements. Note that this is the same SCA listed under Air Quality.</b></p> <p><b>SCA-HAZ-1: Asbestos in Structures (#23)</b></p> <p><u>Requirement:</u> The project applicant shall comply with all applicable laws and regulations regarding demolition and renovation of Asbestos Containing Materials (ACM), including but not limited to California Code of Regulations, Title 8; California Business and Professions Code, Division 3; California Health and Safety Code sections 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended. Evidence of compliance shall be submitted to the City upon request.</p> <p><u>When Required:</u> Prior to approval of construction-related permit</p> <p><u>Initial Approval:</u> Applicable regulatory agency with jurisdiction</p> <p><u>Monitoring/Inspection:</u> Applicable regulatory agency with jurisdiction</p>	<p>Prior to approval of construction-related permit</p>	<p>City of Oakland, CEDA, Building Services Division</p> <p>Bay Area Air Quality Management District</p>	<p>Evidence of compliance shall be submitted to the City upon request</p>
<p><b>SCA-HAZ-2: Hazardous Materials Related to Construction (#39)</b></p> <p><u>Requirement:</u> The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health. These shall include, at a minimum, the following:</p> <ol style="list-style-type: none"> <li>Follow manufacture’s recommendations for use, storage, and disposal of chemical products used in construction;</li> <li>Avoid overtopping construction equipment fuel gas tanks;</li> <li>During routine maintenance of construction equipment, properly contain and remove grease and oils;</li> <li>Properly dispose of discarded containers of fuels and other chemicals;</li> <li>Implement lead-safe work practices and comply with all local, regional, state, and federal requirements concerning lead (for more information refer to the Alameda County Lead Poisoning Prevention Program); and</li> <li>If soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the project applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the</li> </ol>	<p>Ongoing through demolition, grading and construction activities</p>	<p>City of Oakland, CEDA, Building Services Division, and Planning and Zoning Division</p>	<p>Verify that construction BMPs are implemented.</p>

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<p>applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notifying the City and applicable regulatory agency(ies) and implementation of the actions described in the City’s Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate.</p> <p><u>When Required:</u> During construction  <u>Initial Approval:</u> N/A  <u>Monitoring/Inspection:</u> Bureau of Building</p>			
<p><b>SCA-HAZ-3: Site Contamination (#40)</b>  <b><i>a. Environmental Site Assessment Required</i></b>  <u>Requirement:</u> The project applicant shall submit a Phase I Environmental Site Assessment report, and Phase II Environmental Site Assessment report if warranted by the Phase I report, for the project site for review and approval by the City. The report(s) shall be prepared by a qualified environmental assessment professional and include recommendations for remedial action, as appropriate, for hazardous materials. The project applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency.  <u>When Required:</u> Prior to approval of construction-related permit  <u>Initial Approval:</u> Oakland Fire Department  <u>Monitoring/Inspection:</u> Oakland Fire Department</p> <p><b><i>b. Health and Safety Plan Required</i></b>  <u>Requirement:</u> The project applicant shall submit a Health and Safety Plan for the review and approval by the City in order to protect project construction workers from risks associated with hazardous materials. The project applicant shall implement the approved Plan.  <u>When Required:</u> Prior to approval of construction-related permit  <u>Initial Approval:</u> Bureau of Building  <u>Monitoring/Inspection:</u> Bureau of Building</p> <p><b><i>c. Best Management Practices (BMPs) Required for Contaminated Sites</i></b>  <u>Requirement:</u> The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential soil and groundwater hazards. These shall include the following:</p>	<p>Prior to issuance of a demolition, grading, or building permit;</p>	<p>City of Oakland, CEDA, Building Services Division, and Planning and Zoning Division</p>	<p>Verify that written evidence of approval for any remedial actions required has been obtained and that Remediation Action Plan has been adequately prepared.                      Verify that a Construction-Phase Risk Management Plan has adequately been prepared.</p>

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<p>i. Soil generated by construction activities shall be stockpiled on-site in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Specific sampling and handling and transport procedures for reuse or disposal shall be in accordance with applicable local, state, and federal requirements.</p> <p>ii. Groundwater pumped from the subsurface shall be contained on-site in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies. Engineering controls shall be utilized, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building.</p> <p><u>When Required:</u> During construction  <u>Initial Approval:</u> N/A  <u>Monitoring/Inspection:</u> Bureau of Building</p>			
<p><b>SCA-PSR-2: Fire Safety Phasing Plan (#42)</b>  <u>Requirement:</u> The project applicant shall submit a Fire Safety Phasing Plan for City review and approval, and shall implement the approved Plan. The Fire Safety Phasing Plan shall include all of the fire safety features incorporated into each phase of the project and the schedule for implementation of the features.  <u>When Required:</u> Prior to approval of construction-related permit  <u>Initial Approval:</u> Oakland Fire Department  <u>Monitoring/Inspection:</u> Bureau of Building</p>	Submit plan prior to issuance of a demolition, grading, or building permit and concurrent with any p-job submittal permit	City of Oakland, CEDA, Building Services Division, and Planning and Zoning Division and Fire Services Division	Verify that a fire safety phasing plan has been prepared.
<p><b>SCA-HAZ-4: Hazardous Materials Business Plan (#41)</b>  <u>Requirement:</u> The project applicant shall submit a Hazardous Materials Business Plan for review and approval by the City, and shall implement the approved Plan. The approved Plan shall be kept on file with the City and the project applicant shall update the Plan as applicable. The purpose of the Hazardous Materials Business Plan is to ensure that employees are adequately trained to handle hazardous materials and provides information to the Fire Department should emergency response be required. Hazardous materials shall be handled in accordance with all applicable local, state, and federal requirements. The Hazardous Materials Business Plan shall include the following:            a. The types of hazardous materials or chemicals stored and/or used on-site, such as petroleum fuel products, lubricants, solvents, and cleaning fluids.            b. The location of such hazardous materials.</p>	Prior to issuance of a business license for businesses handling hazardous materials	City of Oakland, CEDA, Building Services Division, and Planning and Zoning Division and Fire Services Division	Verify that a hazardous materials business plan has been prepared.

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c. An emergency response plan including employee training information. d. A plan that describes the manner in which these materials are handled, transported, and disposed. <u>When Required:</u> Prior to building permit final <u>Initial Approval:</u> Oakland Fire Department <u>Monitoring/Inspection:</u> Oakland Fire Department			
<b>I. PUBLIC SERVICES</b>			
<b>Compliance with Other Requirements (#3)</b> The project applicant shall comply with all other applicable federal, state, regional, and local laws/codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City’s Bureau of Building, Fire Marshal, and Public Works Department. Compliance with other applicable requirements may require changes to the approved use and/or plans. These changes shall be processed in accordance with the procedures contained in Condition #4.	Prior to issuance of a demolition, grading, P-job, or other construction related permit.	City of Oakland, CEDA, Building Services Division, and Planning and Zoning Division and Fire Services Division	Ensure that the project applicant complies with all applicable laws and regulations
<b>J. UTILITIES AND INFRASTRUCTURE</b>			
<b>SCA-UTIL-1: Construction and Demolition Waste Reduction and Recycling (#74)</b> <u>Requirement:</u> The project applicant shall comply with the City of Oakland Construction and Demolition Waste Reduction and Recycling Ordinance (chapter 15.34 of the Oakland Municipal Code) by submitting a Construction and Demolition Waste Reduction and Recycling Plan (WRRP) for City review and approval, and shall implement the approved WRRP. Projects subject to these requirements include all new construction, renovations/alterations/modifications with construction values of \$50,000 or more (except R-3 type construction), and all demolition (including soft demolition) except demolition of type R-3 construction. The WRRP must specify the methods by which the project will divert construction and demolition debris waste from landfill disposal in accordance with current City requirements. The WRRP may be submitted electronically at <a href="http://www.greenhalosystems.com">www.greenhalosystems.com</a> or manually at the City’s Green Building Resource Center. Current standards, FAQs, and forms are available on the City’s website and in the Green Building Resource Center. <u>When Required:</u> Prior to approval of construction-related permit <u>Initial Approval:</u> Public Works Department, Environmental Services Division <u>Monitoring/Inspection:</u> Public Works Department, Environmental Services Division	Submit plan prior to issuance of demolition, grading, or building permit;  Implement plan according to timeframes outlined in plan	City of Oakland, CEDA, Building Services Division	Verify that a Construction & Demolition Waste Reduction and Recycling Plan and an Operational Diversion Plan have been submitted.
<b>SCA-UTIL-2: Underground Utilities (#75)</b> <u>Requirement:</u> The project applicant shall place underground all new utilities serving the project and under the control of the project applicant and the City, including all	During Construction	City of Oakland, CEDA, Building Services Division	Verify that all utilities have been installed in accordance with

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<p>new gas, electric, cable, and telephone facilities, fire alarm conduits, street light wiring, and other wiring, conduits, and similar facilities. The new facilities shall be placed underground along the project’s street frontage and from the project structures to the point of service. Utilities under the control of other agencies, such as PG&amp;E, shall be placed underground if feasible. All utilities shall be installed in accordance with standard specifications of the serving utilities.</p> <p><u>When Required</u>: During construction  <u>Initial Approval</u>: N/A  <u>Monitoring/Inspection</u>: Bureau of Building</p>			standard specifications of the serving utilities
<p><b>SCA-UTIL-3: Recycling Collection and Storage Space (#76)</b>  <u>Requirement</u>: The project applicant shall comply with the City of Oakland Recycling Space Allocation Ordinance (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall contain recycling collection and storage areas in compliance with the Ordinance. For residential projects, at least two cubic feet of storage and collection space per residential unit is required, with a minimum of ten cubic feet. For nonresidential projects, at least two cubic feet of storage and collection space per 1,000 square feet of building floor area is required, with a minimum of ten cubic feet.</p> <p><u>When Required</u>: Prior to approval of construction-related permit  <u>Initial Approval</u>: Bureau of Planning  <u>Monitoring/Inspection</u>: Bureau of Building</p>	Ongoing	City of Oakland, CEDA, Building Services Division	Verify that the proposed program is implemented and maintained for the duration of the proposed activity or facility.
<p><b>SCA-UTIL-4: Recycling Collection and Storage Space (#76)</b>  <u>Requirement</u>: The project applicant shall comply with the City of Oakland Recycling Space Allocation Ordinance (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall contain recycling collection and storage areas in compliance with the Ordinance. For residential projects, at least two cubic feet of storage and collection space per residential unit is required, with a minimum of ten cubic feet. For nonresidential projects, at least two cubic feet of storage and collection space per 1,000 square feet of building floor area is required, with a minimum of ten cubic feet.</p> <p><u>When Required</u>: Prior to approval of construction-related permit  <u>Initial Approval</u>: Bureau of Planning  <u>Monitoring/Inspection</u>: Bureau of Building</p>	Prior to approval of construction related permits	Bureau of Planning	Verify that recycling collection and storage space has been incorporated into project design
<p><b>Completed in association with the Phase 1 infrastructure improvements.</b>  <b>SCA-UTIL-5: Sanitary Sewer System (#79)</b>  <u>Requirement</u>: The project applicant shall prepare and submit a Sanitary Sewer Impact</p>	Prior to completing the final design for	Public Works Department, Department of	Confirm that any necessary sanitary sewer infrastructure



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<p>Analysis to the City for review and approval in accordance with the City of Oakland Sanitary Sewer Design Guidelines. The Impact Analysis shall include an estimate of pre-project and post-project wastewater flow from the project site. In the event that the Impact Analysis indicates that the net increase in project wastewater flow exceeds City-projected increases in wastewater flow in the sanitary sewer system, the project applicant shall pay the Sanitary Sewer Impact Fee in accordance with the City’s Master Fee Schedule for funding improvements to the sanitary sewer system. <u>When Required:</u> Prior to approval of construction-related permit  <u>Initial Approval:</u> Public Works Department, Department of Engineering and Construction  <u>Monitoring/Inspection:</u> N/A</p>	<p>the project’s sewer system</p>	<p>Engineering and Construction</p>	<p>improvements required by the project are implemented.                      Verify that the project applicant pays additional fees for any City improvements to the sanitary sewer system, as well as any fees to the affected service providers.</p>
<p><b>Completed in association with the Phase 1 infrastructure improvements. SCA-UTIL-6: Storm Drain System (#80)</b>  <u>Requirement:</u> The project storm drainage system shall be designed in accordance with the City of Oakland’s Storm Drainage Design Guidelines. To the maximum extent practicable, peak stormwater runoff from the project site shall be reduced by at least 25 percent compared to the pre-project condition.  <u>When Required:</u> Prior to approval of construction-related permit  <u>Initial Approval:</u> Bureau of Building <u>Monitoring/Inspection:</u> Bureau of Building</p>	<p>Prior to completing the final design for the project’s storm drain system</p>	<p>Public Works Department, Department of Engineering and Construction</p>	<p>Confirm that any necessary stormwater infrastructure improvements required by the project are implemented.                      Verify that the project applicant pays additional fees for any City improvements to the Prior to completing the final design for the project’s storm drain system as well as any fees to the affected service providers.                      Ensure that BMPs to reduce stormwater runoff are implemented.</p>
<p><b>SCA-UTIL-7: Recycled Water (#81)</b>  <u>Requirement:</u> Pursuant to section 16.08.030 of the Oakland Municipal Code, the project applicant shall provide for the use of recycled water in the project for landscape irrigation purposes unless the City determines that there is a higher and better use for the recycled water, the use of recycled water is not economically</p>	<p>Prior to approval of construction-related permit</p>	<p>Bureau of Planning; Bureau of Building</p>	

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<p>justified for the project, or the use of recycled water is not financially or technically feasible for the project. The project applicant shall contact the New Business Office of the East Bay Municipal Utility District (EBMUD) for a recycled water feasibility assessment by the Office of Water Recycling. If recycled water is to be provided in the project, the project drawings submitted for construction-related permits shall include the proposed recycled water system and the project applicant shall install the recycled water system during construction.</p> <p><u>When Required</u>: Prior to approval of construction-related permit  <u>Initial Approval</u>: Bureau of Planning; Bureau of Building  <u>Monitoring/Inspection</u>: Bureau of Building</p>			
<b>K. CULTURAL AND PALEONTOLOGICAL RESOURCES</b>			
<p><b>SCA-CUL-1: Archaeological and Paleontological Resources – Discovery During Construction (#29)</b>  <u>Requirement</u>: Pursuant to CEQA Guidelines section 15064.5(f), in the event that any historic or prehistoric subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant shall notify the City and consult with a qualified archaeologist or paleontologist, as applicable, to assess the significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined unnecessary or infeasible by the City. Feasibility of avoidance shall be determined with consideration of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. Work may proceed on other parts of the project site while measures for the cultural resources are implemented. In the event of data recovery of archaeological resources, the project applicant shall submit an Archaeological Research Design and Treatment Plan (ARDTP) prepared by a qualified archaeologist for review and approval by the City. The ARDTP is required to identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The ARDTP shall include the analysis and specify the curation and storage methods. Data recovery, in general, shall be limited to the portions of the archaeological resource that could be impacted by the</p>	Ongoing throughout demolition, grading, and/or construction	Bureau of Building	Ensure that all work within 50 feet of the site where any prehistoric or historic subsurface cultural resources are discovered is halted.

<b>STANDARD CONDITION OF APPROVALS AND MITIGATION MONITORING AND REPORTING PROGRAM</b>			
<b>Standard Conditions of Approval/Mitigation Measures</b>	<b>Mitigation Implementation/Monitoring</b>		
	<b>When Required</b>	<b>Initial Approval</b>	<b>Monitoring/Inspection</b>
<p>proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practicable. Because the intent of the ARDTP is to save as much of the archaeological resource as possible, including moving the resource, if feasible, preparation and implementation of the ARDTP would reduce the potential adverse impact to less than significant. The project applicant shall implement the ARDTP at his/her expense. In the event of excavation of paleontological resources, the project applicant shall submit an excavation plan prepared by a qualified paleontologist to the City for review and approval. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by a qualified paleontologist, as appropriate, according to current professional standards and at the expense of the project applicant.</p> <p><u>When Required:</u> During construction  <u>Initial Approval:</u> N/A  <u>Monitoring/Inspection:</u> Bureau of Building</p>			
<p><b>SCA-CUL-2: Human Remains – Discovery During Construction (#31)</b>  <u>Requirement:</u> Pursuant to CEQA Guidelines section 15064.5(e)(1), in the event that human skeletal remains are uncovered at the project site during construction activities, all work shall immediately halt and the project applicant shall notify the City and the Alameda County Coroner. If the County Coroner determines that an investigation of the cause of death is required or that the remains are Native American, all work shall cease within 50 feet of the remains until appropriate arrangements are made. In the event that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of section 7050.5 of the California Health and Safety Code. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance, and avoidance measures (if applicable) shall be completed expeditiously and at the expense of the project applicant.</p> <p><u>When Required:</u> During construction  <u>Initial Approval:</u> N/A  <u>Monitoring/Inspection:</u> Bureau of Building</p>	Ongoing throughout demolition, grading, and/or construction	Bureau of Building	Ensure that all work is halted if any human skeletal remains are uncovered at the project site and that the Alameda County Coroner is contacted.
<b>L. AESTHETIC RESOURCES</b>			
<p><b>SCA-AES-1: Public Improvements (#11)</b>  <u>Requirements:</u> The project applicant shall obtain all necessary permits/approvals, such as encroachment permits, obstruction permits, curb/gutter/sidewalk permits, and</p>	Prior to construction	Public Works Department, Department of	Verify all improvements are installed to satisfaction of the city

<b>STANDARD CONDITION OF APPROVALS AND MITIGATION MONITORING AND REPORTING PROGRAM</b>			
<b>Standard Conditions of Approval/Mitigation Measures</b>	<b>Mitigation Implementation/Monitoring</b>		
	<b>When Required</b>	<b>Initial Approval</b>	<b>Monitoring/Inspection</b>
public improvement (“p-job”) permits from the City for work in the public right-of-way, including but not limited to, streets, curbs, gutters, sidewalks, utilities, and fire hydrants. Prior to any work in the public right-of-way, the applicant shall submit plans for review and approval by the Bureau of Planning, the Bureau of Building, and other City departments as required. Public improvements shall be designed and installed to the satisfaction of the City.		Engineering and Construction	
<p><b>SCA-AES-2:-Graffiti Control (#16)</b>  <b>Requirement:</b>                      a. During construction and operation of the project, the project applicant shall incorporate best management practices reasonably related to the control of graffiti and/or the mitigation of the impacts of graffiti. Such best management practices may include, without limitation:</p> <ul style="list-style-type: none"> <li>i. Installation and maintenance of landscaping to discourage defacement of and/or protect likely graffiti-attracting surfaces.</li> <li>ii. Installation and maintenance of lighting to protect likely graffiti-attracting surfaces.</li> <li>iii. Use of paint with anti-graffiti coating.</li> <li>iv. Incorporation of architectural or design elements or features to discourage graffiti defacement in accordance with the principles of Crime Prevention Through Environmental Design (CPTED).</li> <li>v. Other practices approved by the City to deter, protect, or reduce the potential for graffiti defacement.</li> </ul> <p>b. The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include the following:</p> <ul style="list-style-type: none"> <li>i. Removal through scrubbing, washing, sanding, and/or scraping (or similar method) without damaging the surface and without discharging wash water or cleaning detergents into the City storm drain system.</li> <li>ii. Covering with new paint to match the color of the surrounding surface.</li> <li>iii. Replacing with new surfacing (with City permits if required).</li> </ul> <p><u>When Required:</u> Ongoing  <u>Initial Approval:</u> N/A  <u>Monitoring/Inspection:</u> Bureau of Building</p>	Ongoing	Bureau of Building	Verify applicant incorporates best management practices reasonably related to the control of graffiti and/or the mitigation of the impacts of graffiti.
<p><b>SCA-AES-3: Landscape Plan (#17)</b>  <b>a. Landscape Plan Required Requirement:</b>                      The project applicant shall submit a final Landscape Plan for City review and approval</p>	Prior to construction-related permits	Bureau of Planning	Review final Landscape Plan

<b>STANDARD CONDITION OF APPROVALS AND MITIGATION MONITORING AND REPORTING PROGRAM</b>			
<b>Standard Conditions of Approval/Mitigation Measures</b>	<b>Mitigation Implementation/Monitoring</b>		
	<b>When Required</b>	<b>Initial Approval</b>	<b>Monitoring/Inspection</b>
<p>that is consistent with the approved Landscape Plan. The Landscape Plan shall be included with the set of drawings submitted for the construction-related permit and shall comply with the landscape requirements of chapter 17.124 of the Planning Code.</p> <p><u>When Required:</u> Prior to approval of construction-related permit  <u>Initial Approval:</u> Bureau of Planning                      Monitoring/Inspection: N/A</p> <p><i>b. Landscape Installation Requirement:</i>                      The project applicant shall implement the approved Landscape Plan unless a bond, cash deposit, letter of credit, or other equivalent instrument acceptable to the Director of City Planning, is provided. The financial instrument shall equal the greater of \$2,500 or the estimated cost of implementing the Landscape Plan based on a licensed contractor’s bid.</p> <p>When Required: Prior to building permit final                      Initial Approval: Bureau of Planning                      Monitoring/Inspection: Bureau of Building</p> <p><i>c. Landscape Maintenance Requirement:</i>                      All required planting shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable landscaping requirements. The property owner shall be responsible for maintaining planting in adjacent public rights-of-way. All required fences, walls, and irrigation systems shall be permanently maintained in good condition and, whenever necessary, repaired or replaced.</p> <p>When Required: Ongoing                      Initial Approval: N/A                      Monitoring/Inspection: Bureau of Building</p>			
<p><b>SCA-AES-4: Lighting (#18)</b>  <u>Requirement:</u> Proposed new exterior lighting fixtures shall be adequately shielded to a point below the light bulb and reflector to prevent unnecessary glare onto adjacent properties.</p> <p><u>When Required:</u> Prior to building permit final  <u>Initial Approval:</u> N/A                      Monitoring/Inspection: Bureau of Building</p>	Prior to building permit final	Bureau of Building	Ensure that proposed lighting fixtures are adequately shielded to prevent unnecessary glare onto adjacent properties.





## **Attachment B: Criteria for Use of Addendum, Per CEQA Guidelines Sections 15162, 15164, and 15168**

Section 15164(a) of the California Environmental Quality Act (CEQA) Guidelines states that “a lead agency or responsible agency shall prepare an addendum to a previously certified EIR [Environmental Impact Report] if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.” Section 15164(e) states that “a brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR.”

As discussed in detail in Section III of this document, the analysis in the 2008 Project EIR is considered for this assessment under Sections 15162 and 15164. The 2008 LUTE EIR, and for the housing components of the 2016 Modified Project, the 2010 General Plan Housing Element Update EIR and 2014 Addendum are Program EIRs considered for this assessment of an Addendum, pursuant to Section 15162 and 15164. The Redevelopment Plan EIR analysis is a Program EIR specifically considered for this assessment, pursuant to CEQA Guidelines Section 15168 and Section 15180.

### **Project Modifications**

The City certified an Environmental Impact Report (EIR) for the MacArthur Station Project (formerly referred to as the MacArthur Transit Village Project) (“2008 Project”) on June 4, 2008, pursuant to the California Environmental Quality Act (CEQA). The project evaluated in the 2008 Project EIR included the following components: five buildings with up to 675 units of high-density multi-family housing (113 units [20 percent of the total market rate units] would be below market-rate and 562 units would be market-rate); up to 44,000 square feet of neighborhood-serving commercial; 5,000 square feet of community or childcare facility space; 700 residential, commercial and community use parking spaces; 300 BART parking spaces; and several public infrastructure upgrades, including two new streets in the project site, improvements to the existing access road that connects 40<sup>th</sup> Street with MacArthur Boulevard, the renovation of the existing BART entry plaza, intermodal improvements, and a new public plaza adjacent to the commercial space.

Various components of the MacArthur Station Project have been constructed since approval of the project. Site demolition, construction of the BART parking garage (which provides 483 parking spaces) on Parcel E, and installation of site infrastructure has been completed. Additionally, a building which includes 90 affordable housing rental units has been constructed on Parcel D. A Final Development Plan has been approved for Parcels A and C and construction is anticipated to begin by the end of 2017. Parcel A includes 287 dwelling unit and 22,287 square feet of commercial uses, and Parcel C includes 96 dwelling units, 1,202 square feet of commercial uses, and 5,000 square feet of

community center uses. Table 1 of this document shows the level and type of development associated with each parcel in the MacArthur Station Project.

For the 2016 Modified Project, the applicant is proposing to develop up to 402 dwelling units and 13,000 square feet of commercial space on Parcel B. The required approvals include revisions to the Planned Unit Development including the Preliminary Development Plan (PDP) that is applicable to the entire MacArthur Station; approval of a new Final Development Plan (FDP); Tree Removal Permits; Environmental Review Application; and a Tentative Parcel Map

The Parcel B project, in addition to the development completed or approved for construction on Parcels A, C, D and E, would provide approximately 200 more residential units and approximately 2,311 fewer square feet of commercial space than the project evaluated in the 2008 Project EIR. Additionally, the proposed development on Parcel B would include a 260-foot (25-story) tower, which would be 175 feet (19 stories) taller than originally proposed with the 2008 Project EIR. It should be noted, however, that a 240-foot (23-story) Tower alternative was evaluated within the 2008 Project EIR. Furthermore, the construction of the 2016 Modified Project is not expected to result in new off-site transportation impacts or substantially increase the magnitude of already identified impacts, as described in Section VII.

#### **Conditions for Addendum**

None of the following conditions for preparation of a subsequent EIR per Sections 15162(a) and 15168 apply to the Modified Project:

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
  - (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
  - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

- (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

### **Project Consistency with Sections 15162 and 15168 of the CEQA Guidelines**

Since certification of the 2008 Project EIR, no changes have occurred in the circumstances under which the 2016 Modified Project would be implemented, that would change the severity of the Modified Project's physical impacts, as explained in the CEQA Checklist in Section VII of this document. No new information has emerged that would materially change the analyses or conclusions set forth in the 2008 Project EIR.

Furthermore, as demonstrated in the CEQA Checklist, the 2016 Modified Project would not result in any new significant environmental impacts, result in any substantial increases in the significance of previously identified effects, or necessitate implementation of additional or considerably different mitigation measures than those identified in the 2008 Project EIR, nor render any mitigation measures or alternatives found not to be feasible, feasible. The effects of the 2016 Modified Project would be substantially the same as those reported in the 2008 Project EIR.

The analysis presented in the CEQA Checklist included in Section VII, combined with the prior 2008 Project EIR analysis, demonstrates that the 2016 Modified Project would not result in significant impacts that were not previously identified in the EIR. The 2016 Modified Project would not result in a substantial increase in the significance of impacts, nor would it contribute considerably to cumulative effects that were not already accounted for in the certified 2008 Project EIR. Overall, the 2016 Modified Project's impacts are similar to those identified and discussed in the 2008 Project EIR, as described in the CEQA Checklist, and the findings reached in the EIR are applicable.



## **Attachment C: Project Consistency with Community Plan or Zoning, Per CEQA Guidelines Section 15183**

Section 15183(a) of the CEQA Guidelines states that "...projects which are consistent with the development density established by the existing zoning, community plan, or general plan policies for which an Environmental Impact Report (EIR) was certified shall not require additional environmental review, except as may be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site."

As discussed in detail in Section III of this document, the analysis in the 1998 LUTE EIR and the 2010 Housing Element Update EIR and its 2014 Addendum, are considered the qualified planning level CEQA documents for this assessment, pursuant to CEQA Guidelines Section 15183.

### **2016 Modified Project**

The proposed project is located in a developed urbanized area of Oakland. Various components of the MacArthur Station Project have been constructed since approval of the project. Site demolition, construction of the BART parking garage (which provides 483 parking spaces) on Parcel E, and installation of site infrastructure has been completed. Additionally, a building which includes 90 affordable housing rental units has been constructed on Parcel D. A Final Development Plan has been approved for Parcels A and C and construction is anticipated to begin by the end of 2017. Parcel A includes 287 dwelling units and 22,287 square feet of commercial uses, and Parcel C includes 96 dwelling units, 1,202 square feet of commercial uses, and 5,000 square feet of community center uses.

For the 2016 Modified Project, the applicant is proposing to develop up to 402 dwelling units and 13,000 square feet of commercial space on Parcel B. The Parcel B project, in addition to the development completed or approved for construction on Parcels A, C, D and E, would provide approximately 200 more residential units and approximately 2,311 fewer square feet of commercial space than the project evaluated in the 2008 Project EIR. Additionally, the proposed development on Parcel B would include a 260-foot (25-story) tower, which would be 175-feet (19 stories) taller than originally proposed with the 2008 Project EIR. It should be noted, however, that a 240-foot (23-story) Tower alternative was evaluated within the 2008 Project EIR. Furthermore, the construction of the 2016 Modified Project is not expected to result in new off-site transportation impacts or substantially increase the magnitude of already identified impacts, as described in Section VII.

### **Project Consistency**

As determined by the City of Oakland Bureau of Planning, the proposed land uses are permitted in the zoning district in which the Project is located. With the exception of the

height], the 2016 Modified Project and is consistent with the bulk, density, and land uses envisioned for the project site, as outlined below.

- The General Plan land use designation for the site is Neighborhood Center Mixed-Use. The proposed project is consistent with the Neighborhood Center Mixed-Use designation, which encourages high density mixed-use development. The proposed project would provide for a variety of commercial and residential uses on the project site that would be pedestrian-oriented and be neighborhood-serving.
- The site is zoned Transit-Oriented Development (S-15). The intent of this zone is to create, preserve and enhance areas devoted primarily to serve multiple nodes of transportation and to feature high-density residential, commercial and mixed-use development to encourage a balance of pedestrian-oriented activities, transit opportunities, and concentrated development. Additionally, this zone is intended to encourage a safe and pleasant pedestrian environment near transit stations by allowing a mixture of residential, civic, commercial and light industrial activities appropriate around transit centers such as Bay Area Rapid Transit District (BART) stations. The 2016 Modified Project would be consistent with the purposes of this district.
- The proposed development on Parcel B would include a 260-foot (25-story) tower, which would be 175-feet (19 stories) taller than originally proposed with the 2008 Project EIR. The project applicant will seek revisions to the Planned Unit Development to accommodate the building height. It should be noted, however, that a 240-foot (23-story) Tower alternative was evaluated within the 2008 Project EIR. At the time the 2008 Project EIR was certified, this alternative was neither rejected nor approved. It was noted in the Findings document that in the future, the project sponsor may apply to the City to incorporate the alternative into the Project and the City would consider and process this revised application in accordance with standard procedures, with appropriate public notice before the City Planning Commission. Furthermore, the construction of the 2016 Modified Project is not expected to result in new impacts or substantially increase the magnitude of already identified impacts, as described in Section VII.
- The 2016 Modified Project proposed 875 dwelling units on an 8.2 acre site, which equates to a residential density of 108 dwelling units per acre. This is below the maximum residential density of 125 units per gross acre identified for the Neighborhood Center Mixed Use designation in the General Plan.

Therefore, the 2016 Modified is eligible for consideration of an exemption under California Public Resources Code Section 21083.3, and Section 15183 of the CEQA Guidelines.



## Attachment D: Infill Performance Standards, Per CEQA Guidelines Section 15183.3

California Environmental Quality Act (CEQA) Guidelines Section 15183.3(b) and CEQA Guidelines Appendix M establish eligibility requirements for projects to qualify as infill projects. Table D-1, on the pages following, shows how the proposed project satisfies each of the applicable requirements.

Table D-1 Project Infill Eligibility	
CEQA Eligibility Criteria	Eligible?/Notes for Proposed Project
1. Be located in an urban area on a site that either has been previously developed or that adjoins existing qualified urban uses on at least 75 percent of the site’s perimeter. For the purpose of this subdivision, “adjoin” means the infill project is immediately adjacent to qualified urban uses, or is only separated from such uses by an improved right-of-way. (CEQA Guidelines Section 15183.3[b][1])	Yes The project site has been previously developed with buildings and surface parking lots, and adjoins existing urban uses, as described in the Project Description, above.
2. Satisfy the performance Standards provided in Appendix M (CEQA Guidelines Section 15183.3[b][2]) as presented in 2a and 2b below:	—
2a. <i>Performance Standards Related to Project Design.</i> All projects must implement <b>all</b> of the following:	—
Renewable Energy. <i>Non-Residential Projects.</i> All nonresidential projects shall include on-site renewable power generation, such as solar photovoltaic, solar thermal, and wind power generation, or clean back-up power supplies, where feasible. <i>Residential Projects.</i> Residential projects are also encouraged to include such on-site renewable power generation.	Not Applicable According to Section IV (G) of CEQA Appendix M, for mixed-use projects “...the performance standards in this section that apply to the predominant use shall govern the entire project.” Because the predominant use is residential, the proposed project is not required to include on-site renewable power generation.
Soil and Water Remediation. If the project site is included on any list compiled pursuant to Section 65962.5 of the Government Code, the project shall document how it has remediated the site, if remediation is completed. Alternatively, the project shall implement the recommendations provided in a preliminary endangerment assessment or comparable document that identifies remediation appropriate for the site.	Yes On September 9, 2013, the San Francisco Bay Regional Water Quality Control Board (Regional Water Board) issued a “Notice of Intent to Issue No Further Action Status – MacArthur BART Transit Village” letter for the entire MacArthur Station site. The letter noted that Regional Water Board staff had reviewed the July 2013 Remedial Action Completion Report (RACR) for the MacArthur Transit Village, which also included a Soil Management Plan (SMP). The letter noted that based on the proper implementation of the SMP during construction, together with construction

<b>Table D-1 Project Infill Eligibility</b>	
<b>CEQA Eligibility Criteria</b>	<b>Eligible?/Notes for Proposed Project</b>
	<p>of buildings with ground floor parking, all components of the remedy would be completed, The Regional Water Board intends to grant the MacArthur Station site “no further action” status, upon recordation of an appropriate deed restriction which: 1) incorporates the SMP; 2) requires that structures for habitation include ground floor parking or another adequate vapor mitigation measure; and 3) prohibits use of underlying groundwater. The letter also noted that the MacArthur Station site is being divided into new parcels, and that the new owner(s) would be responsible for recording the deed restriction on their individual parcel and complying with its requirements in order to obtain “no further action” status for that parcel. Once all of the parcels have been granted “no further action” the regulatory file for the case will be closed.</p>
<p><b>Residential Units Near High-Volume Roadways and Stationary Sources.</b>                      If a project includes residential units located within 500 feet, or other distance determined to be appropriate by the local agency or air district based on local conditions, of a high volume roadway or other significant sources of air pollution, the project shall comply with any policies and standards identified in the local general plan, specific plan, zoning code, or community risk reduction plan for the protection of public health from such sources of air pollution.                      If the local government has not adopted such plans or policies, the project shall include measures, such as enhanced air filtration and project design, that the lead agency finds, based on substantial evidence, will promote the protection of public health from sources of air pollution. Those measures may include, among others, the recommendations of the California Air Resources Board, air districts, and the California Air Pollution Control Officers Association.</p>	<p>Yes                      Per the findings of the MacArthur Transit Village Environmental Impact Report, the proposed project is located as close as 75 feet from State Route 24 (SR-24) and 1,000 feet from I-580. As a result, a health risk assessment was performed to evaluate the risk to future site residents caused by exposure to toxic air contaminants from vehicle exhaust from I-580, SR-24 and Telegraph Avenue in accordance with these guidelines (see discussion below under Toxic Air Contaminants). The risk assessment determined that the future residents would not be exposed to significant levels of toxic air contaminants; as a result no significant impact related to the siting of sensitive uses adjacent to a freeway would result. Additionally, the project applicant would be required to implement SCA-AIR-2: Exposure to Air Pollution (Toxic Air Contaminants)(#20).</p>
<p>2b. <i>Additional Performance Standards by Project Type.</i> In addition to implementing all the features described in criterion 2a above, the project must meet eligibility requirements provided below by project type.<sup>a</sup></p>	

<b>Table D-1 Project Infill Eligibility</b>	
<b>CEQA Eligibility Criteria</b>	<b>Eligible?/Notes for Proposed Project</b>
<p><b>Residential.</b> A residential project must meet <b>one</b> of the following:</p> <p><i>A. Projects achieving below average regional per capita vehicle miles traveled.</i> A residential project is eligible if it is located in a “low vehicle travel area” within the region;</p> <p><i>B. Projects located within ½ mile of an Existing Major Transit Stop or High Quality Transit Corridor.</i> A residential project is eligible if it is located within ½ mile of an existing major transit stop or an existing stop along a high quality transit corridor; <b>or</b></p> <p><i>C. Low-Income Housing.</i> A residential or mixed-use project consisting of 300 or fewer residential units all of which are affordable to low income households is eligible if the developer of the development project provides sufficient legal commitments to the lead agency to ensure the continued availability and use of the housing units for lower income households, as defined in Section 50079.5 of the Health and Safety Code, for a period of at least 30 years, at monthly housing costs, as determined pursuant to Section 50053 of the Health and Safety Code.</p>	<p>The proposed project is eligible under Section (B). The project site is well-served by multiple transit providers, including numerous Alameda-Contra Costa County Transit District (AC Transit) routes and is located immediately adjacent to the MacArthur BART Transit Station.</p>
<p><b>Commercial/Retail.</b> A commercial/retail project must meet <b>one</b> of the following:</p> <p><i>A. Regional Location.</i> A commercial project with no single-building floor-plate greater than 50,000 square feet is eligible if it locates in a “low vehicle travel area”; <b>or</b></p> <p><i>B. Proximity to Households.</i> A project with no single-building floor-plate greater than 50,000 square feet located within ½ mile of 1,800 households is eligible.</p>	<p>Not Applicable</p> <p>According to Section IV (G) of CEQA Appendix M, for mixed-use projects “...the performance standards in this Section that apply to the predominant use shall govern the entire project.” Because the predominant use is residential, the requirements for commercial/retail projects do not apply.</p>
<p><b>Office Building.</b> An office building project must meeting <b>one</b> of the following:</p> <p><i>A. Regional Location.</i> Office buildings, both commercial and public, are eligible if they locate in a low vehicle travel area; <b>or</b></p> <p><i>B. Proximity to a Major Transit Stop.</i> Office buildings, both commercial and public, within ½ mile of an existing major transit stop, or ¼ mile of an existing stop along a high quality transit corridor, are eligible.</p>	<p>Not Applicable</p>
<p>Schools.</p> <p>Elementary schools within 1 mile of 50 percent of the projected student</p>	<p>Not Applicable</p>

<b>Table D-1 Project Infill Eligibility</b>	
<b>CEQA Eligibility Criteria</b>	<b>Eligible?/Notes for Proposed Project</b>
<p>population are eligible. Middle schools and high schools within 2 miles of 50 percent of the projected student population are eligible. Alternatively, any school within ½ mile of an existing major transit stop or an existing stop along a high quality transit corridor is eligible.</p> <p>Additionally, to be eligible, all schools shall provide parking and storage for bicycles and scooters, and shall comply with the requirements of Sections 17213, 17213.1, and 17213.2 of the California Education Code.</p>	
<p>Transit. Transit stations, as defined in Section 15183.3(e)(1), are eligible.</p>	Not Applicable
<p>Small Walkable Community Projects. Small walkable community projects, as defined in Section 15183.3, subdivision (e)(6), that implement the project features in 2a above are eligible.</p>	Not Applicable
<p>3. Be consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy, <b>except</b> as provided in CEQA Guidelines Sections 15183.3(b)(3)(A) or (b)(3)(B) below:</p> <p>(b)(3)(A). Only where an infill project is proposed within the boundaries of a metropolitan planning organization for which a sustainable communities strategy or an alternative planning strategy will be, but is not yet in effect, a residential infill project must have a density of at least 20 units per acre, and a retail or commercial infill project must have a floor area ratio of at least 0.75; <b>or</b></p> <p>(b)(3)(B). Where an infill project is proposed outside of the boundaries of a metropolitan planning organization, the infill project must meet the definition of a “small walkable community project” in CEQA Guidelines §15183.3(f)(5). (CEQA Guidelines Section 15183.3[b][3])</p>	<p>Yes (see explanation below table)</p>

**Explanation for Eligibility Criterion 3 (from Table D-1 above)**

The adopted Plan Bay Area (2013) serves as the sustainable communities strategy for the Bay Area, per Senate Bill 375. As defined by the Plan, Priority Development Areas (PDAs) are areas where new development will support the needs of residents and workers in a pedestrian-friendly environment served by transit. The MacArthur Station site is within the “MacArthur Transit Village” PDA. The proposed project is consistent with the Oakland General Plan and the Planning Code, as discussed in Attachment C.

- The General Plan land use designation for the site is Neighborhood Center Mixed-Use. The proposed project is consistent with the Neighborhood Center Mixed-Use designation, which encourages high density mixed-use development. The proposed project would provide for a variety of commercial and residential uses on the project site that would be pedestrian-oriented and be neighborhood-serving.
- The site is zoned Transit-Oriented Development (S-15). The intent of this zone is to create, preserve and enhance areas devoted primarily to serve multiple nodes of transportation and to feature high-density residential, commercial and mixed-use development to encourage a balance of pedestrian-oriented activities, transit opportunities, and concentrated development. Additionally, this zone is intended to encourage a safe and pleasant pedestrian environment near transit stations by allowing a mixture of residential, civic, commercial and light industrial activities appropriate around transit centers such as Bay Area Rapid Transit District (BART) stations. The 2016 Modified Project would be consistent with the purposes of this district.
- The proposed development on Parcel B would include a 260-foot (25-story) tower, which would be 175 feet (19 stories) taller than originally proposed with the 2008 Project EIR. The project applicant will seek revisions to the Planned Unit Development to accommodate the building height. It should be noted, however, that a 240-foot (23-story) Tower alternative was evaluated within the 2008 Project EIR. At the time the 2008 Project EIR was certified, this alternative is neither rejected nor approved. It was noted in the Findings document that in the future, the project sponsor may apply to the City to incorporate the alternative into the Project and the City would consider and process this revised application in accordance with standard procedures, with appropriate public notice before the City Planning Commission. Furthermore, the construction of the 2016 Modified Project is not expected to result in new impacts or substantially increase the magnitude of already identified impacts, as described in Section VII.
- The 2016 Modified Project proposed 875 dwelling units on an 8.2 acre site, which equates to a residential density of 108 dwelling units per acre. This is below the maximum residential density of 125 units per gross acre identified for the Neighborhood Center Mixed Use designation in the General Plan.





## Attachment E: Air Quality and Greenhouse Gas Emissions Data



**MacArthur BART MTV**  
**Alameda County, Annual**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Library	5.00	1000sqft	0.11	5,000.00	0
Enclosed Parking with Elevator	1,293.00	Space	11.64	517,200.00	0
Apartments High Rise	980.00	Dwelling Unit	15.81	980,000.00	2803
Regional Shopping Center	33.50	1000sqft	0.77	33,500.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	63
<b>Climate Zone</b>	5			<b>Operational Year</b>	2020
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	427	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics - CO2 intensity factor changed to the 2013 emission factor reported in PG&E's (2015) Greenhouse Gas Emission Factors: Guidance for PG&E Customers.

Land Use - Unit amounts based on maximum development scenario.

Demolition - Parking lot demo assumption: (Area of parking lot)(Depth of asphalt)(Density asphalt) = (200 KSF)(0.25 ft)(0.0725 tons/ft^3) = 3,625 tons

Building demo assumption: (Area of buildings)(CalEEMod conversion factor) = (100 KSF)(0.046 tons/ft^2) = 4,600 tons

Grading - Max soil export assumption: (175 KSF)(15 feet) = 2,625 KSF = approximately 100,000 cubic yards

Architectural Coating -

Vehicle Trips - Weekday trip rate based on Fehr & Peers (2015). Weekend ITE trip rates reduced by 43% in accordance with the City of Oakland Transportation Impact Study Guidelines for development in an urban environment that is within 0.25 miles of a BART station.

Woodstoves - No woodstoves or fireplaces.

Energy Use - 2008 Title 24 Energy Intensities updated to 2013 Title 24 standards under Mitigation Tab.

Water And Wastewater - EBMUD would service the proposed project and applies 100 percent aerobic process and 100 percent cogeneration.

Construction Off-road Equipment Mitigation - SCA-19 Enhanced Controls require use of Tier 4 engines. These emission reductions are considered part of the project's unmitigated emissions.

Energy Mitigation - Current 2013 Title 24 energy standards exceed 2008 Title 24 energy standards by 25%. These emission reductions are considered part of the project's unmitigated emissions.

Water Mitigation - CALGreen Code mandatory requirement. These emission reductions are considered part of the project's unmitigated emissions

Operational Off-Road Equipment - t

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblFireplaces	NumberGas	539.00	0.00
tblFireplaces	NumberNoFireplace	303.80	0.00
tblFireplaces	NumberWood	137.20	0.00
tblGrading	MaterialExported	0.00	100,000.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	427
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	7.16	4.08
tblVehicleTrips	ST_TR	46.55	26.53
tblVehicleTrips	ST_TR	49.97	28.48
tblVehicleTrips	SU_TR	6.07	3.46
tblVehicleTrips	SU_TR	25.49	14.53

tblVehicleTrips	SU_TR	25.24	14.39
tblVehicleTrips	WD_TR	6.59	2.73
tblVehicleTrips	WD_TR	56.24	42.18
tblVehicleTrips	WD_TR	42.94	24.33
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaDigestCogenCombDigestGasPercent	0.00	100.00
tblWater	AnaDigestCogenCombDigestGasPercent	0.00	100.00
tblWater	AnaDigestCogenCombDigestGasPercent	0.00	100.00
tblWater	AnaDigestCogenCombDigestGasPercent	0.00	100.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	4.90	0.00
tblWoodstoves	NumberNoncatalytic	4.90	0.00

## 2.0 Emissions Summary



## 2.1 Overall Construction

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	1.0908	8.5531	11.0494	0.0219	1.3950	0.3311	1.7261	0.4438	0.3078	0.7516	0.0000	1,835.676 0	1,835.676 0	0.1536	0.0000	1,838.901 9
2018	0.9860	5.6909	10.9425	0.0228	1.2741	0.2349	1.5090	0.3424	0.2201	0.5625	0.0000	1,781.642 5	1,781.642 5	0.1277	0.0000	1,784.323 5
2019	9.8832	0.5848	0.9706	2.0500e-003	0.1004	0.0277	0.1281	0.0269	0.0258	0.0527	0.0000	158.6828	158.6828	0.0194	0.0000	159.0892
<b>Total</b>	<b>11.9599</b>	<b>14.8288</b>	<b>22.9624</b>	<b>0.0468</b>	<b>2.7695</b>	<b>0.5937</b>	<b>3.3632</b>	<b>0.8131</b>	<b>0.5537</b>	<b>1.3668</b>	<b>0.0000</b>	<b>3,776.001 3</b>	<b>3,776.001 3</b>	<b>0.3006</b>	<b>0.0000</b>	<b>3,782.314 6</b>

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.6443	3.9598	10.3869	0.0219	1.3950	0.0573	1.4523	0.4438	0.0533	0.4971	0.0000	1,835.675 5	1,835.675 5	0.1536	0.0000	1,838.901 4
2018	0.6803	2.9463	10.9266	0.0228	1.2741	0.0452	1.3193	0.3424	0.0420	0.3845	0.0000	1,781.642 1	1,781.642 1	0.1277	0.0000	1,784.323 1
2019	9.8447	0.1833	1.0173	2.0500e-003	0.1004	3.2500e-003	0.1037	0.0269	3.0700e-003	0.0300	0.0000	158.6827	158.6827	0.0194	0.0000	159.0892
<b>Total</b>	<b>11.1693</b>	<b>7.0893</b>	<b>22.3309</b>	<b>0.0468</b>	<b>2.7695</b>	<b>0.1058</b>	<b>2.8753</b>	<b>0.8131</b>	<b>0.0984</b>	<b>0.9116</b>	<b>0.0000</b>	<b>3,776.000 4</b>	<b>3,776.000 4</b>	<b>0.3006</b>	<b>0.0000</b>	<b>3,782.313 6</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	6.61	52.19	2.75	0.00	0.00	82.18	14.51	0.00	82.23	33.31	0.00	0.00	0.00	0.00	0.00	0.00

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.2008	0.0846	7.3131	3.9000e-004		0.0402	0.0402		0.0402	0.0402	0.0000	11.9100	11.9100	0.0117	0.0000	12.1548
Energy	0.0483	0.4140	0.1820	2.6400e-003		0.0334	0.0334		0.0334	0.0334	0.0000	1,923.1872	1,923.1872	0.1073	0.0291	1,934.4527
Mobile	2.0288	5.3224	21.2829	0.0478	3.1076	0.0787	3.1863	0.8352	0.0726	0.9077	0.0000	3,405.8928	3,405.8928	0.1188	0.0000	3,408.3877
Waste						0.0000	0.0000		0.0000	0.0000	99.5833	0.0000	99.5833	5.8852	0.0000	223.1726
Water						0.0000	0.0000		0.0000	0.0000	23.5239	91.6762	115.2000	0.0872	0.0524	133.2890
<b>Total</b>	<b>9.2780</b>	<b>5.8209</b>	<b>28.7781</b>	<b>0.0508</b>	<b>3.1076</b>	<b>0.1523</b>	<b>3.2599</b>	<b>0.8352</b>	<b>0.1462</b>	<b>0.9813</b>	<b>123.1072</b>	<b>5,432.6662</b>	<b>5,555.7733</b>	<b>6.2101</b>	<b>0.0815</b>	<b>5,711.4567</b>

## 2.2 Overall Operational

### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.2008	0.0846	7.3131	3.9000e-004		0.0402	0.0402		0.0402	0.0402	0.0000	11.9100	11.9100	0.0117	0.0000	12.1548
Energy	0.0385	0.3300	0.1451	2.1000e-003		0.0266	0.0266		0.0266	0.0266	0.0000	1,708.2969	1,708.2969	0.0974	0.0256	1,718.2904
Mobile	2.0288	5.3224	21.2829	0.0478	3.1076	0.0787	3.1863	0.8352	0.0726	0.9077	0.0000	3,405.8928	3,405.8928	0.1188	0.0000	3,408.3877
Waste						0.0000	0.0000		0.0000	0.0000	99.5833	0.0000	99.5833	5.8852	0.0000	223.1726
Water						0.0000	0.0000		0.0000	0.0000	18.8191	84.2302	103.0493	0.0705	0.0421	117.5834
<b>Total</b>	<b>9.2681</b>	<b>5.7369</b>	<b>28.7411</b>	<b>0.0503</b>	<b>3.1076</b>	<b>0.1455</b>	<b>3.2531</b>	<b>0.8352</b>	<b>0.1394</b>	<b>0.9745</b>	<b>118.4024</b>	<b>5,210.3299</b>	<b>5,328.7323</b>	<b>6.1836</b>	<b>0.0678</b>	<b>5,479.5889</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.11</b>	<b>1.44</b>	<b>0.13</b>	<b>1.06</b>	<b>0.00</b>	<b>4.45</b>	<b>0.21</b>	<b>0.00</b>	<b>4.64</b>	<b>0.69</b>	<b>3.82</b>	<b>4.09</b>	<b>4.09</b>	<b>0.43</b>	<b>16.88</b>	<b>4.06</b>

## 3.0 Construction Detail

### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	2/10/2017	5	30	
2	Site Preparation	Site Preparation	2/11/2017	3/10/2017	5	20	
3	Grading	Grading	3/11/2017	5/12/2017	5	45	
4	Building Construction	Building Construction	5/13/2017	1/18/2019	5	440	
5	Paving	Paving	1/19/2019	3/8/2019	5	35	
6	Architectural Coating	Architectural Coating	3/9/2019	4/26/2019	5	35	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

**Residential Indoor: 1,984,500; Residential Outdoor: 661,500; Non-Residential Indoor: 833,550; Non-Residential Outdoor: 277,850  
(Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	813.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	12,500.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	936.00	196.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	187.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment  
 Clean Paved Roads

### 3.2 Demolition - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0880	0.0000	0.0880	0.0133	0.0000	0.0133	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0607	0.6405	0.5084	6.0000e-004		0.0319	0.0319		0.0297	0.0297	0.0000	54.9273	54.9273	0.0151	0.0000	55.2438
<b>Total</b>	<b>0.0607</b>	<b>0.6405</b>	<b>0.5084</b>	<b>6.0000e-004</b>	<b>0.0880</b>	<b>0.0319</b>	<b>0.1199</b>	<b>0.0133</b>	<b>0.0297</b>	<b>0.0430</b>	<b>0.0000</b>	<b>54.9273</b>	<b>54.9273</b>	<b>0.0151</b>	<b>0.0000</b>	<b>55.2438</b>

### 3.2 Demolition - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.6900e-003	0.1093	0.0968	3.1000e-004	6.8600e-003	1.4100e-003	8.2700e-003	1.8900e-003	1.3000e-003	3.1800e-003	0.0000	27.5704	27.5704	2.0000e-004	0.0000	27.5747
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	1.1400e-003	0.0109	2.0000e-005	2.0400e-003	2.0000e-005	2.0600e-003	5.4000e-004	2.0000e-005	5.6000e-004	0.0000	1.7869	1.7869	1.0000e-004	0.0000	1.7889
<b>Total</b>	<b>9.4500e-003</b>	<b>0.1105</b>	<b>0.1078</b>	<b>3.3000e-004</b>	<b>8.9000e-003</b>	<b>1.4300e-003</b>	<b>0.0103</b>	<b>2.4300e-003</b>	<b>1.3200e-003</b>	<b>3.7400e-003</b>	<b>0.0000</b>	<b>29.3574</b>	<b>29.3574</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>29.3636</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0880	0.0000	0.0880	0.0133	0.0000	0.0133	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.1100e-003	0.0308	0.3574	6.0000e-004		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	54.9273	54.9273	0.0151	0.0000	55.2437
<b>Total</b>	<b>7.1100e-003</b>	<b>0.0308</b>	<b>0.3574</b>	<b>6.0000e-004</b>	<b>0.0880</b>	<b>9.5000e-004</b>	<b>0.0890</b>	<b>0.0133</b>	<b>9.5000e-004</b>	<b>0.0143</b>	<b>0.0000</b>	<b>54.9273</b>	<b>54.9273</b>	<b>0.0151</b>	<b>0.0000</b>	<b>55.2437</b>



### 3.2 Demolition - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.6900e-003	0.1093	0.0968	3.1000e-004	6.8600e-003	1.4100e-003	8.2700e-003	1.8900e-003	1.3000e-003	3.1800e-003	0.0000	27.5704	27.5704	2.0000e-004	0.0000	27.5747
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.6000e-004	1.1400e-003	0.0109	2.0000e-005	2.0400e-003	2.0000e-005	2.0600e-003	5.4000e-004	2.0000e-005	5.6000e-004	0.0000	1.7869	1.7869	1.0000e-004	0.0000	1.7889
<b>Total</b>	<b>9.4500e-003</b>	<b>0.1105</b>	<b>0.1078</b>	<b>3.3000e-004</b>	<b>8.9000e-003</b>	<b>1.4300e-003</b>	<b>0.0103</b>	<b>2.4300e-003</b>	<b>1.3200e-003</b>	<b>3.7400e-003</b>	<b>0.0000</b>	<b>29.3574</b>	<b>29.3574</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>29.3636</b>

### 3.3 Site Preparation - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0484	0.5175	0.3940	3.9000e-004		0.0275	0.0275		0.0253	0.0253	0.0000	36.3154	36.3154	0.0111	0.0000	36.5491
<b>Total</b>	<b>0.0484</b>	<b>0.5175</b>	<b>0.3940</b>	<b>3.9000e-004</b>	<b>0.1807</b>	<b>0.0275</b>	<b>0.2082</b>	<b>0.0993</b>	<b>0.0253</b>	<b>0.1247</b>	<b>0.0000</b>	<b>36.3154</b>	<b>36.3154</b>	<b>0.0111</b>	<b>0.0000</b>	<b>36.5491</b>

### 3.3 Site Preparation - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1000e-004	9.1000e-004	8.7400e-003	2.0000e-005	1.6300e-003	1.0000e-005	1.6500e-003	4.3000e-004	1.0000e-005	4.5000e-004	0.0000	1.4295	1.4295	8.0000e-005	0.0000	1.4312
<b>Total</b>	<b>6.1000e-004</b>	<b>9.1000e-004</b>	<b>8.7400e-003</b>	<b>2.0000e-005</b>	<b>1.6300e-003</b>	<b>1.0000e-005</b>	<b>1.6500e-003</b>	<b>4.3000e-004</b>	<b>1.0000e-005</b>	<b>4.5000e-004</b>	<b>0.0000</b>	<b>1.4295</b>	<b>1.4295</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.4312</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.7600e-003	0.0206	0.2124	3.9000e-004		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004	0.0000	36.3153	36.3153	0.0111	0.0000	36.5490
<b>Total</b>	<b>4.7600e-003</b>	<b>0.0206</b>	<b>0.2124</b>	<b>3.9000e-004</b>	<b>0.1807</b>	<b>6.3000e-004</b>	<b>0.1813</b>	<b>0.0993</b>	<b>6.3000e-004</b>	<b>0.0999</b>	<b>0.0000</b>	<b>36.3153</b>	<b>36.3153</b>	<b>0.0111</b>	<b>0.0000</b>	<b>36.5490</b>

### 3.3 Site Preparation - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1000e-004	9.1000e-004	8.7400e-003	2.0000e-005	1.6300e-003	1.0000e-005	1.6500e-003	4.3000e-004	1.0000e-005	4.5000e-004	0.0000	1.4295	1.4295	8.0000e-005	0.0000	1.4312
<b>Total</b>	<b>6.1000e-004</b>	<b>9.1000e-004</b>	<b>8.7400e-003</b>	<b>2.0000e-005</b>	<b>1.6300e-003</b>	<b>1.0000e-005</b>	<b>1.6500e-003</b>	<b>4.3000e-004</b>	<b>1.0000e-005</b>	<b>4.5000e-004</b>	<b>0.0000</b>	<b>1.4295</b>	<b>1.4295</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.4312</b>

### 3.4 Grading - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2008	0.0000	0.2008	0.0818	0.0000	0.0818	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1372	1.5658	1.0531	1.3900e-003		0.0746	0.0746		0.0687	0.0687	0.0000	128.8663	128.8663	0.0395	0.0000	129.6955
<b>Total</b>	<b>0.1372</b>	<b>1.5658</b>	<b>1.0531</b>	<b>1.3900e-003</b>	<b>0.2008</b>	<b>0.0746</b>	<b>0.2754</b>	<b>0.0818</b>	<b>0.0687</b>	<b>0.1505</b>	<b>0.0000</b>	<b>128.8663</b>	<b>128.8663</b>	<b>0.0395</b>	<b>0.0000</b>	<b>129.6955</b>

### 3.4 Grading - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1336	1.6812	1.4890	4.7100e-003	0.1055	0.0217	0.1271	0.0290	0.0199	0.0489	0.0000	423.8998	423.8998	3.0900e-003	0.0000	423.9647
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5200e-003	2.2800e-003	0.0219	5.0000e-005	4.0800e-003	3.0000e-005	4.1200e-003	1.0900e-003	3.0000e-005	1.1200e-003	0.0000	3.5738	3.5738	1.9000e-004	0.0000	3.5779
<b>Total</b>	<b>0.1351</b>	<b>1.6835</b>	<b>1.5108</b>	<b>4.7600e-003</b>	<b>0.1095</b>	<b>0.0217</b>	<b>0.1312</b>	<b>0.0301</b>	<b>0.0199</b>	<b>0.0500</b>	<b>0.0000</b>	<b>427.4737</b>	<b>427.4737</b>	<b>3.2800e-003</b>	<b>0.0000</b>	<b>427.5426</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2008	0.0000	0.2008	0.0818	0.0000	0.0818	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0170	0.0738	0.7825	1.3900e-003		2.2700e-003	2.2700e-003		2.2700e-003	2.2700e-003	0.0000	128.8662	128.8662	0.0395	0.0000	129.6953
<b>Total</b>	<b>0.0170</b>	<b>0.0738</b>	<b>0.7825</b>	<b>1.3900e-003</b>	<b>0.2008</b>	<b>2.2700e-003</b>	<b>0.2031</b>	<b>0.0818</b>	<b>2.2700e-003</b>	<b>0.0841</b>	<b>0.0000</b>	<b>128.8662</b>	<b>128.8662</b>	<b>0.0395</b>	<b>0.0000</b>	<b>129.6953</b>

### 3.4 Grading - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1336	1.6812	1.4890	4.7100e-003	0.1055	0.0217	0.1271	0.0290	0.0199	0.0489	0.0000	423.8998	423.8998	3.0900e-003	0.0000	423.9647
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5200e-003	2.2800e-003	0.0219	5.0000e-005	4.0800e-003	3.0000e-005	4.1200e-003	1.0900e-003	3.0000e-005	1.1200e-003	0.0000	3.5738	3.5738	1.9000e-004	0.0000	3.5779
<b>Total</b>	<b>0.1351</b>	<b>1.6835</b>	<b>1.5108</b>	<b>4.7600e-003</b>	<b>0.1095</b>	<b>0.0217</b>	<b>0.1312</b>	<b>0.0301</b>	<b>0.0199</b>	<b>0.0500</b>	<b>0.0000</b>	<b>427.4737</b>	<b>427.4737</b>	<b>3.2800e-003</b>	<b>0.0000</b>	<b>427.5426</b>

### 3.5 Building Construction - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2560	2.1785	1.4957	2.2100e-003		0.1470	0.1470		0.1380	0.1380	0.0000	197.5703	197.5703	0.0486	0.0000	198.5914
<b>Total</b>	<b>0.2560</b>	<b>2.1785</b>	<b>1.4957</b>	<b>2.2100e-003</b>		<b>0.1470</b>	<b>0.1470</b>		<b>0.1380</b>	<b>0.1380</b>	<b>0.0000</b>	<b>197.5703</b>	<b>197.5703</b>	<b>0.0486</b>	<b>0.0000</b>	<b>198.5914</b>

### 3.5 Building Construction - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1818	1.4649	2.2218	3.8700e-003	0.1046	0.0213	0.1258	0.0300	0.0196	0.0496	0.0000	346.4649	346.4649	2.7000e-003	0.0000	346.5217
Worker	0.2615	0.3910	3.7491	8.3700e-003	0.7009	5.7000e-003	0.7066	0.1864	5.2500e-003	0.1917	0.0000	613.2713	613.2713	0.0330	0.0000	613.9632
<b>Total</b>	<b>0.4433</b>	<b>1.8559</b>	<b>5.9709</b>	<b>0.0122</b>	<b>0.8054</b>	<b>0.0270</b>	<b>0.8324</b>	<b>0.2165</b>	<b>0.0248</b>	<b>0.2413</b>	<b>0.0000</b>	<b>959.7362</b>	<b>959.7362</b>	<b>0.0357</b>	<b>0.0000</b>	<b>960.4849</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0269	0.1839	1.4364	2.2100e-003		3.3500e-003	3.3500e-003		3.3500e-003	3.3500e-003	0.0000	197.5700	197.5700	0.0486	0.0000	198.5912
<b>Total</b>	<b>0.0269</b>	<b>0.1839</b>	<b>1.4364</b>	<b>2.2100e-003</b>		<b>3.3500e-003</b>	<b>3.3500e-003</b>		<b>3.3500e-003</b>	<b>3.3500e-003</b>	<b>0.0000</b>	<b>197.5700</b>	<b>197.5700</b>	<b>0.0486</b>	<b>0.0000</b>	<b>198.5912</b>

**3.5 Building Construction - 2017****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1818	1.4649	2.2218	3.8700e-003	0.1046	0.0213	0.1258	0.0300	0.0196	0.0496	0.0000	346.4649	346.4649	2.7000e-003	0.0000	346.5217
Worker	0.2615	0.3910	3.7491	8.3700e-003	0.7009	5.7000e-003	0.7066	0.1864	5.2500e-003	0.1917	0.0000	613.2713	613.2713	0.0330	0.0000	613.9632
<b>Total</b>	<b>0.4433</b>	<b>1.8559</b>	<b>5.9709</b>	<b>0.0122</b>	<b>0.8054</b>	<b>0.0270</b>	<b>0.8324</b>	<b>0.2165</b>	<b>0.0248</b>	<b>0.2413</b>	<b>0.0000</b>	<b>959.7362</b>	<b>959.7362</b>	<b>0.0357</b>	<b>0.0000</b>	<b>960.4849</b>

**3.5 Building Construction - 2018****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9844	308.9844	0.0756	0.0000	310.5723
<b>Total</b>	<b>0.3483</b>	<b>3.0355</b>	<b>2.2880</b>	<b>3.5000e-003</b>		<b>0.1950</b>	<b>0.1950</b>		<b>0.1833</b>	<b>0.1833</b>	<b>0.0000</b>	<b>308.9844</b>	<b>308.9844</b>	<b>0.0756</b>	<b>0.0000</b>	<b>310.5723</b>



### 3.5 Building Construction - 2018

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2706	2.0993	3.3654	6.1200e-003	0.1654	0.0312	0.1966	0.0475	0.0287	0.0762	0.0000	538.6027	538.6027	4.2000e-003	0.0000	538.6909
Worker	0.3671	0.5561	5.2891	0.0132	1.1087	8.6900e-003	1.1174	0.2949	8.0300e-003	0.3029	0.0000	934.0554	934.0554	0.0479	0.0000	935.0603
<b>Total</b>	<b>0.6377</b>	<b>2.6554</b>	<b>8.6545</b>	<b>0.0194</b>	<b>1.2741</b>	<b>0.0399</b>	<b>1.3140</b>	<b>0.3424</b>	<b>0.0367</b>	<b>0.3792</b>	<b>0.0000</b>	<b>1,472.6581</b>	<b>1,472.6581</b>	<b>0.0521</b>	<b>0.0000</b>	<b>1,473.7511</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0426	0.2909	2.2721	3.5000e-003		5.3000e-003	5.3000e-003		5.3000e-003	5.3000e-003	0.0000	308.9841	308.9841	0.0756	0.0000	310.5720
<b>Total</b>	<b>0.0426</b>	<b>0.2909</b>	<b>2.2721</b>	<b>3.5000e-003</b>		<b>5.3000e-003</b>	<b>5.3000e-003</b>		<b>5.3000e-003</b>	<b>5.3000e-003</b>	<b>0.0000</b>	<b>308.9841</b>	<b>308.9841</b>	<b>0.0756</b>	<b>0.0000</b>	<b>310.5720</b>

**3.5 Building Construction - 2018****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2706	2.0993	3.3654	6.1200e-003	0.1654	0.0312	0.1966	0.0475	0.0287	0.0762	0.0000	538.6027	538.6027	4.2000e-003	0.0000	538.6909
Worker	0.3671	0.5561	5.2891	0.0132	1.1087	8.6900e-003	1.1174	0.2949	8.0300e-003	0.3029	0.0000	934.0554	934.0554	0.0479	0.0000	935.0603
<b>Total</b>	<b>0.6377</b>	<b>2.6554</b>	<b>8.6545</b>	<b>0.0194</b>	<b>1.2741</b>	<b>0.0399</b>	<b>1.3140</b>	<b>0.3424</b>	<b>0.0367</b>	<b>0.3792</b>	<b>0.0000</b>	<b>1,472.6581</b>	<b>1,472.6581</b>	<b>0.0521</b>	<b>0.0000</b>	<b>1,473.7511</b>

**3.5 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0165	0.1468	0.1198	1.9000e-004		9.0000e-003	9.0000e-003		8.4600e-003	8.4600e-003	0.0000	16.3886	16.3886	3.9900e-003	0.0000	16.4723
<b>Total</b>	<b>0.0165</b>	<b>0.1468</b>	<b>0.1198</b>	<b>1.9000e-004</b>		<b>9.0000e-003</b>	<b>9.0000e-003</b>		<b>8.4600e-003</b>	<b>8.4600e-003</b>	<b>0.0000</b>	<b>16.3886</b>	<b>16.3886</b>	<b>3.9900e-003</b>	<b>0.0000</b>	<b>16.4723</b>

### 3.5 Building Construction - 2019

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0133	0.1028	0.1708	3.3000e-004	8.8700e-003	1.5500e-003	0.0104	2.5500e-003	1.4300e-003	3.9800e-003	0.0000	28.3915	28.3915	2.2000e-004	0.0000	28.3962
Worker	0.0179	0.0272	0.2575	7.1000e-004	0.0595	4.6000e-004	0.0599	0.0158	4.2000e-004	0.0162	0.0000	48.3040	48.3040	2.3900e-003	0.0000	48.3541
<b>Total</b>	<b>0.0312</b>	<b>0.1299</b>	<b>0.4282</b>	<b>1.0400e-003</b>	<b>0.0683</b>	<b>2.0100e-003</b>	<b>0.0704</b>	<b>0.0184</b>	<b>1.8500e-003</b>	<b>0.0202</b>	<b>0.0000</b>	<b>76.6955</b>	<b>76.6955</b>	<b>2.6100e-003</b>	<b>0.0000</b>	<b>76.7502</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.2900e-003	0.0156	0.1219	1.9000e-004		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	16.3886	16.3886	3.9900e-003	0.0000	16.4723
<b>Total</b>	<b>2.2900e-003</b>	<b>0.0156</b>	<b>0.1219</b>	<b>1.9000e-004</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>		<b>2.8000e-004</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>16.3886</b>	<b>16.3886</b>	<b>3.9900e-003</b>	<b>0.0000</b>	<b>16.4723</b>

### 3.5 Building Construction - 2019

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0133	0.1028	0.1708	3.3000e-004	8.8700e-003	1.5500e-003	0.0104	2.5500e-003	1.4300e-003	3.9800e-003	0.0000	28.3915	28.3915	2.2000e-004	0.0000	28.3962
Worker	0.0179	0.0272	0.2575	7.1000e-004	0.0595	4.6000e-004	0.0599	0.0158	4.2000e-004	0.0162	0.0000	48.3040	48.3040	2.3900e-003	0.0000	48.3541
<b>Total</b>	<b>0.0312</b>	<b>0.1299</b>	<b>0.4282</b>	<b>1.0400e-003</b>	<b>0.0683</b>	<b>2.0100e-003</b>	<b>0.0704</b>	<b>0.0184</b>	<b>1.8500e-003</b>	<b>0.0202</b>	<b>0.0000</b>	<b>76.6955</b>	<b>76.6955</b>	<b>2.6100e-003</b>	<b>0.0000</b>	<b>76.7502</b>

### 3.6 Paving - 2019

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0250	0.2614	0.2514	3.9000e-004		0.0142	0.0142		0.0130	0.0130	0.0000	35.0691	35.0691	0.0111	0.0000	35.3021
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0250</b>	<b>0.2614</b>	<b>0.2514</b>	<b>3.9000e-004</b>		<b>0.0142</b>	<b>0.0142</b>		<b>0.0130</b>	<b>0.0130</b>	<b>0.0000</b>	<b>35.0691</b>	<b>35.0691</b>	<b>0.0111</b>	<b>0.0000</b>	<b>35.3021</b>

### 3.6 Paving - 2019

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	1.0900e-003	0.0103	3.0000e-005	2.3800e-003	2.0000e-005	2.4000e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	1.9353	1.9353	1.0000e-004	0.0000	1.9373
<b>Total</b>	<b>7.2000e-004</b>	<b>1.0900e-003</b>	<b>0.0103</b>	<b>3.0000e-005</b>	<b>2.3800e-003</b>	<b>2.0000e-005</b>	<b>2.4000e-003</b>	<b>6.3000e-004</b>	<b>2.0000e-005</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>1.9353</b>	<b>1.9353</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.9373</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.8000e-003	0.0208	0.2962	3.9000e-004		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	35.0690	35.0690	0.0111	0.0000	35.3020
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>4.8000e-003</b>	<b>0.0208</b>	<b>0.2962</b>	<b>3.9000e-004</b>		<b>6.4000e-004</b>	<b>6.4000e-004</b>		<b>6.4000e-004</b>	<b>6.4000e-004</b>	<b>0.0000</b>	<b>35.0690</b>	<b>35.0690</b>	<b>0.0111</b>	<b>0.0000</b>	<b>35.3020</b>

### 3.6 Paving - 2019

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	1.0900e-003	0.0103	3.0000e-005	2.3800e-003	2.0000e-005	2.4000e-003	6.3000e-004	2.0000e-005	6.5000e-004	0.0000	1.9353	1.9353	1.0000e-004	0.0000	1.9373
<b>Total</b>	<b>7.2000e-004</b>	<b>1.0900e-003</b>	<b>0.0103</b>	<b>3.0000e-005</b>	<b>2.3800e-003</b>	<b>2.0000e-005</b>	<b>2.4000e-003</b>	<b>6.3000e-004</b>	<b>2.0000e-005</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>1.9353</b>	<b>1.9353</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.9373</b>

### 3.7 Architectural Coating - 2019

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	9.7963					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6600e-003	0.0321	0.0322	5.0000e-005		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	4.4682	4.4682	3.8000e-004	0.0000	4.4761
<b>Total</b>	<b>9.8009</b>	<b>0.0321</b>	<b>0.0322</b>	<b>5.0000e-005</b>		<b>2.2500e-003</b>	<b>2.2500e-003</b>		<b>2.2500e-003</b>	<b>2.2500e-003</b>	<b>0.0000</b>	<b>4.4682</b>	<b>4.4682</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>4.4761</b>

### 3.7 Architectural Coating - 2019

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.9500e-003	0.0136	0.1286	3.5000e-004	0.0297	2.3000e-004	0.0299	7.9000e-003	2.1000e-004	8.1100e-003	0.0000	24.1262	24.1262	1.1900e-003	0.0000	24.1512
<b>Total</b>	<b>8.9500e-003</b>	<b>0.0136</b>	<b>0.1286</b>	<b>3.5000e-004</b>	<b>0.0297</b>	<b>2.3000e-004</b>	<b>0.0299</b>	<b>7.9000e-003</b>	<b>2.1000e-004</b>	<b>8.1100e-003</b>	<b>0.0000</b>	<b>24.1262</b>	<b>24.1262</b>	<b>1.1900e-003</b>	<b>0.0000</b>	<b>24.1512</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	9.7963					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2000e-004	2.2500e-003	0.0321	5.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	4.4682	4.4682	3.8000e-004	0.0000	4.4761
<b>Total</b>	<b>9.7968</b>	<b>2.2500e-003</b>	<b>0.0321</b>	<b>5.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>4.4682</b>	<b>4.4682</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>4.4761</b>



### 3.7 Architectural Coating - 2019

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.9500e-003	0.0136	0.1286	3.5000e-004	0.0297	2.3000e-004	0.0299	7.9000e-003	2.1000e-004	8.1100e-003	0.0000	24.1262	24.1262	1.1900e-003	0.0000	24.1512
<b>Total</b>	<b>8.9500e-003</b>	<b>0.0136</b>	<b>0.1286</b>	<b>3.5000e-004</b>	<b>0.0297</b>	<b>2.3000e-004</b>	<b>0.0299</b>	<b>7.9000e-003</b>	<b>2.1000e-004</b>	<b>8.1100e-003</b>	<b>0.0000</b>	<b>24.1262</b>	<b>24.1262</b>	<b>1.1900e-003</b>	<b>0.0000</b>	<b>24.1512</b>

### 4.0 Operational Detail - Mobile

#### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.0288	5.3224	21.2829	0.0478	3.1076	0.0787	3.1863	0.8352	0.0726	0.9077	0.0000	3,405.8928	3,405.8928	0.1188	0.0000	3,408.3877
Unmitigated	2.0288	5.3224	21.2829	0.0478	3.1076	0.0787	3.1863	0.8352	0.0726	0.9077	0.0000	3,405.8928	3,405.8928	0.1188	0.0000	3,408.3877

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	2,675.40	3,998.40	3390.80	6,622,537	6,622,537
Enclosed Parking with Elevator	0.00	0.00	0.00		
Library	210.90	132.65	72.65	305,026	305,026
Regional Shopping Center	815.06	954.08	482.07	1,380,457	1,380,457
<b>Total</b>	<b>3,701.36</b>	<b>5,085.13</b>	<b>3,945.52</b>	<b>8,308,020</b>	<b>8,308,020</b>

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments High Rise	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Library	9.50	7.30	7.30	52.00	43.00	5.00	44	44	12
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.543091	0.062201	0.166716	0.110184	0.030625	0.004564	0.019041	0.050825	0.001789	0.003661	0.005684	0.000199	0.001418

### 5.0 Energy Detail

#### 4.4 Fleet Mix

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Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,326.9578	1,326.9578	0.0901	0.0187	1,334.6305
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,444.7381	1,444.7381	0.0981	0.0203	1,453.0919
NaturalGas Mitigated	0.0385	0.3300	0.1451	2.1000e-003		0.0266	0.0266		0.0266	0.0266	0.0000	381.3391	381.3391	7.3100e-003	6.9900e-003	383.6599
NaturalGas Unmitigated	0.0483	0.4140	0.1820	2.6400e-003		0.0334	0.0334		0.0334	0.0334	0.0000	478.4491	478.4491	9.1700e-003	8.7700e-003	481.3608

**5.2 Energy by Land Use - NaturalGas**  
**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Library	128400	6.9000e-004	6.2900e-003	5.2900e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.8519	6.8519	1.3000e-004	1.3000e-004	6.8936
Regional Shopping Center	160800	8.7000e-004	7.8800e-003	6.6200e-003	5.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004	0.0000	8.5809	8.5809	1.6000e-004	1.6000e-004	8.6331
Apartments High Rise	8.6766e+006	0.0468	0.3998	0.1701	2.5500e-003		0.0323	0.0323		0.0323	0.0323	0.0000	463.0162	463.0162	8.8700e-003	8.4900e-003	465.8341
<b>Total</b>		<b>0.0484</b>	<b>0.4140</b>	<b>0.1820</b>	<b>2.6400e-003</b>		<b>0.0334</b>	<b>0.0334</b>		<b>0.0334</b>	<b>0.0334</b>	<b>0.0000</b>	<b>478.4491</b>	<b>478.4491</b>	<b>9.1600e-003</b>	<b>8.7800e-003</b>	<b>481.3608</b>

### 5.2 Energy by Land Use - NaturalGas

#### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Library	104925	5.7000e-004	5.1400e-003	4.3200e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.5992	5.5992	1.1000e-004	1.0000e-004	5.6333
Regional Shopping Center	126462	6.8000e-004	6.2000e-003	5.2100e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.7485	6.7485	1.3000e-004	1.2000e-004	6.7896
Apartments High Rise	6.91464e+006	0.0373	0.3186	0.1356	2.0300e-003		0.0258	0.0258		0.0258	0.0258	0.0000	368.9914	368.9914	7.0700e-003	6.7600e-003	371.2370
<b>Total</b>		<b>0.0385</b>	<b>0.3300</b>	<b>0.1451</b>	<b>2.1000e-003</b>		<b>0.0266</b>	<b>0.0266</b>		<b>0.0266</b>	<b>0.0266</b>	<b>0.0000</b>	<b>381.3391</b>	<b>381.3391</b>	<b>7.3100e-003</b>	<b>6.9800e-003</b>	<b>383.6599</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	3.54304e+006	686.2305	0.0466	9.6400e-003	690.1985
Enclosed Parking with Elevator	3.48593e+006	675.1683	0.0459	9.4900e-003	679.0722
Library	41350	8.0088	5.4000e-004	1.1000e-004	8.0551
Regional Shopping Center	388935	75.3305	5.1200e-003	1.0600e-003	75.7660
<b>Total</b>		<b>1,444.7381</b>	<b>0.0981</b>	<b>0.0203</b>	<b>1,453.0919</b>

### 5.3 Energy by Land Use - Electricity

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	3.46659e+006	671.4230	0.0456	9.4300e-003	675.3053
Enclosed Parking with Elevator	2.97907e+006	576.9984	0.0392	8.1100e-003	580.3347
Library	39500	7.6505	5.2000e-004	1.1000e-004	7.6948
Regional Shopping Center	365988	70.8859	4.8100e-003	1.0000e-003	71.2958
<b>Total</b>		<b>1,326.9578</b>	<b>0.0901</b>	<b>0.0187</b>	<b>1,334.6305</b>

### 6.0 Area Detail

#### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	7.2008	0.0846	7.3131	3.9000e-004		0.0402	0.0402		0.0402	0.0402	0.0000	11.9100	11.9100	0.0117	0.0000	12.1548
Unmitigated	7.2008	0.0846	7.3131	3.9000e-004		0.0402	0.0402		0.0402	0.0402	0.0000	11.9100	11.9100	0.0117	0.0000	12.1548

### 6.2 Area by SubCategory

#### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.9796					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.9977					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2235	0.0846	7.3131	3.9000e-004		0.0402	0.0402		0.0402	0.0402	0.0000	11.9100	11.9100	0.0117	0.0000	12.1548
<b>Total</b>	<b>7.2008</b>	<b>0.0846</b>	<b>7.3131</b>	<b>3.9000e-004</b>		<b>0.0402</b>	<b>0.0402</b>		<b>0.0402</b>	<b>0.0402</b>	<b>0.0000</b>	<b>11.9100</b>	<b>11.9100</b>	<b>0.0117</b>	<b>0.0000</b>	<b>12.1548</b>



## 6.2 Area by SubCategory

### Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.9796					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.9977					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2235	0.0846	7.3131	3.9000e-004		0.0402	0.0402		0.0402	0.0402	0.0000	11.9100	11.9100	0.0117	0.0000	12.1548
<b>Total</b>	<b>7.2008</b>	<b>0.0846</b>	<b>7.3131</b>	<b>3.9000e-004</b>		<b>0.0402</b>	<b>0.0402</b>		<b>0.0402</b>	<b>0.0402</b>	<b>0.0000</b>	<b>11.9100</b>	<b>11.9100</b>	<b>0.0117</b>	<b>0.0000</b>	<b>12.1548</b>

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	103.0493	0.0705	0.0421	117.5834
Unmitigated	115.2000	0.0872	0.0524	133.2890

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	63.8509 / 40.2539	110.5628	0.0837	0.0504	127.9337
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Library	0.156445 / 0.244695	0.3699	2.1000e-004	1.2000e-004	0.4131
Regional Shopping Center	2.48143 / 1.52088	4.2673	3.2500e-003	1.9600e-003	4.9422
<b>Total</b>		<b>115.2000</b>	<b>0.0872</b>	<b>0.0524</b>	<b>133.2890</b>

## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	51.0808 / 40.2539	98.8941	0.0677	0.0404	112.8513
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Library	0.125156 / 0.244695	0.3413	1.7000e-004	1.0000e-004	0.3761
Regional Shopping Center	1.98514 / 1.52088	3.8138	2.6300e-003	1.5700e-003	4.3561
<b>Total</b>		<b>103.0493</b>	<b>0.0705</b>	<b>0.0421</b>	<b>117.5834</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	99.5833	5.8852	0.0000	223.1726
Unmitigated	99.5833	5.8852	0.0000	223.1726

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	450.8	91.5083	5.4080	0.0000	205.0761
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Library	4.6	0.9338	0.0552	0.0000	2.0926
Regional Shopping Center	35.18	7.1412	0.4220	0.0000	16.0039
<b>Total</b>		<b>99.5833</b>	<b>5.8852</b>	<b>0.0000</b>	<b>223.1726</b>

## 8.2 Waste by Land Use

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	450.8	91.5083	5.4080	0.0000	205.0761
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Library	4.6	0.9338	0.0552	0.0000	2.0926
Regional Shopping Center	35.18	7.1412	0.4220	0.0000	16.0039
<b>Total</b>		<b>99.5833</b>	<b>5.8852</b>	<b>0.0000</b>	<b>223.1726</b>

## 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## 10.0 Vegetation

**Summary of Backup Diesel Generator Model Parameters**

Off-Road Equipment Model Input Parameters						Emission Factors							Priority Criteria Pollutants				GHGs
Off-Road Equipment	Quantity	Days per year	Hours per day	Engine Horsepower	Load Factor	ROG (g/bhp-hr)	NOx (g/bhp-hr)	Exhaust PM10 (g/bhp-hr)	Exhaust PM2.5 (g/bhp-hr)	CO2 (g/bhp-hr)	CH4 (g/bhp-hr)	N2O <sup>1</sup> (g/bhp-hr)	ROG (lbs/year)	NOx (lbs/year)	Exhaust PM10 (lbs/year)	Exhaust PM2.5 (lbs/year)	CO2eq (lbs/year)
Backup Diesel Generator	3	50	1	1000	1	0.0600	2.2400	0.0160	0.0160	568.3	0.0210	0.0096	19.8	740	5.29	5.29	188,881

Notes:

Emission rates for criteria pollutants derived from CalEEMod assuming Tier 4 engines.

Emission rates for greenhouse gases derived from CalEEMod assuming statewide average for 2020.

Emissions = [quantity x total hours x hp x LF x EF]/454 g/lb

Load factor conservatively assumed to equal one.

CO2eq = CO2 x GWP<sub>CO2</sub> + CH4 x GWP<sub>CH4</sub> + N2O x GWP<sub>N2O</sub>

CalEEMod = California Emissions Estimator Model (ENVIRON International Corporation and the California Air Districts, 2013)

lbs = pounds

g = grams

hp = horse power

bhp = brake horsepower

LF = load factor

EF = emission factor

GHGs = greenhouse gases

hr = hour

ROG = reactive organic gases

NOx = nitrogen oxides

PM10 = particulate matter less than 10 microns in diameter

PM2.5 = particulate matter less than 2.5 microns in diameter

CO2 = carbon dioxide

CH4 = methane

N2O = nitrous oxide

CO2eq = carbon dioxide equivalent

Global Warming Potentials (GWP)

CO2	1
CH4	25
N2O	298

Source: Title 40 Code of Federal Regulations, Chapter I, Subchapter C, Part 98, Subpart A, Table A-1

<sup>1</sup> N2O emission rate based on ratio of CH4 emission to N2O emission rate for diesel construction equipment.

EPA, 2014. *Emission Factors for Greenhouse Gas Inventories*. Table 5 - Mobile Combustion CH4 and N2O Emission Factors for Non-road Vehicles. [http://www2.epa.gov/sites/production/files/2015-07/documents/emission-factors\\_2014.p](http://www2.epa.gov/sites/production/files/2015-07/documents/emission-factors_2014.p)

**Summary of ISCST3 and Health Risk Assessment Parameters and Results for DPM and PM<sub>2.5</sub> Emissions during Construction**

Construction Assumptions		
Construction Duration	Quantity	Notes
Total Construction Work Days	605	CalEEMod
Total Construction Period (years)	2.3	CalEEMod
Work Hours/Day	8	CalEEMod

ISCST3 Model Parameters and Results			
	Units	Value	Notes
<b>VOLUME SOURCE: Off-Road Equipment</b>			
Emission Rate	gram/second	0.00070	Converted from total onsite exhaust PM10 with SCA-19
Number of Sources	count	148	SMAQMD, 2009
Release Height	meters	5.0	SMAQMD, 2009
Length of Side	meters	10.0	SMAQMD, 2009
Initial Lateral Dimension	meters	2.3	USEPA, 1995
Initial Vertical Dimension	meters	1.0	SMAQMD, 2009
<b>LINE-SOURCE (AREA): Hauling/Vendor/Worker Trips</b>			
Emission Rate	gram/second	0.00024	Converted from 5% of total offsite exhaust PM10
Number of Sources	count	5	BAAQMD, 2012
Length of Side	meters	8.5	ISCST3 Haul Road Calculator
Release Height	meters	3.5	ISCST3 Haul Road Calculator
Initial Vertical Dimension	meters	3.25	ISCST3 Haul Road Calculator
<b>RECEPTORS</b>			
Grid Spacing	meters	10	SMAQMD, 2009
Flag Pole Receptor Height	meters	1.5	BAAQMD, 2012
<b>Emissions Source</b>	<b>Pollutant</b>	<b>Annual Average Concentration</b>	<b>Notes</b>
Off-Road Equipment and Onsite Vehicle Trips	DPM ( $\mu\text{g}/\text{m}^3$ )	0.0131	At maximum exposed individual resident (MEIR) location
	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	0.0122	At MEIR location (based on ratio of total PM10 and PM2.5)

Health Risk Assessment Parameters and Results					
Hazard Index for DPM	Units	Value	Notes		
Chronic REL	$\mu\text{g}/\text{m}^3$	5.0	OEHHA, 2015		
Chronic Hazard Index for DPM	unitless	0.003	At MEIR location		
Inhalation Cancer Risk Assessment for DPM	Units	Age Group			Notes
		3rd Trimester	0-2 Years	2-9 Years	
Concentration (C)	$\mu\text{g}/\text{m}^3$	0.0131	0.0131	0.0131	ISCST3 Annual Average
Daily Breathing Rate (DBR)	L/kg-day	361	1090	861	95th percentile (OEHHA, 2015)
Inhalation absorption factor (A)	unitless	1.0	1.0	1.0	OEHHA, 2015
Exposure Frequency (EF)	unitless	0.96	0.96	0.96	350 days/365 days in a year (OEHHA, 2015)
Dose Conversion Factor (CF <sub>D</sub> )	$\text{mg}\cdot\text{m}^3/\mu\text{g}\cdot\text{L}$	0.000001	0.000001	0.000001	Conversion of $\mu\text{g}$ to mg and L to $\text{m}^3$
Dose	$\text{mg}/\text{kg}/\text{day}$	0.000005	0.000014	0.000011	$C\cdot\text{DBR}\cdot A\cdot\text{EF}\cdot\text{CF}_D$ (OEHHA, 2015)
Cancer Potency Factor (CPF)	$(\text{mg}/\text{kg}/\text{day})^{-1}$	1.1	1.1	1.1	OEHHA, 2015
Age Sensitivity Factor (ASF)	unitless	10	10	3	OEHHA, 2015
Annual Exposure Duration (ED)	years	0.25	2.00	0.07	Based on total construction period of 2.32 years
Averaging Time (AT)	years	70	70	70	70 years for residents (OEHHA, 2015)
Fraction of time at home (FAH)	unitless	0.85	0.85	0.72	OEHHA, 2015
Cancer Risk Conversion Factor (CF)	$\text{m}^3/\text{L}$	1000000	1000000	1000000	Chances per million (OEHHA, 2015)
Cancer Risk	per million	0.15	3.66	0.02	At MEIR location
Total Cancer Risk	per million		3.84		At MEIR location

Notes:

DPM = diesel particulate matter

PM10 = particulate matter with aerodynamic resistance diameters equal to or less than 10 microns

PM2.5 = particulate matter with aerodynamic resistance diameters equal to or less than 2.5 microns

REL = reference exposure level

$\mu\text{g}/\text{m}^3$  = micrograms per cubic meter

L/kg-day = liters per kilogram-day

$\text{m}^3/\text{L}$  = cubic meters per liter

$(\text{mg}/\text{kg}/\text{day})^{-1}$  = 1/milligrams per kilograms per day

Office of Environmental Health Hazard Assessment (OEHHA), 2015. *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. February.

Sacramento Metropolitan Air Quality Management District (SMAQMD), 2009. *Guide to Air Quality Assessment in Sacramento County*. Revised June 2015.

Bay Area Air Quality Management District (BAAQMD), 2012. *Recommended Methods for Screening and Modeling Local Risks and Hazards*. May.

U.S. Environmental Protection Agency (USEPA), 1995. *User's Guide for the Industrial Source Complex (ISC3) Dispersion Models; Volume I - User Instructions*. Septemeber.



**Bay Area Air Quality Management District  
Risk & Hazard Stationary Source Inquiry Form**

This form is required when users request stationary source data from BAAQMD. This form is to be used with the BAAQMD's Google Earth stationary source screening tables.

For guidance on conducting a risk & hazard screening, including for roadways & freeways, refer to the District's Risk & Hazard Analysis flow chart

Also see the District's Recommended Methods for Screening and Modeling Local Risks and Hazards document

Table A: Requestor Contact Information	
Contact Name:	Patrick Sutton
Affiliation:	BASELINE Environmental Consulting
Phone:	510-922-0080
Email:	patrick@baseline-env.com
Date of Request	5/9/2016
Project Name:	MacArthur BART Parcel B
Address:	
City:	Oakland
County:	Alameda
Type (residential, commercial, mixed use, industrial, etc.):	Mixed use
Project size (# of units, or building square feet):	880 units
Comments:	
Looking for information on site with "No Data" or "NA"	

**For Air District assistance, the following steps must be completed:**

1. Complete all the contact and project information requested in Table A. Incomplete forms will not be processed. Please include a project site map.
2. Download and install the free program Google Earth, <http://www.google.com/earth/download/ge/>, and then download the county specific Google Earth stationary source application files from the District's website, <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx>. The small points on the map represent stationary sources permitted by the District (Map A on right). These permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc. Click on a point to view the source's Information Table, including the name, location, and preliminary estimated cancer risk, hazard index, and PM2.5 concentration.
3. Find the project site in Google Earth by inputting the site's address in the Google Earth search box.
4. Identify stationary sources near the project. Verify that the location of the source on the map matches with the source's address in the Information Table, by using the Google Earth address search box to confirm the source's address location. Please report any mapping errors to the District.
5. List the stationary source information in Table B Section 1 below.
6. Note that a small percentage of the stationary sources have Health Risk Screening Assessment (HRSA) data INSTEAD of screening level data. These sources will be noted by an asterisk next to the Plant Name (Map B on right). If HRSA values are presented, these values have already been modeled and cannot be adjusted further.
7. Email this completed form to District staff. District staff will provide the most recent risk, hazard, and PM2.5 data that are available for the source(s). If this information or data are not available, source emissions data will be provided. Staff will respond to inquiries within three weeks.

**Note that a public records request received for the same stationary source information will cancel the processing of your SSIF request.**

**Submit forms, maps, and questions to Alison Kirk at 415-749-5169, or akirk@baaqmd.gov .**

**Table B: Stationary Sources**

Table B Section 1: Requestor fills out these columns based on Google Earth data										Table B Section 2: BAAQMD returns form with additional information in these columns as needed									
Distance from Receptor (feet)	Plant # or Gas Dispensary #	Facility Name	Street Address	Screening Level Cancer Risk (1)	Screening Level Hazard Index (1)	Screening Level PM2.5 (1)	Permit #s (2)	Source #s (2)	Fuel Code (3)	Type of Source(s) (4)	HRSA Ap # (5)	HRSA Date (6)	HRSA Engineer (7)	HRSA Cancer Risk in a million	Age Sensitivity Factor (8)	HRSA Adjusted Cancer Risk	HRSA Chronic Health (9)	HRSA PM2.5 Risk	Status/Comments
870	G11397	California Highway Patrol	3601 Telegraph Ave	1.133	0.005	0												0	Screening values from 2013 data. Low risk, no further study needed.

**Footnotes:**

1. These Cancer Risk, Hazard Index, and PM2.5 columns represent the values in the Google Earth Plant Information Table.
2. Each plant may have multiple permits and sources.
3. Fuel codes: 98 = diesel, 189 = Natural Gas.
4. Permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc.
5. If a Health Risk Screening Assessment (HRSA) was completed for the source, the application number will be listed here.
6. The date that the HRSA was completed.
7. Engineer who completed the HRSA. For District purposes only.
8. All HRSA completed before 1/5/2010 need to be multiplied by an age sensitivity factor of 1.7.
9. The HRSA "Chronic Health" number represents the Hazard Index.
10. Further information about common sources:
  - a. Sources that only include diesel internal combustion engines can be adjusted using the BAAQMD's Diesel Multiplier worksheet.
  - b. The risk from natural gas boilers used for space heating when <25 MM BTU/hr would have an estimated cancer risk of one in a million or less, and a chronic hazard index of 0.003 or less. To be conservative, requestor should assume the cancer risk is 1 in a million and the hazard index is 0.003 for these sources.
  - c. BAAQMD Reg 11 Rule 16 required that all co-residential (sharing a wall, floor, ceiling or is in the same building as a residential unit) dry cleaners cease use of perc on July 1, 2010. Therefore, there is no cancer risk, hazard or PM2.5 concentrations from co-residential dry cleaning businesses in the BAAQMD.
  - d. Non co-residential dry cleaners must phase out use of perc by Jan. 1, 2023. Therefore, the risk from these dry cleaners does not need to be factored in over a 70-year period, but instead should reflect the number of years perc use will continue after the project's residents or other sensitive receptors (such as students, patients, etc) take occupancy.
  - e. Gas stations can be adjusted using BAAQMD's Gas Station Distance Multiplier worksheet.
  - f. Unless otherwise noted, exempt sources are considered insignificant. See BAAQMD Reg 2 Rule 1 for a list of exempt sources.
  - g. This spray booth is considered to be insignificant.

Date last updated:

5/30/12

Plant #: Proposed Source  
 Plant Name: Parcel B Project  
 Number of Sources: 1 Backup Generator

Pollutant Name	Emissions/lbs per day	Cancer Risk (in millions)
ACETALDEHYDE		0.00E+00
ACETAMIDE		0.00E+00
ACRYLAMIDE		0.00E+00
ACRYLONITRILE		0.00E+00
ALLYL CHLORIDE		0.00E+00
2-AMINOANTHRAQUINONE		0.00E+00
ANILINE		0.00E+00
ARSENIC AND COMPOUNDS (INORGANIC) <sup>1,2</sup>		0.00E+00
ASBESTOS <sup>3</sup>		0.00E+00
BENZENE <sup>1</sup>		0.00E+00
BENZIDINE (AND ITS SALTS) values also apply to:		0.00E+00
<i>Benzidine based dyes</i>		0.00E+00
<i>Direct Black 38</i>		0.00E+00
<i>Direct Blue 6</i>		0.00E+00
<i>Direct Brown 95 (technical grade)</i>		0.00E+00
BENZYL CHLORIDE		0.00E+00
BERYLLIUM AND COMPOUNDS <sup>2</sup>		0.00E+00
BIS(2-CHLOROETHYL)ETHER (Dichloroethyl ether)		0.00E+00
BIS(CHLOROMETHYL)ETHER		0.00E+00
POTASSIUM BROMATE		0.00E+00
1,3-BUTADIENE		0.00E+00
CADMIUM AND COMPOUNDS <sup>2</sup>		0.00E+00
CARBON TETRACHLORIDE <sup>1</sup> (Tetrachloromethane)		0.00E+00
CHLORINATED PARAFFINS		0.00E+00
4-CHLORO-O-PHENYLENEDIAMINE		0.00E+00
CHLOROFORM <sup>1</sup>		0.00E+00
PENTACHLOROPHENOL		0.00E+00
2,4,6-TRICHLOROPHENOL		0.00E+00
p-CHLORO-o-TOLUIDINE		0.00E+00
CHROMIUM 6+2		0.00E+00
<i>Barium chromate2</i>		0.00E+00
<i>Calcium chromate2</i>		0.00E+00
<i>Lead chromate2</i>		0.00E+00
<i>Sodium dichromate2</i>		0.00E+00
<i>Strontium chromate2</i>		0.00E+00
CHROMIC TRIOXIDE (as chromic acid mist)		0.00E+00
p-CRESIDINE		0.00E+00
CUPFERRON		0.00E+00
2,4-DIAMINOANISOLE		0.00E+00
2,4-DIAMINOTOLUENE		0.00E+00
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)		0.00E+00
1,4-DICHLOROBENZENE		0.00E+00
3,3-DICHLOROBENZIDINE		0.00E+00
1,1-DICHLOROETHANE (Ethylidene dichloride)		0.00E+00
Di(2-ETHYLHEXYL)PHTHALATE (DEHP)		0.00E+00
p-DIMETHYLAMINOAZOBENZENE		0.00E+00
2,4-DINITROTOLUENE		0.00E+00
1,4-DIOXANE (1,4-Diethylene dioxide)		0.00E+00
EPICHLOROHYDRIN (1-Chloro-2,3-epoxypropane)		0.00E+00
ETHYL BENZENE		0.00E+00
ETHYLENE DIBROMIDE (1,2-Dibromoethane)		0.00E+00
ETHYLENE DICHLORIDE (1,2-Dichloroethane)		0.00E+00
ETHYLENE OXIDE (1,2-Epoxyethane)		0.00E+00
ETHYLENE THIOUREA		0.00E+00
FORMALDEHYDE		0.00E+00
HEXACHLOROBENZENE		0.00E+00
HEXACHLOROCYCLOHEXANES (mixed or technical grade)		0.00E+00
alpha-HEXACHLOROCYCLOHEXANE		0.00E+00
beta-HEXACHLOROCYCLOHEXANE		0.00E+00
gamma-HEXACHLOROCYCLOHEXANE (Lindane)		0.00E+00
HYDRAZINE		0.00E+00
LEAD AND COMPOUNDS 2,4 (inorganic) values also apply to:		0.00E+00
<i>Lead acetate2</i>		0.00E+00
<i>Lead phosphate2</i>		0.00E+00
<i>Lead subacetate2</i>		0.00E+00
METHYL tertiary-BUTYL ETHER		0.00E+00
4,4'-METHYLENE BIS (2-CHLOROANILINE) (MOCA)		0.00E+00
METHYLENE CHLORIDE (Dichloromethane)		0.00E+00
4,4'-METHYLENE DIANILINE (AND ITS DICHLORIDE)		0.00E+00
MICHLER'S KETONE (4,4'-Bis(dimethylamino)benzophenone)		0.00E+00
N-NITROSODI-n-BUTYLAMINE		0.00E+00
N-NITROSODI-n-PROPYLAMINE		0.00E+00
N-NITROSODIETHYLAMINE		0.00E+00
N-NITROSODIMETHYLAMINE		0.00E+00
N-NITROSODIPHENYLAMINE		0.00E+00
N-NITROSO-N-METHYLETHYLAMINE		0.00E+00
N-NITROSOMORPHOLINE		0.00E+00
N-NITROSOPIPERIDINE		0.00E+00
N-NITROSOPYRROLIDINE		0.00E+00
NICKEL AND COMPOUNDS <sup>2</sup> (values also apply to):		0.00E+00
<i>Nickel acetate2</i>		0.00E+00
<i>Nickel carbonate2</i>		0.00E+00
<i>Nickel carbonyl2</i>		0.00E+00
<i>Nickel hydroxide2</i>		0.00E+00
<i>Nickelocene2</i>		0.00E+00
NICKEL OXIDE <sup>2</sup>		0.00E+00
<i>Nickel refinery dust from the pyrometallurgical process2</i>		0.00E+00
<i>Nickel subsulfide2</i>		0.00E+00
p-NITROSODIPHENYLAMINE		0.00E+00
PARTICULATE EMISSIONS FROM DIESEL-FUELED ENGINES	4.83E-03	5.13E-06
PERCHLOROETHYLENE (Tetrachloroethylene)		0.00E+00
PCB (POLYCHLORINATED BIPHENYLS) [low risk] 2,6		0.00E+00
PCB (POLYCHLORINATED BIPHENYLS) [high risk] 2,6		0.00E+00
POLYCHLORINATED DIBENZO-P-DIOXINS (PCDD)(AS 2,3,7,8-PCDD EQUIV) 2,7		0.00E+00
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN <sub>2,7</sub>		0.00E+00
POLYCHLORINATED DIBENZOFURANS (PCDF)(AS 2,3,7,8-PCDD EQUIV) 2,7		0.00E+00
2,3,7,8-TETRACHLORODIBENZOFURAN <sub>2,7</sub>		0.00E+00
POLYCYCLIC AROMATIC HYDROCARBON <sub>2</sub> (PAH) (AS B(a)P-EQUIV) <sub>5</sub>		0.00E+00
BENZO(A)PYRENE <sub>2,5</sub>		0.00E+00
NAPHTHALENE		0.00E+00
1,3-PROPANE SULTONE		0.00E+00
PROPYLENE OXIDE		0.00E+00
1,1,2,2-TETRACHLOROETHANE		0.00E+00
THIOACETAMIDE		0.00E+00
<i>Toluene diisocyanates</i>		0.00E+00
TOLUENE-2,4-DIISOCYANATE		0.00E+00
TOLUENE-2,6-DIISOCYANATE		0.00E+00
1,1,2-TRICHLOROETHANE (Vinyl trichloride)		0.00E+00
TRICHLOROETHYLENE		0.00E+00
URETHANE (Ethyl carbamate)		0.00E+00
VINYL CHLORIDE (Chloroethylene)		0.00E+00
<b>TOTAL:</b>		<b>5.13E-06</b>

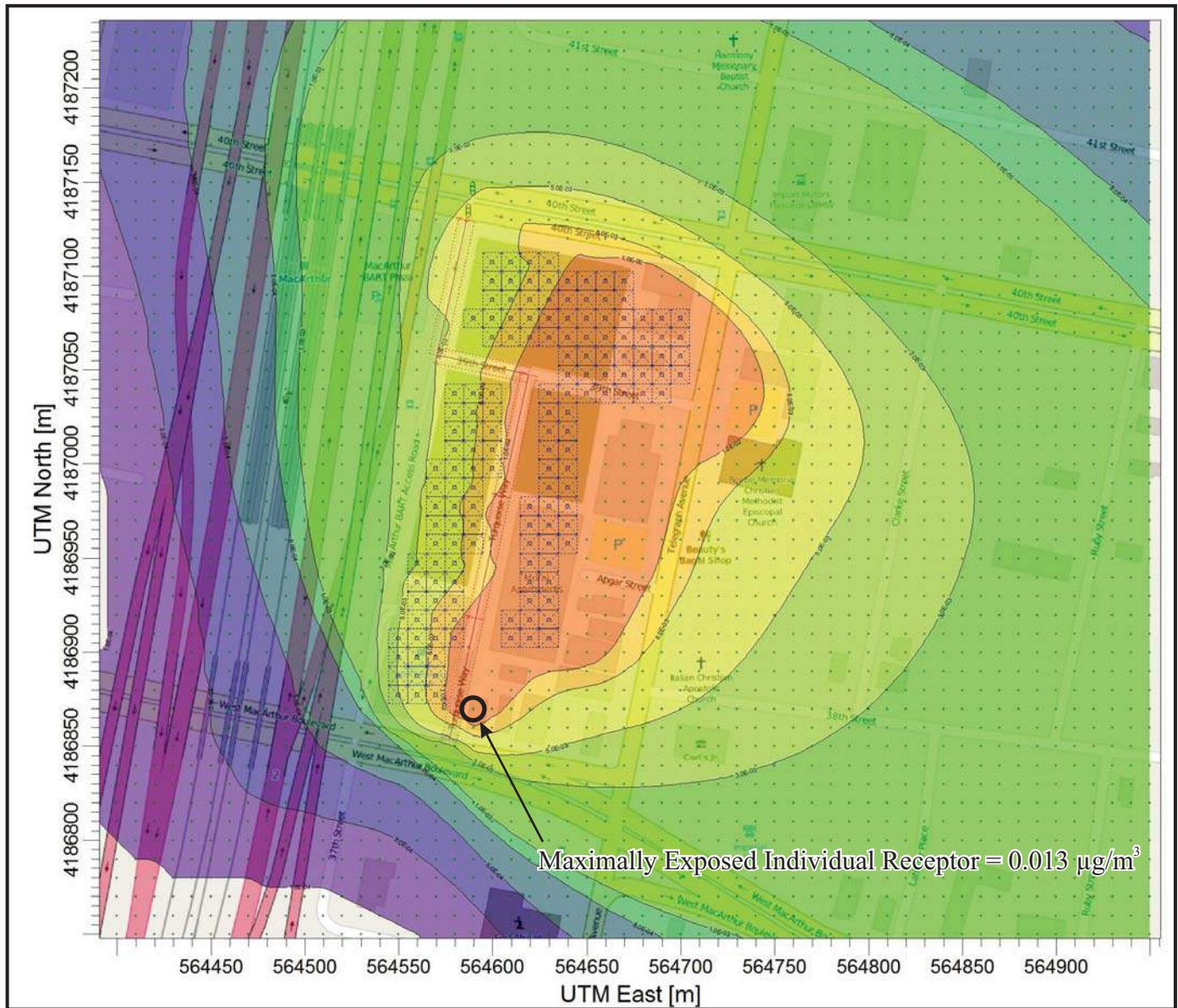
Plant #: Proposed Source  
 Plant Name: Parcel B Project  
 Number of Sources: 1 Backup Generator

Pollutant Name	Emission/lbs per day	Chronic Hazard
ACETALDEHYDE	0	0
ACROLEIN	0	0
ACRYLONITRILE	0	0
AMMONIA	0	0
ARSENIC AND COMPOUNDS (INORGANIC)1,2	0	0
ARSINE	0	0
BENZENE1	0	0
BERYLLIUM AND COMPOUNDS2	0	0
1,3-BUTADIENE	0	0
CADMIUM AND COMPOUNDS2	0	0
CARBON DISULFIDE1	0	0
CARBON TETRACHLORIDE1 (Tetrachloromethane)	0	0
CHLORINE	0	0
CHLORINE DIOXIDE	0	0
CHLOROBENZENE	0	0
CHLOROFORM1	0	0
2,3,4,6-Tetrachlorophenol	0	0
CHLOROPICRIN	0	0
CHROMIUM 6+2	0	0
Barium chromate2	0	0
Calcium chromate2	0	0
Lead chromate2	0	0
Sodium dichromate2	0	0
Strontium chromate2	0	0
CHROMIC TRIOXIDE (as chromic acid mist)	0	0
CRESOLS	0	0
M-CRESOL	0	0
O-CRESOL	0	0
P-CRESOL	0	0
Cyanide And Compounds (inorganic)	0	0
HYDROGEN CYANIDE (Hydrocyanic acid)	0	0
1,4-DICHLOROBENZENE	0	0
DIETHANOLAMINE	0	0
DIMETHYLAMINE	0	0
N,N-DIMETHYL FORMAMIDE	0	0
1,4-DIOXANE (1,4-Diethylene dioxide)	0	0
EPICHLOROHYDRIN (1-Chloro-2,3-epoxypropane)	0	0
1,2-EPOXYBUTANE	0	0
ETHYL BENZENE	0	0
ETHYL CHLORIDE (Chloroethane)	0	0
ETHYLENE DIBROMIDE (1,2-Dibromoethane)	0	0
ETHYLENE DICHLORIDE (1,2-Dichloroethane)	0	0
ETHYLENE GLYCOL	0	0
ETHYLENE OXIDE (1,2-Epoxyethane)	0	0
Fluorides	0	0
HYDROGEN FLUORIDE (Hydrofluoric acid)	0	0
FORMALDEHYDE	0	0
GASOLINE VAPORS	0	0
GLUTARALDEHYDE	0	0
ETHYLENE GLYCOL ETHYL ETHER – EGEE1	0	0
ETHYLENE GLYCOL ETHYL ETHER ACETATE – EGEEA1	0	0
ETHYLENE GLYCOL METHYL ETHER – EGME1	0	0
ETHYLENE GLYCOL METHYL ETHER ACETATE – EGMEA	0	0
n-HEXANE	0	0
HYDRAZINE	0	0
HYDROCHLORIC ACID (Hydrogen chloride)	0	0
HYDROGEN SULFIDE	0	0
ISOPHORONE	0	0
ISOPROPYL ALCOHOL (Isopropanol)	0	0
MALEIC ANHYDRIDE	0	0
MANGANESE AND COMPOUNDS	0	0
MERCURY AND COMPOUNDS (INORGANIC) values also apply to:	0	0
Mercuric chloride	0	0
METHANOL	0	0
METHYL BROMIDE (Bromomethane)	0	0
METHYL tertiary-BUTYL ETHER	0	0
METHYL CHLOROFORM (1,1,1-Trichloroethane)	0	0
METHYL ISOCYANATE	0	0
METHYLENE CHLORIDE (Dichloromethane)	0	0
4,4'-METHYLENE DIANILINE (AND ITS DICHLORIDE)	0	0
METHYLENE DIPHENYL ISOCYANATE	0	0
NICKEL AND COMPOUNDS2 (values also apply to:)	0	0
Nickel acetate2	0	0
Nickel carbonate2	0	0
Nickel carbonyl2	0	0
Nickel hydroxide2	0	0
Nickelocene2	0	0
NICKEL OXIDE2	0	0
Nickel refinery dust from the pyrometallurgical process2	0	0
Nickel subsulfide2	0	0
NITROGEN DIOXIDE	0	0
PARTICULATE EMISSIONS FROM DIESEL-FUELED ENGINES	4.83E-03	0.001822726
PERCHLOROETHYLENE (Tetrachloroethylene)	0	0
PHENOL	0	0
PHOSPHINE	0	0
PHOSPHORIC ACID	0	0
PHOSPHORUS (WHITE)	0	0
PHTHALIC ANHYDRIDE	0	0
POLYCHLORINATED DIBENZO-P-DIOXINS (PCDD)(AS 2,3,7,8-PCDD EQUIV) 2,7	0	0
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN2,7	0	0
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN2,7	0	0
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN2,7	0	0
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN2,7	0	0
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN2,7	0	0
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN2,7	0	0
1,2,3,4,6,7,8,9-OCTACHLORODIBENZO-P-DIOXIN2,7	0	0
POLYCHLORINATED DIBENZOFURANS (PCDF)(AS 2,3,7,8-PCDD EQUIV) 2,7	0	0
2,3,7,8-TETRACHLORODIBENZOFURAN2,7	0	0
1,2,3,7,8-PENTACHLORODIBENZOFURAN2,7	0	0
2,3,4,7,8-PENTACHLORODIBENZOFURAN2,7	0	0
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN2,7	0	0
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN2,7	0	0
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN2,7	0	0
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN2,7	0	0
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN2,7	0	0
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN2,7	0	0
1,2,3,4,6,7,8,9-OCTACHLORODIBENZOFURAN2,7	0	0
NAPHTHALENE	0	0
PROPYLENE (PROPENE)	0	0
PROPYLENE GLYCOL MONOMETHYL ETHER	0	0
PROPYLENE OXIDE	0	0
SELENIUM AND COMPOUNDS	0	0
Selenium sulfide	0	0
SILICA (Crystalline, Respirable)	0	0
STYRENE	0	0
SULFUR DIOXIDE	0	0
SULFURIC ACID AND OLEUM	0	0
SULFURIC ACID	0	0
SULFUR TRIOXIDE	0	0
OLEUM	0	0
TOLUENE	0	0
Toluene diisocyanates	0	0
TOLUENE-2,4-DIISOCYANATE	0	0
TOLUENE-2,6-DIISOCYANATE	0	0
TRICHLOROETHYLENE	0	0
TRIETHYLAMINE	0	0
VINYL ACETATE	0	0
VINYLDENE CHLORIDE (1,1-Dichloroethylene)	0	0
XYLENES (mixed isomers)	0	0
m-XYLENE	0	0
o-XYLENE	0	0
p-XYLENE	0	0
<b>TOTAL:</b>		<b>1.82E-03</b>

**Plant #:** Proposed Source  
**Plant Name:** Parcel B Project  
**Number of Sources:** 1 Backup Generator

Diesel PM Concentrations	Emissions (lbs/day)	12.5 Concentration (ug/m3)
	4.83E-03	0.009321565
		0
		0
		0
		0
		0
		0
		0
		0
		0
		0
		0
		0
		0
<b>TOTAL:</b>		0.009321565

# Dispersion Modeling Results for DPM during Construction



Source: ISCST3 Air Dispersion Model

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**
*****
**
** ISCST3 Input Produced by:
** AERMOD View Ver. 9.0.0
** Lakes Environmental Software Inc.
** Date: 5/27/2016
** File: C:\Users\BASELINE\Documents\Projects\16204-00 UPP
MacArthur BART\MacArthurModel\MacArthurModel.INP
**
*****
**
**
*****
** ISCST3 Control Pathway
*****
**
**
CO STARTING
  TITLEONE C:\Users\BASELINE\Documents\Projects\16204-00 UPP
MacArthur BART\Mac
  MODELOPT DFAULT CONC NOCMPL  URBAN
  AVERTIME ANNUAL
  POLLUTID PM_10
  TERRHGTS FLAT
  FLAGPOLE 1.50
  RUNORNOT RUN
  ERRORFIL MA5EB6~2.ERR
CO FINISHED
**
*****
** ISCST3 Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
**
-----
----
** Line Source Represented by Area Sources
** LINE AREA Source ID = ARLN1
** DESCRSRC Hauling/Vendors/Worker Trips
** PREFIX
** Length of Side = 8.50
** Ratio = 10
** Vertical Dimension = 3.25
** Emission Rate = 8.7842E-08
** Nodes = 4
** 564585.988, 4187129.855, 0.00, 3.50
** 564570.269, 4187057.881, 0.00, 3.50

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\*\* 564619.079, 4187047.540, 0.00, 3.50  
\*\* 564576.887, 4186853.541, 0.00, 3.50  
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LOCATION	A0000001	AREA	564581.835	4187130.761
LOCATION	A0000002	AREA	564569.388	4187053.723
LOCATION	A0000003	AREA	564614.926	4187048.443
LOCATION	A0000004	AREA	564600.862	4186983.777
LOCATION	A0000005	AREA	564586.798	4186919.111
**	End of LINE AREA Source ID = ARLN1			
LOCATION	VOL1	VOLUME	564549.643	4186877.587
LOCATION	VOL2	VOLUME	564559.643	4186877.587
LOCATION	VOL3	VOLUME	564569.643	4186877.587
LOCATION	VOL4	VOLUME	564549.643	4186887.587
LOCATION	VOL5	VOLUME	564559.643	4186887.587
LOCATION	VOL6	VOLUME	564569.643	4186887.587
LOCATION	VOL7	VOLUME	564549.643	4186897.587
LOCATION	VOL8	VOLUME	564559.643	4186897.587
LOCATION	VOL9	VOLUME	564569.643	4186897.587
LOCATION	VOL10	VOLUME	564549.643	4186907.587
LOCATION	VOL11	VOLUME	564559.643	4186907.587
LOCATION	VOL12	VOLUME	564569.643	4186907.587
LOCATION	VOL13	VOLUME	564579.643	4186907.587
LOCATION	VOL14	VOLUME	564609.643	4186907.587
LOCATION	VOL15	VOLUME	564619.643	4186907.587
LOCATION	VOL16	VOLUME	564629.643	4186907.587
LOCATION	VOL17	VOLUME	564559.643	4186917.587
LOCATION	VOL18	VOLUME	564569.643	4186917.587
LOCATION	VOL19	VOLUME	564579.643	4186917.587
LOCATION	VOL20	VOLUME	564609.643	4186917.587
LOCATION	VOL21	VOLUME	564619.643	4186917.587
LOCATION	VOL22	VOLUME	564629.643	4186917.587
LOCATION	VOL23	VOLUME	564559.643	4186927.587
LOCATION	VOL24	VOLUME	564569.643	4186927.587
LOCATION	VOL25	VOLUME	564579.643	4186927.587
LOCATION	VOL26	VOLUME	564619.643	4186927.587
LOCATION	VOL27	VOLUME	564629.643	4186927.587
LOCATION	VOL28	VOLUME	564559.643	4186937.587
LOCATION	VOL29	VOLUME	564569.643	4186937.587
LOCATION	VOL30	VOLUME	564579.643	4186937.587
LOCATION	VOL31	VOLUME	564619.643	4186937.587
LOCATION	VOL32	VOLUME	564629.643	4186937.587
LOCATION	VOL33	VOLUME	564559.643	4186947.587
LOCATION	VOL34	VOLUME	564569.643	4186947.587
LOCATION	VOL35	VOLUME	564579.643	4186947.587
LOCATION	VOL36	VOLUME	564619.643	4186947.587
LOCATION	VOL37	VOLUME	564629.643	4186947.587
LOCATION	VOL38	VOLUME	564569.643	4186957.587
LOCATION	VOL39	VOLUME	564579.643	4186957.587
LOCATION	VOL40	VOLUME	564589.643	4186957.587
LOCATION	VOL41	VOLUME	564619.643	4186957.587



LOCATION VOL42	VOLUME	564629.643	4186957.587
LOCATION VOL43	VOLUME	564639.643	4186957.587
LOCATION VOL44	VOLUME	564569.643	4186967.587
LOCATION VOL45	VOLUME	564579.643	4186967.587
LOCATION VOL46	VOLUME	564589.643	4186967.587
LOCATION VOL47	VOLUME	564619.643	4186967.587
LOCATION VOL48	VOLUME	564629.643	4186967.587
LOCATION VOL49	VOLUME	564639.643	4186967.587
LOCATION VOL50	VOLUME	564569.643	4186977.587
LOCATION VOL51	VOLUME	564579.643	4186977.587
LOCATION VOL52	VOLUME	564589.643	4186977.587
LOCATION VOL53	VOLUME	564619.643	4186977.587
LOCATION VOL54	VOLUME	564629.643	4186977.587
LOCATION VOL55	VOLUME	564639.643	4186977.587
LOCATION VOL56	VOLUME	564569.643	4186987.587
LOCATION VOL57	VOLUME	564579.643	4186987.587
LOCATION VOL58	VOLUME	564589.643	4186987.587
LOCATION VOL59	VOLUME	564629.643	4186987.587
LOCATION VOL60	VOLUME	564639.643	4186987.587
LOCATION VOL61	VOLUME	564569.643	4186997.587
LOCATION VOL62	VOLUME	564579.643	4186997.587
LOCATION VOL63	VOLUME	564589.643	4186997.587
LOCATION VOL64	VOLUME	564599.643	4186997.587
LOCATION VOL65	VOLUME	564629.643	4186997.587
LOCATION VOL66	VOLUME	564639.643	4186997.587
LOCATION VOL67	VOLUME	564579.643	4187007.587
LOCATION VOL68	VOLUME	564589.643	4187007.587
LOCATION VOL69	VOLUME	564599.643	4187007.587
LOCATION VOL70	VOLUME	564629.643	4187007.587
LOCATION VOL71	VOLUME	564639.643	4187007.587
LOCATION VOL72	VOLUME	564579.643	4187017.587
LOCATION VOL73	VOLUME	564589.643	4187017.587
LOCATION VOL74	VOLUME	564599.643	4187017.587
LOCATION VOL75	VOLUME	564629.643	4187017.587
LOCATION VOL76	VOLUME	564639.643	4187017.587
LOCATION VOL77	VOLUME	564579.643	4187027.587
LOCATION VOL78	VOLUME	564589.643	4187027.587
LOCATION VOL79	VOLUME	564599.643	4187027.587
LOCATION VOL80	VOLUME	564629.643	4187027.587
LOCATION VOL81	VOLUME	564639.643	4187027.587
LOCATION VOL82	VOLUME	564579.643	4187037.587
LOCATION VOL83	VOLUME	564589.643	4187037.587
LOCATION VOL84	VOLUME	564599.643	4187037.587
LOCATION VOL85	VOLUME	564629.643	4187037.587
LOCATION VOL86	VOLUME	564639.643	4187037.587
LOCATION VOL87	VOLUME	564649.643	4187037.587
LOCATION VOL88	VOLUME	564659.643	4187037.587
LOCATION VOL89	VOLUME	564669.643	4187037.587
LOCATION VOL90	VOLUME	564679.643	4187037.587
LOCATION VOL91	VOLUME	564689.643	4187037.587
LOCATION VOL92	VOLUME	564639.643	4187047.587
LOCATION VOL93	VOLUME	564649.643	4187047.587

LOCATION VOL94	VOLUME	564659.643	4187047.587
LOCATION VOL95	VOLUME	564669.643	4187047.587
LOCATION VOL96	VOLUME	564679.643	4187047.587
LOCATION VOL97	VOLUME	564689.643	4187047.587
LOCATION VOL98	VOLUME	564699.643	4187047.587
LOCATION VOL99	VOLUME	564639.643	4187057.587
LOCATION VOL100	VOLUME	564649.643	4187057.587
LOCATION VOL101	VOLUME	564659.643	4187057.587
LOCATION VOL102	VOLUME	564669.643	4187057.587
LOCATION VOL103	VOLUME	564679.643	4187057.587
LOCATION VOL104	VOLUME	564689.643	4187057.587
LOCATION VOL105	VOLUME	564699.643	4187057.587
LOCATION VOL106	VOLUME	564599.643	4187067.587
LOCATION VOL107	VOLUME	564609.643	4187067.587
LOCATION VOL108	VOLUME	564619.643	4187067.587
LOCATION VOL109	VOLUME	564629.643	4187067.587
LOCATION VOL110	VOLUME	564639.643	4187067.587
LOCATION VOL111	VOLUME	564649.643	4187067.587
LOCATION VOL112	VOLUME	564659.643	4187067.587
LOCATION VOL113	VOLUME	564669.643	4187067.587
LOCATION VOL114	VOLUME	564679.643	4187067.587
LOCATION VOL115	VOLUME	564689.643	4187067.587
LOCATION VOL116	VOLUME	564699.643	4187067.587
LOCATION VOL117	VOLUME	564589.643	4187077.587
LOCATION VOL118	VOLUME	564599.643	4187077.587
LOCATION VOL119	VOLUME	564609.643	4187077.587
LOCATION VOL120	VOLUME	564619.643	4187077.587
LOCATION VOL121	VOLUME	564629.643	4187077.587
LOCATION VOL122	VOLUME	564639.643	4187077.587
LOCATION VOL123	VOLUME	564649.643	4187077.587
LOCATION VOL124	VOLUME	564659.643	4187077.587
LOCATION VOL125	VOLUME	564669.643	4187077.587
LOCATION VOL126	VOLUME	564679.643	4187077.587
LOCATION VOL127	VOLUME	564689.643	4187077.587
LOCATION VOL128	VOLUME	564699.643	4187077.587
LOCATION VOL129	VOLUME	564599.643	4187087.587
LOCATION VOL130	VOLUME	564609.643	4187087.587
LOCATION VOL131	VOLUME	564619.643	4187087.587
LOCATION VOL132	VOLUME	564629.643	4187087.587
LOCATION VOL133	VOLUME	564639.643	4187087.587
LOCATION VOL134	VOLUME	564649.643	4187087.587
LOCATION VOL135	VOLUME	564659.643	4187087.587
LOCATION VOL136	VOLUME	564669.643	4187087.587
LOCATION VOL137	VOLUME	564599.643	4187097.587
LOCATION VOL138	VOLUME	564609.643	4187097.587
LOCATION VOL139	VOLUME	564619.643	4187097.587
LOCATION VOL140	VOLUME	564629.643	4187097.587
LOCATION VOL141	VOLUME	564639.643	4187097.587
LOCATION VOL142	VOLUME	564649.643	4187097.587
LOCATION VOL143	VOLUME	564659.643	4187097.587
LOCATION VOL144	VOLUME	564669.643	4187097.587
LOCATION VOL145	VOLUME	564599.643	4187107.587

LOCATION VOL146	VOLUME	564609.643	4187107.587
LOCATION VOL147	VOLUME	564619.643	4187107.587
LOCATION VOL148	VOLUME	564629.643	4187107.587

\*\* Source Parameters \*\*

\*\* LINE AREA Source ID = ARLN1

SRCPARAM A0000001	8.7842E-08	3.498	73.670	8.500
102.319	3.254			
SRCPARAM A0000002	8.7842E-08	3.498	49.893	8.500
11.962	3.254			
SRCPARAM A0000003	8.7842E-08	3.498	66.178	8.500
102.270	3.254			
SRCPARAM A0000004	8.7842E-08	3.498	66.178	8.500
102.270	3.254			
SRCPARAM A0000005	8.7842E-08	3.498	66.178	8.500
102.270	3.254			

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SRCPARAM VOL1	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL2	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL3	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL4	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL5	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL6	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL7	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL8	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL9	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL10	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL11	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL12	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL13	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL14	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL15	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL16	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL17	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL18	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL19	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL20	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL21	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL22	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL23	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL24	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL25	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL26	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL27	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL28	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL29	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL30	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL31	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL32	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL33	4.7535E-06	5.000	2.326	1.000
SRCPARAM VOL34	4.7535E-06	5.000	2.326	1.000





SRCPARAM	VOL139	4.7535E-06	5.000	2.326	1.000
SRCPARAM	VOL140	4.7535E-06	5.000	2.326	1.000
SRCPARAM	VOL141	4.7535E-06	5.000	2.326	1.000
SRCPARAM	VOL142	4.7535E-06	5.000	2.326	1.000
SRCPARAM	VOL143	4.7535E-06	5.000	2.326	1.000
SRCPARAM	VOL144	4.7535E-06	5.000	2.326	1.000
SRCPARAM	VOL145	4.7535E-06	5.000	2.326	1.000
SRCPARAM	VOL146	4.7535E-06	5.000	2.326	1.000
SRCPARAM	VOL147	4.7535E-06	5.000	2.326	1.000
SRCPARAM	VOL148	4.7535E-06	5.000	2.326	1.000

\*\* Variable Emissions Type: "By Season / Hour / Day (SHRDOW)"

\*\* Variable Emission Scenario: "Scenario 2"

\*\* WeekDays:

\*\* Winter

EMISFACT	A0000001	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	A0000001	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	A0000001	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	A0000001	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	A0000002	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	A0000002	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	A0000002	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	A0000002	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	A0000003	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	A0000003	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	A0000003	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	A0000003	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	A0000004	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	A0000004	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	A0000004	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	A0000004	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	A0000005	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	A0000005	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	A0000005	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	A0000005	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0

\*\* Spring

EMISFACT	A0000001	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	A0000001	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	A0000001	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	A0000001	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	A0000002	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	A0000002	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	A0000002	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	A0000002	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	A0000003	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	A0000003	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	A0000003	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	A0000003	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	A0000004	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	A0000004	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	A0000004	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	A0000004	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0











EMISFACT A0000004	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT A0000004	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT A0000004	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT A0000004	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT A0000005	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT A0000005	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT A0000005	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT A0000005	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** WeekDays:							
** Winter							
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL1	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL1	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL1	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL1	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Saturday:							
** Winter							
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Sunday:							
** Winter							

EMISFACT	VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL1	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL2	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL2	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL2	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL2	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL2	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL2	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL2	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL2	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							

EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Sunday:							
** Winter							
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL2	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** WeekDays:							
** Winter							
EMISFACT VOL3	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL3	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL3	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL3	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL3	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL3	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL3	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL3	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL3	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL3	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL3	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL3	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL3	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL3	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL3	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL3	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Saturday:							









EMISFACT VOL5	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL5	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL5	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL5	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL5	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL5	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL5	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL5	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL5	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** WeekDays:							
** Winter							
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL6	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL6	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL6	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL6	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL6	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL6	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL6	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL6	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Saturday:							
** Winter							
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL6	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0

```

    EMISFACT VOL6          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
** Winter
    EMISFACT VOL6          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL6          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL6          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL6          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
    EMISFACT VOL6          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL6          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL6          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL6          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
    EMISFACT VOL6          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL6          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL6          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL6          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
    EMISFACT VOL6          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL6          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL6          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL6          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
** Winter
    EMISFACT VOL7          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL7          SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
    EMISFACT VOL7          SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
    EMISFACT VOL7          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
    EMISFACT VOL7          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL7          SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
    EMISFACT VOL7          SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
    EMISFACT VOL7          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
    EMISFACT VOL7          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL7          SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
    EMISFACT VOL7          SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
    EMISFACT VOL7          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
    EMISFACT VOL7          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL7          SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
    EMISFACT VOL7          SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
    EMISFACT VOL7          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
** Winter
    EMISFACT VOL7          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL7          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL7          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL7          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
    EMISFACT VOL7          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
    EMISFACT VOL7          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0

```

EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL7	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL8	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL8	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL8	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL8	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL8	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL8	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL8	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0

EMISFACT VOL8	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Saturday:							
** Winter							
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Sunday:							
** Winter							
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL8	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** WeekDays:							
** Winter							
EMISFACT VOL9	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL9	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL9	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL9	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL9	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0



EMISFACT	VOL9	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL9	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL9	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL10	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL10	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL10	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL10	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							

EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL10	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL11	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL11	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL11	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL11	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							

EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL11	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL12	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL12	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL12	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL12	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL12	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL12	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL12	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL12	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL12	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL12	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL12	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL12	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL12	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL12	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL12	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL12	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL12	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL12	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL12	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL12	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0





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** Fall
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL13      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
** Winter
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
** Winter
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL13      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
** Winter
EMISFACT VOL14      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL14      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL14      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0

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EMISFACT VOL14	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL14	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL14	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL14	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL14	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** WeekDays:							
** Winter							
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL15	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL15	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL15	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL15	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Saturday:							
** Winter							
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Sunday:							
** Winter							
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0

EMISFACT	VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL15	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL16	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL16	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL16	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL16	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0

EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL16	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL17	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL17	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL17	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL17	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL17	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL17	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL17	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL17	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL17	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL17	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL17	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL17	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL17	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL17	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL17	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL17	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL17	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0









EMISFACT	VOL19	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL19	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL19	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL19	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL19	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL19	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL19	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL19	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL20	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL20	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL20	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL20	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL20	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							











	EMISFACT	VOL24	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL24	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer								
	EMISFACT	VOL24	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL24	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL24	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL24	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall								
	EMISFACT	VOL24	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL24	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL24	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL24	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:								
**	Winter								
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL25	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT	VOL25	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring								
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL25	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT	VOL25	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer								
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL25	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT	VOL25	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall								
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL25	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT	VOL25	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:								
**	Winter								
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring								
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer								
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall								
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0



EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL25	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL26	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL26	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL26	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL26	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL26	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL26	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL26	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL26	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL26	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL26	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL26	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL26	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL26	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL26	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL26	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL26	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL26	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL26	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL26	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL26	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL26	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0



EMISFACT	VOL27	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL27	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL27	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL28	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL28	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL28	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL28	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							







```

** Fall
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
** Winter
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL30 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
** Winter
EMISFACT VOL31 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL31 SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL31 SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL31 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
EMISFACT VOL31 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL31 SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL31 SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL31 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
EMISFACT VOL31 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL31 SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL31 SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL31 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
EMISFACT VOL31 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL31 SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL31 SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL31 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
** Winter
EMISFACT VOL31 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL31 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL31 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0

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	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring								
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer								
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall								
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:								
**	Winter								
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring								
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer								
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall								
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL31	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:								
**	Winter								
	EMISFACT	VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL32	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT	VOL32	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
	EMISFACT	VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring								
	EMISFACT	VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL32	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT	VOL32	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
	EMISFACT	VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer								
	EMISFACT	VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL32	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT	VOL32	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0



EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL32	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Saturday:							
** Winter							
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Sunday:							
** Winter							
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL32	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** WeekDays:							
** Winter							
EMISFACT VOL33	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL33	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0



EMISFACT	VOL33	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL33	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL33	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL33	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL33	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL33	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL34	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL34	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL34	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL34	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL34	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0



EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Sunday:							
** Winter							
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL35	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** WeekDays:							
** Winter							
EMISFACT VOL36	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL36	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL36	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL36	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL36	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL36	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL36	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL36	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL36	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL36	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL36	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL36	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL36	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL36	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL36	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL36	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Saturday:							
** Winter							











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** Sunday:
** Winter
  EMISFACT VOL39      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL39      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL39      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL39      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
  EMISFACT VOL39      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL39      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL39      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL39      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
  EMISFACT VOL39      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL39      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL39      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL39      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
  EMISFACT VOL39      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL39      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL39      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL39      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
** Winter
  EMISFACT VOL40      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL40      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
  EMISFACT VOL40      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
  EMISFACT VOL40      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
  EMISFACT VOL40      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL40      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
  EMISFACT VOL40      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
  EMISFACT VOL40      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
  EMISFACT VOL40      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL40      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
  EMISFACT VOL40      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
  EMISFACT VOL40      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
  EMISFACT VOL40      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL40      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
  EMISFACT VOL40      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
  EMISFACT VOL40      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
** Winter
  EMISFACT VOL40      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL40      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL40      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL40      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
  EMISFACT VOL40      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL40      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL40      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0

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EMISFACT	VOL43	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL43	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL43	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL43	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL43	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL43	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL43	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL43	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL43	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL43	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL43	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL44	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL44	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL44	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL44	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0

EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL44	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL45	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL45	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL45	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL45	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL45	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL45	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL45	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL45	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL45	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL45	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL45	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL45	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL45	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL45	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL45	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL45	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL45	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL45	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL45	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL45	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							





EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL46	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL46	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL47	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL47	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL47	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL47	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0





	EMISFACT VOL48	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
	EMISFACT VOL48	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL48	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL48	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
	EMISFACT VOL48	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL48	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL48	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
	EMISFACT VOL48	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL48	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL48	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
	EMISFACT VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL49	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT VOL49	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
	EMISFACT VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
	EMISFACT VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL49	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT VOL49	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
	EMISFACT VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
	EMISFACT VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL49	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT VOL49	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
	EMISFACT VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
	EMISFACT VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL49	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT VOL49	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
	EMISFACT VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
	EMISFACT VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
	EMISFACT VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
	EMISFACT VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0

EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL49	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL50	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL50	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL50	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL50	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL50	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL50	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL50	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL50	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL50	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL50	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL50	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL50	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL50	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL50	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL50	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL50	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL50	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL50	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0









EMISFACT	VOL52	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL52	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL52	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL52	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL52	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL52	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL52	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL53	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL53	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL53	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL53	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL53	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							



EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL54	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL55	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL55	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL55	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL55	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL55	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL55	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL55	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL55	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL55	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL55	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL55	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL55	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL55	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL55	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL55	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL55	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							







EMISFACT VOL57	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL57	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL57	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL57	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL57	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL57	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL57	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL57	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL57	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** WeekDays:							
** Winter							
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL58	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL58	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL58	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL58	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Saturday:							
** Winter							
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0



EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Sunday:							
** Winter							
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL58	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** WeekDays:							
** Winter							
EMISFACT VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL59	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL59	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL59	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL59	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL59	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL59	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL59	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL59	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Saturday:							
** Winter							
EMISFACT VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0

EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL59	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL60	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL60	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL60	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL60	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL60	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL60	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL60	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0

EMISFACT VOL60	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Saturday:							
** Winter							
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Sunday:							
** Winter							
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL60	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** WeekDays:							
** Winter							
EMISFACT VOL61	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL61	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL61	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL61	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL61	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0





EMISFACT	VOL62	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL62	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL62	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL62	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL62	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL62	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL62	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL62	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL62	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL62	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL62	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL62	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL63	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL63	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL63	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL63	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							

EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL63	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL64	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL64	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL64	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL64	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL64	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL64	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL64	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL64	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL64	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL64	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL64	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL64	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL64	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL64	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL64	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL64	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL64	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL64	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL64	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL64	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0





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** Fall
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL65      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
** Winter
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
** Winter
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL65      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
** Winter
EMISFACT VOL66      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL66      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL66      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0

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EMISFACT VOL66          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
EMISFACT VOL66          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL66          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL66          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL66          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
** Winter
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL67          SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL67          SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL67          SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL67          SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
** Winter
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
** Winter
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL67          SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0

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EMISFACT	VOL67	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL67	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL67	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL67	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL67	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL67	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL67	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL67	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL67	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL67	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL67	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL67	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL67	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL67	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL68	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL68	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL68	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL68	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0

EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL68	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL69	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL69	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL69	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL69	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL69	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL69	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL69	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL69	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL69	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL69	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL69	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL69	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL69	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL69	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL69	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL69	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL69	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0









EMISFACT VOL71	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL71	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL71	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL71	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL71	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL71	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL71	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL71	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** WeekDays:							
** Winter							
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL72	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL72	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL72	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL72	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Saturday:							
** Winter							
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL72	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Sunday:							











EMISFACT	VOL76	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL76	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL76	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL76	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL76	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL76	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL76	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL76	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL76	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL76	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL77	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL77	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL77	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL77	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0

EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL77	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL78	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL78	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL78	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL78	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL78	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL78	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL78	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL78	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL78	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL78	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL78	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL78	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL78	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL78	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL78	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL78	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL78	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL78	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL78	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL78	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL78	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0





EMISFACT VOL79	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL79	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Saturday:							
** Winter							
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Sunday:							
** Winter							
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL79	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** WeekDays:							
** Winter							
EMISFACT VOL80	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL80	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL80	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL80	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							







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** Fall
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
** Winter
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL82      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
** Winter
EMISFACT VOL83      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL83      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL83      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL83      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
EMISFACT VOL83      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL83      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL83      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL83      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
EMISFACT VOL83      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL83      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL83      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL83      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
EMISFACT VOL83      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL83      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL83      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL83      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
** Winter
EMISFACT VOL83      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL83      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL83      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0

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	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring								
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer								
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall								
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:								
**	Winter								
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring								
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer								
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall								
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL83	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:								
**	Winter								
	EMISFACT	VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL84	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT	VOL84	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
	EMISFACT	VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring								
	EMISFACT	VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL84	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT	VOL84	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
	EMISFACT	VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer								
	EMISFACT	VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL84	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT	VOL84	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0

EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL84	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Saturday:							
** Winter							
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Sunday:							
** Winter							
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL84	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** WeekDays:							
** Winter							
EMISFACT VOL85	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL85	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0





EMISFACT	VOL85	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL85	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL85	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL85	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL85	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL85	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL86	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL86	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL86	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL86	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL86	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0



EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL87	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL88	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL88	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL88	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL88	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL88	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL88	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL88	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL88	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL88	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL88	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL88	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL88	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL88	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL88	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL88	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL88	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							











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** Sunday:
** Winter
  EMISFACT VOL91      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL91      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL91      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL91      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
  EMISFACT VOL91      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL91      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL91      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL91      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
  EMISFACT VOL91      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL91      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL91      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL91      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
  EMISFACT VOL91      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL91      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL91      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL91      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
** Winter
  EMISFACT VOL92      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL92      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
  EMISFACT VOL92      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
  EMISFACT VOL92      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
  EMISFACT VOL92      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL92      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
  EMISFACT VOL92      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
  EMISFACT VOL92      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
  EMISFACT VOL92      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL92      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
  EMISFACT VOL92      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
  EMISFACT VOL92      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
  EMISFACT VOL92      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL92      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
  EMISFACT VOL92      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
  EMISFACT VOL92      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
** Winter
  EMISFACT VOL92      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL92      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL92      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL92      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
  EMISFACT VOL92      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL92      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL92      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0

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EMISFACT	VOL95	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL95	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL95	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL95	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL95	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL95	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL95	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL95	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL95	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL95	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL95	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL96	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL96	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL96	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL96	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0

EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL96	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL97	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL97	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL97	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL97	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL97	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL97	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL97	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL97	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL97	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL97	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL97	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL97	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL97	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL97	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL97	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL97	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL97	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL97	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL97	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL97	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							





EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL98	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL98	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL99	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL99	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL99	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL99	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0



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** Fall
EMISFACT VOL99      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL99      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL99      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL99      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
** Winter
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL100     SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL100     SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL100     SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL100     SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
** Winter
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
** Winter
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL100     SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0

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	EMISFACT VOL100	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
	EMISFACT VOL100	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL100	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL100	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
	EMISFACT VOL100	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL100	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL100	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
	EMISFACT VOL100	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL100	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL100	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
	EMISFACT VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL101	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT VOL101	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
	EMISFACT VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
	EMISFACT VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL101	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT VOL101	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
	EMISFACT VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
	EMISFACT VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL101	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT VOL101	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
	EMISFACT VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
	EMISFACT VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL101	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT VOL101	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
	EMISFACT VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
	EMISFACT VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
	EMISFACT VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
	EMISFACT VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0

EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL101	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL102	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL102	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL102	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL102	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL102	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL102	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL102	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL102	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL102	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL102	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL102	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL102	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL102	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL102	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL102	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL102	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL102	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL102	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0









EMISFACT	VOL104	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL104	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL104	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL104	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL104	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL104	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL104	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL105	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL105	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL105	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL105	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL105	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							



EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL106	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL107	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL107	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL107	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL107	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL107	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL107	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL107	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL107	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL107	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL107	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL107	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL107	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL107	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL107	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL107	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL107	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							







EMISFACT	VOL109	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL109	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL109	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL109	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL109	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL109	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL109	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL109	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL109	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL110	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL110	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL110	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL110	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL110	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL110	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL110	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL110	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL110	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0

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EMISFACT VOL110      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
** Winter
EMISFACT VOL110      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL110      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL110      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL110      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
EMISFACT VOL110      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL110      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL110      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL110      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
EMISFACT VOL110      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL110      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL110      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL110      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
EMISFACT VOL110      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL110      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL110      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL110      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
** Winter
EMISFACT VOL111      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL111      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL111      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL111      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
EMISFACT VOL111      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL111      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL111      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL111      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
EMISFACT VOL111      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL111      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL111      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL111      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
EMISFACT VOL111      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL111      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL111      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL111      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
** Winter
EMISFACT VOL111      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL111      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL111      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL111      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
EMISFACT VOL111      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL111      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0

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EMISFACT	VOL112	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL112	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL113	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL113	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL113	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL113	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL113	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0







EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL115	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL116	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL116	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL116	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL116	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL116	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL116	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL116	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL116	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL116	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL116	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL116	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL116	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL116	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL116	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL116	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL116	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL116	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL116	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL116	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL116	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0









EMISFACT	VOL118	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL118	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL118	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL118	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL118	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL119	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL119	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL119	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL119	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL119	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0



EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL120	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL121	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL121	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL121	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL121	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL121	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL121	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL121	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL121	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL121	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL121	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL121	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL121	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL121	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL121	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL121	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL121	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL121	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0





















EMISFACT	VOL128	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL128	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL128	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL128	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL128	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL128	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL128	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL128	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL128	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL128	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL129	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL129	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL129	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL129	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0

EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL129	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL130	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL130	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL130	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL130	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL130	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL130	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL130	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL130	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL130	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL130	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL130	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL130	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL130	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL130	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL130	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL130	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL130	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL130	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL130	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL130	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL130	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0





EMISFACT	VOL131	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL131	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL131	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL132	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL132	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL132	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL132	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							







```

** Fall
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
** Winter
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL134 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
** Winter
EMISFACT VOL135 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL135 SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL135 SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL135 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
EMISFACT VOL135 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL135 SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL135 SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL135 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
EMISFACT VOL135 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL135 SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL135 SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL135 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
EMISFACT VOL135 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL135 SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
EMISFACT VOL135 SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
EMISFACT VOL135 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
** Winter
EMISFACT VOL135 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL135 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL135 SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0

```

	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring								
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer								
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall								
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:								
**	Winter								
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring								
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer								
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall								
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL135	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:								
**	Winter								
	EMISFACT	VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL136	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT	VOL136	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
	EMISFACT	VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring								
	EMISFACT	VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL136	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT	VOL136	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
	EMISFACT	VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer								
	EMISFACT	VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
	EMISFACT	VOL136	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
	EMISFACT	VOL136	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0

EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT VOL136	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Saturday:							
** Winter							
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Sunday:							
** Winter							
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Spring							
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Summer							
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** Fall							
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL136	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
** WeekDays:							
** Winter							
EMISFACT VOL137	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT VOL137	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0





EMISFACT	VOL137	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL137	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL137	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL137	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL137	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL137	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL138	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL138	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL138	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL138	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL138	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0



EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Sunday:							
**	Winter							
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL139	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	WeekDays:							
**	Winter							
EMISFACT	VOL140	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL140	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL140	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL140	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Spring							
EMISFACT	VOL140	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL140	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL140	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL140	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Summer							
EMISFACT	VOL140	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL140	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL140	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL140	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Fall							
EMISFACT	VOL140	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
EMISFACT	VOL140	SHRDOW	0.0	0.0	1.0	1.0	1.0	1.0
EMISFACT	VOL140	SHRDOW	1.0	1.0	1.0	1.0	0.0	0.0
EMISFACT	VOL140	SHRDOW	0.0	0.0	0.0	0.0	0.0	0.0
**	Saturday:							
**	Winter							









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** Sunday:
** Winter
  EMISFACT VOL143      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL143      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL143      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL143      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
  EMISFACT VOL143      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL143      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL143      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL143      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
  EMISFACT VOL143      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL143      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL143      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL143      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
  EMISFACT VOL143      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL143      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL143      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL143      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** WeekDays:
** Winter
  EMISFACT VOL144      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL144      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
  EMISFACT VOL144      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
  EMISFACT VOL144      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
  EMISFACT VOL144      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL144      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
  EMISFACT VOL144      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
  EMISFACT VOL144      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
  EMISFACT VOL144      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL144      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
  EMISFACT VOL144      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
  EMISFACT VOL144      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
  EMISFACT VOL144      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL144      SHRDOWN 0.0 0.0 1.0 1.0 1.0 1.0
  EMISFACT VOL144      SHRDOWN 1.0 1.0 1.0 1.0 0.0 0.0
  EMISFACT VOL144      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Saturday:
** Winter
  EMISFACT VOL144      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL144      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL144      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL144      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
  EMISFACT VOL144      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL144      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
  EMISFACT VOL144      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0

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EMISFACT VOL148      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL148      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL148      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Sunday:
** Winter
EMISFACT VOL148      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL148      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL148      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL148      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Spring
EMISFACT VOL148      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL148      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL148      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL148      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Summer
EMISFACT VOL148      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL148      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL148      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL148      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
** Fall
EMISFACT VOL148      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL148      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL148      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL148      SHRDOWN 0.0 0.0 0.0 0.0 0.0 0.0
SRCGROUP ALL

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SO FINISHED

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\*\* ISCST3 Receptor Pathway

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RE STARTING

\*\* DESCRREC "UCART1" "Receptors generated from Uniform Cartesian Grid"

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DISCCART      564349.72    4186699.97    1.50
DISCCART      564359.72    4186699.97    1.50
DISCCART      564369.72    4186699.97    1.50
DISCCART      564379.72    4186699.97    1.50
DISCCART      564389.72    4186699.97    1.50
DISCCART      564399.72    4186699.97    1.50
DISCCART      564409.72    4186699.97    1.50
DISCCART      564419.72    4186699.97    1.50
DISCCART      564429.72    4186699.97    1.50
DISCCART      564439.72    4186699.97    1.50
DISCCART      564449.72    4186699.97    1.50
DISCCART      564459.72    4186699.97    1.50
DISCCART      564469.72    4186699.97    1.50
DISCCART      564479.72    4186699.97    1.50
DISCCART      564489.72    4186699.97    1.50
DISCCART      564499.72    4186699.97    1.50
DISCCART      564509.72    4186699.97    1.50

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DISCCART	564519.72	4186699.97	1.50
DISCCART	564529.72	4186699.97	1.50
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UAIRDATA 1804 2000  
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\*\* ISCST3 Output Pathway  
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\*\* Auto-Generated Plotfiles  
PLOTFILE ANNUAL ALL MACART~1.IS\AN00GALL.PLT 31  
OU FINISHED

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*** SETUP Finishes Successfully ***  
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\Documents\Projects\16204-00 UPP MacArthur BART\Mac \*\*\*  
05/27/16

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\*\*MODELOPTs:

PAGE 1

CONC URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* MODEL SETUP

OPTIONS SUMMARY \*\*\*

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\*\*Simple Terrain Model is Selected

\*\*Model Is Setup For Calculation of Average CONCentration Values.

-- SCAVENGING/DEPOSITION LOGIC --

\*\*Model Uses NO DRY DEPLETION. DDPLETE = F

\*\*Model Uses NO WET DEPLETION. WDPLETE = F

\*\*NO WET SCAVENGING Data Provided.

\*\*NO GAS DRY DEPOSITION Data Provided.

\*\*Model Does NOT Use GRIDDED TERRAIN Data for Depletion  
Calculations

\*\*Model Uses URBAN Dispersion.

\*\*Model Uses Regulatory DEFAULT Options:

1. Final Plume Rise.
2. Stack-tip Downwash.
3. Buoyancy-induced Dispersion.
4. Use Calms Processing Routine.
5. Not Use Missing Data Processing Routine.
6. Default Wind Profile Exponents.
7. Default Vertical Potential Temperature Gradients.
8. "Upper Bound" Values for Supersquat Buildings.
9. No Exponential Decay for URBAN/Non-SO2

\*\*Model Assumes Receptors on FLAT Terrain.

\*\*Model Accepts FLAGPOLE Receptor Heights.

\*\*Model Calculates ANNUAL Averages Only

\*\*This Run Includes: 153 Source(s); 1 Source Group(s); and  
3374 Receptor(s)

\*\*The Model Assumes A Pollutant Type of: PM\_10

\*\*Model Set To Continue RUNning After the Setup Testing.

```

**Output Options Selected:
    Model Outputs Tables of ANNUAL Averages by Receptor
    Model Outputs External File(s) of High Values for
Plotting (PLOTFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values:  c
for Calm Hours
                                                                m
for Missing Hours
                                                                b
for Both Calm and Missing Hours

**Misc. Inputs: Anem. Hgt. (m) = 27.70 ; Decay Coef. =
0.000 ; Rot. Angle = 0.0
                Emission Units = GRAMS/SEC
; Emission Rate Unit Factor = 0.10000E+07
                Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 1.6 MB of RAM.

**Input Runstream File: MacArthurModel.INP
**Output Print File: MacArthurModel.OUT
**Detailed Error/Message File: MA5EB6~2.ERR

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\*\*MODELOPTs:

PAGE    2

CONC                            URBAN FLAT    FLGPOL DFAULT

NOCMPL

\*\*\* VOLUME

SOURCE DATA \*\*\*

RELEASE	NUMBER	EMISSION	RATE			BASE
SOURCE	INIT.	INIT.	EMISSION	X	Y	ELEV.
HEIGHT	SY	SZ	SCALAR	VARY		
ID	CATS.		(GRAMS/SEC)	(METERS)	(METERS)	(METERS)
(METERS)	(METERS)	(METERS)	BY			
VOL1	0	0.47535E-05	SHRDOW	564549.6	4186877.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL2	0	0.47535E-05	SHRDOW	564559.6	4186877.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL3	0	0.47535E-05	SHRDOW	564569.6	4186877.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL4	0	0.47535E-05	SHRDOW	564549.6	4186887.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL5	0	0.47535E-05	SHRDOW	564559.6	4186887.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL6	0	0.47535E-05	SHRDOW	564569.6	4186887.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL7	0	0.47535E-05	SHRDOW	564549.6	4186897.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL8	0	0.47535E-05	SHRDOW	564559.6	4186897.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL9	0	0.47535E-05	SHRDOW	564569.6	4186897.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL10	0	0.47535E-05	SHRDOW	564549.6	4186907.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL11	0	0.47535E-05	SHRDOW	564559.6	4186907.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL12	0	0.47535E-05	SHRDOW	564569.6	4186907.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL13	0	0.47535E-05	SHRDOW	564579.6	4186907.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL14	0	0.47535E-05	SHRDOW	564609.6	4186907.5	0.0
5.00	2.33	1.00	SHRDOW			

VOL15		0	0.47535E-05	564619.6	4186907.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL16		0	0.47535E-05	564629.6	4186907.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL17		0	0.47535E-05	564559.6	4186917.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL18		0	0.47535E-05	564569.6	4186917.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL19		0	0.47535E-05	564579.6	4186917.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL20		0	0.47535E-05	564609.6	4186917.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL21		0	0.47535E-05	564619.6	4186917.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL22		0	0.47535E-05	564629.6	4186917.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL23		0	0.47535E-05	564559.6	4186927.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL24		0	0.47535E-05	564569.6	4186927.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL25		0	0.47535E-05	564579.6	4186927.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL26		0	0.47535E-05	564619.6	4186927.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL27		0	0.47535E-05	564629.6	4186927.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL28		0	0.47535E-05	564559.6	4186937.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL29		0	0.47535E-05	564569.6	4186937.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL30		0	0.47535E-05	564579.6	4186937.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL31		0	0.47535E-05	564619.6	4186937.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL32		0	0.47535E-05	564629.6	4186937.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL33		0	0.47535E-05	564559.6	4186947.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL34		0	0.47535E-05	564569.6	4186947.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL35		0	0.47535E-05	564579.6	4186947.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL36		0	0.47535E-05	564619.6	4186947.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL37		0	0.47535E-05	564629.6	4186947.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL38		0	0.47535E-05	564569.6	4186957.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL39		0	0.47535E-05	564579.6	4186957.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL40		0	0.47535E-05	564589.6	4186957.5	0.0
5.00	2.33	1.00	SHRDOW			



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CONC                            URBAN FLAT    FLGPOL DFAULT

NOCMPL

\*\*\* VOLUME

SOURCE DATA \*\*\*

RELEASE	NUMBER	EMISSION	RATE			BASE
SOURCE	INIT.	INIT.	EMISSION	X	Y	ELEV.
HEIGHT	SY	SZ	SCALAR	VARY		
ID	CATS.		(METERS)	(METERS)	(METERS)	(METERS)
(METERS)	(METERS)	(METERS)	BY			
VOL41	0	0.47535E-05	SHRDOW	564619.6	4186957.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL42	0	0.47535E-05	SHRDOW	564629.6	4186957.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL43	0	0.47535E-05	SHRDOW	564639.6	4186957.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL44	0	0.47535E-05	SHRDOW	564569.6	4186967.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL45	0	0.47535E-05	SHRDOW	564579.6	4186967.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL46	0	0.47535E-05	SHRDOW	564589.6	4186967.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL47	0	0.47535E-05	SHRDOW	564619.6	4186967.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL48	0	0.47535E-05	SHRDOW	564629.6	4186967.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL49	0	0.47535E-05	SHRDOW	564639.6	4186967.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL50	0	0.47535E-05	SHRDOW	564569.6	4186977.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL51	0	0.47535E-05	SHRDOW	564579.6	4186977.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL52	0	0.47535E-05	SHRDOW	564589.6	4186977.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL53	0	0.47535E-05	SHRDOW	564619.6	4186977.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL54	0	0.47535E-05	SHRDOW	564629.6	4186977.5	0.0
5.00	2.33	1.00	SHRDOW			

VOL55		0	0.47535E-05	564639.6	4186977.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL56		0	0.47535E-05	564569.6	4186987.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL57		0	0.47535E-05	564579.6	4186987.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL58		0	0.47535E-05	564589.6	4186987.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL59		0	0.47535E-05	564629.6	4186987.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL60		0	0.47535E-05	564639.6	4186987.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL61		0	0.47535E-05	564569.6	4186997.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL62		0	0.47535E-05	564579.6	4186997.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL63		0	0.47535E-05	564589.6	4186997.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL64		0	0.47535E-05	564599.6	4186997.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL65		0	0.47535E-05	564629.6	4186997.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL66		0	0.47535E-05	564639.6	4186997.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL67		0	0.47535E-05	564579.6	4187007.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL68		0	0.47535E-05	564589.6	4187007.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL69		0	0.47535E-05	564599.6	4187007.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL70		0	0.47535E-05	564629.6	4187007.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL71		0	0.47535E-05	564639.6	4187007.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL72		0	0.47535E-05	564579.6	4187017.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL73		0	0.47535E-05	564589.6	4187017.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL74		0	0.47535E-05	564599.6	4187017.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL75		0	0.47535E-05	564629.6	4187017.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL76		0	0.47535E-05	564639.6	4187017.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL77		0	0.47535E-05	564579.6	4187027.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL78		0	0.47535E-05	564589.6	4187027.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL79		0	0.47535E-05	564599.6	4187027.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL80		0	0.47535E-05	564629.6	4187027.5	0.0
5.00	2.33	1.00	SHRDOW			





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NOCMPL

\*\*\* VOLUME

SOURCE DATA \*\*\*

RELEASE	NUMBER	EMISSION	RATE			BASE
SOURCE	INIT.	INIT.	EMISSION	X	Y	ELEV.
HEIGHT	SY	SZ	SCALAR	VARY		
ID	CATS.		(GRAMS/SEC)	(METERS)	(METERS)	(METERS)
(METERS)	(METERS)	(METERS)	BY			
VOL81	0	0.47535E-05	SHRDOW	564639.6	4187027.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL82	0	0.47535E-05	SHRDOW	564579.6	4187037.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL83	0	0.47535E-05	SHRDOW	564589.6	4187037.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL84	0	0.47535E-05	SHRDOW	564599.6	4187037.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL85	0	0.47535E-05	SHRDOW	564629.6	4187037.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL86	0	0.47535E-05	SHRDOW	564639.6	4187037.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL87	0	0.47535E-05	SHRDOW	564649.6	4187037.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL88	0	0.47535E-05	SHRDOW	564659.6	4187037.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL89	0	0.47535E-05	SHRDOW	564669.6	4187037.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL90	0	0.47535E-05	SHRDOW	564679.6	4187037.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL91	0	0.47535E-05	SHRDOW	564689.6	4187037.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL92	0	0.47535E-05	SHRDOW	564639.6	4187047.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL93	0	0.47535E-05	SHRDOW	564649.6	4187047.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL94	0	0.47535E-05	SHRDOW	564659.6	4187047.5	0.0
5.00	2.33	1.00	SHRDOW			

VOL95		0	0.47535E-05	564669.6	4187047.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL96		0	0.47535E-05	564679.6	4187047.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL97		0	0.47535E-05	564689.6	4187047.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL98		0	0.47535E-05	564699.6	4187047.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL99		0	0.47535E-05	564639.6	4187057.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL100		0	0.47535E-05	564649.6	4187057.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL101		0	0.47535E-05	564659.6	4187057.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL102		0	0.47535E-05	564669.6	4187057.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL103		0	0.47535E-05	564679.6	4187057.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL104		0	0.47535E-05	564689.6	4187057.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL105		0	0.47535E-05	564699.6	4187057.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL106		0	0.47535E-05	564599.6	4187067.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL107		0	0.47535E-05	564609.6	4187067.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL108		0	0.47535E-05	564619.6	4187067.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL109		0	0.47535E-05	564629.6	4187067.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL110		0	0.47535E-05	564639.6	4187067.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL111		0	0.47535E-05	564649.6	4187067.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL112		0	0.47535E-05	564659.6	4187067.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL113		0	0.47535E-05	564669.6	4187067.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL114		0	0.47535E-05	564679.6	4187067.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL115		0	0.47535E-05	564689.6	4187067.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL116		0	0.47535E-05	564699.6	4187067.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL117		0	0.47535E-05	564589.6	4187077.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL118		0	0.47535E-05	564599.6	4187077.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL119		0	0.47535E-05	564609.6	4187077.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL120		0	0.47535E-05	564619.6	4187077.5	0.0
5.00	2.33	1.00	SHRDOW			



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NOCMPL

\*\*\* VOLUME

SOURCE DATA \*\*\*

RELEASE	NUMBER	EMISSION	RATE			BASE
SOURCE	INIT.	INIT.	EMISSION	X	Y	ELEV.
HEIGHT	SY	SZ	SCALAR	VARY		
ID	CATS.		(GRAMS/SEC)	(METERS)	(METERS)	(METERS)
(METERS)	(METERS)	(METERS)	BY			
VOL121	0	0.47535E-05	SHRDOW	564629.6	4187077.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL122	0	0.47535E-05	SHRDOW	564639.6	4187077.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL123	0	0.47535E-05	SHRDOW	564649.6	4187077.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL124	0	0.47535E-05	SHRDOW	564659.6	4187077.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL125	0	0.47535E-05	SHRDOW	564669.6	4187077.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL126	0	0.47535E-05	SHRDOW	564679.6	4187077.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL127	0	0.47535E-05	SHRDOW	564689.6	4187077.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL128	0	0.47535E-05	SHRDOW	564699.6	4187077.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL129	0	0.47535E-05	SHRDOW	564599.6	4187087.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL130	0	0.47535E-05	SHRDOW	564609.6	4187087.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL131	0	0.47535E-05	SHRDOW	564619.6	4187087.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL132	0	0.47535E-05	SHRDOW	564629.6	4187087.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL133	0	0.47535E-05	SHRDOW	564639.6	4187087.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL134	0	0.47535E-05	SHRDOW	564649.6	4187087.5	0.0
5.00	2.33	1.00	SHRDOW			

VOL135		0	0.47535E-05	564659.6	4187087.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL136		0	0.47535E-05	564669.6	4187087.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL137		0	0.47535E-05	564599.6	4187097.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL138		0	0.47535E-05	564609.6	4187097.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL139		0	0.47535E-05	564619.6	4187097.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL140		0	0.47535E-05	564629.6	4187097.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL141		0	0.47535E-05	564639.6	4187097.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL142		0	0.47535E-05	564649.6	4187097.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL143		0	0.47535E-05	564659.6	4187097.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL144		0	0.47535E-05	564669.6	4187097.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL145		0	0.47535E-05	564599.6	4187107.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL146		0	0.47535E-05	564609.6	4187107.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL147		0	0.47535E-05	564619.6	4187107.5	0.0
5.00	2.33	1.00	SHRDOW			
VOL148		0	0.47535E-05	564629.6	4187107.5	0.0
5.00	2.33	1.00	SHRDOW			

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\*\*\* AREA SOURCE

DATA \*\*\*

RELEASE	X-DIM	NUMBER	EMISSION	RATE	COORD (SW CORNER)		BASE
SOURCE	PART.	(GRAMS/SEC	ORIENT.	INIT.	EMISSION	RATE	
HEIGHT	OF AREA	OF AREA	OF AREA	SZ	SCALAR	VARY	ELEV.
ID	CATS.	/METER**2)	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)	(METERS)	(METERS)	(DEG.)	(METERS)		BY	
A0000001	0	0.87842E-07	564581.8	4187130.8		0.0	
3.50	73.67	8.50	102.32	3.25	SHRDOW		
A0000002	0	0.87842E-07	564569.4	4187053.8		0.0	
3.50	49.89	8.50	11.96	3.25	SHRDOW		
A0000003	0	0.87842E-07	564614.9	4187048.5		0.0	
3.50	66.18	8.50	102.27	3.25	SHRDOW		
A0000004	0	0.87842E-07	564600.9	4186983.8		0.0	
3.50	66.18	8.50	102.27	3.25	SHRDOW		
A0000005	0	0.87842E-07	564586.8	4186919.0		0.0	
3.50	66.18	8.50	102.27	3.25	SHRDOW		

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URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* SOURCE IDs DEFINING

SOURCE GROUPS \*\*\*

GROUP ID  
IDs

SOURCE

ALL A0000001, A0000002, A0000003, A0000004, A0000005, VOL1  
, VOL2 , VOL3 , VOL4 , VOL5 , VOL6 , VOL7 ,  
VOL8 , VOL9 , VOL10 , VOL11 , VOL12 ,  
VOL13 , VOL14 , VOL15 , VOL16 , VOL17 , VOL18 , VOL19  
,  
VOL20 , VOL21 , VOL22 , VOL23 , VOL24 ,  
VOL25 , VOL26 , VOL27 , VOL28 , VOL29 , VOL30 , VOL31  
,  
VOL32 , VOL33 , VOL34 , VOL35 , VOL36 ,  
VOL37 , VOL38 , VOL39 , VOL40 , VOL41 , VOL42 , VOL43  
,  
VOL44 , VOL45 , VOL46 , VOL47 , VOL48 ,  
VOL49 , VOL50 , VOL51 , VOL52 , VOL53 , VOL54 , VOL55  
,  
VOL56 , VOL57 , VOL58 , VOL59 , VOL60 ,  
VOL61 , VOL62 , VOL63 , VOL64 , VOL65 , VOL66 , VOL67  
,  
VOL68 , VOL69 , VOL70 , VOL71 , VOL72 ,  
VOL73 , VOL74 , VOL75 , VOL76 , VOL77 , VOL78 , VOL79  
,  
VOL80 , VOL81 , VOL82 , VOL83 , VOL84 ,  
VOL85 , VOL86 , VOL87 , VOL88 , VOL89 , VOL90 , VOL91  
,  
VOL92 , VOL93 , VOL94 , VOL95 , VOL96 ,

VOL97 , VOL98 , VOL99 , VOL100 , VOL101 , VOL102 ,  
VOL103 ,  
  
VOL104 , VOL105 , VOL106 , VOL107 , VOL108 ,  
VOL109 , VOL110 , VOL111 , VOL112 , VOL113 , VOL114 ,  
VOL115 ,  
  
VOL116 , VOL117 , VOL118 , VOL119 , VOL120 ,  
VOL121 , VOL122 , VOL123 , VOL124 , VOL125 , VOL126 ,  
VOL127 ,  
  
VOL128 , VOL129 , VOL130 , VOL131 , VOL132 ,  
VOL133 , VOL134 , VOL135 , VOL136 , VOL137 , VOL138 ,  
VOL139 ,  
  
VOL140 , VOL141 , VOL142 , VOL143 , VOL144 ,  
VOL145 , VOL146 , VOL147 , VOL148 ,



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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = A0000001 ; SOURCE TYPE = AREA :

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
----	--------	----	--------	----	--------	----	--------

-----

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC                            URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = A0000002 ; SOURCE TYPE = AREA            :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = A0000003 ; SOURCE TYPE = AREA            :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = A0000004 ; SOURCE TYPE = AREA :

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = A0000005 ; SOURCE TYPE = AREA :

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL1            ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL2            ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL3            ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL4            ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC                                    URBAN FLAT    FLGPOL DFAULT  
 NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL5            ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL6            ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL7            ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL8            ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL9            ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL10 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
-----	-----	-----	-----	-----	-----	-----	-----

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL11        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL12        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL13        ;    SOURCE TYPE = VOLUME        :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
----	-----	----	-----	----	-----	----	-----
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL14        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL15        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL16        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL17        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL18 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------

-----

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL19        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL20        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL21 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------

-----

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL22        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL23        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL24        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL25 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------

-----

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL26        ;    SOURCE TYPE = VOLUME        :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL27        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL28        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL29        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL30            ;    SOURCE TYPE = VOLUME            :

1	2	3	4	5	6	7	8
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL31        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL32        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL33        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL34 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------

-----

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME        :

HOURLY SCALAR	HOURLY SCALAR	HOURLY SCALAR	HOURLY SCALAR	HOURLY SCALAR	HOURLY SCALAR	HOURLY SCALAR	HOURLY SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL36        ;    SOURCE TYPE = VOLUME        :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL37        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL38        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL39        ;    SOURCE TYPE = VOLUME        :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL40        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL41        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL42        ;    SOURCE TYPE = VOLUME        :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

-----

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL43        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL44        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL45        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL46        ;    SOURCE TYPE = VOLUME        :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL47 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL48        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL49        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL50 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------

-----

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL51        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL52        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL53 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------

-----

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL54        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL55        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL56        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
```

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL57        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL58        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL59 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL60        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL61        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
```

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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL62 ; SOURCE TYPE = VOLUME :

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL63 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL64        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL65 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------

-----

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL66        ;    SOURCE TYPE = VOLUME        :

HR	SCAL	HR	SCAL	HR	SCAL	HR	SCAL
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL67        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL68        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL69        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL70 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL71        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL72        ;    SOURCE TYPE = VOLUME        :

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL73        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL74        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL75        ;    SOURCE TYPE = VOLUME        :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL76        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL77        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL78        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL79        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL80		; SOURCE TYPE = VOLUME		:			
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
-----							
SEASON = WINTER;							
DAY OF WEEK = WEEKDAY							
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
SEASON = SPRING;							
DAY OF WEEK = WEEKDAY							
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
SEASON = SUMMER;							
DAY OF WEEK = WEEKDAY							
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
SEASON = FALL ;							
DAY OF WEEK = WEEKDAY							
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
SEASON = WINTER;							
DAY OF WEEK = SATURDAY							



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL81        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL82        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL83 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------

-----

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL84 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------

-----

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL85        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL86        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL87 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------

-----  
-----

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL88        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL89        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL90        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL91        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL92        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL93        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL94        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL95        ;    SOURCE TYPE = VOLUME        :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL96        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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\*\*MODELOPTs:

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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL97        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL98        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL99        ;    SOURCE TYPE = VOLUME        :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL100    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL101    ;    SOURCE TYPE = VOLUME    :

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL102    ;    SOURCE TYPE = VOLUME    :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL103    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
```

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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL104    ;    SOURCE TYPE = VOLUME    :

HR	SCAL	HR	SCAL	HR	SCAL	HR	SCAL
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
```

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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL105    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL106    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
```

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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL107    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL108    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL109 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL110    ;    SOURCE TYPE = VOLUME    :

HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR	HOURLY	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL111    ;    SOURCE TYPE = VOLUME    :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL112 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
------	--------	------	--------	------	--------	------	--------

-----

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL113    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL114    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
```

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL115    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL116 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

-----  
-----

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL117 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL118    ;    SOURCE TYPE = VOLUME    :

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
```

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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL119    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL120    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
```

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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL121    ;    SOURCE TYPE = VOLUME    :

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL122    ;    SOURCE TYPE = VOLUME    :  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR    HOUR    SCALAR  
 - - - - -  
 - - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY  
 1 .0000E+00    2 .0000E+00    3 .0000E+00    4 .0000E+00  
 5 .0000E+00    6 .0000E+00    7 .0000E+00    8 .0000E+00  
 9 .1000E+01    10 .1000E+01    11 .1000E+01    12 .1000E+01  
 13 .1000E+01    14 .1000E+01    15 .1000E+01    16 .1000E+01  
 17 .0000E+00    18 .0000E+00    19 .0000E+00    20 .0000E+00  
 21 .0000E+00    22 .0000E+00    23 .0000E+00    24 .0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL123    ;    SOURCE TYPE = VOLUME    :

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
```



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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL124    ;    SOURCE TYPE = VOLUME    :

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
```

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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL125    ;    SOURCE TYPE = VOLUME    :

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL126 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL127    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
```

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL128    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL129 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL130    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL131    ;    SOURCE TYPE = VOLUME    :

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
```



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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL132    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
```

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL133    ;    SOURCE TYPE = VOLUME    :

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL134    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
```

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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL135    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
```

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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL136    ;    SOURCE TYPE = VOLUME    :

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL137    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
```

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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL138    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL139    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL140    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL141    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL142 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

-----

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL143 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
```

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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL144    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL145    ;    SOURCE TYPE = VOLUME    :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY





```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL146 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
```

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URBAN FLAT FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL147 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



```
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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URBAN FLAT    FLGPOL DFAULT

NOCMPL

\* SOURCE EMISSION RATE SCALARS WHICH VARY  
 SEASONALLY, DIURNALLY AND BY DAY OF WEEK (SHRDOW) \*

SOURCE ID = VOL148    ;    SOURCE TYPE = VOLUME    :

HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SPRING;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = SUMMER;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = FALL ;

DAY OF WEEK = WEEKDAY

1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00
5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.1000E+01
13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00
21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

SEASON = WINTER;

DAY OF WEEK = SATURDAY



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17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
SEASON = FALL ;
DAY OF WEEK = SUNDAY
1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00
5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00
9 .0000E+00 10 .0000E+00 11 .0000E+00 12 .0000E+00
13 .0000E+00 14 .0000E+00 15 .0000E+00 16 .0000E+00
17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00
21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00
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05/27/16

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\*\*MODELOPTs:

PAGE 161

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

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\*\*MODELOPTs:

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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*MODELOPTs:

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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

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05/27/16

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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*\* ISCST3 - VERSION 02035 \*\*\* \*\*\* C:\Users\BASELINE  
\Documents\Projects\16204-00 UPP MacArthur BART\Mac \*\*\*  
05/27/16

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\*\*\* 15:45:52

\*\*MODELOPTs:

PAGE 165

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*\* ISCST3 - VERSION 02035 \*\*\* \*\*\* C:\Users\BASELINE  
\Documents\Projects\16204-00 UPP MacArthur BART\Mac \*\*\*  
05/27/16

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\*\*\* 15:45:52

\*\*MODELOPTs:

PAGE 166

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*\* ISCST3 - VERSION 02035 \*\*\* \*\*\* C:\Users\BASELINE  
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05/27/16

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\*\*\* 15:45:52

\*\*MODELOPTs:

PAGE 167

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*MODELOPTs:

PAGE 168

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*MODELOPTs:

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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*MODELOPTs:

PAGE 170

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*\* ISCST3 - VERSION 02035 \*\*\* \*\*\* C:\Users\BASELINE  
\Documents\Projects\16204-00 UPP MacArthur BART\Mac \*\*\*  
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\*\*MODELOPTs:

PAGE 171

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*\* ISCST3 - VERSION 02035 \*\*\* \*\*\* C:\Users\BASELINE  
\Documents\Projects\16204-00 UPP MacArthur BART\Mac \*\*\*  
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\*\*MODELOPTs:

PAGE 172

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*\* 15:45:52

\*\*MODELOPTs:

PAGE 173

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\Documents\Projects\16204-00 UPP MacArthur BART\Mac \*\*\*  
05/27/16

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\*\*\* 15:45:52

\*\*MODELOPTs:

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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*MODELOPTs:

PAGE 175

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*MODELOPTs:

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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*MODELOPTs:

PAGE 177

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*MODELOPTs:

PAGE 178

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*MODELOPTs:

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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*MODELOPTs:

PAGE 180

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\Documents\Projects\16204-00 UPP MacArthur BART\Mac \*\*\*  
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\*\*MODELOPTs:

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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*\* ISCST3 - VERSION 02035 \*\*\* \*\*\* C:\Users\BASELINE  
\Documents\Projects\16204-00 UPP MacArthur BART\Mac \*\*\*  
05/27/16

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\*\*\* 15:45:52

\*\*MODELOPTs:

PAGE 182

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*\* ISCST3 - VERSION 02035 \*\*\* \*\*\* C:\Users\BASELINE  
\Documents\Projects\16204-00 UPP MacArthur BART\Mac \*\*\*  
05/27/16

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\*\*\* 15:45:52

\*\*MODELOPTs:

PAGE 183

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*\* ISCST3 - VERSION 02035 \*\*\* \*\*\* C:\Users\BASELINE  
\Documents\Projects\16204-00 UPP MacArthur BART\Mac \*\*\*  
05/27/16

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\*\*\* 15:45:52

\*\*MODELOPTs:

PAGE 184

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\Documents\Projects\16204-00 UPP MacArthur BART\Mac \*\*\*  
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\*\*MODELOPTs:

PAGE 185

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*MODELOPTs:

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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*MODELOPTs:

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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*\* ISCST3 - VERSION 02035 \*\*\* \*\*\* C:\Users\BASELINE  
\Documents\Projects\16204-00 UPP MacArthur BART\Mac \*\*\*  
05/27/16

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\*\*MODELOPTs:

PAGE 188

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*\* ISCST3 - VERSION 02035 \*\*\* \*\*\* C:\Users\BASELINE  
\Documents\Projects\16204-00 UPP MacArthur BART\Mac \*\*\*  
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\*\*\* 15:45:52

\*\*MODELOPTs:

PAGE 189

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*\* ISCST3 - VERSION 02035 \*\*\* \*\*\* C:\Users\BASELINE  
\Documents\Projects\16204-00 UPP MacArthur BART\Mac \*\*\*  
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\*\*MODELOPTs:

PAGE 190

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\Documents\Projects\16204-00 UPP MacArthur BART\Mac \*\*\*  
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\*\*\* 15:45:52

\*\*MODELOPTs:

PAGE 191

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*MODELOPTs:

PAGE 192

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*MODELOPTs:

PAGE 193

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*MODELOPTs:

PAGE 194

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*\* ISCST3 - VERSION 02035 \*\*\* \*\*\* C:\Users\BASELINE  
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\*\*MODELOPTs:

PAGE 195

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*MODELOPTs:

PAGE 196

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*MODELOPTs:

PAGE 197

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

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\*\*MODELOPTs:

PAGE 198

CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* DISCRETE

CARTESIAN RECEPTORS \*\*\*

(X-COORD, Y-COORD,

ZELEV, ZFLAG)

(METERS)

( 564519.8, 4187290.0,	0.0,	1.5);	(
564529.8, 4187290.0,	0.0,	1.5);	(
( 564539.8, 4187290.0,	0.0,	1.5);	(
564549.8, 4187290.0,	0.0,	1.5);	(
( 564559.8, 4187290.0,	0.0,	1.5);	(
564569.8, 4187290.0,	0.0,	1.5);	(
( 564579.8, 4187290.0,	0.0,	1.5);	(
564589.8, 4187290.0,	0.0,	1.5);	(
( 564599.8, 4187290.0,	0.0,	1.5);	(
564609.8, 4187290.0,	0.0,	1.5);	(
( 564619.8, 4187290.0,	0.0,	1.5);	(
564629.8, 4187290.0,	0.0,	1.5);	(
( 564639.8, 4187290.0,	0.0,	1.5);	(
564649.8, 4187290.0,	0.0,	1.5);	(
( 564659.8, 4187290.0,	0.0,	1.5);	(
564669.8, 4187290.0,	0.0,	1.5);	(
( 564679.8, 4187290.0,	0.0,	1.5);	(
564689.8, 4187290.0,	0.0,	1.5);	(
( 564699.8, 4187290.0,	0.0,	1.5);	(
564709.8, 4187290.0,	0.0,	1.5);	(
( 564719.8, 4187290.0,	0.0,	1.5);	(
564729.8, 4187290.0,	0.0,	1.5);	(
( 564739.8, 4187290.0,	0.0,	1.5);	(
564749.8, 4187290.0,	0.0,	1.5);	(
( 564759.8, 4187290.0,	0.0,	1.5);	(
564769.8, 4187290.0,	0.0,	1.5);	(
( 564779.8, 4187290.0,	0.0,	1.5);	(
564789.8, 4187290.0,	0.0,	1.5);	(
( 564799.8, 4187290.0,	0.0,	1.5);	(
564809.8, 4187290.0,	0.0,	1.5);	(
( 564819.8, 4187290.0,	0.0,	1.5);	(
564829.8, 4187290.0,	0.0,	1.5);	(
( 564839.8, 4187290.0,	0.0,	1.5);	(
564849.8, 4187290.0,	0.0,	1.5);	(

( 564859.8, 4187290.0, 0.0, 1.5); (  
564869.8, 4187290.0, 0.0, 1.5); (  
( 564879.8, 4187290.0, 0.0, 1.5); (  
564889.8, 4187290.0, 0.0, 1.5); (  
( 564899.8, 4187290.0, 0.0, 1.5); (  
564909.8, 4187290.0, 0.0, 1.5); (  
( 564919.8, 4187290.0, 0.0, 1.5); (  
564929.8, 4187290.0, 0.0, 1.5); (  
( 564939.8, 4187290.0, 0.0, 1.5); (  
564949.8, 4187290.0, 0.0, 1.5);

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\*\*MODELOPTs:

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\*\*\* METEOROLOGICAL

DAYS SELECTED FOR PROCESSING \*\*\*

(1

=YES; 0=NO)

	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	
	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	
	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	
	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	
	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	
	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	
	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	
	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	
	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

\*\*\* UPPER BOUND OF FIRST THROUGH

FIFTH WIND SPEED CATEGORIES \*\*\*

(METERS/SEC)

5.14,    8.23,    10.80,                    1.54,    3.09,

\*\*\* WIND

PROFILE EXPONENTS \*\*\*

CATEGORY            STABILITY

WIND SPEED

4	CATEGORY	1	2	3
	5	6		
	A	.15000E+00	.15000E+00	
.15000E+00	.15000E+00	.15000E+00	.15000E+00	
	B	.15000E+00	.15000E+00	
.15000E+00	.15000E+00	.15000E+00	.15000E+00	
	C	.20000E+00	.20000E+00	
.20000E+00	.20000E+00	.20000E+00	.20000E+00	
	D	.25000E+00	.25000E+00	
.25000E+00	.25000E+00	.25000E+00	.25000E+00	
	E	.30000E+00	.30000E+00	
.30000E+00	.30000E+00	.30000E+00	.30000E+00	
	F	.30000E+00	.30000E+00	
.30000E+00	.30000E+00	.30000E+00	.30000E+00	

\*\*\* VERTICAL POTENTIAL

TEMPERATURE GRADIENTS \*\*\*  
KELVIN PER METER)

(DEGREES

CATEGORY	STABILITY	WIND SPEED		
4	CATEGORY	1	2	3
	5	6		
	A	.00000E+00	.00000E+00	
.00000E+00	.00000E+00	.00000E+00	.00000E+00	
	B	.00000E+00	.00000E+00	
.00000E+00	.00000E+00	.00000E+00	.00000E+00	
	C	.00000E+00	.00000E+00	
.00000E+00	.00000E+00	.00000E+00	.00000E+00	
	D	.00000E+00	.00000E+00	
.00000E+00	.00000E+00	.00000E+00	.00000E+00	
	E	.20000E-01	.20000E-01	
.20000E-01	.20000E-01	.20000E-01	.20000E-01	
	F	.35000E-01	.35000E-01	
.35000E-01	.35000E-01	.35000E-01	.35000E-01	

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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* THE FIRST 24 HOURS OF METEOROLOGICAL  
DATA \*\*\*

FILE: METDAT~1\OST003RA.ASC  
FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)  
SURFACE STATION NO.: 1804 UPPER AIR  
STATION NO.: 1804  
NAME: UNKNOWN  
NAME: UNKNOWN  
YEAR: 2000  
YEAR: 2000

M-O	LENGTH	FLOW	SPEED	TEMP	STAB	MIXING	HEIGHT (M)	USTAR		
YR	MN	DY	HR	VECTOR	(M/S)	(K)	CLASS	RURAL	URBAN	(M/S)
(M)	(M)	(M)	(M)	(mm/HR)						
00	01	01	01	3.0	2.55	283.5	4	300.0	300.0	0.0000
0.0	0.0000	0	0.00							
00	01	01	02	355.0	1.83	283.3	5	300.0	300.0	0.0000
0.0	0.0000	0	0.00							
00	01	01	03	94.5	1.97	283.2	6	300.0	300.0	0.0000
0.0	0.0000	0	0.00							
00	01	01	04	152.6	3.89	282.3	5	300.0	300.0	0.0000
0.0	0.0000	0	0.00							
00	01	01	05	164.1	4.47	281.8	4	300.0	300.0	0.0000
0.0	0.0000	0	0.00							
00	01	01	06	172.0	5.01	281.9	4	300.0	300.0	0.0000
0.0	0.0000	0	0.00							
00	01	01	07	178.7	2.73	282.0	4	300.0	300.0	0.0000
0.0	0.0000	0	0.00							
00	01	01	08	148.7	2.19	282.0	4	300.0	300.0	0.0000
0.0	0.0000	0	0.00							
00	01	01	09	133.5	2.37	281.8	4	300.0	300.0	0.0000
0.0	0.0000	0	0.00							
00	01	01	10	153.8	1.92	282.0	3	300.0	300.0	0.0000
0.0	0.0000	0	0.00							
00	01	01	11	351.9	1.25	282.8	2	300.0	300.0	0.0000
0.0	0.0000	0	0.00							

00 01 01 12	53.1	2.15	283.1	1	300.0	300.0	0.0000
0.0 0.0000	0	0.00					
00 01 01 13	112.2	2.59	282.9	2	300.0	300.0	0.0000
0.0 0.0000	0	0.00					
00 01 01 14	127.9	1.92	283.3	3	300.0	300.0	0.0000
0.0 0.0000	0	0.00					
00 01 01 15	104.2	1.70	284.3	2	300.0	300.0	0.0000
0.0 0.0000	0	0.00					
00 01 01 16	125.0	7.29	284.5	3	300.0	300.0	0.0000
0.0 0.0000	0	0.00					
00 01 01 17	119.0	8.72	284.6	4	300.0	300.0	0.0000
0.0 0.0000	0	0.00					
00 01 01 18	126.9	7.64	284.0	4	300.0	300.0	0.0000
0.0 0.0000	0	0.00					
00 01 01 19	130.0	6.97	283.8	4	300.0	300.0	0.0000
0.0 0.0000	0	0.00					
00 01 01 20	124.8	5.99	283.6	4	300.0	300.0	0.0000
0.0 0.0000	0	0.00					
00 01 01 21	111.9	5.50	283.4	4	300.0	300.0	0.0000
0.0 0.0000	0	0.00					
00 01 01 22	126.9	5.10	283.0	4	300.0	300.0	0.0000
0.0 0.0000	0	0.00					
00 01 01 23	133.0	6.44	282.8	4	300.0	300.0	0.0000
0.0 0.0000	0	0.00					
00 01 01 24	155.4	4.74	282.3	4	300.0	300.0	0.0000
0.0 0.0000	0	0.00					

\*\*\* NOTES: STABILITY CLASS 1=A, 2=B, 3=C, 4=D, 5=E AND 6=F.  
FLOW VECTOR IS DIRECTION TOWARD WHICH WIND IS  
BLOWING.



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\*\*MODELOPTs:

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
    VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
    VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3    \*\*

X-COORD (M)	Y-COORD (M)	CONC
564349.75	4186700.00	0.00009
564359.75	4186700.00	0.00009
564369.75	4186700.00	0.00009
564379.75	4186700.00	0.00009
564389.75	4186700.00	0.00008
564399.75	4186700.00	0.00008
564409.75	4186700.00	0.00008
564419.75	4186700.00	0.00008
564429.75	4186700.00	0.00009
564439.75	4186700.00	0.00009
564449.75	4186700.00	0.00009
564459.75	4186700.00	0.00009
564469.75	4186700.00	0.00009
564479.75	4186700.00	0.00009
564489.75	4186700.00	0.00009
564499.75	4186700.00	0.00010
564509.75	4186700.00	0.00010
564519.75	4186700.00	0.00010
564529.75	4186700.00	0.00011
564539.75	4186700.00	0.00011
564549.75	4186700.00	0.00012
564559.75	4186700.00	0.00012

564569.75	4186700.00	0.00013
564579.75	4186700.00	0.00013
564589.75	4186700.00	0.00015
564599.75	4186700.00	0.00016
564609.75	4186700.00	0.00017
564619.75	4186700.00	0.00020
564629.75	4186700.00	0.00022
564639.75	4186700.00	0.00025
564649.75	4186700.00	0.00028
564659.75	4186700.00	0.00031
564669.75	4186700.00	0.00034
564679.75	4186700.00	0.00038
564689.75	4186700.00	0.00041
564699.75	4186700.00	0.00045
564709.75	4186700.00	0.00048
564719.75	4186700.00	0.00052
564729.75	4186700.00	0.00055
564739.75	4186700.00	0.00058
564749.75	4186700.00	0.00061
564759.75	4186700.00	0.00064
564769.75	4186700.00	0.00066
564779.75	4186700.00	0.00068
564789.75	4186700.00	0.00070
564799.75	4186700.00	0.00072
564809.75	4186700.00	0.00074
564819.75	4186700.00	0.00075
564829.75	4186700.00	0.00076
564839.75	4186700.00	0.00077
564849.75	4186700.00	0.00078
564859.75	4186700.00	0.00079
564869.75	4186700.00	0.00079
564879.75	4186700.00	0.00080
564889.75	4186700.00	0.00080
564899.75	4186700.00	0.00080
564909.75	4186700.00	0.00080
564919.75	4186700.00	0.00080
564929.75	4186700.00	0.00079
564939.75	4186700.00	0.00079
564949.75	4186700.00	0.00078
564349.75	4186710.00	0.00009
564359.75	4186710.00	0.00009
564369.75	4186710.00	0.00009
564379.75	4186710.00	0.00009
564389.75	4186710.00	0.00009
564399.75	4186710.00	0.00009
564409.75	4186710.00	0.00009
564419.75	4186710.00	0.00009
564429.75	4186710.00	0.00009
564439.75	4186710.00	0.00009
564449.75	4186710.00	0.00009
564459.75	4186710.00	0.00009
564469.75	4186710.00	0.00010

	564479.75	4186710.00	0.00010
564489.75	4186710.00	0.00010	
	564499.75	4186710.00	0.00010
564509.75	4186710.00	0.00011	
	564519.75	4186710.00	0.00011
564529.75	4186710.00	0.00011	

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\*\*MODELOPTs:

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
   INCLUDING SOURCE(S):  
A0000001, A0000002, A0000003, A0000004, A0000005, VOL1       , VOL2  
,  
   VOL3       , VOL4       , VOL5       , VOL6       , VOL7       , VOL8  
, VOL9       , VOL10      , VOL11      , VOL12      , VOL13      , VOL14      ,  
   VOL15      , VOL16      , VOL17      , VOL18      , VOL19      , VOL20  
, VOL21      , VOL22      , VOL23      , VOL24      , VOL25      , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
MICROGRAMS/M\*\*3                                \*\*

X-COORD (M)	Y-COORD (M)	CONC
564539.75	4186710.00	0.00012
564549.75	4186710.00	0.00012
564559.75	4186710.00	0.00013
564569.75	4186710.00	0.00014
564579.75	4186710.00	0.00015
564589.75	4186710.00	0.00016
564599.75	4186710.00	0.00017
564609.75	4186710.00	0.00019
564619.75	4186710.00	0.00022
564629.75	4186710.00	0.00025
564639.75	4186710.00	0.00028
564649.75	4186710.00	0.00031
564659.75	4186710.00	0.00035
564669.75	4186710.00	0.00039
564679.75	4186710.00	0.00043
564689.75	4186710.00	0.00047
564699.75	4186710.00	0.00051
564709.75	4186710.00	0.00055
564719.75	4186710.00	0.00058
564729.75	4186710.00	0.00062
564739.75	4186710.00	0.00065
564749.75	4186710.00	0.00068

564759.75	4186710.00	0.00071
564769.75	4186710.00	0.00073
564779.75	4186710.00	0.00076
564789.75	4186710.00	0.00078
564799.75	4186710.00	0.00079
564809.75	4186710.00	0.00081
564819.75	4186710.00	0.00082
564829.75	4186710.00	0.00083
564839.75	4186710.00	0.00084
564849.75	4186710.00	0.00085
564859.75	4186710.00	0.00085
564869.75	4186710.00	0.00086
564879.75	4186710.00	0.00086
564889.75	4186710.00	0.00086
564899.75	4186710.00	0.00085
564909.75	4186710.00	0.00085
564919.75	4186710.00	0.00085
564929.75	4186710.00	0.00084
564939.75	4186710.00	0.00084
564949.75	4186710.00	0.00083
564349.75	4186720.00	0.00010
564359.75	4186720.00	0.00010
564369.75	4186720.00	0.00010
564379.75	4186720.00	0.00010
564389.75	4186720.00	0.00010
564399.75	4186720.00	0.00010
564409.75	4186720.00	0.00010
564419.75	4186720.00	0.00010
564429.75	4186720.00	0.00010
564439.75	4186720.00	0.00010
564449.75	4186720.00	0.00010
564459.75	4186720.00	0.00010
564469.75	4186720.00	0.00010
564479.75	4186720.00	0.00011
564489.75	4186720.00	0.00011
564499.75	4186720.00	0.00011
564509.75	4186720.00	0.00011
564519.75	4186720.00	0.00012
564529.75	4186720.00	0.00012
564539.75	4186720.00	0.00013
564549.75	4186720.00	0.00013
564559.75	4186720.00	0.00014
564569.75	4186720.00	0.00015
564579.75	4186720.00	0.00016
564589.75	4186720.00	0.00017
564599.75	4186720.00	0.00019
564609.75	4186720.00	0.00022
564619.75	4186720.00	0.00025
564629.75	4186720.00	0.00028
564639.75	4186720.00	0.00032
564649.75	4186720.00	0.00036
564659.75	4186720.00	0.00040

	564669.75	4186720.00	0.00044
564679.75	4186720.00	0.00049	
	564689.75	4186720.00	0.00053
564699.75	4186720.00	0.00058	
	564709.75	4186720.00	0.00062
564719.75	4186720.00	0.00066	

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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* THE ANNUAL ( 1 YRS) AVERAGE  
CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
INCLUDING SOURCE(S):  
A0000001, A0000002, A0000003, A0000004, A0000005, VOL1 , VOL2  
,  
VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8  
, VOL9 , VOL10 , VOL11 , VOL12 , VOL13 , VOL14 ,  
VOL15 , VOL16 , VOL17 , VOL18 , VOL19 , VOL20  
, VOL21 , VOL22 , VOL23 , VOL24 , VOL25 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
\*\*

X-COORD (M)	Y-COORD (M)	CONC
564729.75	4186720.00	0.00070
564739.75	4186720.00	0.00073
564749.75	4186720.00	0.00076
564759.75	4186720.00	0.00079
564769.75	4186720.00	0.00082
564779.75	4186720.00	0.00084
564789.75	4186720.00	0.00086
564799.75	4186720.00	0.00087
564809.75	4186720.00	0.00089
564819.75	4186720.00	0.00090
564829.75	4186720.00	0.00091
564839.75	4186720.00	0.00091
564849.75	4186720.00	0.00092
564859.75	4186720.00	0.00092
564869.75	4186720.00	0.00092
564879.75	4186720.00	0.00092
564889.75	4186720.00	0.00092
564899.75	4186720.00	0.00091
564909.75	4186720.00	0.00091
564919.75	4186720.00	0.00090
564929.75	4186720.00	0.00089
564939.75	4186720.00	0.00089

	564949.75	4186720.00	0.00088
564349.75	4186730.00	0.00011	
	564359.75	4186730.00	0.00011
564369.75	4186730.00	0.00011	
	564379.75	4186730.00	0.00011
564389.75	4186730.00	0.00011	
	564399.75	4186730.00	0.00011
564409.75	4186730.00	0.00011	
	564419.75	4186730.00	0.00011
564429.75	4186730.00	0.00011	
	564439.75	4186730.00	0.00011
564449.75	4186730.00	0.00011	
	564459.75	4186730.00	0.00011
564469.75	4186730.00	0.00011	
	564479.75	4186730.00	0.00011
564489.75	4186730.00	0.00012	
	564499.75	4186730.00	0.00012
564509.75	4186730.00	0.00012	
	564519.75	4186730.00	0.00013
564529.75	4186730.00	0.00013	
	564539.75	4186730.00	0.00014
564549.75	4186730.00	0.00014	
	564559.75	4186730.00	0.00015
564569.75	4186730.00	0.00016	
	564579.75	4186730.00	0.00017
564589.75	4186730.00	0.00019	
	564599.75	4186730.00	0.00022
564609.75	4186730.00	0.00024	
	564619.75	4186730.00	0.00028
564629.75	4186730.00	0.00032	
	564639.75	4186730.00	0.00037
564649.75	4186730.00	0.00041	
	564659.75	4186730.00	0.00046
564669.75	4186730.00	0.00051	
	564679.75	4186730.00	0.00056
564689.75	4186730.00	0.00061	
	564699.75	4186730.00	0.00066
564709.75	4186730.00	0.00071	
	564719.75	4186730.00	0.00075
564729.75	4186730.00	0.00079	
	564739.75	4186730.00	0.00082
564749.75	4186730.00	0.00085	
	564759.75	4186730.00	0.00088
564769.75	4186730.00	0.00091	
	564779.75	4186730.00	0.00093
564789.75	4186730.00	0.00095	
	564799.75	4186730.00	0.00096
564809.75	4186730.00	0.00097	
	564819.75	4186730.00	0.00098
564829.75	4186730.00	0.00099	
	564839.75	4186730.00	0.00099
564849.75	4186730.00	0.00099	



	564859.75	4186730.00	0.00099
564869.75	4186730.00	0.00099	
	564879.75	4186730.00	0.00099
564889.75	4186730.00	0.00098	
	564899.75	4186730.00	0.00098
564909.75	4186730.00	0.00097	

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\*\*MODELOPTs:

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CONC URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* THE ANNUAL ( 1 YRS) AVERAGE  
CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
INCLUDING SOURCE(S):  
A0000001, A0000002, A0000003, A0000004, A0000005, VOL1 , VOL2  
,  
VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8  
, VOL9 , VOL10 , VOL11 , VOL12 , VOL13 , VOL14 ,  
VOL15 , VOL16 , VOL17 , VOL18 , VOL19 , VOL20  
, VOL21 , VOL22 , VOL23 , VOL24 , VOL25 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN \*\*

X-COORD (M)	Y-COORD (M)	CONC
564919.75	4186730.00	0.00096
564929.75	4186730.00	0.00095
564939.75	4186730.00	0.00094
564949.75	4186730.00	0.00093
564349.75	4186740.00	0.00011
564359.75	4186740.00	0.00012
564369.75	4186740.00	0.00012
564379.75	4186740.00	0.00012
564389.75	4186740.00	0.00012
564399.75	4186740.00	0.00012
564409.75	4186740.00	0.00012
564419.75	4186740.00	0.00012
564429.75	4186740.00	0.00012
564439.75	4186740.00	0.00012
564449.75	4186740.00	0.00012
564459.75	4186740.00	0.00012
564469.75	4186740.00	0.00012
564479.75	4186740.00	0.00012
564489.75	4186740.00	0.00013
564499.75	4186740.00	0.00013
564509.75	4186740.00	0.00013
564519.75	4186740.00	0.00014

564529.75	4186740.00	0.00014
564539.75	4186740.00	0.00015
564549.75	4186740.00	0.00016
564559.75	4186740.00	0.00017
564569.75	4186740.00	0.00018
564579.75	4186740.00	0.00019
564589.75	4186740.00	0.00021
564599.75	4186740.00	0.00024
564609.75	4186740.00	0.00028
564619.75	4186740.00	0.00032
564629.75	4186740.00	0.00037
564639.75	4186740.00	0.00042
564649.75	4186740.00	0.00048
564659.75	4186740.00	0.00054
564669.75	4186740.00	0.00059
564679.75	4186740.00	0.00065
564689.75	4186740.00	0.00071
564699.75	4186740.00	0.00076
564709.75	4186740.00	0.00081
564719.75	4186740.00	0.00085
564729.75	4186740.00	0.00089
564739.75	4186740.00	0.00093
564749.75	4186740.00	0.00096
564759.75	4186740.00	0.00099
564769.75	4186740.00	0.00101
564779.75	4186740.00	0.00103
564789.75	4186740.00	0.00105
564799.75	4186740.00	0.00106
564809.75	4186740.00	0.00107
564819.75	4186740.00	0.00107
564829.75	4186740.00	0.00108
564839.75	4186740.00	0.00108
564849.75	4186740.00	0.00108
564859.75	4186740.00	0.00107
564869.75	4186740.00	0.00107
564879.75	4186740.00	0.00106
564889.75	4186740.00	0.00105
564899.75	4186740.00	0.00104
564909.75	4186740.00	0.00103
564919.75	4186740.00	0.00102
564929.75	4186740.00	0.00100
564939.75	4186740.00	0.00099
564949.75	4186740.00	0.00098
564349.75	4186750.00	0.00012
564359.75	4186750.00	0.00012
564369.75	4186750.00	0.00013
564379.75	4186750.00	0.00013
564389.75	4186750.00	0.00013
564399.75	4186750.00	0.00013
564409.75	4186750.00	0.00013
564419.75	4186750.00	0.00013
564429.75	4186750.00	0.00013

	564439.75	4186750.00	0.00013
564449.75	4186750.00	0.00013	
	564459.75	4186750.00	0.00013
564469.75	4186750.00	0.00013	
	564479.75	4186750.00	0.00013
564489.75	4186750.00	0.00014	

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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* THE ANNUAL ( 1 YRS) AVERAGE  
 CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*

INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1 , VOL2  
 ,  
 VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8  
 , VOL9 , VOL10 , VOL11 , VOL12 , VOL13 , VOL14 ,  
 VOL15 , VOL16 , VOL17 , VOL18 , VOL19 , VOL20  
 , VOL21 , VOL22 , VOL23 , VOL24 , VOL25 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
 \*\*

X-COORD (M)	Y-COORD (M)	CONC
564499.75	4186750.00	0.00014
564509.75	4186750.00	0.00014
564519.75	4186750.00	0.00015
564529.75	4186750.00	0.00016
564539.75	4186750.00	0.00016
564549.75	4186750.00	0.00017
564559.75	4186750.00	0.00018
564569.75	4186750.00	0.00020
564579.75	4186750.00	0.00021
564589.75	4186750.00	0.00024
564599.75	4186750.00	0.00028
564609.75	4186750.00	0.00032
564619.75	4186750.00	0.00037
564629.75	4186750.00	0.00043
564639.75	4186750.00	0.00050
564649.75	4186750.00	0.00056
564659.75	4186750.00	0.00063
564669.75	4186750.00	0.00069
564679.75	4186750.00	0.00076
564689.75	4186750.00	0.00082
564699.75	4186750.00	0.00088
564709.75	4186750.00	0.00093

564719.75	4186750.00	0.00097
564729.75	4186750.00	0.00101
564739.75	4186750.00	0.00105
564749.75	4186750.00	0.00108
564759.75	4186750.00	0.00111
564769.75	4186750.00	0.00113
564779.75	4186750.00	0.00114
564789.75	4186750.00	0.00116
564799.75	4186750.00	0.00117
564809.75	4186750.00	0.00117
564819.75	4186750.00	0.00117
564829.75	4186750.00	0.00117
564839.75	4186750.00	0.00117
564849.75	4186750.00	0.00116
564859.75	4186750.00	0.00116
564869.75	4186750.00	0.00115
564879.75	4186750.00	0.00113
564889.75	4186750.00	0.00112
564899.75	4186750.00	0.00111
564909.75	4186750.00	0.00109
564919.75	4186750.00	0.00108
564929.75	4186750.00	0.00106
564939.75	4186750.00	0.00105
564949.75	4186750.00	0.00103
564349.75	4186760.00	0.00013
564359.75	4186760.00	0.00013
564369.75	4186760.00	0.00013
564379.75	4186760.00	0.00014
564389.75	4186760.00	0.00014
564399.75	4186760.00	0.00014
564409.75	4186760.00	0.00014
564419.75	4186760.00	0.00014
564429.75	4186760.00	0.00015
564439.75	4186760.00	0.00015
564449.75	4186760.00	0.00015
564459.75	4186760.00	0.00015
564469.75	4186760.00	0.00015
564479.75	4186760.00	0.00015
564489.75	4186760.00	0.00015
564499.75	4186760.00	0.00015
564509.75	4186760.00	0.00016
564519.75	4186760.00	0.00016
564529.75	4186760.00	0.00017
564539.75	4186760.00	0.00018
564549.75	4186760.00	0.00019
564559.75	4186760.00	0.00020
564569.75	4186760.00	0.00022
564579.75	4186760.00	0.00024
564589.75	4186760.00	0.00027
564599.75	4186760.00	0.00032
564609.75	4186760.00	0.00038
564619.75	4186760.00	0.00044

	564629.75	4186760.00	0.00052
564639.75	4186760.00	0.00059	
	564649.75	4186760.00	0.00067
564659.75	4186760.00	0.00075	
	564669.75	4186760.00	0.00082
564679.75	4186760.00	0.00089	

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
    VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
    VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
564689.75	4186760.00	0.00096
564699.75	4186760.00	0.00102
564709.75	4186760.00	0.00107
564719.75	4186760.00	0.00112
564729.75	4186760.00	0.00116
564739.75	4186760.00	0.00119
564749.75	4186760.00	0.00122
564759.75	4186760.00	0.00124
564769.75	4186760.00	0.00126
564779.75	4186760.00	0.00127
564789.75	4186760.00	0.00128
564799.75	4186760.00	0.00128
564809.75	4186760.00	0.00128
564819.75	4186760.00	0.00128
564829.75	4186760.00	0.00127
564839.75	4186760.00	0.00127
564849.75	4186760.00	0.00126
564859.75	4186760.00	0.00124
564869.75	4186760.00	0.00123
564879.75	4186760.00	0.00121
564889.75	4186760.00	0.00120
564899.75	4186760.00	0.00118



564909.75	4186760.00	0.00116
564919.75	4186760.00	0.00114
564929.75	4186760.00	0.00112
564939.75	4186760.00	0.00110
564949.75	4186760.00	0.00108
564349.75	4186770.00	0.00013
564359.75	4186770.00	0.00013
564369.75	4186770.00	0.00014
564379.75	4186770.00	0.00014
564389.75	4186770.00	0.00015
564399.75	4186770.00	0.00015
564409.75	4186770.00	0.00016
564419.75	4186770.00	0.00016
564429.75	4186770.00	0.00016
564439.75	4186770.00	0.00016
564449.75	4186770.00	0.00016
564459.75	4186770.00	0.00016
564469.75	4186770.00	0.00016
564479.75	4186770.00	0.00017
564489.75	4186770.00	0.00017
564499.75	4186770.00	0.00017
564509.75	4186770.00	0.00017
564519.75	4186770.00	0.00018
564529.75	4186770.00	0.00019
564539.75	4186770.00	0.00020
564549.75	4186770.00	0.00021
564559.75	4186770.00	0.00022
564569.75	4186770.00	0.00024
564579.75	4186770.00	0.00027
564589.75	4186770.00	0.00032
564599.75	4186770.00	0.00037
564609.75	4186770.00	0.00045
564619.75	4186770.00	0.00053
564629.75	4186770.00	0.00062
564639.75	4186770.00	0.00071
564649.75	4186770.00	0.00080
564659.75	4186770.00	0.00089
564669.75	4186770.00	0.00098
564679.75	4186770.00	0.00106
564689.75	4186770.00	0.00112
564699.75	4186770.00	0.00119
564709.75	4186770.00	0.00124
564719.75	4186770.00	0.00128
564729.75	4186770.00	0.00132
564739.75	4186770.00	0.00135
564749.75	4186770.00	0.00137
564759.75	4186770.00	0.00139
564769.75	4186770.00	0.00140
564779.75	4186770.00	0.00141
564789.75	4186770.00	0.00141
564799.75	4186770.00	0.00141
564809.75	4186770.00	0.00140

	564819.75	4186770.00	0.00139
564829.75	4186770.00	0.00138	
	564839.75	4186770.00	0.00137
564849.75	4186770.00	0.00135	
	564859.75	4186770.00	0.00133
564869.75	4186770.00	0.00132	

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\*\*MODELOPTs:

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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* THE ANNUAL ( 1 YRS) AVERAGE  
CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
INCLUDING SOURCE(S):  
A0000001, A0000002, A0000003, A0000004, A0000005, VOL1 , VOL2  
,  
, VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8  
, VOL9 , VOL10 , VOL11 , VOL12 , VOL13 , VOL14 ,  
, VOL15 , VOL16 , VOL17 , VOL18 , VOL19 , VOL20  
, VOL21 , VOL22 , VOL23 , VOL24 , VOL25 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
\*\*

X-COORD (M)	Y-COORD (M)	CONC
564879.75	4186770.00	0.00129
564889.75	4186770.00	0.00127
564899.75	4186770.00	0.00125
564909.75	4186770.00	0.00123
564919.75	4186770.00	0.00120
564929.75	4186770.00	0.00118
564939.75	4186770.00	0.00116
564949.75	4186770.00	0.00113
564349.75	4186780.00	0.00013
564359.75	4186780.00	0.00014
564369.75	4186780.00	0.00015
564379.75	4186780.00	0.00015
564389.75	4186780.00	0.00016
564399.75	4186780.00	0.00016
564409.75	4186780.00	0.00017
564419.75	4186780.00	0.00017
564429.75	4186780.00	0.00018
564439.75	4186780.00	0.00018
564449.75	4186780.00	0.00018
564459.75	4186780.00	0.00018
564469.75	4186780.00	0.00018
564479.75	4186780.00	0.00019

564489.75	4186780.00	0.00019
564499.75	4186780.00	0.00019
564509.75	4186780.00	0.00019
564519.75	4186780.00	0.00020
564529.75	4186780.00	0.00021
564539.75	4186780.00	0.00022
564549.75	4186780.00	0.00023
564559.75	4186780.00	0.00025
564569.75	4186780.00	0.00028
564579.75	4186780.00	0.00032
564589.75	4186780.00	0.00037
564599.75	4186780.00	0.00045
564609.75	4186780.00	0.00054
564619.75	4186780.00	0.00065
564629.75	4186780.00	0.00076
564639.75	4186780.00	0.00087
564649.75	4186780.00	0.00098
564659.75	4186780.00	0.00108
564669.75	4186780.00	0.00117
564679.75	4186780.00	0.00126
564689.75	4186780.00	0.00133
564699.75	4186780.00	0.00139
564709.75	4186780.00	0.00144
564719.75	4186780.00	0.00148
564729.75	4186780.00	0.00151
564739.75	4186780.00	0.00153
564749.75	4186780.00	0.00155
564759.75	4186780.00	0.00156
564769.75	4186780.00	0.00156
564779.75	4186780.00	0.00156
564789.75	4186780.00	0.00155
564799.75	4186780.00	0.00154
564809.75	4186780.00	0.00153
564819.75	4186780.00	0.00151
564829.75	4186780.00	0.00150
564839.75	4186780.00	0.00148
564849.75	4186780.00	0.00145
564859.75	4186780.00	0.00143
564869.75	4186780.00	0.00140
564879.75	4186780.00	0.00138
564889.75	4186780.00	0.00135
564899.75	4186780.00	0.00132
564909.75	4186780.00	0.00130
564919.75	4186780.00	0.00127
564929.75	4186780.00	0.00124
564939.75	4186780.00	0.00121
564949.75	4186780.00	0.00118
564349.75	4186790.00	0.00014
564359.75	4186790.00	0.00014
564369.75	4186790.00	0.00015
564379.75	4186790.00	0.00016
564389.75	4186790.00	0.00016

	564399.75	4186790.00	0.00017
564409.75	4186790.00	0.00018	
	564419.75	4186790.00	0.00018
564429.75	4186790.00	0.00019	
	564439.75	4186790.00	0.00020
564449.75	4186790.00	0.00020	

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\*\*MODELOPTs:

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

                                 \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
                                  INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
                  VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
                  VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
564459.75	4186790.00	0.00020
564469.75	4186790.00	0.00021
564479.75	4186790.00	0.00021
564489.75	4186790.00	0.00021
564499.75	4186790.00	0.00022
564509.75	4186790.00	0.00022
564519.75	4186790.00	0.00022
564529.75	4186790.00	0.00023
564539.75	4186790.00	0.00025
564549.75	4186790.00	0.00026
564559.75	4186790.00	0.00029
564569.75	4186790.00	0.00032
564579.75	4186790.00	0.00037
564589.75	4186790.00	0.00045
564599.75	4186790.00	0.00055
564609.75	4186790.00	0.00068
564619.75	4186790.00	0.00082
564629.75	4186790.00	0.00096
564639.75	4186790.00	0.00109
564649.75	4186790.00	0.00122
564659.75	4186790.00	0.00133
564669.75	4186790.00	0.00142

564679.75	4186790.00	0.00150
564689.75	4186790.00	0.00157
564699.75	4186790.00	0.00163
564709.75	4186790.00	0.00167
564719.75	4186790.00	0.00170
564729.75	4186790.00	0.00172
564739.75	4186790.00	0.00174
564749.75	4186790.00	0.00174
564759.75	4186790.00	0.00174
564769.75	4186790.00	0.00173
564779.75	4186790.00	0.00172
564789.75	4186790.00	0.00171
564799.75	4186790.00	0.00169
564809.75	4186790.00	0.00167
564819.75	4186790.00	0.00164
564829.75	4186790.00	0.00162
564839.75	4186790.00	0.00159
564849.75	4186790.00	0.00156
564859.75	4186790.00	0.00153
564869.75	4186790.00	0.00150
564879.75	4186790.00	0.00146
564889.75	4186790.00	0.00143
564899.75	4186790.00	0.00140
564909.75	4186790.00	0.00137
564919.75	4186790.00	0.00133
564929.75	4186790.00	0.00130
564939.75	4186790.00	0.00127
564949.75	4186790.00	0.00124
564349.75	4186800.00	0.00014
564359.75	4186800.00	0.00015
564369.75	4186800.00	0.00015
564379.75	4186800.00	0.00016
564389.75	4186800.00	0.00017
564399.75	4186800.00	0.00018
564409.75	4186800.00	0.00019
564419.75	4186800.00	0.00020
564429.75	4186800.00	0.00020
564439.75	4186800.00	0.00021
564449.75	4186800.00	0.00022
564459.75	4186800.00	0.00023
564469.75	4186800.00	0.00023
564479.75	4186800.00	0.00024
564489.75	4186800.00	0.00024
564499.75	4186800.00	0.00025
564509.75	4186800.00	0.00025
564519.75	4186800.00	0.00026
564529.75	4186800.00	0.00027
564539.75	4186800.00	0.00028
564549.75	4186800.00	0.00030
564559.75	4186800.00	0.00033
564569.75	4186800.00	0.00037
564579.75	4186800.00	0.00044

	564589.75	4186800.00	0.00055
564599.75	4186800.00	0.00070	
	564609.75	4186800.00	0.00088
564619.75	4186800.00	0.00106	
	564629.75	4186800.00	0.00123
564639.75	4186800.00	0.00139	





564869.75	4186800.00	0.00159
564879.75	4186800.00	0.00155
564889.75	4186800.00	0.00151
564899.75	4186800.00	0.00147
564909.75	4186800.00	0.00144
564919.75	4186800.00	0.00140
564929.75	4186800.00	0.00136
564939.75	4186800.00	0.00132
564949.75	4186800.00	0.00129
564349.75	4186810.00	0.00014
564359.75	4186810.00	0.00015
564369.75	4186810.00	0.00016
564379.75	4186810.00	0.00017
564389.75	4186810.00	0.00018
564399.75	4186810.00	0.00019
564409.75	4186810.00	0.00020
564419.75	4186810.00	0.00021
564429.75	4186810.00	0.00022
564439.75	4186810.00	0.00023
564449.75	4186810.00	0.00024
564459.75	4186810.00	0.00025
564469.75	4186810.00	0.00026
564479.75	4186810.00	0.00027
564489.75	4186810.00	0.00028
564499.75	4186810.00	0.00028
564509.75	4186810.00	0.00029
564519.75	4186810.00	0.00030
564529.75	4186810.00	0.00031
564539.75	4186810.00	0.00032
564549.75	4186810.00	0.00035
564559.75	4186810.00	0.00039
564569.75	4186810.00	0.00045
564579.75	4186810.00	0.00055
564589.75	4186810.00	0.00071
564599.75	4186810.00	0.00093
564609.75	4186810.00	0.00118
564619.75	4186810.00	0.00142
564629.75	4186810.00	0.00163
564639.75	4186810.00	0.00180
564649.75	4186810.00	0.00193
564659.75	4186810.00	0.00203
564669.75	4186810.00	0.00211
564679.75	4186810.00	0.00217
564689.75	4186810.00	0.00221
564699.75	4186810.00	0.00223
564709.75	4186810.00	0.00224
564719.75	4186810.00	0.00224
564729.75	4186810.00	0.00223
564739.75	4186810.00	0.00221
564749.75	4186810.00	0.00219
564759.75	4186810.00	0.00216
564769.75	4186810.00	0.00212

564779.75	4186810.00	0.00208
564789.75	4186810.00	0.00204
564799.75	4186810.00	0.00200
564809.75	4186810.00	0.00196
564819.75	4186810.00	0.00191
564829.75	4186810.00	0.00187

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

                                 \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
                                  INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
                                  VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
                                  VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

			** CONC OF PM <sub>10</sub> IN
			**
MICROGRAMS/M**3			
X-COORD (M)	Y-COORD (M)	CONC	
564839.75	4186810.00	0.00182	
564849.75	4186810.00	0.00177	
564859.75	4186810.00	0.00173	
564869.75	4186810.00	0.00168	
564879.75	4186810.00	0.00164	
564889.75	4186810.00	0.00159	
564899.75	4186810.00	0.00155	
564909.75	4186810.00	0.00150	
564919.75	4186810.00	0.00146	
564929.75	4186810.00	0.00142	
564939.75	4186810.00	0.00138	
564949.75	4186810.00	0.00134	
564349.75	4186820.00	0.00014	
564359.75	4186820.00	0.00015	
564369.75	4186820.00	0.00016	
564379.75	4186820.00	0.00017	
564389.75	4186820.00	0.00018	
564399.75	4186820.00	0.00019	
564409.75	4186820.00	0.00020	
564419.75	4186820.00	0.00021	
564429.75	4186820.00	0.00023	
564439.75	4186820.00	0.00024	

564449.75	4186820.00	0.00026
564459.75	4186820.00	0.00027
564469.75	4186820.00	0.00029
564479.75	4186820.00	0.00030
564489.75	4186820.00	0.00031
564499.75	4186820.00	0.00032
564509.75	4186820.00	0.00034
564519.75	4186820.00	0.00035
564529.75	4186820.00	0.00037
564539.75	4186820.00	0.00038
564549.75	4186820.00	0.00041
564559.75	4186820.00	0.00046
564569.75	4186820.00	0.00056
564579.75	4186820.00	0.00070
564589.75	4186820.00	0.00096
564599.75	4186820.00	0.00131
564609.75	4186820.00	0.00167
564619.75	4186820.00	0.00197
564629.75	4186820.00	0.00219
564639.75	4186820.00	0.00235
564649.75	4186820.00	0.00246
564659.75	4186820.00	0.00253
564669.75	4186820.00	0.00257
564679.75	4186820.00	0.00260
564689.75	4186820.00	0.00260
564699.75	4186820.00	0.00260
564709.75	4186820.00	0.00258
564719.75	4186820.00	0.00255
564729.75	4186820.00	0.00252
564739.75	4186820.00	0.00248
564749.75	4186820.00	0.00243
564759.75	4186820.00	0.00238
564769.75	4186820.00	0.00233
564779.75	4186820.00	0.00228
564789.75	4186820.00	0.00222
564799.75	4186820.00	0.00216
564809.75	4186820.00	0.00211
564819.75	4186820.00	0.00205
564829.75	4186820.00	0.00199
564839.75	4186820.00	0.00194
564849.75	4186820.00	0.00188
564859.75	4186820.00	0.00183
564869.75	4186820.00	0.00177
564879.75	4186820.00	0.00172
564889.75	4186820.00	0.00167
564899.75	4186820.00	0.00162
564909.75	4186820.00	0.00157
564919.75	4186820.00	0.00152
564929.75	4186820.00	0.00147
564939.75	4186820.00	0.00143
564949.75	4186820.00	0.00138
564349.75	4186830.00	0.00014

	564359.75	4186830.00	0.00015
564369.75	4186830.00	0.00016	
	564379.75	4186830.00	0.00017
564389.75	4186830.00	0.00018	
	564399.75	4186830.00	0.00019
564409.75	4186830.00	0.00021	

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\*\*MODELOPTs:

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

                                 \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL                    \*\*\*  
                                  INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
                          VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
                          VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
564419.75	4186830.00	0.00022
564429.75	4186830.00	0.00024
564439.75	4186830.00	0.00025
564449.75	4186830.00	0.00027
564459.75	4186830.00	0.00029
564469.75	4186830.00	0.00031
564479.75	4186830.00	0.00033
564489.75	4186830.00	0.00035
564499.75	4186830.00	0.00037
564509.75	4186830.00	0.00039
564519.75	4186830.00	0.00041
564529.75	4186830.00	0.00044
564539.75	4186830.00	0.00047
564549.75	4186830.00	0.00050
564559.75	4186830.00	0.00058
564569.75	4186830.00	0.00072
564579.75	4186830.00	0.00096
564589.75	4186830.00	0.00142
564599.75	4186830.00	0.00202
564609.75	4186830.00	0.00251
564619.75	4186830.00	0.00283
564629.75	4186830.00	0.00299

564639.75	4186830.00	0.00307
564649.75	4186830.00	0.00311
564659.75	4186830.00	0.00311
564669.75	4186830.00	0.00310
564679.75	4186830.00	0.00308
564689.75	4186830.00	0.00305
564699.75	4186830.00	0.00300
564709.75	4186830.00	0.00295
564719.75	4186830.00	0.00290
564729.75	4186830.00	0.00283
564739.75	4186830.00	0.00276
564749.75	4186830.00	0.00269
564759.75	4186830.00	0.00262
564769.75	4186830.00	0.00255
564779.75	4186830.00	0.00248
564789.75	4186830.00	0.00240
564799.75	4186830.00	0.00233
564809.75	4186830.00	0.00226
564819.75	4186830.00	0.00219
564829.75	4186830.00	0.00212
564839.75	4186830.00	0.00206
564849.75	4186830.00	0.00199
564859.75	4186830.00	0.00193
564869.75	4186830.00	0.00187
564879.75	4186830.00	0.00181
564889.75	4186830.00	0.00175
564899.75	4186830.00	0.00169
564909.75	4186830.00	0.00163
564919.75	4186830.00	0.00158
564929.75	4186830.00	0.00153
564939.75	4186830.00	0.00148
564949.75	4186830.00	0.00143
564349.75	4186840.00	0.00014
564359.75	4186840.00	0.00015
564369.75	4186840.00	0.00016
564379.75	4186840.00	0.00017
564389.75	4186840.00	0.00018
564399.75	4186840.00	0.00020
564409.75	4186840.00	0.00021
564419.75	4186840.00	0.00023
564429.75	4186840.00	0.00024
564439.75	4186840.00	0.00026
564449.75	4186840.00	0.00028
564459.75	4186840.00	0.00030
564469.75	4186840.00	0.00033
564479.75	4186840.00	0.00036
564489.75	4186840.00	0.00039
564499.75	4186840.00	0.00042
564509.75	4186840.00	0.00045
564519.75	4186840.00	0.00048
564529.75	4186840.00	0.00052
564539.75	4186840.00	0.00057



	564549.75	4186840.00	0.00064
564559.75	4186840.00	0.00077	
	564569.75	4186840.00	0.00101
564579.75	4186840.00	0.00144	
	564589.75	4186840.00	0.00249
564599.75	4186840.00	0.00348	

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL                   \*\*\*

   INCLUDING SOURCE(S):

A0000001, A0000002, A0000003, A0000004, A0000005, VOL1            , VOL2  
 ,  
    VOL3            , VOL4            , VOL5            , VOL6            , VOL7            , VOL8  
 , VOL9            , VOL10            , VOL11            , VOL12            , VOL13            , VOL14            ,  
    VOL15            , VOL16            , VOL17            , VOL18            , VOL19            , VOL20  
 , VOL21            , VOL22            , VOL23            , VOL24            , VOL25            , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM\_10            IN  
 \*\*

MICROGRAMS/M\*\*3

X-COORD (M)	Y-COORD (M)	CONC
564609.75	4186840.00	0.00394
564619.75	4186840.00	0.00405
564629.75	4186840.00	0.00402
564639.75	4186840.00	0.00394
564649.75	4186840.00	0.00385
564659.75	4186840.00	0.00377
564669.75	4186840.00	0.00369
564679.75	4186840.00	0.00362
564689.75	4186840.00	0.00353
564699.75	4186840.00	0.00345
564709.75	4186840.00	0.00336
564719.75	4186840.00	0.00326
564729.75	4186840.00	0.00316
564739.75	4186840.00	0.00306
564749.75	4186840.00	0.00297
564759.75	4186840.00	0.00287
564769.75	4186840.00	0.00277
564779.75	4186840.00	0.00268
564789.75	4186840.00	0.00259
564799.75	4186840.00	0.00250
564809.75	4186840.00	0.00241
564819.75	4186840.00	0.00233

564829.75	4186840.00	0.00225
564839.75	4186840.00	0.00217
564849.75	4186840.00	0.00210
564859.75	4186840.00	0.00202
564869.75	4186840.00	0.00195
564879.75	4186840.00	0.00189
564889.75	4186840.00	0.00182
564899.75	4186840.00	0.00176
564909.75	4186840.00	0.00170
564919.75	4186840.00	0.00164
564929.75	4186840.00	0.00158
564939.75	4186840.00	0.00152
564949.75	4186840.00	0.00147
564349.75	4186850.00	0.00014
564359.75	4186850.00	0.00015
564369.75	4186850.00	0.00016
564379.75	4186850.00	0.00017
564389.75	4186850.00	0.00019
564399.75	4186850.00	0.00020
564409.75	4186850.00	0.00021
564419.75	4186850.00	0.00023
564429.75	4186850.00	0.00025
564439.75	4186850.00	0.00027
564449.75	4186850.00	0.00029
564459.75	4186850.00	0.00032
564469.75	4186850.00	0.00034
564479.75	4186850.00	0.00038
564489.75	4186850.00	0.00042
564499.75	4186850.00	0.00046
564509.75	4186850.00	0.00051
564519.75	4186850.00	0.00055
564529.75	4186850.00	0.00061
564539.75	4186850.00	0.00068
564549.75	4186850.00	0.00080
564559.75	4186850.00	0.00108
564569.75	4186850.00	0.00160
564579.75	4186850.00	0.00305
564589.75	4186850.00	0.00578
564599.75	4186850.00	0.00608
564609.75	4186850.00	0.00585
564619.75	4186850.00	0.00549
564629.75	4186850.00	0.00514
564639.75	4186850.00	0.00486
564649.75	4186850.00	0.00465
564659.75	4186850.00	0.00448
564669.75	4186850.00	0.00434
564679.75	4186850.00	0.00420
564689.75	4186850.00	0.00407
564699.75	4186850.00	0.00393
564709.75	4186850.00	0.00379
564719.75	4186850.00	0.00365
564729.75	4186850.00	0.00351

	564739.75	4186850.00	0.00338
564749.75	4186850.00	0.00324	
	564759.75	4186850.00	0.00312
564769.75	4186850.00	0.00300	
	564779.75	4186850.00	0.00288
564789.75	4186850.00	0.00277	

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
    VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
    VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
564799.75	4186850.00	0.00267
564809.75	4186850.00	0.00256
564819.75	4186850.00	0.00247
564829.75	4186850.00	0.00237
564839.75	4186850.00	0.00229
564849.75	4186850.00	0.00220
564859.75	4186850.00	0.00212
564869.75	4186850.00	0.00204
564879.75	4186850.00	0.00197
564889.75	4186850.00	0.00189
564899.75	4186850.00	0.00182
564909.75	4186850.00	0.00176
564919.75	4186850.00	0.00169
564929.75	4186850.00	0.00163
564939.75	4186850.00	0.00157
564949.75	4186850.00	0.00151
564349.75	4186860.00	0.00014
564359.75	4186860.00	0.00015
564369.75	4186860.00	0.00016
564379.75	4186860.00	0.00017
564389.75	4186860.00	0.00019
564399.75	4186860.00	0.00020

564409.75	4186860.00	0.00022
564419.75	4186860.00	0.00023
564429.75	4186860.00	0.00025
564439.75	4186860.00	0.00027
564449.75	4186860.00	0.00030
564459.75	4186860.00	0.00032
564469.75	4186860.00	0.00036
564479.75	4186860.00	0.00039
564489.75	4186860.00	0.00044
564499.75	4186860.00	0.00049
564509.75	4186860.00	0.00056
564519.75	4186860.00	0.00063
564529.75	4186860.00	0.00071
564539.75	4186860.00	0.00081
564589.75	4186860.00	0.00981
564599.75	4186860.00	0.00869
564609.75	4186860.00	0.00769
564619.75	4186860.00	0.00686
564629.75	4186860.00	0.00623
564639.75	4186860.00	0.00579
564649.75	4186860.00	0.00549
564659.75	4186860.00	0.00525
564669.75	4186860.00	0.00505
564679.75	4186860.00	0.00485
564689.75	4186860.00	0.00465
564699.75	4186860.00	0.00445
564709.75	4186860.00	0.00425
564719.75	4186860.00	0.00405
564729.75	4186860.00	0.00387
564739.75	4186860.00	0.00369
564749.75	4186860.00	0.00353
564759.75	4186860.00	0.00337
564769.75	4186860.00	0.00322
564779.75	4186860.00	0.00308
564789.75	4186860.00	0.00295
564799.75	4186860.00	0.00283
564809.75	4186860.00	0.00271
564819.75	4186860.00	0.00260
564829.75	4186860.00	0.00250
564839.75	4186860.00	0.00240
564849.75	4186860.00	0.00230
564859.75	4186860.00	0.00221
564869.75	4186860.00	0.00212
564879.75	4186860.00	0.00204
564889.75	4186860.00	0.00196
564899.75	4186860.00	0.00188
564909.75	4186860.00	0.00181
564919.75	4186860.00	0.00174
564929.75	4186860.00	0.00167
564939.75	4186860.00	0.00161
564949.75	4186860.00	0.00155
564349.75	4186870.00	0.00014

	564359.75	4186870.00	0.00015
564369.75	4186870.00	0.00016	
	564379.75	4186870.00	0.00017
564389.75	4186870.00	0.00018	
	564399.75	4186870.00	0.00020
564409.75	4186870.00	0.00022	

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
    VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
    VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
564419.75	4186870.00	0.00023
564429.75	4186870.00	0.00025
564439.75	4186870.00	0.00028
564449.75	4186870.00	0.00030
564459.75	4186870.00	0.00033
564469.75	4186870.00	0.00036
564479.75	4186870.00	0.00041
564489.75	4186870.00	0.00046
564499.75	4186870.00	0.00052
564509.75	4186870.00	0.00059
564519.75	4186870.00	0.00069
564529.75	4186870.00	0.00081
564589.75	4186870.00	0.01306
564599.75	4186870.00	0.01098
564609.75	4186870.00	0.00936
564619.75	4186870.00	0.00814
564629.75	4186870.00	0.00731
564639.75	4186870.00	0.00678
564649.75	4186870.00	0.00644
564659.75	4186870.00	0.00616
564669.75	4186870.00	0.00589
564679.75	4186870.00	0.00560



564689.75	4186870.00	0.00530
564699.75	4186870.00	0.00501
564709.75	4186870.00	0.00473
564719.75	4186870.00	0.00447
564729.75	4186870.00	0.00423
564739.75	4186870.00	0.00401
564749.75	4186870.00	0.00380
564759.75	4186870.00	0.00362
564769.75	4186870.00	0.00344
564779.75	4186870.00	0.00328
564789.75	4186870.00	0.00313
564799.75	4186870.00	0.00299
564809.75	4186870.00	0.00285
564819.75	4186870.00	0.00273
564829.75	4186870.00	0.00261
564839.75	4186870.00	0.00250
564849.75	4186870.00	0.00240
564859.75	4186870.00	0.00230
564869.75	4186870.00	0.00220
564879.75	4186870.00	0.00211
564889.75	4186870.00	0.00202
564899.75	4186870.00	0.00194
564909.75	4186870.00	0.00186
564919.75	4186870.00	0.00179
564929.75	4186870.00	0.00172
564939.75	4186870.00	0.00165
564949.75	4186870.00	0.00158
564349.75	4186880.00	0.00013
564359.75	4186880.00	0.00014
564369.75	4186880.00	0.00016
564379.75	4186880.00	0.00017
564389.75	4186880.00	0.00018
564399.75	4186880.00	0.00020
564409.75	4186880.00	0.00021
564419.75	4186880.00	0.00023
564429.75	4186880.00	0.00025
564439.75	4186880.00	0.00028
564449.75	4186880.00	0.00030
564459.75	4186880.00	0.00034
564469.75	4186880.00	0.00037
564479.75	4186880.00	0.00041
564489.75	4186880.00	0.00047
564499.75	4186880.00	0.00054
564509.75	4186880.00	0.00063
564519.75	4186880.00	0.00074
564529.75	4186880.00	0.00091
564599.75	4186880.00	0.01273
564609.75	4186880.00	0.01076
564619.75	4186880.00	0.00935
564629.75	4186880.00	0.00847
564639.75	4186880.00	0.00800
564649.75	4186880.00	0.00767

	564659.75	4186880.00	0.00732
564669.75	4186880.00	0.00689	
	564679.75	4186880.00	0.00643
564689.75	4186880.00	0.00599	
	564699.75	4186880.00	0.00558
564709.75	4186880.00	0.00521	

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
    VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
    VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M**3			** CONC OF PM_10    IN
			**
X-COORD (M)	Y-COORD (M)	CONC	
564719.75	4186880.00	0.00488	
564729.75	4186880.00	0.00458	
564739.75	4186880.00	0.00431	
564749.75	4186880.00	0.00407	
564759.75	4186880.00	0.00385	
564769.75	4186880.00	0.00365	
564779.75	4186880.00	0.00347	
564789.75	4186880.00	0.00330	
564799.75	4186880.00	0.00314	
564809.75	4186880.00	0.00299	
564819.75	4186880.00	0.00286	
564829.75	4186880.00	0.00273	
564839.75	4186880.00	0.00260	
564849.75	4186880.00	0.00249	
564859.75	4186880.00	0.00238	
564869.75	4186880.00	0.00228	
564879.75	4186880.00	0.00218	
564889.75	4186880.00	0.00209	
564899.75	4186880.00	0.00200	
564909.75	4186880.00	0.00191	
564919.75	4186880.00	0.00183	
564929.75	4186880.00	0.00175	

564939.75	4186880.00	0.00168
564949.75	4186880.00	0.00161
564349.75	4186890.00	0.00013
564359.75	4186890.00	0.00014
564369.75	4186890.00	0.00015
564379.75	4186890.00	0.00017
564389.75	4186890.00	0.00018
564399.75	4186890.00	0.00020
564409.75	4186890.00	0.00021
564419.75	4186890.00	0.00023
564429.75	4186890.00	0.00025
564439.75	4186890.00	0.00028
564449.75	4186890.00	0.00031
564459.75	4186890.00	0.00034
564469.75	4186890.00	0.00038
564479.75	4186890.00	0.00043
564489.75	4186890.00	0.00048
564499.75	4186890.00	0.00056
564509.75	4186890.00	0.00066
564519.75	4186890.00	0.00082
564529.75	4186890.00	0.00107
564599.75	4186890.00	0.01431
564609.75	4186890.00	0.01211
564619.75	4186890.00	0.01069
564629.75	4186890.00	0.01003
564639.75	4186890.00	0.00979
564649.75	4186890.00	0.00941
564659.75	4186890.00	0.00875
564669.75	4186890.00	0.00800
564679.75	4186890.00	0.00730
564689.75	4186890.00	0.00667
564699.75	4186890.00	0.00614
564709.75	4186890.00	0.00567
564719.75	4186890.00	0.00527
564729.75	4186890.00	0.00492
564739.75	4186890.00	0.00460
564749.75	4186890.00	0.00433
564759.75	4186890.00	0.00408
564769.75	4186890.00	0.00385
564779.75	4186890.00	0.00365
564789.75	4186890.00	0.00346
564799.75	4186890.00	0.00329
564809.75	4186890.00	0.00313
564819.75	4186890.00	0.00298
564829.75	4186890.00	0.00283
564839.75	4186890.00	0.00270
564849.75	4186890.00	0.00258
564859.75	4186890.00	0.00246
564869.75	4186890.00	0.00235
564879.75	4186890.00	0.00224
564889.75	4186890.00	0.00214
564899.75	4186890.00	0.00205

	564909.75	4186890.00	0.00195
564919.75	4186890.00	0.00187	
	564929.75	4186890.00	0.00179
564939.75	4186890.00	0.00171	
	564949.75	4186890.00	0.00163
564349.75	4186900.00	0.00013	

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
    VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
    VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
564359.75	4186900.00	0.00014
564369.75	4186900.00	0.00015
564379.75	4186900.00	0.00016
564389.75	4186900.00	0.00018
564399.75	4186900.00	0.00019
564409.75	4186900.00	0.00021
564419.75	4186900.00	0.00023
564429.75	4186900.00	0.00025
564439.75	4186900.00	0.00028
564449.75	4186900.00	0.00031
564459.75	4186900.00	0.00035
564469.75	4186900.00	0.00039
564479.75	4186900.00	0.00044
564489.75	4186900.00	0.00051
564499.75	4186900.00	0.00060
564509.75	4186900.00	0.00072
564519.75	4186900.00	0.00092
564529.75	4186900.00	0.00127
564639.75	4186900.00	0.01250
564649.75	4186900.00	0.01148
564659.75	4186900.00	0.01017
564669.75	4186900.00	0.00902

564679.75	4186900.00	0.00806
564689.75	4186900.00	0.00728
564699.75	4186900.00	0.00664
564709.75	4186900.00	0.00609
564719.75	4186900.00	0.00563
564729.75	4186900.00	0.00523
564739.75	4186900.00	0.00488
564749.75	4186900.00	0.00457
564759.75	4186900.00	0.00430
564769.75	4186900.00	0.00405
564779.75	4186900.00	0.00382
564789.75	4186900.00	0.00362
564799.75	4186900.00	0.00343
564809.75	4186900.00	0.00325
564819.75	4186900.00	0.00309
564829.75	4186900.00	0.00294
564839.75	4186900.00	0.00280
564849.75	4186900.00	0.00266
564859.75	4186900.00	0.00253
564869.75	4186900.00	0.00241
564879.75	4186900.00	0.00230
564889.75	4186900.00	0.00219
564899.75	4186900.00	0.00209
564909.75	4186900.00	0.00199
564919.75	4186900.00	0.00190
564929.75	4186900.00	0.00182
564939.75	4186900.00	0.00173
564949.75	4186900.00	0.00166
564349.75	4186910.00	0.00012
564359.75	4186910.00	0.00013
564369.75	4186910.00	0.00015
564379.75	4186910.00	0.00016
564389.75	4186910.00	0.00017
564399.75	4186910.00	0.00019
564409.75	4186910.00	0.00021
564419.75	4186910.00	0.00023
564429.75	4186910.00	0.00025
564439.75	4186910.00	0.00028
564449.75	4186910.00	0.00032
564459.75	4186910.00	0.00035
564469.75	4186910.00	0.00040
564479.75	4186910.00	0.00046
564489.75	4186910.00	0.00054
564499.75	4186910.00	0.00065
564509.75	4186910.00	0.00080
564519.75	4186910.00	0.00105
564529.75	4186910.00	0.00148
564639.75	4186910.00	0.01446
564649.75	4186910.00	0.01287
564659.75	4186910.00	0.01118
564669.75	4186910.00	0.00980
564679.75	4186910.00	0.00870

	564689.75	4186910.00	0.00782
564699.75	4186910.00	0.00709	
	564709.75	4186910.00	0.00649
564719.75	4186910.00	0.00597	
	564729.75	4186910.00	0.00553
564739.75	4186910.00	0.00514	



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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
    VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
    VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
564749.75	4186910.00	0.00481
564759.75	4186910.00	0.00451
564769.75	4186910.00	0.00424
564779.75	4186910.00	0.00399
564789.75	4186910.00	0.00377
564799.75	4186910.00	0.00357
564809.75	4186910.00	0.00338
564819.75	4186910.00	0.00320
564829.75	4186910.00	0.00304
564839.75	4186910.00	0.00289
564849.75	4186910.00	0.00274
564859.75	4186910.00	0.00261
564869.75	4186910.00	0.00248
564879.75	4186910.00	0.00236
564889.75	4186910.00	0.00224
564899.75	4186910.00	0.00213
564909.75	4186910.00	0.00203
564919.75	4186910.00	0.00193
564929.75	4186910.00	0.00184
564939.75	4186910.00	0.00175
564949.75	4186910.00	0.00167
564349.75	4186920.00	0.00012

564359.75	4186920.00	0.00013
564369.75	4186920.00	0.00014
564379.75	4186920.00	0.00016
564389.75	4186920.00	0.00017
564399.75	4186920.00	0.00019
564409.75	4186920.00	0.00021
564419.75	4186920.00	0.00023
564429.75	4186920.00	0.00026
564439.75	4186920.00	0.00029
564449.75	4186920.00	0.00032
564459.75	4186920.00	0.00037
564469.75	4186920.00	0.00042
564479.75	4186920.00	0.00049
564489.75	4186920.00	0.00058
564499.75	4186920.00	0.00071
564509.75	4186920.00	0.00089
564519.75	4186920.00	0.00119
564529.75	4186920.00	0.00167
564649.75	4186920.00	0.01373
564659.75	4186920.00	0.01194
564669.75	4186920.00	0.01047
564679.75	4186920.00	0.00929
564689.75	4186920.00	0.00833
564699.75	4186920.00	0.00753
564709.75	4186920.00	0.00687
564719.75	4186920.00	0.00630
564729.75	4186920.00	0.00582
564739.75	4186920.00	0.00540
564749.75	4186920.00	0.00503
564759.75	4186920.00	0.00471
564769.75	4186920.00	0.00442
564779.75	4186920.00	0.00416
564789.75	4186920.00	0.00392
564799.75	4186920.00	0.00371
564809.75	4186920.00	0.00350
564819.75	4186920.00	0.00332
564829.75	4186920.00	0.00314
564839.75	4186920.00	0.00297
564849.75	4186920.00	0.00282
564859.75	4186920.00	0.00267
564869.75	4186920.00	0.00254
564879.75	4186920.00	0.00241
564889.75	4186920.00	0.00228
564899.75	4186920.00	0.00217
564909.75	4186920.00	0.00206
564919.75	4186920.00	0.00196
564929.75	4186920.00	0.00186
564939.75	4186920.00	0.00177
564949.75	4186920.00	0.00168
564349.75	4186930.00	0.00012
564359.75	4186930.00	0.00013
564369.75	4186930.00	0.00014

	564379.75	4186930.00	0.00015
564389.75	4186930.00	0.00017	
	564399.75	4186930.00	0.00019
564409.75	4186930.00	0.00021	
	564419.75	4186930.00	0.00023
564429.75	4186930.00	0.00026	

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
    VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
    VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
564439.75	4186930.00	0.00029
564449.75	4186930.00	0.00033
564459.75	4186930.00	0.00038
564469.75	4186930.00	0.00044
564479.75	4186930.00	0.00052
564489.75	4186930.00	0.00063
564499.75	4186930.00	0.00077
564509.75	4186930.00	0.00098
564519.75	4186930.00	0.00130
564529.75	4186930.00	0.00179
564649.75	4186930.00	0.01444
564659.75	4186930.00	0.01267
564669.75	4186930.00	0.01117
564679.75	4186930.00	0.00991
564689.75	4186930.00	0.00886
564699.75	4186930.00	0.00798
564709.75	4186930.00	0.00724
564719.75	4186930.00	0.00662
564729.75	4186930.00	0.00610
564739.75	4186930.00	0.00565
564749.75	4186930.00	0.00526
564759.75	4186930.00	0.00491

564769.75	4186930.00	0.00461
564779.75	4186930.00	0.00433
564789.75	4186930.00	0.00408
564799.75	4186930.00	0.00384
564809.75	4186930.00	0.00363
564819.75	4186930.00	0.00343
564829.75	4186930.00	0.00324
564839.75	4186930.00	0.00306
564849.75	4186930.00	0.00289
564859.75	4186930.00	0.00274
564869.75	4186930.00	0.00259
564879.75	4186930.00	0.00245
564889.75	4186930.00	0.00232
564899.75	4186930.00	0.00220
564909.75	4186930.00	0.00208
564919.75	4186930.00	0.00197
564929.75	4186930.00	0.00187
564939.75	4186930.00	0.00178
564949.75	4186930.00	0.00169
564349.75	4186940.00	0.00011
564359.75	4186940.00	0.00012
564369.75	4186940.00	0.00014
564379.75	4186940.00	0.00015
564389.75	4186940.00	0.00017
564399.75	4186940.00	0.00019
564409.75	4186940.00	0.00021
564419.75	4186940.00	0.00024
564429.75	4186940.00	0.00027
564439.75	4186940.00	0.00030
564449.75	4186940.00	0.00034
564459.75	4186940.00	0.00040
564469.75	4186940.00	0.00046
564479.75	4186940.00	0.00055
564489.75	4186940.00	0.00067
564499.75	4186940.00	0.00083
564509.75	4186940.00	0.00105
564519.75	4186940.00	0.00138
564529.75	4186940.00	0.00186
564539.75	4186940.00	0.00255
564649.75	4186940.00	0.01523
564659.75	4186940.00	0.01358
564669.75	4186940.00	0.01199
564679.75	4186940.00	0.01058
564689.75	4186940.00	0.00938
564699.75	4186940.00	0.00840
564709.75	4186940.00	0.00759
564719.75	4186940.00	0.00693
564729.75	4186940.00	0.00637
564739.75	4186940.00	0.00589
564749.75	4186940.00	0.00548
564759.75	4186940.00	0.00512
564769.75	4186940.00	0.00480

	564779.75	4186940.00	0.00450
564789.75	4186940.00	0.00423	
	564799.75	4186940.00	0.00398
564809.75	4186940.00	0.00375	
	564819.75	4186940.00	0.00353
564829.75	4186940.00	0.00333	

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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* THE ANNUAL ( 1 YRS) AVERAGE  
CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
INCLUDING SOURCE(S):  
A0000001, A0000002, A0000003, A0000004, A0000005, VOL1 , VOL2  
,  
, VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8  
, VOL9 , VOL10 , VOL11 , VOL12 , VOL13 , VOL14 ,  
, VOL15 , VOL16 , VOL17 , VOL18 , VOL19 , VOL20  
, VOL21 , VOL22 , VOL23 , VOL24 , VOL25 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
\*\*

X-COORD (M)	Y-COORD (M)	CONC
564839.75	4186940.00	0.00314
564849.75	4186940.00	0.00296
564859.75	4186940.00	0.00279
564869.75	4186940.00	0.00264
564879.75	4186940.00	0.00249
564889.75	4186940.00	0.00235
564899.75	4186940.00	0.00222
564909.75	4186940.00	0.00210
564919.75	4186940.00	0.00198
564929.75	4186940.00	0.00188
564939.75	4186940.00	0.00178
564949.75	4186940.00	0.00168
564349.75	4186950.00	0.00011
564359.75	4186950.00	0.00012
564369.75	4186950.00	0.00014
564379.75	4186950.00	0.00015
564389.75	4186950.00	0.00017
564399.75	4186950.00	0.00019
564409.75	4186950.00	0.00021
564419.75	4186950.00	0.00024
564429.75	4186950.00	0.00027
564439.75	4186950.00	0.00031

564449.75	4186950.00	0.00036
564459.75	4186950.00	0.00042
564469.75	4186950.00	0.00049
564479.75	4186950.00	0.00058
564489.75	4186950.00	0.00071
564499.75	4186950.00	0.00088
564509.75	4186950.00	0.00111
564519.75	4186950.00	0.00144
564529.75	4186950.00	0.00190
564539.75	4186950.00	0.00258
564649.75	4186950.00	0.01656
564659.75	4186950.00	0.01475
564669.75	4186950.00	0.01281
564679.75	4186950.00	0.01116
564689.75	4186950.00	0.00983
564699.75	4186950.00	0.00876
564709.75	4186950.00	0.00791
564719.75	4186950.00	0.00721
564729.75	4186950.00	0.00663
564739.75	4186950.00	0.00614
564749.75	4186950.00	0.00571
564759.75	4186950.00	0.00533
564769.75	4186950.00	0.00499
564779.75	4186950.00	0.00468
564789.75	4186950.00	0.00440
564799.75	4186950.00	0.00413
564809.75	4186950.00	0.00388
564819.75	4186950.00	0.00364
564829.75	4186950.00	0.00342
564839.75	4186950.00	0.00322
564849.75	4186950.00	0.00302
564859.75	4186950.00	0.00284
564869.75	4186950.00	0.00268
564879.75	4186950.00	0.00252
564889.75	4186950.00	0.00237
564899.75	4186950.00	0.00223
564909.75	4186950.00	0.00211
564919.75	4186950.00	0.00199
564929.75	4186950.00	0.00187
564939.75	4186950.00	0.00177
564949.75	4186950.00	0.00167
564349.75	4186960.00	0.00011
564359.75	4186960.00	0.00012
564369.75	4186960.00	0.00013
564379.75	4186960.00	0.00015
564389.75	4186960.00	0.00017
564399.75	4186960.00	0.00019
564409.75	4186960.00	0.00022
564419.75	4186960.00	0.00024
564429.75	4186960.00	0.00028
564439.75	4186960.00	0.00032
564449.75	4186960.00	0.00037



	564459.75	4186960.00	0.00043
564469.75	4186960.00	0.00051	
	564479.75	4186960.00	0.00061
564489.75	4186960.00	0.00075	
	564499.75	4186960.00	0.00092
564509.75	4186960.00	0.00116	

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
    VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
    VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
564519.75	4186960.00	0.00149
564529.75	4186960.00	0.00195
564539.75	4186960.00	0.00261
564649.75	4186960.00	0.01767
564659.75	4186960.00	0.01554
564669.75	4186960.00	0.01335
564679.75	4186960.00	0.01157
564689.75	4186960.00	0.01016
564699.75	4186960.00	0.00906
564709.75	4186960.00	0.00819
564719.75	4186960.00	0.00748
564729.75	4186960.00	0.00690
564739.75	4186960.00	0.00640
564749.75	4186960.00	0.00596
564759.75	4186960.00	0.00557
564769.75	4186960.00	0.00521
564779.75	4186960.00	0.00488
564789.75	4186960.00	0.00457
564799.75	4186960.00	0.00428
564809.75	4186960.00	0.00401
564819.75	4186960.00	0.00375
564829.75	4186960.00	0.00351

564839.75	4186960.00	0.00329
564849.75	4186960.00	0.00308
564859.75	4186960.00	0.00289
564869.75	4186960.00	0.00270
564879.75	4186960.00	0.00254
564889.75	4186960.00	0.00238
564899.75	4186960.00	0.00224
564909.75	4186960.00	0.00210
564919.75	4186960.00	0.00198
564929.75	4186960.00	0.00186
564939.75	4186960.00	0.00176
564949.75	4186960.00	0.00166
564349.75	4186970.00	0.00011
564359.75	4186970.00	0.00012
564369.75	4186970.00	0.00013
564379.75	4186970.00	0.00015
564389.75	4186970.00	0.00017
564399.75	4186970.00	0.00019
564409.75	4186970.00	0.00022
564419.75	4186970.00	0.00025
564429.75	4186970.00	0.00029
564439.75	4186970.00	0.00033
564449.75	4186970.00	0.00039
564459.75	4186970.00	0.00045
564469.75	4186970.00	0.00054
564479.75	4186970.00	0.00064
564489.75	4186970.00	0.00078
564499.75	4186970.00	0.00096
564509.75	4186970.00	0.00120
564519.75	4186970.00	0.00153
564529.75	4186970.00	0.00198
564539.75	4186970.00	0.00260
564659.75	4186970.00	0.01593
564669.75	4186970.00	0.01368
564679.75	4186970.00	0.01186
564689.75	4186970.00	0.01044
564699.75	4186970.00	0.00934
564709.75	4186970.00	0.00847
564719.75	4186970.00	0.00778
564729.75	4186970.00	0.00720
564739.75	4186970.00	0.00670
564749.75	4186970.00	0.00625
564759.75	4186970.00	0.00584
564769.75	4186970.00	0.00546
564779.75	4186970.00	0.00510
564789.75	4186970.00	0.00476
564799.75	4186970.00	0.00443
564809.75	4186970.00	0.00413
564819.75	4186970.00	0.00385
564829.75	4186970.00	0.00359
564839.75	4186970.00	0.00335
564849.75	4186970.00	0.00312

	564859.75	4186970.00	0.00291
564869.75	4186970.00	0.00272	
	564879.75	4186970.00	0.00254
564889.75	4186970.00	0.00238	
	564899.75	4186970.00	0.00223
564909.75	4186970.00	0.00209	

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\*\*MODELOPTs:

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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* THE ANNUAL ( 1 YRS) AVERAGE  
CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
INCLUDING SOURCE(S):  
A0000001, A0000002, A0000003, A0000004, A0000005, VOL1 , VOL2  
,  
VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8  
, VOL9 , VOL10 , VOL11 , VOL12 , VOL13 , VOL14 ,  
VOL15 , VOL16 , VOL17 , VOL18 , VOL19 , VOL20  
, VOL21 , VOL22 , VOL23 , VOL24 , VOL25 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
\*\*

X-COORD (M)	Y-COORD (M)	CONC
564919.75	4186970.00	0.00196
564929.75	4186970.00	0.00184
564939.75	4186970.00	0.00173
564949.75	4186970.00	0.00163
564349.75	4186980.00	0.00011
564359.75	4186980.00	0.00012
564369.75	4186980.00	0.00013
564379.75	4186980.00	0.00015
564389.75	4186980.00	0.00017
564399.75	4186980.00	0.00019
564409.75	4186980.00	0.00022
564419.75	4186980.00	0.00026
564429.75	4186980.00	0.00030
564439.75	4186980.00	0.00034
564449.75	4186980.00	0.00040
564459.75	4186980.00	0.00047
564469.75	4186980.00	0.00056
564479.75	4186980.00	0.00067
564489.75	4186980.00	0.00081
564499.75	4186980.00	0.00099
564509.75	4186980.00	0.00123
564519.75	4186980.00	0.00154

564529.75	4186980.00	0.00197
564539.75	4186980.00	0.00256
564549.75	4186980.00	0.00335
564659.75	4186980.00	0.01615
564669.75	4186980.00	0.01393
564679.75	4186980.00	0.01212
564689.75	4186980.00	0.01072
564699.75	4186980.00	0.00965
564709.75	4186980.00	0.00882
564719.75	4186980.00	0.00815
564729.75	4186980.00	0.00758
564739.75	4186980.00	0.00707
564749.75	4186980.00	0.00660
564759.75	4186980.00	0.00616
564769.75	4186980.00	0.00573
564779.75	4186980.00	0.00533
564789.75	4186980.00	0.00495
564799.75	4186980.00	0.00459
564809.75	4186980.00	0.00425
564819.75	4186980.00	0.00394
564829.75	4186980.00	0.00365
564839.75	4186980.00	0.00339
564849.75	4186980.00	0.00315
564859.75	4186980.00	0.00292
564869.75	4186980.00	0.00272
564879.75	4186980.00	0.00253
564889.75	4186980.00	0.00236
564899.75	4186980.00	0.00221
564909.75	4186980.00	0.00206
564919.75	4186980.00	0.00193
564929.75	4186980.00	0.00181
564939.75	4186980.00	0.00170
564949.75	4186980.00	0.00160
564349.75	4186990.00	0.00011
564359.75	4186990.00	0.00012
564369.75	4186990.00	0.00014
564379.75	4186990.00	0.00015
564389.75	4186990.00	0.00017
564399.75	4186990.00	0.00020
564409.75	4186990.00	0.00023
564419.75	4186990.00	0.00026
564429.75	4186990.00	0.00030
564439.75	4186990.00	0.00035
564449.75	4186990.00	0.00041
564459.75	4186990.00	0.00049
564469.75	4186990.00	0.00058
564479.75	4186990.00	0.00069
564489.75	4186990.00	0.00083
564499.75	4186990.00	0.00101
564509.75	4186990.00	0.00125
564519.75	4186990.00	0.00155
564529.75	4186990.00	0.00196

	564539.75	4186990.00	0.00251
564549.75	4186990.00	0.00326	
	564659.75	4186990.00	0.01638
564669.75	4186990.00	0.01418	
	564679.75	4186990.00	0.01241
564689.75	4186990.00	0.01107	

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\*\*MODELOPTs:

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

                                 \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*

                                 INCLUDING SOURCE(S):

A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
                                  VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
                                  VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
564699.75	4186990.00	0.01006
564709.75	4186990.00	0.00929
564719.75	4186990.00	0.00866
564729.75	4186990.00	0.00809
564739.75	4186990.00	0.00756
564749.75	4186990.00	0.00704
564759.75	4186990.00	0.00653
564769.75	4186990.00	0.00604
564779.75	4186990.00	0.00558
564789.75	4186990.00	0.00514
564799.75	4186990.00	0.00473
564809.75	4186990.00	0.00435
564819.75	4186990.00	0.00401
564829.75	4186990.00	0.00369
564839.75	4186990.00	0.00341
564849.75	4186990.00	0.00315
564859.75	4186990.00	0.00291
564869.75	4186990.00	0.00270
564879.75	4186990.00	0.00250
564889.75	4186990.00	0.00233
564899.75	4186990.00	0.00217
564909.75	4186990.00	0.00202



564919.75	4186990.00	0.00189
564929.75	4186990.00	0.00177
564939.75	4186990.00	0.00166
564949.75	4186990.00	0.00156
564349.75	4187000.00	0.00011
564359.75	4187000.00	0.00012
564369.75	4187000.00	0.00014
564379.75	4187000.00	0.00016
564389.75	4187000.00	0.00018
564399.75	4187000.00	0.00020
564409.75	4187000.00	0.00023
564419.75	4187000.00	0.00027
564429.75	4187000.00	0.00031
564439.75	4187000.00	0.00036
564449.75	4187000.00	0.00042
564459.75	4187000.00	0.00050
564469.75	4187000.00	0.00059
564479.75	4187000.00	0.00071
564489.75	4187000.00	0.00085
564499.75	4187000.00	0.00103
564509.75	4187000.00	0.00126
564519.75	4187000.00	0.00156
564529.75	4187000.00	0.00195
564539.75	4187000.00	0.00247
564549.75	4187000.00	0.00321
564659.75	4187000.00	0.01664
564669.75	4187000.00	0.01447
564679.75	4187000.00	0.01279
564689.75	4187000.00	0.01157
564699.75	4187000.00	0.01069
564709.75	4187000.00	0.01000
564719.75	4187000.00	0.00940
564729.75	4187000.00	0.00880
564739.75	4187000.00	0.00818
564749.75	4187000.00	0.00756
564759.75	4187000.00	0.00695
564769.75	4187000.00	0.00636
564779.75	4187000.00	0.00581
564789.75	4187000.00	0.00530
564799.75	4187000.00	0.00484
564809.75	4187000.00	0.00442
564819.75	4187000.00	0.00404
564829.75	4187000.00	0.00370
564839.75	4187000.00	0.00339
564849.75	4187000.00	0.00312
564859.75	4187000.00	0.00287
564869.75	4187000.00	0.00265
564879.75	4187000.00	0.00245
564889.75	4187000.00	0.00227
564899.75	4187000.00	0.00211
564909.75	4187000.00	0.00197
564919.75	4187000.00	0.00184

	564929.75	4187000.00	0.00172
564939.75	4187000.00	0.00161	
	564949.75	4187000.00	0.00151
564349.75	4187010.00	0.00011	
	564359.75	4187010.00	0.00013
564369.75	4187010.00	0.00014	

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
CONCENTRATION    VALUES FOR SOURCE GROUP: ALL                    \*\*\*  
   INCLUDING SOURCE(S):  
A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
,  
   VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
, VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
   VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
, VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
564379.75	4187010.00	0.00016
564389.75	4187010.00	0.00018
564399.75	4187010.00	0.00021
564409.75	4187010.00	0.00024
564419.75	4187010.00	0.00027
564429.75	4187010.00	0.00032
564439.75	4187010.00	0.00037
564449.75	4187010.00	0.00043
564459.75	4187010.00	0.00051
564469.75	4187010.00	0.00061
564479.75	4187010.00	0.00072
564489.75	4187010.00	0.00087
564499.75	4187010.00	0.00105
564509.75	4187010.00	0.00128
564519.75	4187010.00	0.00157
564529.75	4187010.00	0.00195
564539.75	4187010.00	0.00246
564549.75	4187010.00	0.00317
564659.75	4187010.00	0.01696
564669.75	4187010.00	0.01491
564679.75	4187010.00	0.01344
564689.75	4187010.00	0.01244

	564699.75	4187010.00	0.01174
564709.75	4187010.00	0.01114	
	564719.75	4187010.00	0.01049
564729.75	4187010.00	0.00975	
	564739.75	4187010.00	0.00895
564749.75	4187010.00	0.00814	
	564759.75	4187010.00	0.00737
564769.75	4187010.00	0.00665	
	564779.75	4187010.00	0.00600
564789.75	4187010.00	0.00541	
	564799.75	4187010.00	0.00489
564809.75	4187010.00	0.00442	
	564819.75	4187010.00	0.00401
564829.75	4187010.00	0.00365	
	564839.75	4187010.00	0.00333
564849.75	4187010.00	0.00305	
	564859.75	4187010.00	0.00280
564869.75	4187010.00	0.00258	
	564879.75	4187010.00	0.00238
564889.75	4187010.00	0.00220	
	564899.75	4187010.00	0.00204
564909.75	4187010.00	0.00190	
	564919.75	4187010.00	0.00177
564929.75	4187010.00	0.00166	
	564939.75	4187010.00	0.00155
564949.75	4187010.00	0.00145	
	564349.75	4187020.00	0.00012
564359.75	4187020.00	0.00013	
	564369.75	4187020.00	0.00015
564379.75	4187020.00	0.00016	
	564389.75	4187020.00	0.00019
564399.75	4187020.00	0.00021	
	564409.75	4187020.00	0.00024
564419.75	4187020.00	0.00028	
	564429.75	4187020.00	0.00032
564439.75	4187020.00	0.00037	
	564449.75	4187020.00	0.00044
564459.75	4187020.00	0.00052	
	564469.75	4187020.00	0.00061
564479.75	4187020.00	0.00073	
	564489.75	4187020.00	0.00088
564499.75	4187020.00	0.00106	
	564509.75	4187020.00	0.00129
564519.75	4187020.00	0.00158	
	564529.75	4187020.00	0.00195
564539.75	4187020.00	0.00244	
	564549.75	4187020.00	0.00311
564669.75	4187020.00	0.01577	
	564679.75	4187020.00	0.01473
564689.75	4187020.00	0.01407	
	564699.75	4187020.00	0.01358
564709.75	4187020.00	0.01293	

	564719.75	4187020.00	0.01200
564729.75	4187020.00	0.01091	
	564739.75	4187020.00	0.00978
564749.75	4187020.00	0.00870	
	564759.75	4187020.00	0.00771
564769.75	4187020.00	0.00684	



564389.75	4187030.00	0.00019
564399.75	4187030.00	0.00022
564409.75	4187030.00	0.00025
564419.75	4187030.00	0.00028
564429.75	4187030.00	0.00033
564439.75	4187030.00	0.00038
564449.75	4187030.00	0.00045
564459.75	4187030.00	0.00052
564469.75	4187030.00	0.00062
564479.75	4187030.00	0.00074
564489.75	4187030.00	0.00088
564499.75	4187030.00	0.00106
564509.75	4187030.00	0.00129
564519.75	4187030.00	0.00158
564529.75	4187030.00	0.00195
564539.75	4187030.00	0.00242
564549.75	4187030.00	0.00304
564559.75	4187030.00	0.00389
564669.75	4187030.00	0.01753
564679.75	4187030.00	0.01709
564689.75	4187030.00	0.01679
564709.75	4187030.00	0.01524
564719.75	4187030.00	0.01370
564729.75	4187030.00	0.01204
564739.75	4187030.00	0.01046
564749.75	4187030.00	0.00906
564759.75	4187030.00	0.00787
564769.75	4187030.00	0.00687
564779.75	4187030.00	0.00602
564789.75	4187030.00	0.00531
564799.75	4187030.00	0.00472
564809.75	4187030.00	0.00421
564819.75	4187030.00	0.00378
564829.75	4187030.00	0.00341
564839.75	4187030.00	0.00309
564849.75	4187030.00	0.00282
564859.75	4187030.00	0.00258
564869.75	4187030.00	0.00237
564879.75	4187030.00	0.00218
564889.75	4187030.00	0.00201
564899.75	4187030.00	0.00187
564909.75	4187030.00	0.00174
564919.75	4187030.00	0.00162
564929.75	4187030.00	0.00151
564939.75	4187030.00	0.00142
564949.75	4187030.00	0.00133
564349.75	4187040.00	0.00013
564359.75	4187040.00	0.00014
564369.75	4187040.00	0.00016
564379.75	4187040.00	0.00018
564389.75	4187040.00	0.00020
564399.75	4187040.00	0.00022

	564409.75	4187040.00	0.00025
564419.75	4187040.00	0.00029	
	564429.75	4187040.00	0.00034
564439.75	4187040.00	0.00039	
	564449.75	4187040.00	0.00045
564459.75	4187040.00	0.00053	



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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
    VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
    VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
564469.75	4187040.00	0.00062
564479.75	4187040.00	0.00074
564489.75	4187040.00	0.00088
564499.75	4187040.00	0.00106
564509.75	4187040.00	0.00128
564519.75	4187040.00	0.00157
564529.75	4187040.00	0.00193
564539.75	4187040.00	0.00239
564549.75	4187040.00	0.00299
564559.75	4187040.00	0.00381
564709.75	4187040.00	0.01740
564719.75	4187040.00	0.01515
564729.75	4187040.00	0.01279
564739.75	4187040.00	0.01076
564749.75	4187040.00	0.00910
564759.75	4187040.00	0.00776
564769.75	4187040.00	0.00668
564779.75	4187040.00	0.00580
564789.75	4187040.00	0.00508
564799.75	4187040.00	0.00449
564809.75	4187040.00	0.00399
564819.75	4187040.00	0.00358

564829.75	4187040.00	0.00322
564839.75	4187040.00	0.00292
564849.75	4187040.00	0.00266
564859.75	4187040.00	0.00243
564869.75	4187040.00	0.00223
564879.75	4187040.00	0.00206
564889.75	4187040.00	0.00191
564899.75	4187040.00	0.00177
564909.75	4187040.00	0.00164
564919.75	4187040.00	0.00153
564929.75	4187040.00	0.00144
564939.75	4187040.00	0.00135
564949.75	4187040.00	0.00126
564349.75	4187050.00	0.00013
564359.75	4187050.00	0.00014
564369.75	4187050.00	0.00016
564379.75	4187050.00	0.00018
564389.75	4187050.00	0.00020
564399.75	4187050.00	0.00023
564409.75	4187050.00	0.00026
564419.75	4187050.00	0.00030
564429.75	4187050.00	0.00034
564439.75	4187050.00	0.00039
564449.75	4187050.00	0.00046
564459.75	4187050.00	0.00053
564469.75	4187050.00	0.00063
564479.75	4187050.00	0.00074
564489.75	4187050.00	0.00088
564499.75	4187050.00	0.00105
564509.75	4187050.00	0.00127
564519.75	4187050.00	0.00154
564529.75	4187050.00	0.00189
564539.75	4187050.00	0.00234
564549.75	4187050.00	0.00295
564559.75	4187050.00	0.00380
564709.75	4187050.00	0.01857
564719.75	4187050.00	0.01567
564729.75	4187050.00	0.01282
564739.75	4187050.00	0.01052
564749.75	4187050.00	0.00873
564759.75	4187050.00	0.00735
564769.75	4187050.00	0.00628
564779.75	4187050.00	0.00543
564789.75	4187050.00	0.00474
564799.75	4187050.00	0.00418
564809.75	4187050.00	0.00372
564819.75	4187050.00	0.00333
564829.75	4187050.00	0.00301
564839.75	4187050.00	0.00273
564849.75	4187050.00	0.00249
564859.75	4187050.00	0.00228
564869.75	4187050.00	0.00210

	564879.75	4187050.00	0.00193
564889.75	4187050.00	0.00179	
	564899.75	4187050.00	0.00166
564909.75	4187050.00	0.00155	
	564919.75	4187050.00	0.00145
564929.75	4187050.00	0.00136	

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

                                 \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
                                  INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
                                  VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
                                  VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

			** CONC OF PM <sub>10</sub> IN
MICROGRAMS/M**3			**
X-COORD (M)	Y-COORD (M)	CONC	
564939.75	4187050.00	0.00127	
564949.75	4187050.00	0.00120	
564349.75	4187060.00	0.00014	
564359.75	4187060.00	0.00015	
564369.75	4187060.00	0.00017	
564379.75	4187060.00	0.00019	
564389.75	4187060.00	0.00021	
564399.75	4187060.00	0.00024	
564409.75	4187060.00	0.00027	
564419.75	4187060.00	0.00031	
564429.75	4187060.00	0.00035	
564439.75	4187060.00	0.00040	
564449.75	4187060.00	0.00046	
564459.75	4187060.00	0.00054	
564469.75	4187060.00	0.00063	
564479.75	4187060.00	0.00074	
564489.75	4187060.00	0.00087	
564499.75	4187060.00	0.00104	
564509.75	4187060.00	0.00125	
564519.75	4187060.00	0.00151	
564529.75	4187060.00	0.00184	
564539.75	4187060.00	0.00227	

564549.75	4187060.00	0.00286
564559.75	4187060.00	0.00374
564719.75	4187060.00	0.01510
564729.75	4187060.00	0.01207
564739.75	4187060.00	0.00974
564749.75	4187060.00	0.00801
564759.75	4187060.00	0.00672
564769.75	4187060.00	0.00573
564779.75	4187060.00	0.00495
564789.75	4187060.00	0.00433
564799.75	4187060.00	0.00383
564809.75	4187060.00	0.00342
564819.75	4187060.00	0.00307
564829.75	4187060.00	0.00278
564839.75	4187060.00	0.00253
564849.75	4187060.00	0.00231
564859.75	4187060.00	0.00212
564869.75	4187060.00	0.00195
564879.75	4187060.00	0.00181
564889.75	4187060.00	0.00168
564899.75	4187060.00	0.00156
564909.75	4187060.00	0.00146
564919.75	4187060.00	0.00137
564929.75	4187060.00	0.00128
564939.75	4187060.00	0.00121
564949.75	4187060.00	0.00114
564349.75	4187070.00	0.00014
564359.75	4187070.00	0.00016
564369.75	4187070.00	0.00017
564379.75	4187070.00	0.00019
564389.75	4187070.00	0.00022
564399.75	4187070.00	0.00024
564409.75	4187070.00	0.00028
564419.75	4187070.00	0.00031
564429.75	4187070.00	0.00036
564439.75	4187070.00	0.00041
564449.75	4187070.00	0.00047
564459.75	4187070.00	0.00054
564469.75	4187070.00	0.00063
564479.75	4187070.00	0.00074
564489.75	4187070.00	0.00087
564499.75	4187070.00	0.00103
564509.75	4187070.00	0.00123
564519.75	4187070.00	0.00148
564529.75	4187070.00	0.00180
564539.75	4187070.00	0.00224
564549.75	4187070.00	0.00286
564559.75	4187070.00	0.00401
564719.75	4187070.00	0.01336
564729.75	4187070.00	0.01056
564739.75	4187070.00	0.00853
564749.75	4187070.00	0.00705

	564759.75	4187070.00	0.00595
564769.75	4187070.00	0.00511	
	564779.75	4187070.00	0.00444
564789.75	4187070.00	0.00391	
	564799.75	4187070.00	0.00347
564809.75	4187070.00	0.00311	



564429.75	4187080.00	0.00037
564439.75	4187080.00	0.00042
564449.75	4187080.00	0.00048
564459.75	4187080.00	0.00055
564469.75	4187080.00	0.00063
564479.75	4187080.00	0.00074
564489.75	4187080.00	0.00086
564499.75	4187080.00	0.00102
564509.75	4187080.00	0.00121
564519.75	4187080.00	0.00146
564529.75	4187080.00	0.00179
564539.75	4187080.00	0.00223
564549.75	4187080.00	0.00292
564559.75	4187080.00	0.00416
564719.75	4187080.00	0.01074
564729.75	4187080.00	0.00869
564739.75	4187080.00	0.00718
564749.75	4187080.00	0.00605
564759.75	4187080.00	0.00518
564769.75	4187080.00	0.00450
564779.75	4187080.00	0.00395
564789.75	4187080.00	0.00351
564799.75	4187080.00	0.00314
564809.75	4187080.00	0.00283
564819.75	4187080.00	0.00256
564829.75	4187080.00	0.00234
564839.75	4187080.00	0.00214
564849.75	4187080.00	0.00197
564859.75	4187080.00	0.00182
564869.75	4187080.00	0.00169
564879.75	4187080.00	0.00157
564889.75	4187080.00	0.00147
564899.75	4187080.00	0.00137
564909.75	4187080.00	0.00129
564919.75	4187080.00	0.00121
564929.75	4187080.00	0.00114
564939.75	4187080.00	0.00108
564949.75	4187080.00	0.00102
564349.75	4187090.00	0.00015
564359.75	4187090.00	0.00017
564369.75	4187090.00	0.00019
564379.75	4187090.00	0.00021
564389.75	4187090.00	0.00023
564399.75	4187090.00	0.00026
564409.75	4187090.00	0.00029
564419.75	4187090.00	0.00033
564429.75	4187090.00	0.00038
564439.75	4187090.00	0.00043
564449.75	4187090.00	0.00049
564459.75	4187090.00	0.00056
564469.75	4187090.00	0.00064
564479.75	4187090.00	0.00074



	564489.75	4187090.00	0.00087
564499.75	4187090.00	0.00102	
	564509.75	4187090.00	0.00121
564519.75	4187090.00	0.00145	
	564529.75	4187090.00	0.00178
564539.75	4187090.00	0.00224	

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\*\*MODELOPTs:

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\*\*\* THE ANNUAL ( 1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL      \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
                  VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
                  VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3                                \*\*

X-COORD (M)	Y-COORD (M)	CONC
564549.75	4187090.00	0.00293
564559.75	4187090.00	0.00408
564699.75	4187090.00	0.01232
564709.75	4187090.00	0.01018
564719.75	4187090.00	0.00844
564729.75	4187090.00	0.00707
564739.75	4187090.00	0.00600
564749.75	4187090.00	0.00516
564759.75	4187090.00	0.00449
564769.75	4187090.00	0.00395
564779.75	4187090.00	0.00351
564789.75	4187090.00	0.00314
564799.75	4187090.00	0.00283
564809.75	4187090.00	0.00257
564819.75	4187090.00	0.00234
564829.75	4187090.00	0.00215
564839.75	4187090.00	0.00197
564849.75	4187090.00	0.00182
564859.75	4187090.00	0.00169
564869.75	4187090.00	0.00157
564879.75	4187090.00	0.00147
564889.75	4187090.00	0.00137

	564899.75	4187090.00	0.00129
564909.75	4187090.00	0.00121	
	564919.75	4187090.00	0.00114
564929.75	4187090.00	0.00108	
	564939.75	4187090.00	0.00102
564949.75	4187090.00	0.00096	
	564349.75	4187100.00	0.00016
564359.75	4187100.00	0.00018	
	564369.75	4187100.00	0.00019
564379.75	4187100.00	0.00022	
	564389.75	4187100.00	0.00024
564399.75	4187100.00	0.00027	
	564409.75	4187100.00	0.00030
564419.75	4187100.00	0.00034	
	564429.75	4187100.00	0.00039
564439.75	4187100.00	0.00044	
	564449.75	4187100.00	0.00050
564459.75	4187100.00	0.00057	
	564469.75	4187100.00	0.00065
564479.75	4187100.00	0.00075	
	564489.75	4187100.00	0.00087
564499.75	4187100.00	0.00102	
	564509.75	4187100.00	0.00121
564519.75	4187100.00	0.00145	
	564529.75	4187100.00	0.00177
564539.75	4187100.00	0.00222	
	564549.75	4187100.00	0.00289
564559.75	4187100.00	0.00392	
	564569.75	4187100.00	0.00571
564689.75	4187100.00	0.01101	
	564699.75	4187100.00	0.00933
564709.75	4187100.00	0.00788	
	564719.75	4187100.00	0.00671
564729.75	4187100.00	0.00578	
	564739.75	4187100.00	0.00503
564749.75	4187100.00	0.00441	
	564759.75	4187100.00	0.00390
564769.75	4187100.00	0.00348	
	564779.75	4187100.00	0.00312
564789.75	4187100.00	0.00282	
	564799.75	4187100.00	0.00256
564809.75	4187100.00	0.00234	
	564819.75	4187100.00	0.00214
564829.75	4187100.00	0.00197	
	564839.75	4187100.00	0.00182
564849.75	4187100.00	0.00169	
	564859.75	4187100.00	0.00157
564869.75	4187100.00	0.00147	
	564879.75	4187100.00	0.00137
564889.75	4187100.00	0.00129	
	564899.75	4187100.00	0.00121
564909.75	4187100.00	0.00114	

	564919.75	4187100.00	0.00108
564929.75	4187100.00	0.00102	
	564939.75	4187100.00	0.00097
564949.75	4187100.00	0.00092	
	564349.75	4187110.00	0.00017
564359.75	4187110.00	0.00018	



564699.75	4187110.00	0.00722
564709.75	4187110.00	0.00627
564719.75	4187110.00	0.00546
564729.75	4187110.00	0.00480
564739.75	4187110.00	0.00425
564749.75	4187110.00	0.00379
564759.75	4187110.00	0.00340
564769.75	4187110.00	0.00307
564779.75	4187110.00	0.00278
564789.75	4187110.00	0.00253
564799.75	4187110.00	0.00232
564809.75	4187110.00	0.00213
564819.75	4187110.00	0.00196
564829.75	4187110.00	0.00182
564839.75	4187110.00	0.00169
564849.75	4187110.00	0.00157
564859.75	4187110.00	0.00147
564869.75	4187110.00	0.00137
564879.75	4187110.00	0.00129
564889.75	4187110.00	0.00121
564899.75	4187110.00	0.00114
564909.75	4187110.00	0.00108
564919.75	4187110.00	0.00102
564929.75	4187110.00	0.00097
564939.75	4187110.00	0.00092
564949.75	4187110.00	0.00087
564349.75	4187120.00	0.00017
564359.75	4187120.00	0.00019
564369.75	4187120.00	0.00021
564379.75	4187120.00	0.00023
564389.75	4187120.00	0.00026
564399.75	4187120.00	0.00029
564409.75	4187120.00	0.00032
564419.75	4187120.00	0.00036
564429.75	4187120.00	0.00041
564439.75	4187120.00	0.00046
564449.75	4187120.00	0.00052
564459.75	4187120.00	0.00059
564469.75	4187120.00	0.00067
564479.75	4187120.00	0.00077
564489.75	4187120.00	0.00090
564499.75	4187120.00	0.00104
564509.75	4187120.00	0.00123
564519.75	4187120.00	0.00146
564529.75	4187120.00	0.00176
564539.75	4187120.00	0.00216
564549.75	4187120.00	0.00271
564559.75	4187120.00	0.00353
564569.75	4187120.00	0.00481
564639.75	4187120.00	0.00942
564649.75	4187120.00	0.00900
564659.75	4187120.00	0.00850

564669.75	4187120.00	0.00788
564679.75	4187120.00	0.00715
564689.75	4187120.00	0.00643
564699.75	4187120.00	0.00574
564709.75	4187120.00	0.00511
564719.75	4187120.00	0.00454

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\*\*MODELOPTs:

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
    VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
    VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

			** CONC OF PM <sub>10</sub> IN
MICROGRAMS/M**3			**
X-COORD (M)	Y-COORD (M)	CONC	
564729.75	4187120.00	0.00405	
564739.75	4187120.00	0.00364	
564749.75	4187120.00	0.00329	
564759.75	4187120.00	0.00298	
564769.75	4187120.00	0.00272	
564779.75	4187120.00	0.00249	
564789.75	4187120.00	0.00228	
564799.75	4187120.00	0.00210	
564809.75	4187120.00	0.00195	
564819.75	4187120.00	0.00180	
564829.75	4187120.00	0.00168	
564839.75	4187120.00	0.00156	
564849.75	4187120.00	0.00146	
564859.75	4187120.00	0.00137	
564869.75	4187120.00	0.00128	
564879.75	4187120.00	0.00121	
564889.75	4187120.00	0.00114	
564899.75	4187120.00	0.00108	
564909.75	4187120.00	0.00102	
564919.75	4187120.00	0.00096	
564929.75	4187120.00	0.00092	
564939.75	4187120.00	0.00087	



	564949.75	4187120.00	0.00083
564349.75	4187130.00	0.00018	
	564359.75	4187130.00	0.00020
564369.75	4187130.00	0.00022	
	564379.75	4187130.00	0.00024
564389.75	4187130.00	0.00027	
	564399.75	4187130.00	0.00030
564409.75	4187130.00	0.00033	
	564419.75	4187130.00	0.00037
564429.75	4187130.00	0.00042	
	564439.75	4187130.00	0.00047
564449.75	4187130.00	0.00053	
	564459.75	4187130.00	0.00060
564469.75	4187130.00	0.00069	
	564479.75	4187130.00	0.00079
564489.75	4187130.00	0.00091	
	564499.75	4187130.00	0.00105
564509.75	4187130.00	0.00123	
	564519.75	4187130.00	0.00146
564529.75	4187130.00	0.00175	
	564539.75	4187130.00	0.00212
564549.75	4187130.00	0.00263	
	564559.75	4187130.00	0.00334
564569.75	4187130.00	0.00441	
	564609.75	4187130.00	0.00769
564619.75	4187130.00	0.00758	
	564629.75	4187130.00	0.00744
564639.75	4187130.00	0.00721	
	564649.75	4187130.00	0.00694
564659.75	4187130.00	0.00660	
	564669.75	4187130.00	0.00616
564679.75	4187130.00	0.00567	
	564689.75	4187130.00	0.00516
564699.75	4187130.00	0.00468	
	564709.75	4187130.00	0.00424
564719.75	4187130.00	0.00383	
	564729.75	4187130.00	0.00346
564739.75	4187130.00	0.00315	
	564749.75	4187130.00	0.00288
564759.75	4187130.00	0.00263	
	564769.75	4187130.00	0.00242
564779.75	4187130.00	0.00223	
	564789.75	4187130.00	0.00206
564799.75	4187130.00	0.00191	
	564809.75	4187130.00	0.00178
564819.75	4187130.00	0.00166	
	564829.75	4187130.00	0.00155
564839.75	4187130.00	0.00145	
	564849.75	4187130.00	0.00136
564859.75	4187130.00	0.00128	
	564869.75	4187130.00	0.00120
564879.75	4187130.00	0.00114	

	564889.75	4187130.00	0.00107
564899.75	4187130.00	0.00102	
	564909.75	4187130.00	0.00096
564919.75	4187130.00	0.00091	
	564929.75	4187130.00	0.00087
564939.75	4187130.00	0.00083	



564559.75	4187140.00	0.00316
564569.75	4187140.00	0.00402
564609.75	4187140.00	0.00591
564619.75	4187140.00	0.00593
564629.75	4187140.00	0.00586
564639.75	4187140.00	0.00572
564649.75	4187140.00	0.00552
564659.75	4187140.00	0.00527
564669.75	4187140.00	0.00496
564679.75	4187140.00	0.00461
564689.75	4187140.00	0.00425
564699.75	4187140.00	0.00390
564709.75	4187140.00	0.00357
564719.75	4187140.00	0.00327
564729.75	4187140.00	0.00299
564739.75	4187140.00	0.00275
564749.75	4187140.00	0.00253
564759.75	4187140.00	0.00234
564769.75	4187140.00	0.00217
564779.75	4187140.00	0.00201
564789.75	4187140.00	0.00187
564799.75	4187140.00	0.00174
564809.75	4187140.00	0.00163
564819.75	4187140.00	0.00153
564829.75	4187140.00	0.00143
564839.75	4187140.00	0.00135
564849.75	4187140.00	0.00127
564859.75	4187140.00	0.00120
564869.75	4187140.00	0.00113
564879.75	4187140.00	0.00107
564889.75	4187140.00	0.00101
564899.75	4187140.00	0.00096
564909.75	4187140.00	0.00091
564919.75	4187140.00	0.00087
564929.75	4187140.00	0.00083
564939.75	4187140.00	0.00079
564949.75	4187140.00	0.00075
564349.75	4187150.00	0.00019
564359.75	4187150.00	0.00021
564369.75	4187150.00	0.00023
564379.75	4187150.00	0.00026
564389.75	4187150.00	0.00029
564399.75	4187150.00	0.00032
564409.75	4187150.00	0.00035
564419.75	4187150.00	0.00039
564429.75	4187150.00	0.00044
564439.75	4187150.00	0.00049
564449.75	4187150.00	0.00055
564459.75	4187150.00	0.00062
564469.75	4187150.00	0.00071
564479.75	4187150.00	0.00081
564489.75	4187150.00	0.00092

	564499.75	4187150.00	0.00106
564509.75	4187150.00	0.00123	
	564519.75	4187150.00	0.00144
564529.75	4187150.00	0.00169	
	564539.75	4187150.00	0.00201
564549.75	4187150.00	0.00241	



564779.75	4187150.00	0.00182
564789.75	4187150.00	0.00170
564799.75	4187150.00	0.00159
564809.75	4187150.00	0.00149
564819.75	4187150.00	0.00141
564829.75	4187150.00	0.00132
564839.75	4187150.00	0.00125
564849.75	4187150.00	0.00118
564859.75	4187150.00	0.00112
564869.75	4187150.00	0.00106
564879.75	4187150.00	0.00100
564889.75	4187150.00	0.00095
564899.75	4187150.00	0.00091
564909.75	4187150.00	0.00086
564919.75	4187150.00	0.00082
564929.75	4187150.00	0.00079
564939.75	4187150.00	0.00075
564949.75	4187150.00	0.00072
564349.75	4187160.00	0.00020
564359.75	4187160.00	0.00022
564369.75	4187160.00	0.00024
564379.75	4187160.00	0.00027
564389.75	4187160.00	0.00030
564399.75	4187160.00	0.00033
564409.75	4187160.00	0.00036
564419.75	4187160.00	0.00040
564429.75	4187160.00	0.00045
564439.75	4187160.00	0.00050
564449.75	4187160.00	0.00056
564459.75	4187160.00	0.00063
564469.75	4187160.00	0.00071
564479.75	4187160.00	0.00081
564489.75	4187160.00	0.00092
564499.75	4187160.00	0.00106
564509.75	4187160.00	0.00122
564519.75	4187160.00	0.00141
564529.75	4187160.00	0.00164
564539.75	4187160.00	0.00192
564549.75	4187160.00	0.00225
564559.75	4187160.00	0.00264
564569.75	4187160.00	0.00305
564579.75	4187160.00	0.00342
564589.75	4187160.00	0.00368
564599.75	4187160.00	0.00380
564609.75	4187160.00	0.00389
564619.75	4187160.00	0.00393
564629.75	4187160.00	0.00392
564639.75	4187160.00	0.00386
564649.75	4187160.00	0.00375
564659.75	4187160.00	0.00360
564669.75	4187160.00	0.00343
564679.75	4187160.00	0.00324

	564689.75	4187160.00	0.00303
564699.75	4187160.00	0.00283	
	564709.75	4187160.00	0.00264
564719.75	4187160.00	0.00246	
	564729.75	4187160.00	0.00229
564739.75	4187160.00	0.00214	



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\*\*MODELOPTs:

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
    VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
    VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
564749.75	4187160.00	0.00200
564759.75	4187160.00	0.00187
564769.75	4187160.00	0.00175
564779.75	4187160.00	0.00165
564789.75	4187160.00	0.00155
564799.75	4187160.00	0.00146
564809.75	4187160.00	0.00137
564819.75	4187160.00	0.00130
564829.75	4187160.00	0.00123
564839.75	4187160.00	0.00116
564849.75	4187160.00	0.00110
564859.75	4187160.00	0.00104
564869.75	4187160.00	0.00099
564879.75	4187160.00	0.00094
564889.75	4187160.00	0.00090
564899.75	4187160.00	0.00086
564909.75	4187160.00	0.00082
564919.75	4187160.00	0.00078
564929.75	4187160.00	0.00075
564939.75	4187160.00	0.00071
564949.75	4187160.00	0.00068
564349.75	4187170.00	0.00021

564359.75	4187170.00	0.00023
564369.75	4187170.00	0.00025
564379.75	4187170.00	0.00028
564389.75	4187170.00	0.00030
564399.75	4187170.00	0.00033
564409.75	4187170.00	0.00037
564419.75	4187170.00	0.00041
564429.75	4187170.00	0.00046
564439.75	4187170.00	0.00051
564449.75	4187170.00	0.00057
564459.75	4187170.00	0.00064
564469.75	4187170.00	0.00072
564479.75	4187170.00	0.00081
564489.75	4187170.00	0.00092
564499.75	4187170.00	0.00105
564509.75	4187170.00	0.00119
564519.75	4187170.00	0.00137
564529.75	4187170.00	0.00157
564539.75	4187170.00	0.00181
564549.75	4187170.00	0.00208
564559.75	4187170.00	0.00238
564569.75	4187170.00	0.00267
564579.75	4187170.00	0.00291
564589.75	4187170.00	0.00311
564599.75	4187170.00	0.00322
564609.75	4187170.00	0.00328
564619.75	4187170.00	0.00332
564629.75	4187170.00	0.00331
564639.75	4187170.00	0.00326
564649.75	4187170.00	0.00318
564659.75	4187170.00	0.00306
564669.75	4187170.00	0.00293
564679.75	4187170.00	0.00278
564689.75	4187170.00	0.00262
564699.75	4187170.00	0.00246
564709.75	4187170.00	0.00231
564719.75	4187170.00	0.00217
564729.75	4187170.00	0.00203
564739.75	4187170.00	0.00190
564749.75	4187170.00	0.00179
564759.75	4187170.00	0.00168
564769.75	4187170.00	0.00159
564779.75	4187170.00	0.00150
564789.75	4187170.00	0.00141
564799.75	4187170.00	0.00133
564809.75	4187170.00	0.00126
564819.75	4187170.00	0.00120
564829.75	4187170.00	0.00113
564839.75	4187170.00	0.00108
564849.75	4187170.00	0.00103
564859.75	4187170.00	0.00098
564869.75	4187170.00	0.00093

	564879.75	4187170.00	0.00089
564889.75	4187170.00	0.00085	
	564899.75	4187170.00	0.00081
564909.75	4187170.00	0.00077	
	564919.75	4187170.00	0.00074
564929.75	4187170.00	0.00071	

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
    VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
    VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
564939.75	4187170.00	0.00068
564949.75	4187170.00	0.00065
564349.75	4187180.00	0.00021
564359.75	4187180.00	0.00023
564369.75	4187180.00	0.00026
564379.75	4187180.00	0.00028
564389.75	4187180.00	0.00031
564399.75	4187180.00	0.00034
564409.75	4187180.00	0.00038
564419.75	4187180.00	0.00042
564429.75	4187180.00	0.00046
564439.75	4187180.00	0.00051
564449.75	4187180.00	0.00057
564459.75	4187180.00	0.00064
564469.75	4187180.00	0.00072
564479.75	4187180.00	0.00080
564489.75	4187180.00	0.00091
564499.75	4187180.00	0.00103
564509.75	4187180.00	0.00116
564519.75	4187180.00	0.00132
564529.75	4187180.00	0.00149
564539.75	4187180.00	0.00169

564549.75	4187180.00	0.00191
564559.75	4187180.00	0.00214
564569.75	4187180.00	0.00235
564579.75	4187180.00	0.00252
564589.75	4187180.00	0.00267
564599.75	4187180.00	0.00277
564609.75	4187180.00	0.00281
564619.75	4187180.00	0.00284
564629.75	4187180.00	0.00284
564639.75	4187180.00	0.00280
564649.75	4187180.00	0.00273
564659.75	4187180.00	0.00264
564669.75	4187180.00	0.00253
564679.75	4187180.00	0.00241
564689.75	4187180.00	0.00228
564699.75	4187180.00	0.00216
564709.75	4187180.00	0.00204
564719.75	4187180.00	0.00192
564729.75	4187180.00	0.00181
564739.75	4187180.00	0.00171
564749.75	4187180.00	0.00161
564759.75	4187180.00	0.00152
564769.75	4187180.00	0.00144
564779.75	4187180.00	0.00136
564789.75	4187180.00	0.00129
564799.75	4187180.00	0.00123
564809.75	4187180.00	0.00116
564819.75	4187180.00	0.00111
564829.75	4187180.00	0.00105
564839.75	4187180.00	0.00100
564849.75	4187180.00	0.00096
564859.75	4187180.00	0.00091
564869.75	4187180.00	0.00087
564879.75	4187180.00	0.00083
564889.75	4187180.00	0.00080
564899.75	4187180.00	0.00076
564909.75	4187180.00	0.00073
564919.75	4187180.00	0.00070
564929.75	4187180.00	0.00067
564939.75	4187180.00	0.00065
564949.75	4187180.00	0.00062
564349.75	4187190.00	0.00022
564359.75	4187190.00	0.00024
564369.75	4187190.00	0.00026
564379.75	4187190.00	0.00029
564389.75	4187190.00	0.00032
564399.75	4187190.00	0.00035
564409.75	4187190.00	0.00038
564419.75	4187190.00	0.00042
564429.75	4187190.00	0.00047
564439.75	4187190.00	0.00052
564449.75	4187190.00	0.00057

	564459.75	4187190.00	0.00064
564469.75	4187190.00	0.00071	
	564479.75	4187190.00	0.00079
564489.75	4187190.00	0.00089	
	564499.75	4187190.00	0.00100
564509.75	4187190.00	0.00112	

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
    VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
    VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
564519.75	4187190.00	0.00126
564529.75	4187190.00	0.00141
564539.75	4187190.00	0.00158
564549.75	4187190.00	0.00176
564559.75	4187190.00	0.00193
564569.75	4187190.00	0.00209
564579.75	4187190.00	0.00222
564589.75	4187190.00	0.00233
564599.75	4187190.00	0.00242
564609.75	4187190.00	0.00245
564619.75	4187190.00	0.00247
564629.75	4187190.00	0.00247
564639.75	4187190.00	0.00244
564649.75	4187190.00	0.00238
564659.75	4187190.00	0.00230
564669.75	4187190.00	0.00221
564679.75	4187190.00	0.00211
564689.75	4187190.00	0.00201
564699.75	4187190.00	0.00191
564709.75	4187190.00	0.00181
564719.75	4187190.00	0.00172
564729.75	4187190.00	0.00162

564739.75	4187190.00	0.00154
564749.75	4187190.00	0.00146
564759.75	4187190.00	0.00138
564769.75	4187190.00	0.00131
564779.75	4187190.00	0.00125
564789.75	4187190.00	0.00119
564799.75	4187190.00	0.00113
564809.75	4187190.00	0.00107
564819.75	4187190.00	0.00102
564829.75	4187190.00	0.00098
564839.75	4187190.00	0.00093
564849.75	4187190.00	0.00089
564859.75	4187190.00	0.00085
564869.75	4187190.00	0.00082
564879.75	4187190.00	0.00078
564889.75	4187190.00	0.00075
564899.75	4187190.00	0.00072
564909.75	4187190.00	0.00069
564919.75	4187190.00	0.00067
564929.75	4187190.00	0.00064
564939.75	4187190.00	0.00062
564949.75	4187190.00	0.00059
564349.75	4187200.00	0.00023
564359.75	4187200.00	0.00025
564369.75	4187200.00	0.00027
564379.75	4187200.00	0.00029
564389.75	4187200.00	0.00032
564399.75	4187200.00	0.00035
564409.75	4187200.00	0.00039
564419.75	4187200.00	0.00042
564429.75	4187200.00	0.00047
564439.75	4187200.00	0.00052
564449.75	4187200.00	0.00057
564459.75	4187200.00	0.00063
564469.75	4187200.00	0.00070
564479.75	4187200.00	0.00078
564489.75	4187200.00	0.00087
564499.75	4187200.00	0.00097
564509.75	4187200.00	0.00108
564519.75	4187200.00	0.00120
564529.75	4187200.00	0.00133
564539.75	4187200.00	0.00147
564549.75	4187200.00	0.00161
564559.75	4187200.00	0.00175
564569.75	4187200.00	0.00187
564579.75	4187200.00	0.00197
564589.75	4187200.00	0.00206
564599.75	4187200.00	0.00213
564609.75	4187200.00	0.00216
564619.75	4187200.00	0.00217
564629.75	4187200.00	0.00216
564639.75	4187200.00	0.00214



	564649.75	4187200.00	0.00209
564659.75	4187200.00	0.00203	
	564669.75	4187200.00	0.00195
564679.75	4187200.00	0.00187	
	564689.75	4187200.00	0.00179
564699.75	4187200.00	0.00170	

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CONC

URBAN FLAT FLGPOL DFAULT

NOCMPL

\*\*\* THE ANNUAL ( 1 YRS) AVERAGE  
CONCENTRATION VALUES FOR SOURCE GROUP: ALL \*\*\*  
INCLUDING SOURCE(S):  
A0000001, A0000002, A0000003, A0000004, A0000005, VOL1 , VOL2  
,  
VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8  
, VOL9 , VOL10 , VOL11 , VOL12 , VOL13 , VOL14 ,  
VOL15 , VOL16 , VOL17 , VOL18 , VOL19 , VOL20  
, VOL21 , VOL22 , VOL23 , VOL24 , VOL25 , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

MICROGRAMS/M\*\*3 \*\* CONC OF PM\_10 IN  
\*\*

X-COORD (M)	Y-COORD (M)	CONC
564709.75	4187200.00	0.00162
564719.75	4187200.00	0.00154
564729.75	4187200.00	0.00147
564739.75	4187200.00	0.00139
564749.75	4187200.00	0.00132
564759.75	4187200.00	0.00126
564769.75	4187200.00	0.00120
564779.75	4187200.00	0.00115
564789.75	4187200.00	0.00109
564799.75	4187200.00	0.00104
564809.75	4187200.00	0.00100
564819.75	4187200.00	0.00095
564829.75	4187200.00	0.00091
564839.75	4187200.00	0.00087
564849.75	4187200.00	0.00083
564859.75	4187200.00	0.00080
564869.75	4187200.00	0.00077
564879.75	4187200.00	0.00074
564889.75	4187200.00	0.00071
564899.75	4187200.00	0.00068
564909.75	4187200.00	0.00065
564919.75	4187200.00	0.00063

564929.75	4187200.00	0.00061
564939.75	4187200.00	0.00059
564949.75	4187200.00	0.00056
564349.75	4187210.00	0.00023
564359.75	4187210.00	0.00025
564369.75	4187210.00	0.00027
564379.75	4187210.00	0.00030
564389.75	4187210.00	0.00032
564399.75	4187210.00	0.00035
564409.75	4187210.00	0.00039
564419.75	4187210.00	0.00042
564429.75	4187210.00	0.00047
564439.75	4187210.00	0.00051
564449.75	4187210.00	0.00057
564459.75	4187210.00	0.00062
564469.75	4187210.00	0.00069
564479.75	4187210.00	0.00076
564489.75	4187210.00	0.00084
564499.75	4187210.00	0.00093
564509.75	4187210.00	0.00103
564519.75	4187210.00	0.00113
564529.75	4187210.00	0.00125
564539.75	4187210.00	0.00137
564549.75	4187210.00	0.00148
564559.75	4187210.00	0.00159
564569.75	4187210.00	0.00169
564579.75	4187210.00	0.00177
564589.75	4187210.00	0.00183
564599.75	4187210.00	0.00189
564609.75	4187210.00	0.00191
564619.75	4187210.00	0.00192
564629.75	4187210.00	0.00192
564639.75	4187210.00	0.00190
564649.75	4187210.00	0.00186
564659.75	4187210.00	0.00180
564669.75	4187210.00	0.00174
564679.75	4187210.00	0.00167
564689.75	4187210.00	0.00160
564699.75	4187210.00	0.00153
564709.75	4187210.00	0.00146
564719.75	4187210.00	0.00139
564729.75	4187210.00	0.00133
564739.75	4187210.00	0.00127
564749.75	4187210.00	0.00121
564759.75	4187210.00	0.00115
564769.75	4187210.00	0.00110
564779.75	4187210.00	0.00106
564789.75	4187210.00	0.00101
564799.75	4187210.00	0.00097
564809.75	4187210.00	0.00092
564819.75	4187210.00	0.00088
564829.75	4187210.00	0.00085

	564839.75	4187210.00	0.00081
564849.75	4187210.00	0.00078	
	564859.75	4187210.00	0.00075
564869.75	4187210.00	0.00072	
	564879.75	4187210.00	0.00069
564889.75	4187210.00	0.00067	

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

\*\*\* THE ANNUAL (    1 YRS) AVERAGE

CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*

INCLUDING SOURCE(S):

A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2

,

      VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8

, VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,

      VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20

, VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

\*\* CONC OF PM<sub>10</sub>        IN

MICROGRAMS/M\*\*3

\*\*

X-COORD (M)	Y-COORD (M)	CONC
564899.75	4187210.00	0.00064
564909.75	4187210.00	0.00062
564919.75	4187210.00	0.00060
564929.75	4187210.00	0.00058
564939.75	4187210.00	0.00056
564949.75	4187210.00	0.00054
564349.75	4187220.00	0.00023
564359.75	4187220.00	0.00025
564369.75	4187220.00	0.00028
564379.75	4187220.00	0.00030
564389.75	4187220.00	0.00033
564399.75	4187220.00	0.00036
564409.75	4187220.00	0.00039
564419.75	4187220.00	0.00042
564429.75	4187220.00	0.00046
564439.75	4187220.00	0.00051
564449.75	4187220.00	0.00056
564459.75	4187220.00	0.00061
564469.75	4187220.00	0.00068
564479.75	4187220.00	0.00074
564489.75	4187220.00	0.00082
564499.75	4187220.00	0.00090

564509.75	4187220.00	0.00098
564519.75	4187220.00	0.00107
564529.75	4187220.00	0.00117
564539.75	4187220.00	0.00127
564549.75	4187220.00	0.00137
564559.75	4187220.00	0.00146
564569.75	4187220.00	0.00153
564579.75	4187220.00	0.00159
564589.75	4187220.00	0.00165
564599.75	4187220.00	0.00169
564609.75	4187220.00	0.00171
564619.75	4187220.00	0.00172
564629.75	4187220.00	0.00171
564639.75	4187220.00	0.00169
564649.75	4187220.00	0.00166
564659.75	4187220.00	0.00162
564669.75	4187220.00	0.00156
564679.75	4187220.00	0.00151
564689.75	4187220.00	0.00145
564699.75	4187220.00	0.00139
564709.75	4187220.00	0.00133
564719.75	4187220.00	0.00127
564729.75	4187220.00	0.00121
564739.75	4187220.00	0.00116
564749.75	4187220.00	0.00111
564759.75	4187220.00	0.00106
564769.75	4187220.00	0.00102
564779.75	4187220.00	0.00097
564789.75	4187220.00	0.00093
564799.75	4187220.00	0.00090
564809.75	4187220.00	0.00086
564819.75	4187220.00	0.00082
564829.75	4187220.00	0.00079
564839.75	4187220.00	0.00076
564849.75	4187220.00	0.00073
564859.75	4187220.00	0.00070
564869.75	4187220.00	0.00068
564879.75	4187220.00	0.00065
564889.75	4187220.00	0.00063
564899.75	4187220.00	0.00061
564909.75	4187220.00	0.00059
564919.75	4187220.00	0.00057
564929.75	4187220.00	0.00055
564939.75	4187220.00	0.00053
564949.75	4187220.00	0.00051
564349.75	4187230.00	0.00024
564359.75	4187230.00	0.00026
564369.75	4187230.00	0.00028
564379.75	4187230.00	0.00030
564389.75	4187230.00	0.00033
564399.75	4187230.00	0.00036
564409.75	4187230.00	0.00039

564419.75	4187230.00	0.00042
564429.75	4187230.00	0.00046
564439.75	4187230.00	0.00050
564449.75	4187230.00	0.00055
564459.75	4187230.00	0.00060
564469.75	4187230.00	0.00066

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\*\*MODELOPTs:

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
    VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
    VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
564479.75	4187230.00	0.00072
564489.75	4187230.00	0.00079
564499.75	4187230.00	0.00086
564509.75	4187230.00	0.00093
564519.75	4187230.00	0.00102
564529.75	4187230.00	0.00110
564539.75	4187230.00	0.00118
564549.75	4187230.00	0.00126
564559.75	4187230.00	0.00133
564569.75	4187230.00	0.00139
564579.75	4187230.00	0.00144
564589.75	4187230.00	0.00149
564599.75	4187230.00	0.00152
564609.75	4187230.00	0.00154
564619.75	4187230.00	0.00154
564629.75	4187230.00	0.00154
564639.75	4187230.00	0.00152
564649.75	4187230.00	0.00149
564659.75	4187230.00	0.00146
564669.75	4187230.00	0.00141
564679.75	4187230.00	0.00136
564689.75	4187230.00	0.00131



564699.75	4187230.00	0.00126
564709.75	4187230.00	0.00121
564719.75	4187230.00	0.00116
564729.75	4187230.00	0.00111
564739.75	4187230.00	0.00106
564749.75	4187230.00	0.00102
564759.75	4187230.00	0.00098
564769.75	4187230.00	0.00094
564779.75	4187230.00	0.00090
564789.75	4187230.00	0.00087
564799.75	4187230.00	0.00083
564809.75	4187230.00	0.00080
564819.75	4187230.00	0.00077
564829.75	4187230.00	0.00074
564839.75	4187230.00	0.00071
564849.75	4187230.00	0.00069
564859.75	4187230.00	0.00066
564869.75	4187230.00	0.00064
564879.75	4187230.00	0.00061
564889.75	4187230.00	0.00059
564899.75	4187230.00	0.00057
564909.75	4187230.00	0.00055
564919.75	4187230.00	0.00054
564929.75	4187230.00	0.00052
564939.75	4187230.00	0.00050
564949.75	4187230.00	0.00049
564349.75	4187240.00	0.00024
564359.75	4187240.00	0.00026
564369.75	4187240.00	0.00028
564379.75	4187240.00	0.00030
564389.75	4187240.00	0.00033
564399.75	4187240.00	0.00036
564409.75	4187240.00	0.00039
564419.75	4187240.00	0.00042
564429.75	4187240.00	0.00046
564439.75	4187240.00	0.00050
564449.75	4187240.00	0.00054
564459.75	4187240.00	0.00059
564469.75	4187240.00	0.00064
564479.75	4187240.00	0.00070
564489.75	4187240.00	0.00076
564499.75	4187240.00	0.00082
564509.75	4187240.00	0.00089
564519.75	4187240.00	0.00096
564529.75	4187240.00	0.00103
564539.75	4187240.00	0.00110
564549.75	4187240.00	0.00117
564559.75	4187240.00	0.00123
564569.75	4187240.00	0.00127
564579.75	4187240.00	0.00131
564589.75	4187240.00	0.00135
564599.75	4187240.00	0.00138

	564609.75	4187240.00	0.00139
564619.75	4187240.00	0.00140	
	564629.75	4187240.00	0.00139
564639.75	4187240.00	0.00137	
	564649.75	4187240.00	0.00135
564659.75	4187240.00	0.00132	

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\*\*MODELOPTs:

PAGE 239

CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
    VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
    VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
564669.75	4187240.00	0.00128
564679.75	4187240.00	0.00124
564689.75	4187240.00	0.00120
564699.75	4187240.00	0.00115
564709.75	4187240.00	0.00111
564719.75	4187240.00	0.00106
564729.75	4187240.00	0.00102
564739.75	4187240.00	0.00098
564749.75	4187240.00	0.00094
564759.75	4187240.00	0.00091
564769.75	4187240.00	0.00087
564779.75	4187240.00	0.00084
564789.75	4187240.00	0.00081
564799.75	4187240.00	0.00078
564809.75	4187240.00	0.00075
564819.75	4187240.00	0.00072
564829.75	4187240.00	0.00070
564839.75	4187240.00	0.00067
564849.75	4187240.00	0.00065
564859.75	4187240.00	0.00062
564869.75	4187240.00	0.00060
564879.75	4187240.00	0.00058

564889.75	4187240.00	0.00056
564899.75	4187240.00	0.00054
564909.75	4187240.00	0.00052
564919.75	4187240.00	0.00051
564929.75	4187240.00	0.00049
564939.75	4187240.00	0.00048
564949.75	4187240.00	0.00046
564349.75	4187250.00	0.00024
564359.75	4187250.00	0.00026
564369.75	4187250.00	0.00028
564379.75	4187250.00	0.00030
564389.75	4187250.00	0.00033
564399.75	4187250.00	0.00035
564409.75	4187250.00	0.00038
564419.75	4187250.00	0.00042
564429.75	4187250.00	0.00045
564439.75	4187250.00	0.00049
564449.75	4187250.00	0.00053
564459.75	4187250.00	0.00057
564469.75	4187250.00	0.00062
564479.75	4187250.00	0.00067
564489.75	4187250.00	0.00073
564499.75	4187250.00	0.00078
564509.75	4187250.00	0.00084
564519.75	4187250.00	0.00091
564529.75	4187250.00	0.00097
564539.75	4187250.00	0.00103
564549.75	4187250.00	0.00109
564559.75	4187250.00	0.00113
564569.75	4187250.00	0.00117
564579.75	4187250.00	0.00120
564589.75	4187250.00	0.00123
564599.75	4187250.00	0.00125
564609.75	4187250.00	0.00127
564619.75	4187250.00	0.00127
564629.75	4187250.00	0.00126
564639.75	4187250.00	0.00125
564649.75	4187250.00	0.00123
564659.75	4187250.00	0.00120
564669.75	4187250.00	0.00117
564679.75	4187250.00	0.00114
564689.75	4187250.00	0.00110
564699.75	4187250.00	0.00106
564709.75	4187250.00	0.00102
564719.75	4187250.00	0.00098
564729.75	4187250.00	0.00094
564739.75	4187250.00	0.00091
564749.75	4187250.00	0.00087
564759.75	4187250.00	0.00084
564769.75	4187250.00	0.00081
564779.75	4187250.00	0.00078
564789.75	4187250.00	0.00075

	564799.75	4187250.00	0.00073
564809.75	4187250.00	0.00070	
	564819.75	4187250.00	0.00068
564829.75	4187250.00	0.00065	
	564839.75	4187250.00	0.00063
564849.75	4187250.00	0.00061	

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\*\*MODELOPTs:

PAGE 240

CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
    VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
    VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
564859.75	4187250.00	0.00059
564869.75	4187250.00	0.00057
564879.75	4187250.00	0.00055
564889.75	4187250.00	0.00053
564899.75	4187250.00	0.00051
564909.75	4187250.00	0.00050
564919.75	4187250.00	0.00048
564929.75	4187250.00	0.00047
564939.75	4187250.00	0.00045
564949.75	4187250.00	0.00044
564349.75	4187260.00	0.00024
564359.75	4187260.00	0.00026
564369.75	4187260.00	0.00028
564379.75	4187260.00	0.00030
564389.75	4187260.00	0.00033
564399.75	4187260.00	0.00035
564409.75	4187260.00	0.00038
564419.75	4187260.00	0.00041
564429.75	4187260.00	0.00044
564439.75	4187260.00	0.00048
564449.75	4187260.00	0.00052
564459.75	4187260.00	0.00056

564469.75	4187260.00	0.00060
564479.75	4187260.00	0.00065
564489.75	4187260.00	0.00070
564499.75	4187260.00	0.00075
564509.75	4187260.00	0.00080
564519.75	4187260.00	0.00086
564529.75	4187260.00	0.00091
564539.75	4187260.00	0.00096
564549.75	4187260.00	0.00101
564559.75	4187260.00	0.00105
564569.75	4187260.00	0.00108
564579.75	4187260.00	0.00111
564589.75	4187260.00	0.00113
564599.75	4187260.00	0.00115
564609.75	4187260.00	0.00116
564619.75	4187260.00	0.00116
564629.75	4187260.00	0.00115
564639.75	4187260.00	0.00114
564649.75	4187260.00	0.00112
564659.75	4187260.00	0.00110
564669.75	4187260.00	0.00107
564679.75	4187260.00	0.00104
564689.75	4187260.00	0.00101
564699.75	4187260.00	0.00098
564709.75	4187260.00	0.00094
564719.75	4187260.00	0.00091
564729.75	4187260.00	0.00087
564739.75	4187260.00	0.00084
564749.75	4187260.00	0.00081
564759.75	4187260.00	0.00078
564769.75	4187260.00	0.00076
564779.75	4187260.00	0.00073
564789.75	4187260.00	0.00071
564799.75	4187260.00	0.00068
564809.75	4187260.00	0.00066
564819.75	4187260.00	0.00064
564829.75	4187260.00	0.00062
564839.75	4187260.00	0.00059
564849.75	4187260.00	0.00057
564859.75	4187260.00	0.00056
564869.75	4187260.00	0.00054
564879.75	4187260.00	0.00052
564889.75	4187260.00	0.00050
564899.75	4187260.00	0.00049
564909.75	4187260.00	0.00047
564919.75	4187260.00	0.00046
564929.75	4187260.00	0.00044
564939.75	4187260.00	0.00043
564949.75	4187260.00	0.00042
564349.75	4187270.00	0.00024
564359.75	4187270.00	0.00026
564369.75	4187270.00	0.00028

	564379.75	4187270.00	0.00030
564389.75	4187270.00	0.00032	
	564399.75	4187270.00	0.00035
564409.75	4187270.00	0.00037	
	564419.75	4187270.00	0.00040
564429.75	4187270.00	0.00043	



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\*\*MODELOPTs:

PAGE 241

CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1       , VOL2  
 ,  
                  VOL3       , VOL4       , VOL5       , VOL6       , VOL7       , VOL8  
 , VOL9       , VOL10       , VOL11       , VOL12       , VOL13       , VOL14       ,  
                  VOL15       , VOL16       , VOL17       , VOL18       , VOL19       , VOL20  
 , VOL21       , VOL22       , VOL23       , VOL24       , VOL25       , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10       IN  
 MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
564439.75	4187270.00	0.00047
564449.75	4187270.00	0.00050
564459.75	4187270.00	0.00054
564469.75	4187270.00	0.00058
564479.75	4187270.00	0.00062
564489.75	4187270.00	0.00067
564499.75	4187270.00	0.00072
564509.75	4187270.00	0.00076
564519.75	4187270.00	0.00081
564529.75	4187270.00	0.00086
564539.75	4187270.00	0.00090
564549.75	4187270.00	0.00094
564559.75	4187270.00	0.00097
564569.75	4187270.00	0.00100
564579.75	4187270.00	0.00102
564589.75	4187270.00	0.00104
564599.75	4187270.00	0.00105
564609.75	4187270.00	0.00106
564619.75	4187270.00	0.00106
564629.75	4187270.00	0.00106
564639.75	4187270.00	0.00105
564649.75	4187270.00	0.00103

564659.75	4187270.00	0.00101
564669.75	4187270.00	0.00099
564679.75	4187270.00	0.00096
564689.75	4187270.00	0.00093
564699.75	4187270.00	0.00090
564709.75	4187270.00	0.00087
564719.75	4187270.00	0.00084
564729.75	4187270.00	0.00081
564739.75	4187270.00	0.00078
564749.75	4187270.00	0.00076
564759.75	4187270.00	0.00073
564769.75	4187270.00	0.00071
564779.75	4187270.00	0.00068
564789.75	4187270.00	0.00066
564799.75	4187270.00	0.00064
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564619.75	4187280.00	0.00098	

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

   \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*  
    INCLUDING SOURCE(S):  
 A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
    VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
    VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3     \*\*

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CONC

URBAN FLAT    FLGPOL DFAULT

NOCMPL

                                 \*\*\* THE ANNUAL (    1 YRS) AVERAGE  
 CONCENTRATION    VALUES FOR SOURCE GROUP: ALL            \*\*\*

                                 INCLUDING SOURCE(S):

A0000001, A0000002, A0000003, A0000004, A0000005, VOL1        , VOL2  
 ,  
                                  VOL3        , VOL4        , VOL5        , VOL6        , VOL7        , VOL8  
 , VOL9        , VOL10        , VOL11        , VOL12        , VOL13        , VOL14        ,  
                                  VOL15        , VOL16        , VOL17        , VOL18        , VOL19        , VOL20  
 , VOL21        , VOL22        , VOL23        , VOL24        , VOL25        , . . . ,

\*\*\* DISCRETE

CARTESIAN RECEPTOR POINTS \*\*\*

   \*\* CONC OF PM\_10        IN  
 MICROGRAMS/M\*\*3     \*\*

X-COORD (M)	Y-COORD (M)	CONC
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564829.75	4187290.00	0.00052
564839.75	4187290.00	0.00050
564849.75	4187290.00	0.00049
564859.75	4187290.00	0.00047
564869.75	4187290.00	0.00046
564879.75	4187290.00	0.00045
564889.75	4187290.00	0.00043
564899.75	4187290.00	0.00042
564909.75	4187290.00	0.00041
564919.75	4187290.00	0.00040
564929.75	4187290.00	0.00039
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NOCMPL

\*\*\* THE SUMMARY OF

MAXIMUM ANNUAL (    1 YRS) RESULTS \*\*\*

\*\* CONC OF PM<sub>10</sub>    IN  
 \*\*

MICROGRAMS/M\*\*3

NETWORK

GROUP ID

AVERAGE CONC

RECEPTOR (XR, YR, ZELEV, ZFLAG)    OF TYPE    GRID-ID

```

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ALL        1ST HIGHEST VALUE IS        0.01857 AT ( 564709.75,
4187050.00,        0.00,        1.50) DC        NA
            2ND HIGHEST VALUE IS        0.01767 AT ( 564649.75,
4186960.00,        0.00,        1.50) DC        NA
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4187030.00,        0.00,        1.50) DC        NA
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            8TH HIGHEST VALUE IS        0.01664 AT ( 564659.75,
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            9TH HIGHEST VALUE IS        0.01656 AT ( 564649.75,
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\*\*\* RECEPTOR TYPES:    GC = GRIDCART  
                           GP = GRIDPOLR  
                           DC = DISCCART  
                           DP = DISCPOLR  
                           BD = BOUNDARY



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\*\*\* Message Summary : ISCST3 Model Execution \*\*\*

----- Summary of Total Messages -----

A Total of	0 Fatal Error Message(s)
A Total of	0 Warning Message(s)
A Total of	4 Informational Message(s)
A Total of	4 Calm Hours Identified

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*  
\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
\*\*\* NONE \*\*\*

\*\*\*\*\*  
\*\*\* ISCST3 Finishes Successfully \*\*\*  
\*\*\*\*\*



## Attachment F: Prior Construction Noise Analysis





350 FRANK OGAWA PLAZA  
5<sup>TH</sup> FLOOR  
OAKLAND, CA 94612  
510.251.8210  
WWW.UP-PARTNERS.COM

**MEMORANDUM**

**DATE:** MARCH 18, 2011

**TO:**  
Eric Angstadt and Catherine Payne  
CEDA, City of Oakland  
250 Frank H. Ogawa Plaza, Suite 3315  
Oakland, CA 94612-2032

**FROM:**  
Lynette Dias, AICP

**RE:** Response to Letters Received Regarding the MacArthur Transit Village Stage One Final Development Plan Permit and Vesting Tentative Track Map 8047.

**A. EXECUTIVE SUMMARY AND OVERVIEW**

**1. The Surgery Center Letters**

The City has received two letters (dated December 17 and December 21, 2010) from Holland & Knight, who represent Alta Bates Summit Medical Center Surgery Property Company LLC, The Surgery Center at Alta Bates Summit Medical Center, including Alta Bates Summit Medical Center, a Sutter Health affiliate (the Surgery Center). The Surgery Center is located at 3875 Telegraph Avenue on a parcel that is in Phase 5 of the MacArthur Transit Village Project (MTV Project). (See, MTV Project Site Location and Illustrative Plans, Exhibit A.) The Surgery Center letters mistakenly state that: the MTV Project has been changed to exclude the Surgery Center parcel; based on this change: (1) construction of the MTV Project will have significant noise, vibration, and air quality impacts on the operations, services, and patient care at the Surgery Center; and (2) the City Council should defer its approval of the MTV Project's Phase 1 Final Development Permit (FDP), Vesting Tentative Track Map (VTTM), and other entitlements until these impacts on the Surgery Center are studied in a subsequent EIR.

To: Eric Angstadt and Catherine Payne  
DATE: March 18, 2011  
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2. Summary Conclusion: **No Additional Environmental Review Is Required**

The Surgery Center letters do not raise any issues or contain any new information requiring the City to prepare a supplemental or subsequent EIR for the MTV Project Phase 1 FDP and VTTM for the following reasons:

- **No Project Changes:** The MTV Project has not been changed or modified to exclude the Surgery Center parcel. The MTV Project analyzed in the 2008 EIR and approved by the City is a phased development. The mixed-use building proposed for the Surgery Center parcel has always been in Phase 5, the final phase of development, for which a final development permit application is not required to be submitted until 2019. Thus, the Surgery Center parcel has not been expected or required to be included in the Phase 1 FDP application or approval. The VTTM covers those portions of the MTV Project site controlled by the project sponsor. Although the Surgery Center parcel and one other MTV Project parcel (3901 Telegraph Avenue) are not included in the VTTM, the development of these parcels are in later Project phases and, if subdivision maps are required for the development of these parcels, the necessary subdivision maps will be submitted with (or before) the FDP applications for these later phases are filed. Additionally, future development of the Surgery Center parcel could occur within its existing boundaries and no additional subdivision map may be necessary. Consequently, neither the Phase 1 FDP nor the VTTM change the MTV Project to exclude the Surgery Center and thus no project change has occurred that would require additional environmental review under CEQA.
- **No New Information:** The EIR, which analyzed a phased buildout of the MTV Project, including the noise, vibration, and air quality impacts associated with construction activities, contemplated that the Surgery Center, which would not be removed until in the final phase of development, could be operating during and subsequent to construction of the initial MTV Project phases. The Surgery Center's construction concerns could have been raised in 2008 and 2009 during the public review of the MTV Project EIR and the City's consideration of the initial Project approvals. Thus, these concerns do not constitute new information that could not have been known when the EIR was certified. Consequently, the Surgery Center has not provided new information that would require additional environmental review under CEQA.
- **Project Conditions/Mitigations Sufficient:** The MTV Project conditions of approval and mitigation measures address construction related air, noise, and vibration impacts on the surrounding area, including the Surgery Center parcel. The City's Standard Conditions of Approval (SCA) for dust control (COA-AIR 1) and construction emissions

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(COA-AIR 2) will reduce the potential air quality impacts on uses adjacent to the construction site (see Exhibit B, Referenced Conditions of Approval). Additionally, in response to the Surgery Center's air quality health risk concerns, LSA Associates prepared a health risk assessment to evaluate the construction related dust and emissions on the Surgery Center (see Exhibit C, Health Risk Assessment). The health risk assessment determined that the potential dust and diesel emissions impacts on the Surgery Center would be below the thresholds of significance. A site specific construction noise plan has been prepared pursuant to COA-NOISE 5 (see Exhibit D, Noise Reduction Plan). The analysis conducted for this plan confirms the EIR's conclusion that, with Implementation of the City's SCAs and the noise control strategies provided for in the plan, construction noise impacts on the Surgery Center will be less than significant. In accordance with COA-NOISE-6, Wilson Ihrig and Associates, a vibration expert has evaluated the construction plan for areas near the Surgery Center and has confirmed that the vibration impacts will be less than significant based on the use of certain construction techniques and timing restrictions (see Exhibit E, Vibration Memorandum).

Consequently, there are no substantial project changes, no substantial changes in the project circumstances, and no new information of substantial importance, which could not have been known with the exercise of reasonable diligence when the EIR was certified, that would require major revisions of the 2008 EIR, because of a new significant effect or an increase in the severity of a previously identified significant effect. Under CEQA section 21166<sup>1</sup> and CEQA Guidelines section 15162<sup>2</sup>, no further environmental review is required. Thus, in considering approval of the Phase 1 FDP and VTTM, the City should rely on the previously certified 2008 EIR.

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<sup>1</sup> CEQA section 21166 provides that when an environmental impact report has been prepared for a project, no subsequent or supplemental environmental impact report shall be required by the lead agency unless one or more of the following events occurs: (a) substantial changes are proposed in the project which will require major revisions of the EIR; (b) substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions of the EIR; (c) new information, which was not known and could not have been known at the time the EIR was certified as complete, becomes available.

<sup>2</sup> CEQA Guideline section 15162 provides that the only substantial changes in a project or the project circumstances that would result in new or more severe significant environmental impacts triggers preparation of a subsequent or supplemental EIR. Additionally, new information only triggers preparation of a subsequent or supplement EIR if it could not have been known with the exercise of reasonable diligence when the original EIR was certified and would result in new or more severe significant effects or new information about mitigation measures or alternatives that are rejected.

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### 3. MacArthur Transit Village Project Approvals and Current Applications

In July of 2008, the City Council approved the MTV Project. The MTV Project is the phased buildout of a new mixed-use transit village development located at the existing MacArthur BART station. The MTV Project consists of up to 675 residential units (market-rate and affordable), 42,500 square feet of retail and commercial uses, a 5,000 square foot community center use, a 480 space BART parking garage, and a number of Infrastructure improvements. The MTV Project site includes the existing BART surface parking lots and several private lots on West MacArthur Boulevard and Telegraph Avenue, including 3875 Telegraph Avenue, which is the location of the Surgery Center. The City prepared and certified an EIR (the 2008 EIR) that evaluated the potential impacts of the phased buildout of the MTV Project. The 2008 MTV Project approvals include a rezoning of the MTV Project site; a planned unit development permit (PUD), which includes a preliminary development plan (PDP); design review; a major conditional use permit; and the associated conditions of approval that include, design guidelines, a draft traffic demand management program, and a mitigation monitoring and reporting program (collectively, "the MTV Project approvals").

In July of 2009, the City Council approved a Development Agreement for the MTV Project, which included a phasing plan generally consistent with the 2008 approvals (see Exhibit F, Development Agreement, Section 3.3.3). The phasing plan provided for five separate development phases each having its own schedule for submission of a final development plan (FDP) and target approval date: (1) Phase 1 consisting of the new BART garage on block E, site remediation, BART plaza improvements, Internal Drive, Frontage Road improvements, and a portion of Village Drive; (2) Phase 2 consisting of the affordable rental development on block D; (3) Phase 3 consisting of the mixed-use market rate development on block A; (4) Phase 4 consisting of the mixed-use market rate development on block B; and (5) Phase 5 consisting of the mixed use market rate development on block C, which includes the Surgery Center parcel. The FDP and other necessary applications for Phase 5 may be submitted up to ten years from July 7, 2009 (i.e., July 2019), the date of the Owner Participation Agreement approval, per Development Agreement, Section 3.3.3.

In accordance with the MTV Project approvals and the Development Agreement phasing provisions, the Phase/Stage 1<sup>3</sup> FDP includes the new BART parking garage and the project site infrastructure improvements required to be included in Phase 1. The project sponsor also has submitted a VTTM for those parcels in the MTV Project site controlled by the project sponsor.

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<sup>3</sup> The City also refers to the application as the "Stage 1" applications. "Stage" and "Phase" have the same meaning in reference to the MTV Project phasing.



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The MTV Project parcels not included in the VTTM, the Surgery Center parcel and the 3901 Telegraph Avenue parcel, will be included in future phases and if any subdivision maps are required in connection with development on these parcels, the appropriate maps will be filed with the final development permit applications as required by Condition of Approval No. 26 (see Exhibit B, Referenced Conditions of Approval). The project sponsor has filed the FDP application for the Phase/Stage 2 development on parcel D and that application is under review by the City staff.

## **B. RESPONSES TO COMMENTS**

The following analysis provides responses to each comment raised in the Surgery Center's December 21, 2010 letter.<sup>4</sup> The responses are keyed to each comment included in the Surgery Center letter (see Exhibit G, letter with enumerated comments).

### **Comment 1 – MTV Project**

The Surgery Center asserts that the MTV Project has been changed to delete the Surgery Center site. Additionally, the Surgery Center asserts that the Staff Report contains inconsistent project descriptions.

**Response 1.** The MTV Project has not changed to exclude the Surgery Center parcel. The MTV Project has always been proposed, analyzed in the 2008 EIR, and approved as a phased project. The Phase/Stage 1 FDP under consideration by the City Council simply represents the first phase of the MTV Project. The 2008 EIR, the MTV PUD, and the MTV Development Agreement all describe a phased project and establish requirements related to the phased final applications. The Surgery Center parcel is located in block C of the MTV Project site (see Exhibit A). The development on block C is designated as Phase 5 and the final applications for block C are not expected to be pursued for several years. Consequently, there is no reason or requirement to include the development proposed for the Surgery Center parcel in the Phase/Stage 1 FDP application.

The MTV Project phasing description in the EIR and the phasing requirements in the Conditions of Approval and Development Agreement are summarized below.

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<sup>4</sup> All of the points raised in the Surgery Center December 17, 2010 letter are covered in greater detail in the December 20, 2010 letter.

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### 2008 EIR

The 2008 EIR states the following:

The project would be constructed over approximately seven years (see Table III-3)<sup>5</sup>. The phasing program discussed below is conceptual in that phasing is expected to occur sequentially; however, some phases could occur concurrently, or phasing may occur out of sequence depending on market conditions. (p.68)

Table III-3 Phasing Schedule

Phase	Schedule
BART Plaza Improvements	2009
Site Remediation and Demolition	2009
BART Parking Structure (Building E)	2009
Affordable Development (Building D)	2009
Building B	2010
Building A	2012
Building C [Surgery Center]	2014

Source: MTCP, 2007.

The 2008 EIR described the buildout of the MTV Project as occurring in five phases. (Draft EIR, p.70.) Phase I included the BART garage (block/building E), site remediation, and certain site infrastructure improvements. The Phase 1 FDP application is consistent with the Phase I description in the 2008 EIR. The phasing schedule included the development proposed for the Surgery Center parcel (block/building C) in the final phase. Thus, the 2008 EIR did not anticipate that the Surgery Center parcel development would be included in the Phase/Stage 1 FDP. The Phase 1 FDP is consistent with the 2008 EIR MTV Project and phasing description.

<sup>5</sup> This buildout estimate was later extended to ten years in the Development Agreement.

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#### Conditions of Approval for the MTV Project

The City Council adopted final Conditions of Approval in connection with its July 1, 2008 approval of the MTV Project. Condition No. 2 (Effective Date, Expiration, Extensions and Extinguishment) addresses phasing/staging of the MTV Project (see Exhibit B, Referenced Conditions of Approval). This condition states that the submittal of "Final Development Plans (FDPs) shall be permitted in five (5) stages over a 10 year time period." The description of the Phase/Stage 1 FDP includes the new BART parking garage, site remediation, internal Drive, the Frontage Road improvements, and a portion of Village Drive. (Condition 2.(a)(i).) The Phase/Stage 1 FDP meets the requirements of this condition.

Under Condition of Approval No. 2, the development approved for block C, which includes the Surgery Center parcel, is designated Phase/Stage 5. The FDP for Phase/Stage 5 is required to be submitted to the Planning Department for review and processing within 10 years from the date of the PUD approval. (Condition No. 2.(a)(v).) Thus, the development on the Surgery Center parcel is not required to be a part of the Phase/Stage 1 FDP. Condition No. 2 confirms that: (a) the MTV Project was approved as a phased development; (b) the MTV Project approvals do not require development of the Surgery Center parcel to be included in the Phase/Stage 1 FDP; and (c) development on, and the submittal of the FDP for, the Surgery Center parcel is not expected or required for a number of years.

Although Condition of Approval No. 2 allows the project sponsor discretion to substitute different blocks/buildings in the Phase/Stage 3, 4, and 5 applications, the Phase/Stage 1 and 2 applications must be processed in accordance with the terms of the condition. (Condition No. 2(c).) This provision reflects the City's policy determination regarding the importance of proceeding with the Phase/Stage 1 and 2 improvements early in the development phasing. Additionally, Condition No. 2 provides that the phasing timeframes prescribed in the Development Agreement would supersede this condition. (Condition No. 2(e).) The Development Agreement phasing provisions are discussed below.

Condition of Approval No. 26 (Subdivision Maps) states that the FDP for each development phase must be accompanied by the required subdivision map necessary to subdivide the property (see, Exhibit B, Referenced Conditions of Approval). The VTTM under consideration by the City Council covers all of the MTV Project parcels that are under the project sponsor's control. At the time the FDP for the Surgery Center parcel is pursued, a determination will be made as to whether a subdivision map is required. Development on the Surgery Center parcel, however, may not require a new subdivision map or an amendment of the VTTM. The project sponsor's current MTV Project site plan shows that the existing Surgery Center parcel

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configuration would accommodate the planned development (see Exhibit A, MTV Project Illustrative Plans).

### Development Agreement

Section 3.3.3 of the Development Agreement adopted by the City Council details the requirements for the MTV Project phasing (see, Exhibit A, MTV Project Illustrative Plans). Consistent with the 2008 EIR and the Conditions of Approval, Section 3.3.3 provides for a five-phase development plan. Pursuant to Section 3.3.3, the Phase/Stage 1 FDP includes the BART parking garage, site remediation, BART plaza improvements, Internal Drive, the Frontage Road improvements and a portion of Village Drive. In compliance with the Development Agreement, the project sponsor timely submitted the FDP for Phase/Stage 1 together with the necessary VTTM. The FDP applications for the remaining four project phases are required to be submitted over approximately ten years. The Phase/Stage 5 Surgery Center parcel FDP application is not required until 2019. Thus, the Phase/Stage 1 FDP and the VTTM are consistent with the phasing requirements of the Development Agreement. The submittal of the FDP application for, and development of, the Surgery Center parcel are not required for many years.

### Phase/Stage 1 FDP and VTTM

The Phase/Stage 1 FDP does not include the development planned for the Surgery Center parcel because it is not part of the Phase/Stage 1 development. It is neither necessary nor required by any of the MTV Project approvals for the development of Phase 1 to include the development on the Surgery Center parcel. The VTTM does not include the Surgery Center parcel because the project sponsor does not yet control the Surgery Center parcel. These circumstances are not project changes. As anticipated by the 2008 EIR, the MTV Project Conditions of Approval, and the Development Agreement, it is expected that the project sponsor will proceed with the FDPs for future phases and, if necessary, subdivision maps or VTTM amendments, in accordance with the Project phasing schedule and following any necessary acquisition of the parcels included in these future phases.

### Consistent Project Description

The Surgery Center letter states that the City Staff Report contains an inconsistent Project description. This comment misinterprets the Staff Report. The Surgery Center's assessor parcel number is listed as part of the overall MTV Project site approved in the PUD (and other MTV Project approvals) and the parcel is shown as part of the MTV Project site on the zoning map included in the Staff Report. This information confirms that the Surgery Center parcel remains a part of the MTV Project, even though it is not included in the Phase/Stage 1 FDP and the VTTM.

The Surgery Center letter also characterizes one of the Project modifications as "not requiring

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acquisition of 3875 Telegraph Avenue (the Surgery Center property)." Again, this comment misinterprets the Staff Report. The Staff Report lists the Phase/Stage 1 refinements that have occurred between the PUD/preliminary development plan approval and the FDP in the context of demonstrating that the FDP substantially conforms to the PUD/preliminary development plan. One of the changes listed is the minor shift in the location of a portion of Village Drive in order to align Village Drive with the existing 39<sup>th</sup> Street. The City Council Staff Report, dated December 14, 2010, states (p.5):

- Village Drive, has been shifted to line up with the 39<sup>th</sup> Street right-of-way and to allow the Stage One VTTM to move forward prior to the acquisition of the Surgery Center property.

Although it was originally anticipated that a portion of Village Drive would require use of a portion of the Surgery Center parking area, the original alignment of Village Drive did not require demolition of the Surgery Center building. Moreover, the realignment of Village Drive to avoid the Surgery Center parking area does not preclude acquisition of the Surgery Center parcel and its development in Phase/Stage 5 consistent with Project described in the 2008 EIR, the MTV Project approvals, and the Development Agreement. The Staff Report analysis confirms that the Phase/Stage 1 project refinements reflected in the FDP and VTTM are in substantial conformance with the PUD/preliminary development plan and do not constitute substantial changes or substantial new information that would require revisions to the 2008 EIR. Shifting Village Drive allows acquisition of the Surgery Center parcel after the Phase/Stage 1 approvals; it does not remove Phase/Stage 5 and the development of the Surgery Center parcel from the MTV Project. As shown in the discussion above, Phase/Stage 5 is not anticipated to be developed for quite a few years and there is no reason or obligation to include the development of Phase/Stage 5 or the Surgery Center parcel in the Phase/Stage 1 final approvals.

In summary, the MTV Project has not been changed to exclude the development of the Surgery Center parcel. The development of this parcel is just not part of the Phase/Stage 1 FDP or the VTTM.

#### Comment 2 – Analysis of Impacts on the Surgery Center

The comment states that, because the project has been changed to exclude the Surgery Center, the EIR did not evaluate project's Impacts on the continued operation of the Surgery Center.

Response 2. The 2008 EIR described the MTV Project as a phased development and described the proposed five development phases. (See, Response 1.). The 2008 EIR assumed demolition of the Surgery Center at the time the Surgery Center parcel would be developed, which was

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projected to occur in the final, fifth phase of the MTV Project. The illustrative phasing schedule included in the 2008 EIR showed development of the Surgery Center property in 2014. The 2008 EIR fully considered the construction and operational environmental impacts of the MTV Project on the surrounding area, which, during the first phases of buildout, would include the Surgery Center parcel.

The MTV Project phasing has remained consistent: this is a five phase project and the development on the Surgery Center is part of Phase/Stage 5, which is not expected or required to be initiated for a number of years. No provision in any of the MTV Project approvals requires the Phase/Stage 1 FDP or the initial VTTM to include the Phase/Stage 5 development proposed for the Surgery Center parcel. Abiding by the approved phasing plan does not mean that the Surgery Center parcel has been excluded from the MTV Project. The facts do not support the Surgery Center's assertion that the project has changed. Consequently, there is no substantial project change that would trigger the potential for new environmental review.

Additionally, the concerns now raised by the Surgery Center about its ongoing operations is not new information of substantial importance that could not have been known at the time the 2008 EIR was certified. The 2008 EIR plainly analyzed a phased project with development on the Surgery Center parcel in the final phase. The construction and operational impacts of the MTV Project on surrounding uses were fully assessed in the 2008 EIR. Additionally, the EIR included an alternative (Alternative 3, "Mitigated Reduced Building/Site Alternative") that examined the construction and operational impacts of a project without the Surgery Center site. Thus, the Surgery Center was aware that the first phases of the MTV Project or the implementation of Alternative 3 would involve construction activities adjacent to its site. All of the concerns raised in the Surgery Center letter were known and could have been raised in 2008. The Surgery Center could have, but did not, raise its concerns at the time the City certified the 2008 EIR. The Surgery Center's December 2010 comments on the 2008 EIR do not meet the CEQA definition of new information of substantial importance that was not known, or could not have been known with the exercise of due diligence, at the time the EIR was certified. (*CEQA Guidelines* section 15162.)

In light of these facts, the 2008 EIR remains valid and no longer subject to challenge. The City filed the following Notices of Determination for the MTV Project: (1) July 16, 2008 – NOD for the MTV Project approvals; (2) July 10, 2009 – NOD for the Owner Participation Agreement; (3) July 23, 2009 – NOD for Development Agreement. No legal challenge to the 2008 EIR was filed. The time to do so has long expired.

Moreover, as part of the City staff review of the Phase/Stage 1 FDP and the VTTM, the staff considered the differences between the approved PUD/preliminary development plan and the Phase/Stage 1 FDP and the VTTM to determine whether any additional environmental review

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would be required pursuant to CEQA and the CEQA Guidelines. The staff found that no subsequent or supplemental environmental review was necessary, because the minor refinements to the site plan, some of which implemented Conditions of Approval, did not constitute substantial changes in the project, substantial changes to the project circumstances, or new information of substantial importance that would result in any new significant impacts or a substantial increase in the severity of impacts already identified in the 2008 EIR. See Approved November 3, 2010 Planning Commission Report (revised on 11/13/10).

#### Comment 3 – Notice to the Surgery Center

The comment states that the project sponsor has "unilaterally, and without prior notice" to the Surgery Center changed the project and additional environmental review should be required to consider noise, vibration, dust and diesel particulate matter.

Response 3. The MTV Project has not been changed to exclude the Surgery Center (see discussion above pp 1-10). The Surgery Center owners have known about the MTV Project for several years and were informed that the project sponsor was proceeding with the first phase of development. The project sponsor has provided documentation that since 2008 the project sponsor and the Surgery Center owners have met and corresponded a number of times to discuss the project sponsor's acquisition of the Surgery Center parcel (see Exhibit H, Summary of Negotiations with the Surgery Center).

With respect to the Phase/Stage 1 FDP and the VTTM, the documentation provided by the project sponsor shows that a representative of the Surgery Center attended the April 21, 2010 community presentation by the project sponsor at which the Phase/Stage 1 FDP and construction schedule were reviewed. On June 2, 2010, the project sponsor sent a letter to the Surgery Center to provide an update on the Phase/Stage 1 FDP and the anticipated dates for City hearings on the plan. This letter specifically described the realignment of Village Drive to allow Phase/Stage 1 to proceed without acquiring the right to use a portion of the Surgery Center parcel. The letter also reiterated that the Surgery Center parcel continued to be included as part of the MTV Project and is shown on block C-3 in the current MTV Project illustrative Plan, which reflects the FDP plans for Phases 1 and 2 (see Exhibit A). Representatives of the project sponsor also met with the Surgery Center owners on December 1, 2010 to discuss the MTV Project status and the continued interest in the acquisition.

See responses to the Surgery Center Letter Attachments A and B below regarding noise, vibration, and dust and diesel particulate matter.

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**Comment 4 – Surgery Center Operations**

This comment provides information regarding the Surgery Center's operations, services, and patient care, which it characterizes as "uniquely sensitive receptors."

**Response 4.** The 2008 EIR noise and air quality analyses considered the category of sensitive receptors, which includes residences and hospitals among other uses. To the extent that a surgery center also could be considered a sensitive receptor, it would be covered by the requirements in the City's standard conditions of approval and imposed on the MTV Project to reduce construction noise, vibration, and air quality impacts on these uses.<sup>6</sup> See responses to the Surgery Center Letter Attachments A and B below regarding noise, vibration, and dust and diesel particulate matter.

**Comment 5 – Surgery Center Parcel and the Phase/Stage 1 Applications**

This comment states that the project sponsor has acknowledged that the Surgery Center has been removed from the Project and dismisses the Project's impacts on the Surgery Center.

**Response 5.** This comment misinterprets the information it quotes from the October 26, 2010 memorandum from Art May to Catherine Payne. First, as discussed above (Response 1), the MTV Project has not been changed to remove the Surgery Center parcel. In fact, the memorandum quoted in the Surgery Center letter states the project sponsor expects to include the Surgery Center parcel in an amended VTTM when the project sponsor gains control of the Surgery Center parcel. Nothing in this statement "acknowledges" or implies that the project sponsor has amended the MTV Project to delete Phase/Stage 5 and the development of the Surgery Center parcel. This memorandum merely acknowledges that the Surgery Center parcel is not necessary for the Phase/Stage 1 FDP and the initial VTTM. Second, the memorandum does not dismiss the MTV Project impacts on the Surgery Center. Instead, the quoted sentence from the memorandum means that the Phase/Stage 1 development will not require the use of any portion of the Surgery Center parcel and in this sense will not affect the Surgery Center. The main point of the quoted statement is that the construction of the Phase/Stage 1 development is not dependent on acquisition of the Surgery Center site.

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<sup>6</sup> The standard conditions of approval were formally adopted by the Oakland City Council in November 2008 to reduce potential impacts of projects, Ordinance No. 12899 C.M.S., November 3, 2008. However, the standard conditions of approval were used by the City prior to formal adoption and those related to noise were approved by the Council several years prior to the adoption of the standard conditions of approval.



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#### Comment 6 – Construction Impacts

This comment states that because the Surgery Center has been removed from the MTV Project it will be affected by the construction impacts on its patients, employees, operations, and equipment from noise, vibration, dust and diesel particulate, and fumes.

Response 6. As discussed above, the Surgery Center has not been removed from the MTV Project and no additional CEQA analysis is warranted on this basis. (See, Responses 1 and 2 above.) The 2008 EIR covered the construction impacts of the MTV Project. The 2008 EIR analyzed the MTV Project as a phased project, with the Surgery Center site development in the final phase. Consequently, the construction Impacts from the early development phases on sites included in later development phases were considered in the construction impact analysis. Additionally, the EIR included Alternative 3, a project without the Surgery Center site. This alternative included an evaluation of construction impacts.

To respond to the concerns raised by the Surgery Center, the project sponsor retained LSA Associates and Wilson Ihrig and Associates to (1) prepare a health risk assessment to evaluate the air quality (dust and diesel emission) concerns; (2) prepare the construction noise plan required by the COA-NOISE-5 and evaluate whether the measures included in this plan would ensure that the construction noise would meet City requirements; and (3) evaluate the vibration concerns and recommend any necessary vibration reduction strategies pursuant to COA-NOISE-6. These analyses confirm the EIR's determination that project construction activities undertaken pursuant to the City's Standard Conditions of Approval would not result in significant adverse air quality, noise, or vibration impacts. The LSA Associates and Wilson Ihrig and Associates analyses are discussed in detail below in Responses to the Attachment A and B of the December 21, Surgery Center letter.

In order to provide the City Council with additional information about the potential impacts of construction projects adjacent to medical facilities, we reviewed two EIRs recently certified by the City for new hospitals/medical centers, both of which involve construction activities adjacent to existing hospitals: the Alta Bates Summit Medical Center, Summit Campus Seismic Upgrade and Master Plan EIR (ABSMC EIR) and the Kaiser Permanente Oakland Medical Center Master Plan Project EIR (Kaiser EIR). These hospitals are significantly larger than the Surgery Center, provide more medical services and have more equipment than the Surgery Center, and, unlike the Surgery Center, operate 24 hours a day and accommodate short-term and long-term patient stays.

*Construction Air Quality Comparison:* Both the ABSMC EIR and the Kaiser EIR relied solely on the City's SCAs to mitigate potential construction air quality impacts. The air quality SCAs included in

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the MTV 2008 EIR require more stringent mitigation of dust and equipment emissions than the SCAs Included in the ABSMC EIR and the Kaiser Medical Center EIR.

*Construction Noise Comparison:* The less-than-significant noise finding in the MTV 2008 EIR is consistent with the findings included in the ABSMC EIR and the Kaiser EIR. Both of the ABSMC and Kaiser projects proposed the use of heavy construction equipment immediately adjacent to existing hospital uses. The Kaiser EIR considers the use of pile drivers and the ABSMC EIR considers the use of drilled piles, which would be installed (for both projects) immediately adjacent to existing hospital facilities. The noise SCAs included in the MTV EIR are identical to those Included in the ABSMC EIR and slightly more restrictive than those Included in the Kaiser EIR, which Charles M. Salter Associates (noise consultant for Kaiser EIR) found to be adequate to reduce the construction noise Impacts to a less-than-significant level. The Surgery Center has not identified any unique circumstances of the Surgery Center or the MTV Project would necessitate mitigation beyond what is required by the SCAs and was found to adequately mitigate the construction noise impacts for the ABMSC or the Kaiser projects.

*Construction Vibration Comparison:* The less-than-significant vibration impact finding in the MTV 2008 EIR is consistent with the findings in the ABSMC EIR and the Kaiser EIR. Neither the ABSMC EIR nor the Kaiser EIR identified any vibration impacts and both projects Include construction activities that are significantly more Intense than the MTV Project. The ABSMC EIR states: "since the proposed project would not include any vibration-causing activity aside from that associated with construction and motor vehicles, it can be assumed that no impact would occur with regard to criterion 6) [vibration]. (Draft EIR page 4.5-12). The Kaiser EIR noise and vibration analysis is silent on the topic.

#### **Comment 7 – Environmental Review for the Stage One FDP and VTTM**

The comment asserts that a subsequent EIR must be prepared to analyze the impact of the "modified" project on the Surgery Center, the new circumstance of the continued operation of the Surgery Center, and the new Information regarding the removal of the Surgery Center from the project.

**Response 7.** See Responses 1 and 2 above. The Surgery Center is not being removed from the MTV project. Thus, this is not a substantial change to the MTV Project. The continued operation of the Surgery Center until Phase 5 is proposed for development was assumed in the 2008 EIR. Thus, this is not a substantial change with respect to the circumstances under which the project is undertaken. Because the Surgery Center is not being removed from the MTV Project, this is

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not new information. Therefore, none of the CEQA Guidelines 15162 criteria for subsequent environmental review are triggered and no subsequent EIR is required.

**Comment 8 – Substantial Conformance with Preliminary Development Plan Approval**

The comment asserts that because the Surgery Center has been removed from the MTV Project, the Phase/Stage 1 FDP is not in substantial conformance with the approved preliminary development plan. Additionally, the comment asserts that the City cannot make the required findings for a PUD approval.

Response 8. As explained above, the Surgery Center has not been removed from the MTV Project. City staff evaluated the Phase/Stage 1 FDP application and found it substantially conforms to the approved PUD/preliminary development plan (see Approved November 3, 2010 Planning Commission Report (revised on 11/3/10). The PUD for the MTV Project was approved in 2008. This approval and its findings are no longer subject to challenge.

**Comment 9 – Approval the Stage One VTTM**

The comment asserts that the City cannot approve the VTTM because the Project is likely to cause serious public health and safety problems related to significant impacts on patients at the Surgery Center and the City's SCAs are not adequate.

Response 9. Please refer to Air Quality Master Response to Attachment A, Illingworth & Rodkin, letter dated December 21, 2010, below, which demonstrate that the approval of the VTTM will not cause any public health or safety problems for the Surgery Center patients.

**Attachment A: Illingworth & Rodkin, letter dated December 21, 2010**

This letter details the Surgery Center's specific air quality concerns. The letter presents concerns regarding acute impacts from increased dust and increased exposure to diesel particulate matter that would result based on the assertion that the MTV Project has been changed to eliminate the Surgery Center site and construction will occur immediately adjacent to the Surgery Center.

The following analysis provides a Master Response to the air quality issues raised.

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### Air Quality Master Response

As discussed above, the MTV Project has not been changed to eliminate the Surgery Center site. This comment also incorrectly states that the 2008 EIR did not identify any sensitive receptors adjacent to the Project and did not address localized impacts from construction equipment exhaust. The 2008 EIR air quality analysis identifies sensitive receptors and provides an analysis of construction-related air quality impacts.

The 2008 EIR states that the MTV Project would contribute to regional ozone emissions in the form of emissions from construction vehicles and would contribute to particulate matter emissions through construction vehicle emissions and the disturbance of soil within the project site during the construction period (p. 245). Additionally, an estimate of the construction emissions was prepared based on preliminary construction plans using the URBEMIS 2007 model. Table IV.D-6 (Draft EIR, p. 247) shows the construction emission model results.<sup>7</sup> The temporary construction-period air quality impacts (for all pollutants) were found to be less-than-significant with the implementation of both the City's air quality SCAs, including the standard and enhanced measures for dust control and the construction equipment measures (listed as listed as COA AIR-1 and AIR-2 in the 2008 EIR).

The MTV Project's potential effects on sensitive receptors are addressed on page 246 of the Draft EIR under subsection (5) "Exposure of sensitive receptors to substantial pollutant concentrations." The section describes sensitive receptors as facilities that house or attract children, the elderly, and people with illnesses or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent facilities, and residential areas are cited as examples of sensitive receptors. The 2008 EIR finds that construction of the project would temporarily increase localized emissions and that construction-period air quality impacts (for all pollutants), including impacts to sensitive resources, would be less-than-significant with implementation of the SCAs for dust control and construction equipment measures. (Draft EIR page 246.)

Although no new analysis is warranted under CEQA, a health risk assessment was undertaken to address the Surgery Center's concerns and confirm the EIR's finding that no significant impacts related to construction air quality concerns would occur (see, Health Risk Assessment, Exhibit C). The analysis considered a detailed construction equipment schedule for Phases 1 and 2 that was

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<sup>7</sup> Since the certification of the 2008 EIR, the Bay Area Air Quality Management District (BAAQMD) has adopted new CEQA thresholds for construction emissions. None of the results listed in Table IV.D-6 exceed the new BAAQMD thresholds for construction emissions. BAAQMD CEQA Guidelines (June 2010), p.2-6. However, those guidelines do not apply here because the City commenced review of the Phase 1 FDP and the VTTM applications, including a review under CEQA to determine if any of the factors under CEQA Guidelines sections 15162 or 15163 were implicated CEQA review of Phase 1 commenced prior to February 2010.

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provided by the project sponsor (see Exhibit I, Construction Equipment Schedule, dated January 28, 2011). The findings from this health risk assessment are summarized below.

A health risk assessment (HRA) was conducted to assess health related air quality impacts from construction on patients and workers at the Surgery Center. The HRA assessed the impacts from the Phase/Stage 1 FDP and the Phase/Stage 2 FDP construction activities, because the project sponsor has submitted to the City the Phase/Stage 2 FDP application. Using the detailed construction schedule and equipment list provided by the Keystone Development Group and a combination of the California Air Resources Board's URBEMIS 2007 and HARP models, a detailed HRA was developed. The URBEMIS 2007 model was used to translate the construction details into pollutant emissions rates. These emissions were then assigned locations on the MTV Project site corresponding with the construction phasing plan and within those areas, placed closer to the Surgery Center to maximize the predicted impact. The HARP model was then used to combine these emissions and local meteorological conditions into an air dispersion model to predict pollutant concentrations and corresponding health risk levels. To insure completeness, the health risk levels were determined not only for the patients and workers at the Surgery Center, but also for the residences adjacent to the project site. It is standard HRA methodology to assess only the outdoor risk levels, since the amount of protection afforded by buildings varies substantially. It is probable that the Surgery Center provides above average protection to patients and workers inside the building, however, this HRA does not attempt to quantify that protection.

The primary health concern is the short-term acute effects from the exhaust of the heavy-duty construction equipment operating in close proximity to the Surgery Center. However, there is also a longer term exposure to the workers at the Surgery Center, and possibly to patients of the Surgery Center. Although the Surgery Center does not have inpatient accommodations, this HRA includes the expected carcinogenic and chronic health risks to a patient staying not only overnight but doing so for the entire construction period. It is assumed that the workers stay 8 hours per day on average and continue to work at the Surgery Center for the entire construction period. The HRA conservatively assumes that doctors, nurses, and patients spend all day outside on the side of the Surgery Center building nearest to the construction activities. Based on these conservative assumptions, Table 1 shows the HRA results. The BAAQMD additionally requires that the long-term carcinogenic health risk results have age factors applied to account for the range of age groups in the general population. Table 2 shows the age groups, their adjustment factors, and the adjusted carcinogenic health risk level for someone staying at the Surgery Center for the full construction period, 24 hours a day or for residents of the nearby homes.

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Table 1: Inhalation Health Risks from Construction Operations

Risk Category	Carcinogenic Inhalation Health Risk	Chronic Inhalation Health Index	Acute Inhalation Health Index	Threshold Exceeded
2-Year Patient Risks	0.24 in 1 million	0.0061	0.04	No
Worker Risks	0.047 in 1 million	0.0061	0.04	No
Residential Risks	0.24 in 1 million	0.0061	0.04	No
BAAQMD Threshold	10 in 1 million	1	1	

Source: LSA Associates, Inc., January 2011

Table 2: 70-Year Carcinogenic Age Group Adjustment

Risk Group	ASF	Duration	Carcinogenic Inhalation Health Risk
3rd Trimester to age 2 years	10	2.25/70	0.077 in a million
age 2 years to age 16 years	3	14/70	0.14 in a million
age 16 to 70 years	1	54/70	0.20 in a million
Adjusted 70 year lifetime risk			0.41 in a million
BAAQMD Threshold			10 in a million
Threshold Exceeded			No

Source: LSA Associates, Inc., January 2011

As shown on Tables 1 and 2 for both patients and workers at the Surgery Center, as well as nearby residents, construction operations would result in a maximum health risk level that is below the BAAQMD's criterion of significance (10 in 1 million) for cancer health effects and for chronic or acute health risks. While the Surgery Center patients may be uniquely sensitive to air pollution, these health risk levels are substantially below the BAAQMD's thresholds of significance, making it unlikely that anyone, even uniquely sensitive individuals, would experience a negative health effect.

Historically, the BAAQMD has used the criterion of 10 in 1 million to determine the risk for point sources such as emissions from industrial facilities. This threshold was developed for these kinds of emissions sources that operate continuously for decades. Applying this threshold to a relatively brief event, such as the construction of this project, is very conservative. Additionally, the BAAQMD has documented that the best management approach to fugitive dust emissions from construction activities is an effective approach that reduces fugitive dust from 30 percent to more than 90 percent. Through the City's SCA, which are listed as COA AIR-1 and AIR-2 in the

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2008 EIR, the MTV Project must implement best management practices to reduce fugitive dust emissions.

Attachment B: Charles M Salter Associates, letter dated December 21, 2010

This letter details the Surgery Center's specific construction noise and vibration concerns and asserts that the project would result in potentially significant noise and vibration impacts. The concerns presented are based on the incorrect assertion that the MTV Project has been changed to eliminate the Surgery Center site.

#### Noise Master Response

The 2008 EIR, Section IV.E-7, Noise, includes a discussion of potential effects associated with sensitive receptors during both construction and operation periods and assumes that pile driving may be necessary. The analysis assumes that the MTV Project will be built in five phases, over a seven-year period (page 299) and that the Surgery Center property would be the last phase (page 70). Page 299 of Section IV.E-7, Noise, states:

*Construction of the project is to occur over a seven-year period, beginning in 2009. During this period, a wide variety of construction remediation and demolition equipment would be used and materials would be transported to and from the site during each development phase.*

The 2008 EIR evaluated the increase in traffic flow on local streets associated with the transport of workers, equipment, and materials to and from the project site. The 2008 EIR found that the increase in traffic flow on the surrounding roads due to construction traffic would be minimal, but there would be short-term intermittent high noise levels associated with trucks arriving to and departing from the project site.

The 2008 EIR also evaluated noise generated by heavy equipment operating on the project site, including the potential for pile driving. The 2008 EIR found that construction-related noise associated with typical construction equipment would be 91 dBA Lmax at a distance of 50 feet and that sensitive land uses (or sensitive receptors) would be located within 50 feet of construction. For pile driving on the MTV Project site, the 2008 EIR found that sensitive receptors located within 50 feet of the MTV Project site could be exposed to maximum noise levels of up to 93 dBA Lmax. (Draft EIR p. 299)

The analysis found that the MTV Project construction-related noise effects would be reduced to less than significant with implementation of the City's SCAs for construction noise which are included in the 2008 EIR as: COA NOISE-1: Days/Hours of Construction Operation; COA NOISE-2:

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Noise Control; COA NOISE-3: Noise Complaint Procedures; and COA NOISE-5: Pile Driving and Other Extreme Noise Generators.

As part of the process of preparing for construction of Phase/Stage 1 and Phase/Stage 2 and in compliance with COA NOISE-5, the project applicant retained an acoustical consultant to prepare a final noise plan based on the FDP submittal that details a set of site specific noise attenuation measures to ensure that maximum feasible noise attenuation will be achieved.<sup>8</sup> The plan (see Exhibit D) considers both Phase/Stage 1 and Phase/Stage 2 of the MTV Project and the associated construction equipment schedules provided by the project sponsor (see Exhibit I, Construction Equipment Schedule, dated January 28, 2011). The plan confirms that noise levels from construction activities would be reduced consistent with the requirements of COA-NOISE-5 with implementation of the noise conditions, including the best management practices outlined in COA NOISE 2 and the use of temporary sound walls in certain areas, consistent with the types of measures listed in the COA-NOISE-5, which states:

*The noise reduction plan shall include, but not be limited to, an evaluation of implementing the following measures. These attenuation measures shall include as many of the following control strategies as applicable to the site and construction activity:*

- a) *Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings;*
- b) *Implement "quiet" pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions;*
- c) *Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site;*
- d) *Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example, and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and*
- e) *Monitor the effectiveness of noise attenuation measures by taking noise measurements.*

The noise reduction plan includes the following requirements, which will reduce the projected worst case hourly average construction noise levels at the closest receptor sites:

(1) Prior to initiation of on-site construction-related earthwork activities, a minimum 8-foot high temporary sound barrier shall be erected along the project property line abutting the residential sensitive land uses that are adjacent to the construction site on MacArthur Boulevard and Telegraph Avenue.

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<sup>8</sup> Consistent with the requirements of COA-NOISE-5, which requires a noise plan that includes a set of site-specific noise attenuation measures based on the project's final design plans be submitted to the City for review and approval prior to the commencement of construction, the project sponsor will prepare and submit subsequent noise reduction plans for future phases once final design plans are available and construction is planned to commence.



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(2) Prior to initiation of on-site construction-related earthwork activities, a minimum 6 foot high temporary sound barrier shall be erected along the project property line abutting the outpatient Surgery Center.

(3) These sound barriers shall be constructed with a minimum surface weight of 4 pounds per square foot and shall be constructed so that vertical and horizontal gaps are eliminated. These temporary barriers shall remain in place through the construction phase in which heavy equipment, such as excavators, dozers, scrapers, loaders, rollers, pavers, and dump trucks are operating within 150 feet of the edge of the construction site and the adjacent sensitive land uses.

These noise reduction strategies will ensure that construction noise during the loudest periods of construction for the Phase/Stage 1 and Phase/Stage 2 FDPs will be reduced as required by COA-NOISE-5. In addition, the Project contractor must also comply with all of the other noise reduction strategies in the COA-NOISE-1,-2,-3, and -4, which will further reduce construction noise impacts in the Project vicinity. The noise reduction plan also includes requirements for monitoring construction noise through measurements and for adjusting equipment use if the monitoring identifies construction noise that exceeds the City's thresholds.

#### Construction Vibration Master Response

The 2008 EIR acknowledged that construction activities could cause ground-borne vibration in the Project vicinity (see Draft EIR p. 300). Under the City's significance criteria, temporary vibration from construction work is not considered significant. The City's Standard Condition of Approval for vibration (listed as COA-NOISE-6, Vibration Adjacent Historic Structures, in the 2008 EIR) requires the project applicant to retain an appropriate professional to determine threshold levels of vibration that could damage nearby buildings and design means and methods of construction that would not exceed the thresholds.

Pursuant to the SCA, to respond to the Surgery Concerns, and to confirm that no significant impacts related to vibration would result from the MTV Project construction using the FTA criteria referenced by the Surgery Center, the project sponsor retained Wilson, Ihrig and Associates (WIA), experts in vibration analysis, to analyze the Construction Equipment Schedule (see Exhibit I) for Phases 1 and 2 (see Exhibit E, Vibration Memorandum). As part of the Construction Equipment Schedule, the Project Sponsor has committed to the use of reduced-vibratory construction methods, which would reduce the vibration generated by the construction activities to below the FTA thresholds proposed by the Surgery Center.

TO: Eric Angstadt and Catherine Payne  
DATE: March 18, 2011  
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The WIA analysis confirms that anticipated vibration from construction activities for Phase 1 and 2 of the MTV Project would not exceed the FTA Category 1 criterion, which applies to buildings where vibration would interfere with Interior operations, at the Surgery Center.

Pursuant to the SCA (see COA NOISE-6 In 2008 EIR), WIA recommends that (1) the contractors implement the Construction Equipment Schedule elements detailed in Exhibit I; and (2) vibration monitoring be conducted at the Surgery Center to document the baseline conditions during operations prior to construction and to monitor the vibration at the facilities during the key periods of construction that are subject to vibration to verify that construction-related vibration is not exceeding the FTA category 1 criterion. The key periods of construction would occur when the equipment discussed above are in operation (e.g., vibratory roller compactor, vibrating plate compactors, and/or jumping jack). As part of compliance with COA NOISE-6, the project sponsor will be required to comply with these recommendations which will ensure the impact remains less than significant.

## Conclusion

The Surgery Center letters do not raise any issues or contain any new information requiring the City to prepare a supplemental or subsequent EIR for the MTV Project Phase 1 FDP and VTTM as described in the Executive Summary above.

## Exhibits

- Exhibit A, MTV Project Site Location and Illustrative Plans
- Exhibit B, Referenced Conditions of Approval
- Exhibit C, Health Risk Assessment
- Exhibit D, Noise Reduction Plan
- Exhibit E, Vibration Memorandum
- Exhibit F, Development Agreement, Section 3.3.3
- Exhibit G, December 21 Letter from Surgery Center with comments enumerated
- Exhibit H, Summary of Negotiations with the Surgery Center
- Exhibit I, Construction Equipment Schedule

Exhibit A-EXHIBIT A Area and Surgery Center Location

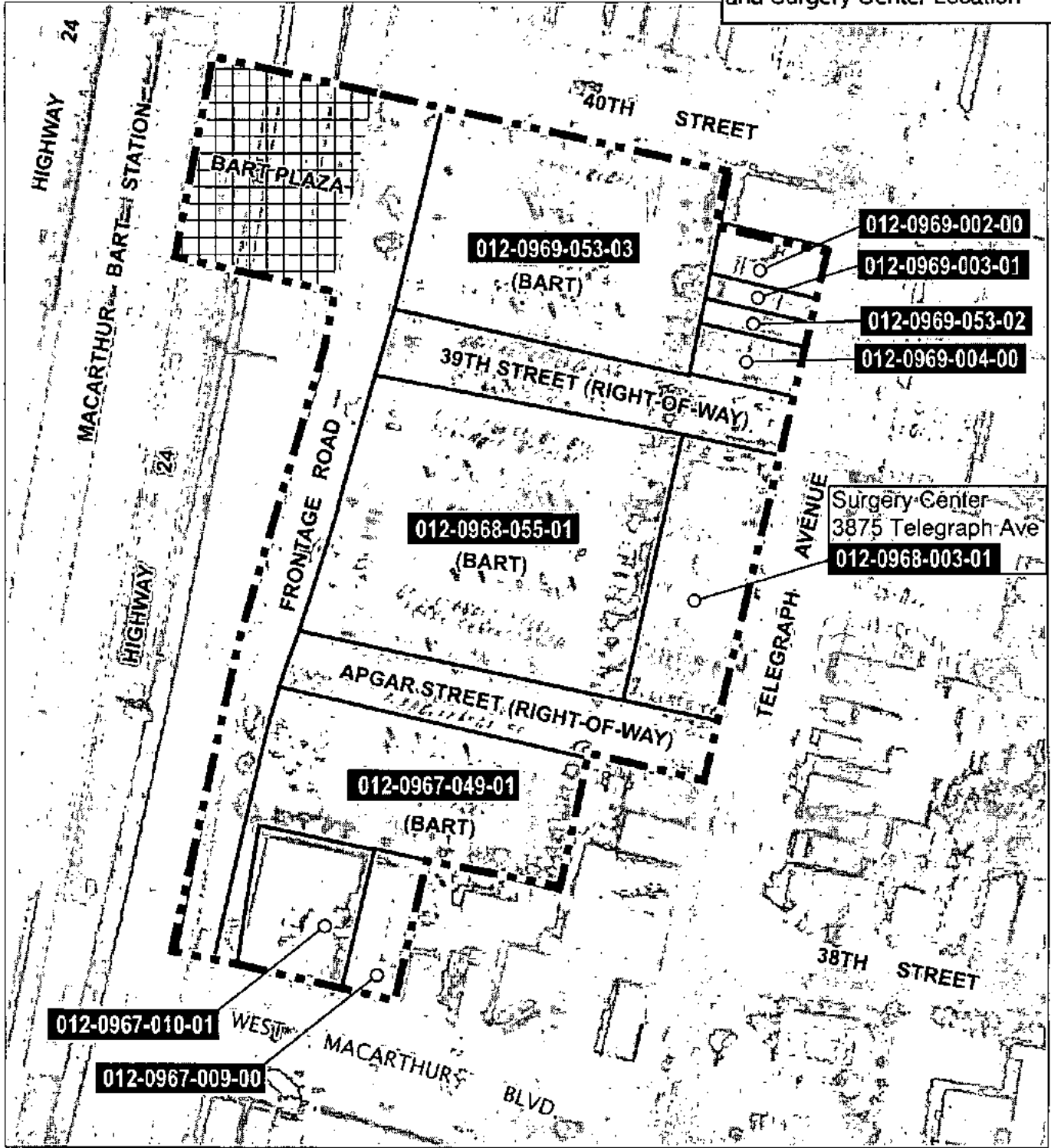



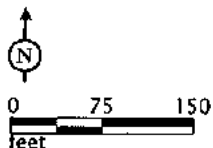


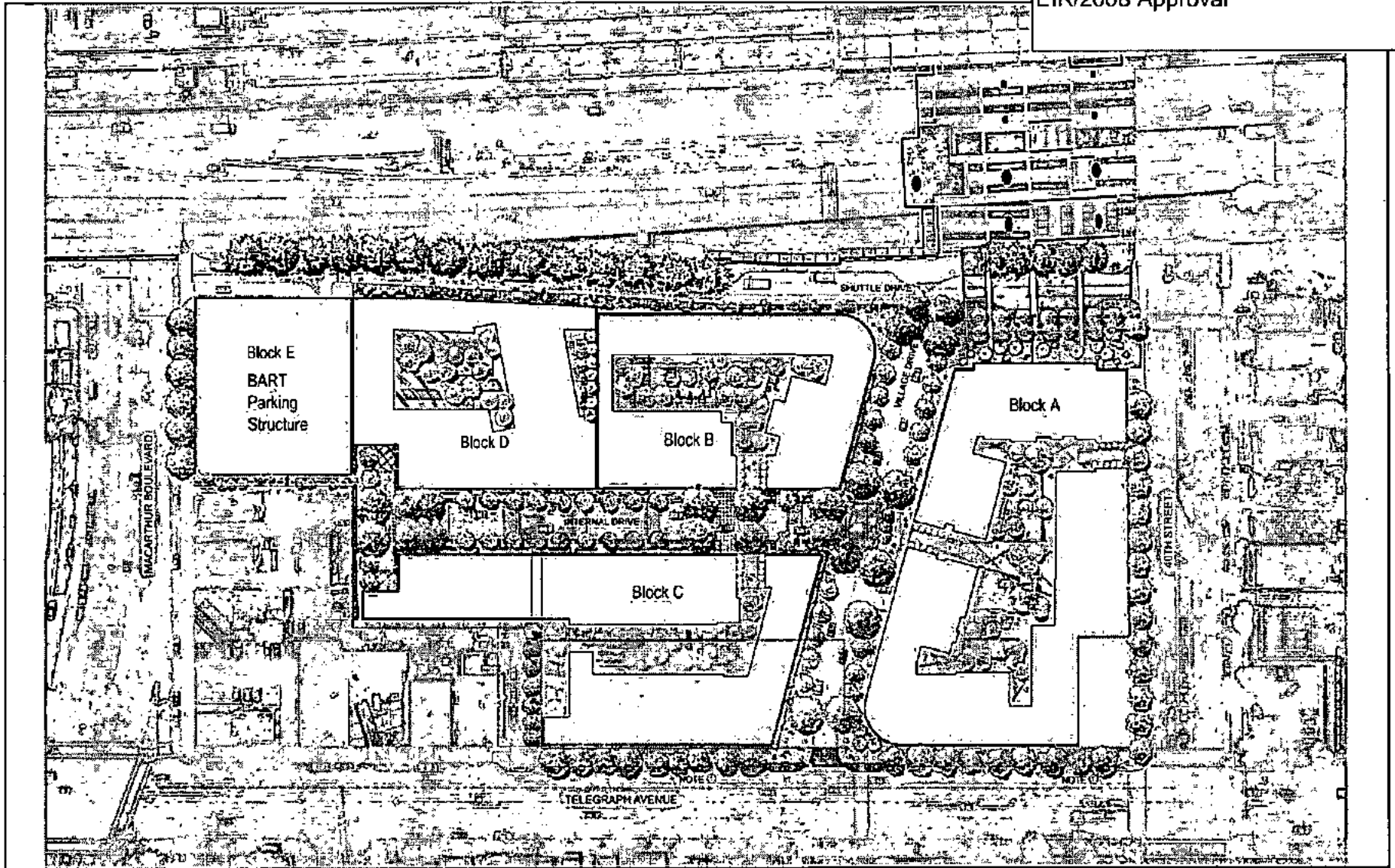
EXHIBIT A1

- Legend
-  Project site
  -  BART Plaza
  -  Parcel lines

MacArthur Transit Village Project Site



SOURCE: CITY OF OAKLAND, 2006.



 Surgery Center Parcel

MacArthur Village Project EIR  
Illustrative Site Plan 2008

EXHIBIT A

Exhibit A-3: Illustrative Plan  
(updated to include Phase 1 and 2  
FDPs, March 2011)

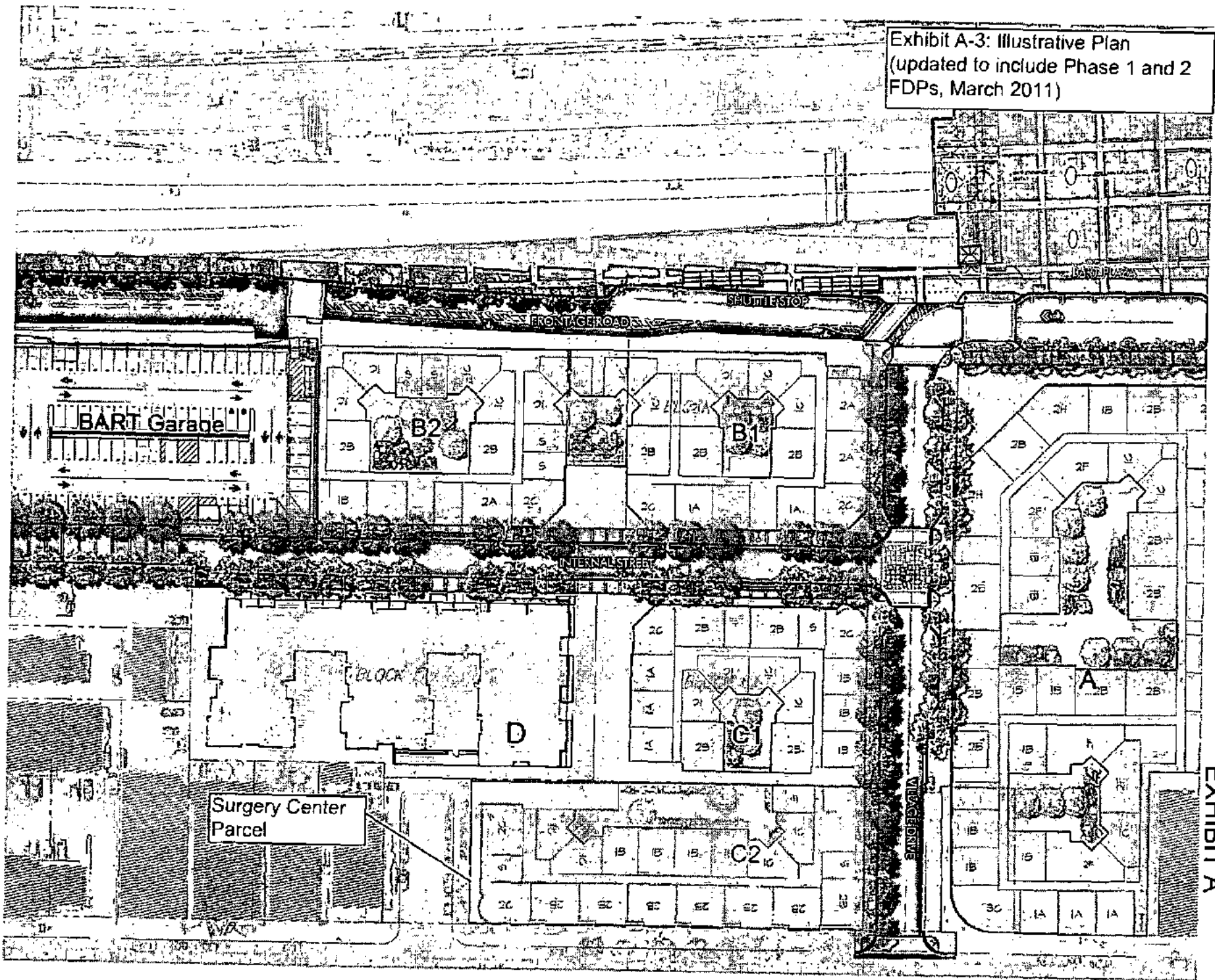


EXHIBIT A

Note: This exhibit only includes pages with conditions of approval referenced in the Surgery Center Letters Response Memorandum. See November 3, Planning Commission Report, dated November 3, 2010 (as amended and approved by the Planning Commission on 11/13/10)

## CONDITIONS OF APPROVAL FOR THE MACARTHUR TRANSIT VILLAGE PROJECT

### Part 1: General Conditions of Approval

#### 1. Approved Use

##### *Ongoing*

a) The project shall be constructed and operated in accordance with the authorized use as described in the application materials, staff report, and the plans submitted on May 28, 2008, and as amended by the following conditions. Any additional uses or facilities other than those approved with this permit, as described in the project description and the approved plans will require a separate application and approval. Any deviation from the approved drawings, Conditions of Approval or use shall require prior written approval from the Director of City Planning or designee. The project may however increase the number of permitted residential dwelling units up to a maximum of 675 dwelling units, as analyzed in the MacArthur Transit Village Project EIR provided that a) the ratio of affordable units (20% of market rate units) is maintained; and the resulting project design with the additional units shall conform in all major respects with the approved Preliminary Development Plan.

b) This action by the City Planning Commission ("this Approval") includes the approvals set forth below. This Approval includes:

i. Planned Unit Development (PUD), under Oakland Planning Code Chapters 17.122 and 17.140;

ii. Major Conditional Use Permit (CUP), under Oakland Planning Code Chapter 17.134; and

iii. Design Review, under Oakland Planning Code Chapter 17.136

c) This Approval shall not become effective unless the proposed legislative actions (rezoning and text amendment) occur as stated in Condition of Approval 20.

#### 2. Effective Date, Expiration, Extensions and Extinguishment

##### *Ongoing*

Unless a different termination date is prescribed, this Approval shall expire two years from the approval date, unless within such period all necessary permits for construction of Stage 1 (the BART Parking Garage) have been issued. Upon written request and payment of appropriate fees submitted no later than the expiration date of this permit, the Director of City Planning or designee may grant two one-year extensions of this date, with additional extensions subject to approval by the approving body. Expiration of any necessary building permit for this project may invalidate this Approval if the said extension period has also expired. These time periods are "tolled" due to litigation challenging this approval and thus such time shall not be counted toward expiration of this approval. The Preliminary Development Plan Approval for the Planned Unit Development Permit shall expire June 4, 2018 and all Final Development Plan phases shall be reviewed and approved by that date (see below for details on FDP Staging).

Conditions of Approval

Notwithstanding, the timeframes provided for in this Condition no. 2 the project sponsor shall, if feasible, make reasonable effort to proceed with all phases of the project as expeditiously as possible, and have the full build out of the project be completed as early as possible.

***FDP Staging***

Submittal of Final Development Plans (FDPs) shall be permitted in five (5) stages over a 10 year time period from the date of this approval, as detailed below.

(a) Each stage of FDP is described below:

- i. Stage 1. Stage 1 FDP for the project will include the construction of Building E, the replacement BART parking garage, site remediation, Internal Drive, the Frontage Road improvements, and the portion of Village Drive that extends from the Frontage Road to the Internal Drive. Stage 1 FDP shall be submitted to the Planning Department for review and processing and the project applicant shall make regular and consistent progress toward approval of Stage 1 FDP within 1 year from the date of this approval. If approved, construction associated with Stage 1 FDP shall commence in earnest by not later than 2 years from the date of Stage 1 FDP approval.
- ii. Stage 2. Stage 2 FDP for the project will include construction of Building D, consisting of a minimum of 90 below market rate rental units. Stage 2 FDP shall be submitted to the Planning Department for review and processing and the project applicant shall make regular and consistent progress toward approval of Stage 2 FDP within 3 years from the date of this approval. If approved, construction associated with Stage 2 FDP shall commence in earnest by not later than 2 years from the date of Stage 2 FDP approval.
- iii. Stage 3. Stage 3 FDP for the project will include construction of Building A, consisting of up to 240 ownership residential units and 26,000 square feet of commercial space. All street improvements, including the completion of Village Drive and any new traffic signals required by the project, will be completed in this phase. This phase will also include the completion of a public plaza directly across Frontage Road from the existing BART Plaza. Stage 3 FDP shall be submitted to the Planning Department for review and processing and the project applicant shall make regular and consistent progress toward approval of Stage 3 FDP within 3 years from the date of this approval. If not feasible, Stage 3 FDP approval may be delayed up to a year. If approved, construction associated with Stage 3 FDP shall commence in earnest not later than 2 years from the date of Stage 3 FDP approval.
- iv. Stage 4. Stage 4 FDP for the project will include the construction of Building B, consisting of up to 150 ownership residential units and 5,500 square feet of commercial space. Stage 4 FDP shall be submitted to the Planning Department for review and processing and the project applicant shall make regular and consistent progress toward approval of Stage 4 FDP within 8 years from the date of this approval. If approved, construction

associated with Stage 4 FDP shall commence in earnest not later than 2 years from the date of Stage 4 FDP approval.

- v. Stage 5. Stage 5 FDP for the will include the constmction of Building C, consisting of up to 195 ownership residential units and 12,500 square feet of commercial space. This phase will also include the construction of a community center use on the ground floor of Building C. Stage 5 FDP shall be submitted to the Planning Department for review and processing 10 years from the date of this approval. If approved, constmction associated with Stage 5 FDP shall commence in earnest not later than 2 years from the date of Stage 5 FDP approval.

- (b) For purposes of this conditions, the term “commence in earnest” shall mean to initiate activities based on a City-issued building permit and other necessary permit (s) and diligently prosecute such permit(s) in substantial reliance thereon and make regular and consistent progress toward the completion of constmction and the issuance of final certificate of occupancy, including successful completion of building inspections to keep the building permit and other permits active without the benefit of extension.
- (c) Provided that Stage 1 and 2 FDPs are approved in accordance with the above time frames, the Developer shall have the discretion to change which buildings (A, B, or C) are constmcted in which Stages (3, 4 or 5) provided that the FDP submittal dates for these stages remain the same. All other modifications to FDP staging shall be subject to review and approval by the Planning Commission.
- (d) FDP Stages may be combined and reviewed prior to the outlined time frames. If each stage of FDP is not submitted/completed within the time frames outlined above, the PDP shall be considered null and void.
- (e) If, subsequent to this approval, a Development Agreement for this project is adopted by the City, the phasing and constmction timeframes prescribed within the Development Agreement shall supersede this condition of approval and govern constmction phasing for the project.

3. Scope of This Approval; Major and Minor Changes

*Ongoing*

The project is approved pursuant to the Planning Code only. Minor changes to approved plans may be approved administratively by the Director of City Planning or designee. Major changes to the approved plans shall be reviewed by the Director of City Planning or designee to determine whether such changes require submittal and approval of a revision to the approved project by the approving body or a new, completely independent permit.

4. Conformance to Approved Plans; Modification of Conditions or Revocation

*Ongoing*

- a) Site shall be kept in a blight/nuisance-free condition. Any existing blight or nuisance shall be abated within 60-90 days of the project sponsor obtaining site control, unless an earlier date is specified elsewhere.
- b) The City of Oakland reserves the right at any time during constmction to require certification by a licensed professional that the as-built project conforms to all applicable zoning requirements, including but not limited to approved maximum heights and minimum setbacks. Failure to constmet the project in accordance with approved



Conditions of Approval

accordance with the California Air Resources Board and the Office of Environmental Health and Hazard Assessment for exposure to vehicular exhaust from roadways, the project sponsor has agreed to incorporate into the project a mechanical ventilation system that meets the efficiency standard of the MERV 13 for those units with windows fronting the freeway or Frontage Road. The ventilations shall be subject to review and approval by the City's Building Services Division. Appropriate maintenance, operation and repair materials will be furnished to project residents.

**25. Components of Final Development Plans.*****Prior to approval of Any Final Development Plans***

In accordance with the Planning Code Chapter 17.140, each stage of FDP shall:

(a) Conform to all major respects with the approved Preliminary Development Plan received by the Planning Division on May 28, 2008, and included as Exhibit F;

(b) Comply with development standards of the S-15 Zone, except and modified for building height as bonus for the Planned Unit Development and shown in the Preliminary Development Plan;

(c) Be consistent with the MacArthur Transit Village Design Guidelines included in these conditions as Exhibit C-3;

(d) Include all information included in the preliminary development plan plus the following:

- i. the location of water, sewerage, and drainage facilities;
- ii. detailed building floor plans, elevations and landscaping plans;
- iii. the character and location of signs;
- iv. plans for street improvements; and
- v. grading or earth-moving plans.

(e) Be sufficiently detailed to indicate fully the ultimate operation and appearance of the development stage including the quality of exterior materials and windows; and

(f) Include copies of legal documents required for dedication or reservation of group or common spaces, for the creation of nonprofit homes' association, or for performance bonds, shall be submitted with each Final Development Plan.

**26. Subdivision Maps*****Prior to final approval of Each Final Development Plan***

Final Development Plans shall be accompanied by subdivision maps as required to subdivide the property. The subdivision maps shall be reviewed and processed in accordance with Title 17, Subdivisions, of the City of Oakland Municipal Code and the Subdivision Map Act.

**27. Final Development Review and Approval by City Council.*****Prior to final approval of Any Final Development Plan***

All Final Development Plan(s) shall be subject to review and recommendation by the Planning Commission's Design Review Committee and Planning Commission, with final approval by the City Council.

**28. Minimum Setback to Buildings Adjacent to Project Site.*****Prior to issuance of a building permit***

All buildings within the project shall maintain a minimum 5 foot setback, except at the ground level, to existing buildings adjacent to the project site. The 5 foot minimum setback will ensure a minimum setback of 9 feet from the south windows located in the building light

**Mitigation Monitoring and Reporting Program**

Standard COA/MM	Mitigation Monitoring			Reporting	
	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure	Comments	Date/Initials
<b>D. AIR QUALITY</b>					
<p><b>COA AIR-1: Dust Control.</b> Prior to issuance of a demolition, grading, or building permit. During construction, the project applicant shall require the construction contractor to implement the following measures required as part of BAAQMD basic and enhanced dust control procedures required for construction sites. These include:</p> <p><b>BASIC (Applies to ALL construction sites)</b></p> <p>a) Water all active construction areas at least twice daily. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible.</p> <p>b) Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).</p> <p>c) Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.</p> <p>d) Sweep daily (with water sweepers using reclaimed water if possible) all paved access roads, parking areas and staging areas at construction sites.</p> <p>e) Sweep streets (with water sweepers using reclaimed water if possible) at the end of each day if visible soil material is carried onto adjacent paved roads.</p> <p>f) Limit the amount of the disturbed area at any one time, where feasible.</p>	<p>Ongoing throughout demolition, grading, and/or construction</p>	<p>City of Oakland, CEDA, Building Services Division</p>	<ul style="list-style-type: none"> <li>• Make regular visits to the project site to ensure that all dust-control mitigation measures are being implemented.</li> <li>• Verify that a designated dust control coordinator is on-call during construction periods.</li> </ul>		

EXHIBIT A

**Mitigation Monitoring and Reporting Program**

Standard COA/MM	Mitigation Monitoring			Reporting	
	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure	Comments	Date/Initials
g) Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph. h) Pave all roadways, driveways, sidewalks, etc. as soon as feasible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used. i) Replant vegetation in disturbed areas as quickly as feasible. j) Enclose, cover, water twice daily or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.). k) Limit traffic speeds on unpaved roads to 15 miles per hour. l) Clean off the tires or tracks of all trucks and equipment leaving any unpaved construction areas.					
<b>ENHANCED</b> (All "Basic" Controls listed above plus the following if the construction site is greater than 4 acres) a) All "Basic" controls listed above, plus: b) Install sandbags or other erosion control measures to prevent silt runoff to public roadways. c) Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more). d) Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such person shall be provided to the BAAQMD prior to the start of construction as well as posted on-site over the duration of construction. e) Install appropriate wind breaks at the construction site to minimize wind blown dust.					

EXHIBIT A

**Mitigation Monitoring and Reporting Program**

Standard COA/MM	Mitigation Monitoring			Reporting	
	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure	Comments	Date/Initials
<p>COA AIR-2: Construction Emissions. Prior to issuance of a demolition, grading, or building permit. To minimize construction equipment emissions during construction, the project applicant shall require the construction contractor to:</p> <p>a) Demonstrate compliance with BAAQMD Regulation 2, Rule 1 (General Requirements) for all portable construction equipment subject to that rule. BAAQMD Regulation 2, Rule 1, provides the issuance of authorities to construct and permits to operate certain types of portable equipment used for construction purposes (e.g., gasoline or diesel-powered engines used in conjunction with power generation, pumps, compressors, and cranes) unless such equipment complies with all applicable requirements of the "CAPCOA" Portable Equipment Registration Rule" or with all applicable requirements of the Statewide Portable Equipment Registration Program. This exemption is provided in BAAQMD Rule 2-1-105.</p> <p>b) Perform low- NOx tune-ups on all diesel-powered construction equipment greater than 50 horsepower (no more than 30 days prior to the start of use of that equipment). Periodic tune-ups (every 90 days) shall be performed for such equipment used continuously during the construction period.</p>	<p>Prior to issuance of a demolition, grading, or building permit; and ongoing throughout construction</p>	<p>City of Oakland, CEDA, Building Services Division</p>	<p>Verify that all construction equipment meets mitigation measures.</p>		
<b>E. NOISE AND VIBRATION</b>					
<p>COA NOISE-1: Days/Hours of Construction Operation. Ongoing throughout demolition, grading, and/or construction. The project applicant shall require construction contractors to limit standard construction activities as follows:</p> <p>a) Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pile driving and/or other extreme noise generating activities greater than 90 dBA limited to between 8:00 a.m. and 4:00 p.m. Monday through Friday.</p>	<p>Ongoing throughout demolition, grading, and/or construction</p>	<p>City of Oakland, CEDA, Building Services Division</p>	<p>Make regular visits to the construction site to ensure that construction activities are restricted the hours designated in COA NOISE-1.</p>		

**Mitigation Monitoring and Reporting Program**

Standard COA/MM	Mitigation Monitoring			Reporting	
	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure	Comments	Date/Initials
<p>b) Any construction activity proposed to occur outside of the standard hours of 7:00 a.m. to 7:00 p.m. Monday through Friday for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened and such construction activities shall only be allowed with the prior written authorization of the Building Services Division.</p> <p>c) Construction activity shall not occur on Saturdays, with the following possible exceptions:</p> <ul style="list-style-type: none"> <li>• Prior to the building being enclosed, requests for Saturday construction for special activities (such as concrete pouring which may require more continuous amounts of time), shall be evaluated on a case-by-case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened. Such construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division.</li> <li>• After the building is enclosed, requests for Saturday construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division, and only then within the interior of the building with the doors and windows closed.</li> </ul> <p>d) No extreme noise generating activities (greater than 90 dBA) shall be allowed on Saturdays, with no exceptions.</p>					

EXHIBIT A

**Mitigation Monitoring and Reporting Program**

Standard COA/MM	Mitigation Monitoring			Reporting	
	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure	Comments	Date/Initials
e) No construction activity shall take place on Sundays or Federal holidays. f) Construction activities include but are not limited to: truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non-enclosed area.					
<p><b>COA NOISE-2: Noise Control.</b> <i>Ongoing throughout demolition, grading, and/or construction.</i> To reduce noise impacts due to construction, the project applicant shall require construction contractors to implement a site-specific noise reduction program, subject to city review and approval, which includes the following measures:</p> <p>a) Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).</p> <p>b) Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.</p>	Ongoing throughout demolition, grading, and/or construction	City of Oakland, CEDA, Building Services Division	<ul style="list-style-type: none"> <li>Verify that a site-specific noise reduction program has been prepared and implemented.</li> <li>Make regular visits to the construction site to ensure that noise from construction activities is appropriately controlled.</li> </ul>		

**Mitigation Monitoring and Reporting Program**

Standard COA/MM	Mitigation Monitoring			Reporting	
	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure	Comments	Date/Initials
c) Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction  d) The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.					
<b>COA NOISE-3: Noise Complaint Procedures. Ongoing throughout demolition, grading, and/or construction. Prior to the issuance of each building permit, along with the submission of construction documents, the project applicant shall submit to the City Building Services Division a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include:</b>  a) A procedure and phone numbers for notifying the City Building Services Division staff and Oakland Police Department; (during regular construction hours and off-hours);  b) A sign posted on-site pertaining with permitted construction days and hours and complaint procedures and who to notify in the event of a problem. The sign shall also include a listing of both the City and construction contractor's telephone numbers (during regular construction hours and off-hours);  c) The designation of an on-site construction complaint and enforcement manager for the project;	Submit list prior to the issuance of a building permit;  Ongoing throughout demolition, grading, and/or construction	City of Oakland, CEDA, Building Services Division	Verify the implementation of the list of measures to respond to and track complaints pertaining to construction noise.		

**Mitigation Monitoring and Reporting Program**

Standard COA/MM	Mitigation Monitoring			Reporting	
	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure	Comments	Date/Initials
<p>d) Notification of neighbors and occupants within 300 feet of the project construction area at least 30 days in advance of extreme noise generating activities about the estimated duration of the activity; and</p> <p>e) A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.</p>					
<p>COA NOISE-4: Interior Noise. Prior to issuance of a building permit. If necessary to comply with the interior noise requirements of the City of Oakland General Plan Noise Element and achieve an acceptable interior noise level, noise reduction in the form of sound-rated assemblies (i.e., windows, exterior doors, and walls) shall be incorporated into project building design, based upon recommendations of a qualified acoustical engineer. Final recommendations for sound-rated assemblies will depend on the specific building designs and layout of buildings on the site and shall be determined during the design phase; however, the following sound-rated assembly recommendations, based on the conceptual project layout and design (described in Chapter III, Project Description) should be included in the final study and will be included in the Standard Condition of Approval:</p> <p>An alternate form of ventilation, such as air conditioning systems, shall be included in the design for all units located within 659 feet of the centerline of SR-24, or within 153 feet of the centerline of 40<sup>th</sup> Street, or within 166 feet of the centerline of MacArthur Boulevard to ensure that windows can remain closed for prolonged periods of time to meet the interior noise standard and Uniform Building Code Requirements.</p>	<p>Submit noise recommendations prior to the issuance of a building permit for each phase of construction containing residential units</p> <p>Implement recommendations according to timeframes outlined in plan</p>	<p>City of Oakland, CEDA, Building Services Division</p>	<p>Verify that appropriate sound-rated assemblies to reduce noise levels have been incorporated into the project building design.</p>		



**Mitigation Monitoring and Reporting Program**

Standard COA/MM	Mitigation Monitoring			Reporting	
	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure	Comments	Date/Initials
All residential building façades directly exposed to and within 240 feet of the centerline of SR-24 must be constructed to meet the interior DNL 45 dB requirement; this likely could be achieved with an overall STC-30 rating with windows having a minimum STC-34 rating. This could be achieved with a typical 1-inch insulated glazing assembly, possibly with one light being laminated (or other appropriate example assembly). Quality control must be exercised in construction to ensure all air-gaps and penetrations of the building shell are controlled and sealed.					
COA NOISE-5: Pile Driving and Other Extreme Noise Generators. Ongoing throughout demolition, grading, and/or construction. To further reduce potential pier drilling, pile driving and/or other extreme noise generating construction impacts greater than 90 dBA, a set of site-specific noise attenuation measures shall be completed under the supervision of a qualified acoustical consultant. Prior to commencing construction, a plan for such measures shall be submitted for review and approval by the City to ensure that maximum feasible noise attenuation will be achieved. This plan shall be based on the final design of the project. A third-party peer review, paid for by the project applicant, may be required to assist the City in evaluating the feasibility and effectiveness of the noise reduction plan submitted by the project applicant. The criterion for approving the plan shall be a determination that maximum feasible noise attenuation will be achieved. A special inspection deposit is required to ensure compliance with the noise reduction plan. The amount of the deposit shall be determined by the Building Official and the deposit shall be submitted by the project applicant concurrent	Submit plan prior commencing construction activities involving pile driving or other extreme noise generators; Implement measures according to timeframes outlined in the plan	City of Oakland, CEDA, Building Services Division	<ul style="list-style-type: none"> <li>Verify that a plan for reducing extreme noise generating construction impacts has been prepared.</li> <li>Verify that the plan will achieve the maximum feasible noise attenuation.</li> <li>Verify that a special inspection deposit has been submitted.</li> </ul>		

**Mitigation Monitoring and Reporting Program**

Standard COA/MM	Mitigation Monitoring			Reporting	
	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure	Comments	Date/Initials
<p>with submittal of the noise reduction plan. The noise reduction plan shall include, but not be limited to, an evaluation of implementing the following measures. These attenuation measures shall include as many of the following control strategies as applicable to the site and construction activity:</p> <ul style="list-style-type: none"> <li>a) Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings;</li> <li>b) Implement "quiet" pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions;</li> <li>c) Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site;</li> <li>d) Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example, and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and</li> <li>e) Monitor the effectiveness of noise attenuation measures by taking noise measurements.</li> </ul>					

**Mitigation Monitoring and Reporting Program**

Standard COA/MM	Mitigation Monitoring			Reporting	
	Monitoring Schedule	Monitoring Responsibility	Monitoring Procedure	Comments	Date/Initials
<p><b>COA NOISE-6: Demolition/Construction Adjacent to Historic Structures.</b> The project applicant shall retain a structural engineer or other appropriate professional to determine threshold levels of vibration and cracking that could damage the buildings adjacent to the project site and design means and methods of construction that shall be utilized to not exceed the thresholds. Additionally, the project applicant shall submit a demolition plan for review and approval so as not to unduly impact neighboring property improvements particularly 505 40th Street. Neighboring property improvements within 10 of the project boundary shall be indicated on the demolition plan. The method of protection for any improvements within 5 feet of the project boundary shall be specifically addressed in the demolition plan. The applicant shall submit such engineering report and demolition plan and means of compliance with the engineering recommendations to the City (CEDA Building Services) for review and approval and implement the approved plan.</p> <p>0)</p>	<p>Prior to the issuance of a demolition, grading, or building permit for building A</p>	<p>City of Oakland, CEDA, Building Services Division</p>	<p>Verify that a structural engineer or other appropriate professional has determined the means and methods of construction will not exceed threshold levels of vibration that may damage buildings adjacent to the project site.</p>		



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BERKELEY  
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FORT COLLINS

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RIVERSIDE  
ROCKLIN  
SAN LUIS OBISPO  
SOUTH SAN FRANCISCO

## MEMORANDUM

**DATE:** March 11, 2011

**TO:** Joe McCarthy, Project Manager, and Art May, Development Director, MacArthur Transit Community Partners

**FROM:** Tony Chung and Ronald Bmgger, LSA Associates, Inc.

**SUBJECT:** Response to Holland & Knight Comment Letter on the EIR for the MacArthur Transit Village Project in the City of Oakland, California.

LSA Associates, Inc. (LSA) has reviewed the comment letter provided by Holland & Knight dated December 21, 2010 on the MacArthur Transit Village Project. Although none of the criteria have been met or circumstances have occurred under CEQA Guidelines section 15162 that would require any additional environmental review with respect to the Project, we have prepared an analysis, including a health risk assessment, responding to the contentions in this letter. The scope of this analysis was to evaluate the air quality impacts associated with construction of the Phase 1 and Phase 2 Final Development Plans of the MacArthur Transit Village project (Phase 1 and 2 FDPs)<sup>1</sup> based on the Construction Equipment Schedule, dated January 28, 2011.

In summary our analysis demonstrates (1) as stated in the Project EIR, the City's Standard Conditions of Approval with respect to dust and diesel emissions will mitigate potential impacts on the Surgery Center; and (2) the project construction would not create a health risk for patients and employees of the Surgery Center. Our responses are provided below.

**Comment:** The Surgery Center states that the following impacts will occur from Project construction:

- Dust and diesel particulate matter impacts on respiratory and cardiovascular patients uniquely sensitive to air pollution.
- Dust contamination of sterile medical devices, and
- Diesel particulate matter and fume impacts on patients and employees at the Surgery Center, including headaches and nausea.

**LSA Response:** The MacArthur Transit Village EIR correctly analyzed the dust and diesel particulate matter emissions associated with Project construction. The Project is subject to the City's Standard Conditions of Approval for dust (SCA-AIR-1) and construction equipment (SCA-AIR2), which are designed to reduce any potential impacts to a less-than-significant level. The requirements of these Standard Conditions of Approval are consistent with the Bay Area Air Quality Management District's (BAAQMD) basic and enhanced construction mitigation measures that were in effect when the EIR was published and remain generally consistent with the BAAQMD's basic and additional construction

<sup>1</sup> These are the two FDPs applications currently on file with the City and the two construction phases of the MacArthur Transit Village Project that are anticipated to overlap to some extent and occur within the next two years. Consequently the effects of both of these construction phases are considered in this analysis.

mitigation measures in the 2010 BAAQMD CEQA Guidelines (page 2-6). Additionally, the Project EIR quantified the estimated construction emissions based on the phased construction schedule in Table IV.D-6 (EIR p.247). This Table confirms that the Project's unmitigated construction emissions are below the BAAQMD's 2010 CEQA Guidelines threshold's of significance for construction emissions. Consequently, there is no evidence to suggest that the Surgery Center would experience any significant adverse impacts related to dust and diesel emissions from the Project construction. The potential dust and diesel particulate matter emissions from the Project construction will be significantly reduced and controlled through implementation of SCA-AIR-1 and SCA-AIR-2. These conditions of approval protect the Surgery Center.

A health risk assessment (HRA) was conducted to more precisely assess the air quality impacts from construction on the project site to patients and workers at the Surgery Center. Using the detailed Construction Equipment Schedule, dated January 28, 2011, provided by the MacArthur Transit Community Partners (MTC) and a combination of the California Air Resources Board's URBEMIS 2007 and HARP models, a very detailed HRA was developed. The URBEMIS 2007 model was used to translate the construction details into pollutant emissions rates. These emissions were then assigned locations on the project site corresponding with the construction phasing plan and within those areas, placed closer to the Surgery Center to maximize the predicted impact. The HARP model was then used to combine these emissions and local meteorological conditions into an air dispersion model to predict pollutant concentrations and corresponding health risk levels. It is standard HRA methodology to assess only the outdoor risk levels, since the amount of protection afforded by buildings vary substantially. It is probable that the Surgery Center provides above average protection to patients and workers within, however, this HRA does not attempt to quantify that protection. Thus, this HRA assumes that the exposure occurs for the standard California-recommended 24 hours per day, 7 days per week, 240 days per year.

The primary health concern is the short-term acute affects from the exhaust of the heavy-duty construction equipment operating in close proximity to the Surgery Center. However, there is also the potential for a longer term exposure to the workers at the Surgery Center, and possibly to patients of the Surgery Center. The Surgery Center currently provides ambulatory care, performing outpatient surgeries and nursing care. It does not have inpatient accommodations. However, since this project has no control over how the Surgery Center operates, this HRA also includes the predicted carcinogenic and chronic health risks to a patient staying not only overnight, but doing so for the entire construction period. It is assumed that the Surgery Center workers stay 8 hours per day on average and continue to work at the Surgery Center for the entire construction period. To insure completeness, the health risk levels were determined not only for the patients and workers at the Surgery Center, but also for the homes surrounding the project site. Again, the HRA assumes the doctors, nurses and patients all spend all day outside on the side of the Surgery Center building nearer to the construction activities. Table 1 shows the HRA results.

**Table 1: Inhalation Health Risks from Construction Operations**

Risk Category	Carcinogenic Inhalation Health Risk	Chronic Inhalation Health Index	Acute Inhalation Health Index	Threshold Exceeded ?
2-Year Patient Risks	0.24 in 1 million	0.0061	0.040	No
Worker Risks	0.047 in 1 million	0.0061	0.040	No
Residential Risks	0.24 in 1 million	0.0061	0.040	No
BAAQMD Threshold	10 in 1 million	1	1	

Source: LSA Associates, Inc., February 2011

The BAAQMD additionally requires that the long-term carcinogenic health risk results have age factors applied to account for the range of age groups in the general population. Table 2 shows the age groups, their adjustment factors, and the adjusted carcinogenic health risk level for someone staying at the Surgery Center for the full construction period 24 hours a day or for residents of the nearby homes.

Table 2: 70-Year Carcinogenic Age Group Adjustment

Risk Group	ASF	Duration	Carcinogenic Inhalation Health Risk
3rd Trimester to age 2 years	10	2.25/70	0.077 in a million
age 2 years to age 16 years	3	14/70	0.14 in a million
age 16 to 70 years	1	54/70	0.20 in a million
Adjusted 70 year lifetime risk			0.41 in a million
BAAQMD Threshold			10 in a million
Threshold Exceeded ?			No

Source: LSA Associates, Inc., February 2011

This HRA completely assessed health risk levels; however, there is no quantitative method to predict fume impacts. Since there is a correlation between pollutant concentrations and the resulting odor, it is logical to conclude that since the HRA shows very low concentrations of pollutants there will not be a odor impact.

## CONCLUSIONS

As shown in Tables 1 and 2 for both patients and workers at the Surgery Center, as well as to nearby residents, construction operations would result in a maximum health risk level that is below the BAAQMD's criterion of significance for cancer health effects (10 in 1 million), and for chronic or acute health risks. While the Surgery Center patients may be uniquely sensitive to air pollution, these health risk levels are substantially below the BAAQMD thresholds of significance, making it unlikely that anyone, even uniquely sensitive individuals, would experience a negative health effect.

Historically, the BAAQMD has used the criterion of 10 in 1 million to determine the risk for point sources such as emissions from industrial facilities. This threshold was developed for these kinds of emissions sources that operate continuously for decades. Applying this threshold to a relatively brief event, such as the construction of this project, is very conservative. Additionally, the BAAQMD has documented that the average ambient air in the San Francisco Bay area has pollutant levels such that everyone living there has a carcinogenic health risk of 602 in 1 million.<sup>2</sup> The increase in health risk to the patients and workers at the Surgery Center is so small that no real difference would be detectable.

<sup>2</sup> Bay Area Air Quality Management District. 2004. *Toxic Air Contaminant Control Program, Annual Report 2002*. June.

Dust control is a major concern of the BAAQMD for all construction operations. As described on page D-47 of the BAAQMD CEQA Guidelines: "For fugitive dust emissions, the BAAQMD recommends following the current best management practices approach which has been a pragmatic and effective approach to the control of fugitive dust emissions. Studies have demonstrated (Western Regional Air Partnership, U.S.EPA) that the application of best management practices at construction sites have significantly controlled fugitive dust emissions. Individual measures have been shown to reduce fugitive dust by anywhere from 30 percent to more than 90 percent. In the aggregate best management practices will substantially reduce fugitive dust emissions from construction sites. These studies support staff's recommendation that projects implementing construction best management practices will reduce fugitive dust emissions to a less than significant level." This project is committed to follow all best management practices to minimize fugitive dust impacts.

Whether a particular odor is objectionable can be very subjective. Odors rarely have direct health impacts, but they can be very unpleasant and can lead to anger and concern over possible health effects among the public. The current BAAQMD odor impact threshold is five confirmed complaints per year over a three year period. This project will be sensitive to odor complaints and make all efforts to minimize odor impacts.

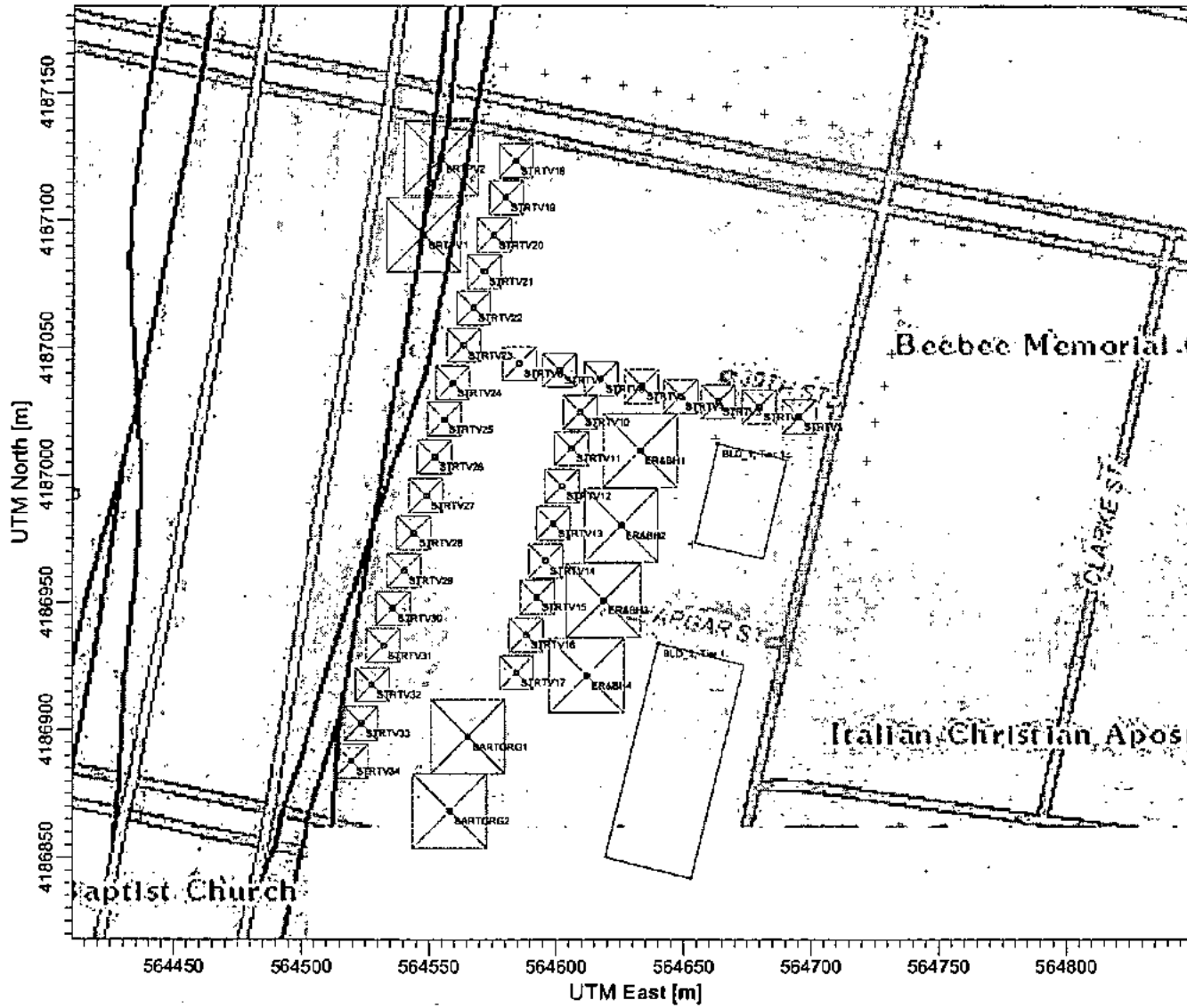
Attachment: HRA Worksheets and modeling files

**HRA Worksheets and Modeling Files**



EXHIBIT C

PROJECT TITLE:  
**MacArthur BART HEALTH RISK ASSESSMENT**  
**Construction Emissions**



COMMENTS:  
 Green pluses represent receptors, large blue rectangles represent buildings, squares with cross inside represent volume sources

SOURCES:  
 41

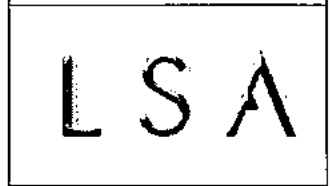
RECEPTORS:  
 25

COMPANY NAME:  
**LSA Associates, Inc.**

MODELER:  
**Ronald Brugger**

DATE:  
**2/11/2011**

SCALE: 12,492  
 0 ——— 0.05 km



PROJECT NO.:  
**MTC1101**

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** ISC8T3 Input Produced by:
** AERMOD View Ver. 6.7.1
** Lakes Environmental Software Inc.
** Date: 1/31/2011
** File: P:\MTC1101\Modeling\MacBExh.INP
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TERRHGTS ELEV
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** ISCST3 Source Pathway
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** DESCRSRC Street Volume 2
LOCATION STRTV3 VOLUME 564663.360 4187028.711 24.000
** DESCRSRC Street Volume 3
LOCATION STRTV4 VOLUME 564648.616 4187030.784 24.000
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LOCATION STRTV5 VOLUME 564633.397 4187034.742 24.000
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LOCATION BARTGRGI VOLUME 564565.370 4186897.289 22.000
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 PLOTFILE PERIOD STRTV3 PE00G031.PLT  
 PLOTFILE 1 STRTV30 1ST 01H1G032.PLT  
 PLOTFILE PERIOD STRTV30 PE00G032.PLT  
 PLOTFILE 1 STRTV3I 1ST 01H1G033.PLT  
 PLOTFILE PERIOD STRTV3I PE00G033.PLT

PLOTFILE 1 STRTV32 1ST 01H1G034.PLT  
PLOTFILE PERIOD STRTV32 FE00G034.PLT  
PLOTFILE 1 STRTV33 1ST 01H1G035.PLT  
PLOTFILE PERIOD STRTV33 PE00G035.PLT  
PLOTFILE 1 STRTV34 1ST 01H1G036.PLT  
PLOTFILE PERIOD STRTV34 PE00G036.PLT  
PLOTFILE 1 STRTV4 1ST 01H1G037.PLT  
PLOTFILE PERIOD STRTV4 PE00G037.PLT  
PLOTFILE 1 STRTV5 1ST 01H1G038.PLT  
PLOTFILE PERIOD STRTV5 PE00G033.PLT  
PLOTFILE 1 STRTV6 1ST 01H1G039.PLT  
PLOTFILE PERIOD STRTV6 PE00G039.PLT  
PLOTFILE 1 STRTV7 1ST 01H1G040.PLT  
PLOTFILE PERIOD STRTV7 PE00G040.PLT  
PLOTFILE 1 STRTV8 1ST 01H1G041.PLT  
PLOTFILE PERIOD STRTV8 PE00G041.PLT  
OU FINISHED  
\*\*

\*\*\*\*\*  
\*\* Project Parameters  
\*\*\*\*\*  
\*\* PROJCTN CoordinateSystemUTM  
\*\* DESCPTN UTM: Universal Transverse Mercator  
\*\* DATUM North American Datum 1983  
\*\* DTMRGN CONUS  
\*\* UNITS m  
\*\* ZONE 10  
\*\*

LSA Associates, Inc.

URBEMIS 2007 Annual Construction Emissions Rates

			PM10 Exhaust	ROG	
2011			0.210069899	0.777930779	
	Demolition 03/03/2011-03/31/2011	Motel Demo	BART Garage	0.011815347	0.024744268
	Mass Grading 04/01/2011-05/31/2011	Environmental Remediation	ER&BH	0.031206026	0.063550874
	Mass Grading 05/01/2011-05/31/2011	BART Garage - Earthwork	BART Garage	0.005756416	0.010915693
	Trenching 06/01/2011-06/30/2011	BART Garage - Piles	BART Garage	0.008540256	0.016372634
	Trenching 06/01/2011-08/31/2011	BART Garage - Grade Beams / Pile Caps	BART Garage	0.029798098	0.047941697
	Demolition 07/01/2011-08/31/2011	Frontage Road - Demo & Earthwork	Street Vols 18-34	0.017847907	0.035941638
	Trenching 08/01/2011-09/30/2011	Frontage Road - Utilities	Street Vols 18-34	0.006552109	0.01258851
	Asphalt 09/01/2011-12/31/2011	BART Garage - Vertical Concrete	BART Garage	0.054765691	0.07922191
	Demolition 09/01/2011-09/30/2011	BART Plaza - Demo	BART Plaza	0.006802976	0.013167806
	Asphalt 10/01/2011-10/31/2011	BART Plaza - Concrete	BART Plaza	0.002212237	0.006062875
	Asphalt 10/01/2011-11/30/2011	Frontage Road - Paving & Sidewalks	Street Vols 18-34	0.017414164	0.031185679
	Trenching 10/01/2011-11/30/2011	W. MacArthur - Utilities	Street Vols 18-34	0.006260904	0.012029021
	Coating 11/01/2011-03/31/2012	BART Garage - Exterior Skin	BART Garage	0.000142053	0.399894425
	Fine Grading 11/01/2011-11/30/2011	BRiDGE - Earthwork	ER&BH	0.006486542	0.013681873
	Asphalt 12/01/2011-02/28/2012	BRiDGE - Concrete	ER&BH	0.002151591	0.004280295
	Asphalt 12/01/2011-12/31/2011	W. MacArthur - Concrete	Street Vols 18-34	0.002317581	0.006351583
2012			0.09	1.10	
	Asphalt 12/01/2011-02/28/2012	BRiDGE - Concrete	ER&BH	0.004216838	0.00847455
	Coating 11/01/2011-03/31/2012	BART Garage - Exterior Skin	BART Garage	0.000210533	0.885031083
	Demolition 01/01/2012-01/31/2012	BART Plaza - Demo	BART Plaza	0.006742369	0.013505804
	Asphalt 02/01/2012-02/28/2012	BART Plaza - Concrete	BART Plaza	0.002146619	0.006132647
	Building 02/01/2012-03/31/2012	BART Garage - Sitework	BART Garage	0.024589458	0.077750154
	Fine Grading 04/01/2012-05/31/2012	Internal Streets & Village - Earthwork	Street Vols 1-16	0.016886366	0.033507655
	Trenching 09/01/2012-11/30/2012	Internal Streets & Village - Utilities	Street Vols 1-16	0.031723811	0.060486488
	Asphalt 11/01/2012-01/30/2013	Internal Streets & Village - Paving & Sidewalk	Street Vols 1-16	0.005711218	0.01110517
2013			0.00	0.01	
	Asphalt 11/01/2012-01/30/2013	Internal & Village - Paving & Sidewalks	Street Vols 1-16	0.003006187	0.00589604
			total	0.305303299	1.87982036938142



Translating Base PM10 and ROG Emissions Rates to Toxic Compound Emissions Rates

Construction Area	Number of modeling sources	Annual Emissions (lb/year)														
		URBEMIS PM10 tons/year	URBEMIS ROG tons/year	Years of Construction	PM10	1,3-butadiene	acetaldehyde	benzene	ethylbenzene	formaldehyde	methanol	mek	naphthalene	styrene	toluene	xylene
BART Garage	2	0.135617852	1.541871863	2	3.875	8.37E-02	3.24	0.882	0.134	6.48	0.0132	0.651	0.0374	0.0256	0.649	0.269
EvRcm & BRIDGE	4	0.044060998	0.089987592	2	0.629	2.44E-03	0.0945	0.0257	0.00392	0.189	3.86E-04	0.019	0.00109	7.46E-04	0.0189	0.00785
BART Plaza	2	0.017904201	0.038869131	2	0.512	2.11E-03	0.0817	0.0222	0.00339	0.163	3.33E-04	0.0164	9.44E-04	6.44E-04	0.0164	0.00679
Internal Street	16	0.057327581	0.110995353	2	0.205	7.53E-04	0.0291	0.00793	0.00121	0.0583	1.19E-04	0.00586	3.37E-04	2.30E-04	0.00584	0.00242
Frontage Rd	17	0.050392666	0.09809643	2	0.169	6.26E-04	0.0242	0.0066	0.00101	0.0485	9.89E-05	0.00487	2.80E-04	1.91E-04	0.00486	0.00201
	41	0.305303299	1.879820369													

Construction Area	Construction days/year	Construction hours/day	Hourly Emissions (lb/hr)											
			PM10	1,3-butadiene	acetaldehyde	benzene	ethylbenzene	formaldehyde	methanol	mek	naphthalene	styrene	toluene	xylene
BART Garage	250	8	1.94E-03	4.19E-05	1.62E-03	4.41E-04	6.70E-05	3.24E-03	6.60E-06	3.26E-04	1.87E-05	1.28E-05	3.25E-04	1.35E-04
EvRcm & BRIDGE			3.15E-04	1.22E-06	4.73E-05	1.29E-05	1.96E-06	9.45E-05	1.93E-07	9.50E-06	5.45E-07	3.73E-07	9.45E-06	3.93E-06
BART Plaza			2.56E-04	1.06E-06	4.09E-05	1.11E-05	1.70E-06	8.15E-05	1.67E-07	8.20E-06	4.72E-07	3.22E-07	8.20E-06	3.40E-06
Internal Street			1.02E-04	3.77E-07	1.46E-05	3.97E-06	6.05E-07	2.92E-05	5.95E-08	2.93E-06	1.69E-07	1.15E-07	2.92E-06	1.21E-06
Frontage Rd			8.47E-05	3.13E-07	1.21E-05	3.30E-06	5.05E-07	2.43E-05	4.95E-08	2.44E-06	1.40E-07	9.55E-08	2.43E-06	1.01E-06

Speciation Profile #81S

1,3-butadiene	0.0019
acetaldehyde	0.07353
benzene	0.02001
ethylbenzene	0.00305
formaldehyde	0.14714
methanol	0.0003
mek	0.01477
naphthalene	0.00085
styrene	0.00058
toluene	0.01473
xylene	0.00611

From the ARB website: Speciation Profiles Used in ARB Modeling  
<http://www.arb.ca.gov/ei/speciate/dndop1.htm#specprof>  
 downloaded 10/14/2010

# EXHIBIT C

This file: P:\MTC1101\Modeling\Rep\_Can\_70yr\_Inh\_AllRec\_AllSrc\_AllCh\_ByRec\_Site.txt

Created by HARP Version 1.4d Build 23.09.07  
 Uses ISC Version 99155  
 Uses BPIP (Dated: 04112)  
 Creation date: 2/1/2011 1:11:46 PM

## EXCEPTION REPORT

(there have been no changes or exceptions)

## INPUT FILES:

Source-Receptor file: P:\MTC1101\Modeling\MACBEXH.SRC  
 Averaging period adjustment factors file: not applicable  
 Emission rates file: EmRates.ems  
 Site parameters file: P:\MTC1101\Modeling\project.sit

Coordinate system: UTM NAD83

Screening mode is OFF

Exposure duration: 70 year (adult resident)  
 Analysis method: 80th Percentile Point Estimate (inhalation pathway only)  
 Health effect: Cancer Risk  
 Receptor(s): All  
 Sources(s): All  
 Chemicals(s): All

## SITE PARAMETERS

Inhalation only. Site parameters not applicable.

## CHEMICAL CROSS-REFERENCE TABLE AND BACKGROUND CONCENTRATIONS

CHEM	CAS	ABBREVIATION	POLLUTANT NAME	BACKGROUND (ug/m <sup>3</sup> )
0001	9901	DieselExhPM	Diesel engine exhaust, particulate matter (Diesel PM)	0.000E+00
0002	106990	1,3-Butadiene	1,3-Butadiene	0.000E+00
0003	75070	Acetaldehyde	Acetaldehyde	0.000E+00
0004	71432	Benzene	Benzene	0.000E+00
0005	100414	Ethyl Benzene	Ethyl benzene	0.000E+00
0006	50000	Formaldehyde	Formaldehyde	0.000E+00
0007	67561	Methanol	Methanol	0.000E+00
0008	78933	MEK	Methyl ethyl ketone {2-Butanone}	0.000E+00
0009	91203	Naphthalene	Naphthalene	0.000E+00
0010	100425	Styrene	Styrene	0.000E+00
0011	108883	Toluene	Toluene	0.000E+00
0012	1330207	Xylenes	Xylenes (mixed)	0.000E+00

## CHEMICAL HEALTH VALUES

CHEM	CAS	ABBREVIATION	CancerPF (Inh) (mg/kg-d) <sup>-1</sup>	CancerPF (Oral) (mg/kg-d) <sup>-1</sup>	ChronicREL (Inh) ug/m <sup>3</sup>	ChronicREL (Oral) mg/kg-d	AcuteREL ug/m <sup>3</sup>
0001	9901	DieselExhPM	1.10E+00	*	5.00E+00	*	*
0002	106990	1,3-Butadiene	6.00E-01	*	2.00E+01	*	*
0003	75070	Acetaldehyde	1.00E-02	*	1.40E+02	*	4.70E+02
0004	71432	Benzene	1.00E-01	*	6.00E+01	*	1.30E+03
0005	100414	Ethyl Benzene	8.70E-03	*	2.00E+03	*	*
0006	50000	Formaldehyde	2.10E-02	*	9.00E+00	*	5.50E+01
0007	67561	Methanol	*	*	4.00E+03	*	2.80E+04
0008	78933	MEK	*	*	*	*	1.30E+04
0009	91203	Naphthalene	1.20E-01	*	9.00E+00	*	*
0010	100425	Styrene	*	*	9.00E+02	*	2.10E+04
0011	108883	Toluene	*	*	3.00E+02	*	3.70E+04
0012	1330207	Xylenes	*	*	7.00E+02	*	2.20E+04

EMISSIONS DATA SOURCE: Emission rates loaded from file: P:\MTC1101\Modeling\ExEmRates2.ems

EXHIBIT A

EXHIBIT C

EMISSION RATES HAVE BEEN MANUALLY EDITED BY USER  
 CHEMICALS ADDED OR DELETED:

ADDED DieselExhPM  
 ADDED 1,3-Butadiene 9901  
 ADDED Acetaldehyde 106990  
 ADDED Benzene 75070  
 ADDED Ethyl Benzene 71432  
 ADDED Formaldehyde 100414  
 ADDED Methanol 50000  
 ADDED MEK 67561  
 ADDED Naphthalene 78933  
 ADDED Styrene 91203  
 ADDED Toluene 100425  
 ADDED Xylenes 108583

EMISSIONS FOR FACILITY FAC#1 DEV=\* PRO=\* STK#1 NAME=STRTV1 STACK 1 EMS (lbs/yr)  
 SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.205	1.02e-4
106990	1,3-Butadiene	1		7.53e-4	3.77e-7
75070	Acetaldehyde	1		0.0291	4.16e-5
71432	Benzene	1		7.93e-3	3.97e-6
100414	Ethyl Benzene	1		0.00121	6.05e-7
50000	Formaldehyde	1		0.0583	2.92e-5
67561	Methanol	1		1.19e-4	5.95e-8
78933	MEK	1		0.00586	2.93e-6
91203	Naphthalene	1		3.37e-4	1.69e-7
100425	Styrene	1		2.30e-4	1.15e-7
108883	Toluene	1		0.00584	2.92e-6
1330207	Xylenes	1		0.00242	1.21e-6

EMISSIONS FOR FACILITY FAC#1 DEV=\* PRO=\* STK#1 NAME=STRTV2 STACK 1 EMS (lbs/yr)  
 SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.205	1.02e-4
106990	1,3-Butadiene	1		7.53e-4	3.77e-7
75070	Acetaldehyde	1		0.0291	4.16e-5
71432	Benzene	1		7.93e-3	3.97e-6
100414	Ethyl Benzene	1		0.00121	6.05e-7
50000	Formaldehyde	1		0.0583	2.92e-5
67561	Methanol	1		1.19e-4	5.95e-3
78933	MEK	1		0.00586	2.93e-6
91203	Naphthalene	1		3.37e-4	1.69e-7
100425	Styrene	1		2.30e-4	1.15e-7
108883	Toluene	1		0.00584	2.92e-6
1330207	Xylenes	1		0.00242	1.21e-6

EMISSIONS FOR FACILITY FAC#1 DEV=\* PRO=\* STK#1 NAME=STRTV3 STACK 1 EMS (lbs/yr)  
 SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.205	1.02e-4
106990	1,3-Butadiene	1		7.53e-4	3.77e-7
75070	Acetaldehyde	1		0.0291	4.16e-5
71432	Benzene	1		7.93e-3	3.97e-6
100414	Ethyl Benzene	1		0.00121	6.05e-7
50000	Formaldehyde	1		0.0583	2.92e-5
67561	Methanol	1		1.19e-4	5.95e-8
78933	MEK	1		0.00586	2.93e-6
91203	Naphthalene	1		3.37e-4	1.69e-7
100425	Styrene	1		2.30e-4	1.15e-7
108883	Toluene	1		0.00584	2.92e-6
1330207	Xylenes	1		0.00242	1.21e-6

EMISSIONS FOR FACILITY FAC#1 DEV=\* PRO=\* STK#1 NAME=STRTV4 STACK 1 EMS (lbs/yr)

EXHIBIT A

SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.205	1.02e-4
106990	1,3-Butadiene	1		7.53e-4	3.77e-7
75070	Acetaldehyde	1		0.0291	4.16e-5
71432	Benzene	1		7.93e-3	3.97e-6
100414	Ethyl Benzene	1		0.00121	6.05e-7
50000	Formaldehyde	1		0.0583	2.92e-5
67561	Methanol	1		1.19e-4	5.95e-8
78933	MEK	1		0.00586	2.93e-6
91203	Naphthalene	1		3.37e-4	1.69e-7
100425	Styrene	1		2.30e-4	1.15e-7
108883	Toluene	1		0.00584	2.92e-6
1330207	Xylenes	1		0.00242	1.21e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV5 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.205	1.02e-4
106990	1,3-Butadiene	1		7.53e-4	3.77e-7
75070	Acetaldehyde	1		0.0291	4.16e-5
71432	Benzene	1		7.93e-3	3.97e-6
100414	Ethyl Benzene	1		0.00121	6.05e-7
50000	Formaldehyde	1		0.0583	2.92e-5
67561	Methanol	1		1.19e-4	5.95e-8
78933	MEK	1		0.00586	2.93e-6
91203	Naphthalene	1		3.37e-4	1.69e-7
100425	Styrene	1		2.30e-4	1.15e-7
108883	Toluene	1		0.00584	2.92e-6
1330207	Xylenes	1		0.00242	1.21e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV6 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.205	1.02e-4
106990	1,3-Butadiene	1		7.53e-4	3.77e-7
75070	Acetaldehyde	1		0.0291	4.16e-5
71432	Benzene	1		7.93e-3	3.97e-6
100414	Ethyl Benzene	1		0.00121	6.05e-7
50000	Formaldehyde	1		0.0583	2.92e-5
67561	Methanol	1		1.19e-4	5.95e-8
78933	MEK	1		0.00586	2.93e-6
91203	Naphthalene	1		3.37e-4	1.69e-7
100425	Styrene	1		2.30e-4	1.15e-7
108883	Toluene	1		0.00584	2.92e-6
1330207	Xylenes	1		0.00242	1.21e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV7 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.205	1.02e-4
106990	1,3-Butadiene	1		7.53e-4	3.77e-7
75070	Acetaldehyde	1		0.0291	4.16e-5
71432	Benzene	1		7.93e-3	3.97e-6
100414	Ethyl Benzene	1		0.00121	6.05e-7
50000	Formaldehyde	1		0.0583	2.92e-5
67561	Methanol	1		1.19e-4	5.95e-8
78933	MEK	1		0.00586	2.93e-6
91203	Naphthalene	1		3.37e-4	1.69e-7
100425	Styrene	1		2.30e-4	1.15e-7
108883	Toluene	1		0.00584	2.92e-6
1330207	Xylenes	1		0.00242	1.21e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV8 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.205	1.02e-4
106990	1,3-Butadiene	1		7.53e-4	3.77e-7
75070	Acetaldehyde	1		0.0291	4.16e-5
71432	Benzene	1		7.93e-3	3.97e-6
100414	Ethyl Benzene	1		0.00121	6.05e-7
50000	Formaldehyde	1		0.0583	2.92e-5
67561	Methanol	1		1.19e-4	5.95e-8
78933	MEK	1		0.00586	2.93e-6
91203	Naphthalene	1		3.37e-4	1.69e-7
100425	Styrene	1		2.30e-4	1.15e-7
108883	Toluene	1		0.00564	2.92e-6
1330207	Xylenes	1		0.00242	1.21e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=I NAME=ER&BH1 STACK 1 EMS (lbs/yr)  
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.629	3.15e-4
106990	1,3-Butadiene	1		2.44e-3	1.22e-6
75070	Acetaldehyde	1		0.0945	4.73e-5
71432	Benzene	1		0.0257	1.29e-5
100414	Ethyl Benzene	1		0.00392	1.96e-6
50000	Formaldehyde	1		0.189	9.45e-5
67561	Methanol	1		3.85e-4	1.93e-7
78933	MEK	1		0.019	9.50e-6
91203	Naphthalene	1		0.00109	5.45e-7
100425	Styrene	1		7.46e-4	3.72e-7
108883	Toluene	1		0.0189	9.45e-6
1330207	Xylenes	1		0.00785	3.93e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=ER&BH4 STACK 1 EMS (lbs/yr)  
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.629	3.15e-4
106990	1,3-Butadiene	1		2.44e-3	1.22e-6
75070	Acetaldehyde	1		0.0945	4.73e-5
71432	Benzene	1		0.0257	1.29e-5
100414	Ethyl Benzene	1		0.00392	1.96e-6
50000	Formaldehyde	1		0.189	9.45e-5
67561	Methanol	1		3.86e-4	1.93e-7
78933	MEK	1		0.019	9.50e-6
91203	Naphthalene	1		0.00109	5.45e-7
100425	Styrene	1		7.46e-4	3.72e-7
108883	Toluene	1		0.0189	9.45e-6
1330207	Xylenes	1		0.00785	3.93e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=ER&BH3 STACK 1 EMS (lbs/yr)  
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.629	3.15e-4
106990	1,3-Butadiene	1		2.44e-3	1.22e-6
75070	Acetaldehyde	1		0.0945	4.73e-5
71422	Benzene	1		0.0257	1.29e-5
100414	Ethyl Benzene	1		0.00392	1.96e-6
50000	Formaldehyde	1		0.189	9.45e-5
67561	Methanol	1		3.86e-4	1.93e-7
78933	MEK	1		0.019	9.50e-6
91203	Naphthalene	1		0.00109	5.45e-7
100425	Styrene	1		7.46e-4	3.72e-7
108883	Toluene	1		0.0189	9.45e-6
1330207	Xylenes	1		0.00785	3.93e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=ER&BH2 STACK 1 EMS (lbs/yr)  
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
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9901	DieselExhPM	1	0.629	3.15e-4
106990	1,3-Butadiene	1	2.44e-3	1.22e-6
75070	Acetaldehyde	1	0.0945	4.73e-5
71432	Benzene	1	0.0257	1.29e-5
100414	Ethyl Benzene	1	0.00392	1.96e-6
50000	Formaldehyde	1	0.189	9.45e-5
67561	Methanol	1	3.86e-4	1.93e-7
78933	MEK	1	0.019	9.50e-6
91203	Naphthalene	1	0.00109	5.45e-7
100425	Styrene	1	7.46e-4	3.72e-7
108853	Toluene	1	0.0189	9.45e-6
1330207	Xylenes	1	0.00785	3.93e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\*\* PRO=\*\* STK=1 NAME=BARTGRG2 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1	CAS	ABBRV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	3.875	1.94e-3	1.94e-3	1.94e-3
106990	1,3-Butadiene	1	9.37e-2	4.19e-5	4.19e-5	4.19e-5
75070	Acetaldehyde	1	3.24	1.62e-3	1.62e-3	1.62e-3
71432	Benzene	1	0.682	4.41e-4	4.41e-4	4.41e-4
100414	Ethyl Benzene	1	0.134	6.70e-5	6.70e-5	6.70e-5
50000	Formaldehyde	1	6.48	3.24e-3	3.24e-3	3.24e-3
67561	Methanol	1	0.0132	6.60e-6	6.60e-6	6.60e-6
78933	MEK	1	0.651	3.26e-4	3.26e-4	3.26e-4
91203	Naphthalene	1	0.0374	1.87e-5	1.87e-5	1.87e-5
100425	Styrene	1	0.0266	1.28e-5	1.28e-5	1.28e-5
108883	Toluene	1	0.649	3.25e-4	3.25e-4	3.25e-4
1330207	Xylenes	1	0.269	1.35e-4	1.35e-4	1.35e-4

EMISSIONS FOR FACILITY FAC=1 DEV=\*\* PRO=\*\* STK=1 NAME=BARTGRG1 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1	CAS	ABBRV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	3.875	1.94e-3	1.94e-3	1.94e-3
106990	1,3-Butadiene	1	8.37e-2	4.19e-5	4.19e-5	4.19e-5
75070	Acetaldehyde	1	3.24	1.62e-3	1.62e-3	1.62e-3
71432	Benzene	1	0.882	4.41e-4	4.41e-4	4.41e-4
100414	Ethyl Benzene	1	0.134	6.70e-5	6.70e-5	6.70e-5
50000	Formaldehyde	1	6.48	3.24e-3	3.24e-3	3.24e-3
67561	Methanol	1	0.0132	6.60e-6	6.60e-6	6.60e-6
78933	MEK	1	0.651	3.26e-4	3.26e-4	3.26e-4
91203	Naphthalene	1	0.0374	1.87e-5	1.87e-5	1.87e-5
100425	Styrene	1	0.0256	1.28e-5	1.28e-5	1.28e-5
108883	Toluene	1	0.649	3.25e-4	3.25e-4	3.25e-4
1330207	Xylenes	1	0.269	1.35e-4	1.35e-4	1.35e-4

EMISSIONS FOR FACILITY FAC=1 DEV=\*\* PRO=\*\* STK=1 NAME=STRTV10 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1	CAS	ABBRV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0.205	1.02e-4	1.02e-4	1.02e-4
106990	1,3-Butadiene	1	7.53e-4	3.77e-7	3.77e-7	3.77e-7
75070	Acetaldehyde	1	0.0291	4.16e-5	4.16e-5	4.16e-5
71432	Benzene	1	7.93e-3	3.97e-6	3.97e-6	3.97e-6
100414	Ethyl Benzene	1	0.00121	6.05e-7	6.05e-7	6.05e-7
50000	Formaldehyde	1	0.0583	2.92e-5	2.92e-5	2.92e-5
67561	Methanol	1	1.19e-4	5.95e-8	5.95e-8	5.95e-8
78933	MEK	1	0.00586	2.93e-6	2.93e-6	2.93e-6
91203	Naphthalene	1	3.37e-4	1.63e-7	1.63e-7	1.63e-7
100425	Styrene	1	2.30e-4	1.15e-7	1.15e-7	1.15e-7
108883	Toluene	1	0.00584	2.92e-6	2.92e-6	2.92e-6
1330207	Xylenes	1	0.00242	1.21e-6	1.21e-6	1.21e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\*\* PRO=\*\* STK=1 NAME=STRTV11 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1	CAS	ABBRV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1	0.205	1.02e-4	1.02e-4	1.02e-4

EXHIBIT C

106990	1,3-Butadiene	1	7.53e-4	3.77e-7
75070	Acetaldehyde	1	0.0291	4.16e-5
71432	Benzene	1	7.93e-3	3.97e-6
100414	Ethyl Benzene	1	0.00121	6.05e-7
50000	Formaldehyde	1	0.0583	2.92e-5
67561	Methanol	1	1.19e-4	5.95e-8
78933	MEK	1	0.00586	2.93e-6
91203	Naphthalene	1	3.37e-4	1.69e-7
100425	Styrene	1	2.30e-4	1.15e-7
108883	Toluene	1	0.00584	2.92e-6
1330207	Xylenes	1	0.00242	1.21e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV12 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.205	1.02e-4
106990	1,3-Rutadiene	1		7.53e-4	3.77e-7
75070	Acetaldehyde	1		0.0291	4.16e-5
71432	Benzene	1		7.93e-3	3.97e-6
100414	Ethyl Benzene	1		0.00121	6.05e-7
50000	Formaldehyde	1		0.0583	2.92e-5
67561	Methanol	1		1.19e-4	5.95e-8
78933	MEK	1		0.00586	2.93e-6
91203	Naphthalene	1		3.37e-4	1.69e-7
100425	Styrene	1		2.30e-4	1.15e-7
108883	Toluene	1		0.00584	2.92e-6
1330207	Xylenes	1		0.00242	1.21e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV13 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.205	1.02e-4
106990	1,3-Butadiene	1		7.53e-4	3.77e-7
75070	Acetaldehyde	1		0.0291	4.16e-5
71432	Benzene	1		7.93e-3	3.97e-6
100414	Ethyl Benzene	1		0.00121	6.05e-7
50000	Formaldehyde	1		0.0583	2.92e-5
67561	Methanol	1		1.19e-4	5.95e-8
78933	MEK	1		0.00586	2.93e-6
91203	Naphthalene	1		3.37e-4	1.69e-7
100425	Styrene	1		2.30e-4	1.15e-7
108883	Toluene	1		0.00584	2.92e-6
1330207	Xylenes	1		0.00242	1.21e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV14 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.205	1.02e-4
106990	1,3-Butadiene	1		7.53e-4	3.77e-7
75070	Acetaldehyde	1		0.0291	4.16e-5
71432	Benzene	1		7.93e-3	3.97e-6
100414	Ethyl Benzene	1		0.00121	6.05e-7
50000	Formaldehyde	1		0.0583	2.92e-5
67561	Methanol	1		1.19e-4	5.95e-8
78933	MEK	1		0.00586	2.93e-6
91203	Naphthalene	1		3.37e-4	1.69e-7
100425	Styrene	1		2.30e-4	1.15e-7
108883	Toluene	1		0.00584	2.92e-6
1330207	Xylenes	1		0.00242	1.21e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV15 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.205	1.02e-4
106990	1,3-Butadiene	1		7.53e-4	3.77e-7

EXHIBIT A

EXHIBIT C

75070	Acetaldehyde	1	0.0291	4.16e-5
71432	Benzene	1	7.93e-3	3.97e-6
100414	Ethyl Benzene	1	0.00121	6.05e-7
50000	Formaldehyde	1	0.0583	2.92e-5
67561	Methanol	1	1.19e-4	5.95e-8
78933	MEK	1	0.00586	2.93e-6
91203	Naphthalene	1	3.37e-4	1.69e-7
100425	Styrene	1	2.30e-4	1.15e-7
108883	Toluene	1	0.00584	2.92e-6
1330207	Xylenes	1	0.00242	1.21e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV16 STACK 1 EMS (lbs/yr)  
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.205	1.02e-4
106990	1,3-Butadiene	1		7.53e-4	3.77e-7
75070	Acetaldehyde	1		0.0291	4.16e-5
71432	Benzene	1		7.93e-3	3.97e-6
100414	Ethyl Benzene	1		0.00121	6.05e-7
50000	Formaldehyde	1		0.0583	2.92e-5
67561	Methanol	1		1.19e-4	5.95e-8
78933	MEK	1		0.00586	2.93e-6
91203	Naphthalene	1		3.37e-4	1.69e-7
100425	Styrene	1		2.30e-4	1.15e-7
108883	Toluene	1		0.00584	2.92e-6
1330207	Xylenes	1		0.00242	1.21e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV17 STACK 1 EMS (lbs/yr)  
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.205	1.02e-4
106990	1,3-Butadiene	1		7.53e-4	3.77e-7
75070	Acetaldehyde	1		0.0291	4.16e-5
71432	Benzene	1		7.93e-3	3.97e-6
100414	Ethyl Benzene	1		0.00121	6.05e-7
50000	Formaldehyde	1		0.0583	2.92e-5
67561	Methanol	1		1.19e-4	5.95e-8
78933	MEK	1		0.00586	2.93e-6
91203	Naphthalene	1		3.37e-4	1.69e-7
100425	Styrene	1		2.30e-4	1.15e-7
108883	Toluene	1		0.00584	2.92e-6
1330207	Xylenes	1		0.00242	1.21e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=B RTPV1 STACK 1 EMS (lbs/yr)  
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.512	2.56e-4
106990	1,3-Butadiene	1		2.11e-3	1.06e-6
75070	Acetaldehyde	1		0.0817	4.09e-5
71432	Benzene	1		0.0222	1.11e-5
100414	Ethyl Benzene	1		0.00339	1.70e-6
50000	Formaldehyde	1		0.163	8.15e-5
67561	Methanol	1		3.33e-4	1.67e-7
78933	MEK	1		0.0164	8.20e-6
91203	Naphthalene	1		9.44e-4	4.72e-7
100425	Styrene	1		6.44e-4	3.22e-7
108883	Toluene	1		0.0164	8.20e-6
1330207	Xylenes	1		0.00679	3.40e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=B RTPV2 STACK 1 EMS (lbs/yr)  
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.512	2.56e-4
106990	1,3-Butadiene	1		2.11e-3	1.06e-6
75070	Acetaldehyde	1		0.0617	4.09e-5



EXHIBIT C

71432	Benzene	1	0.0222	1.11e-5
100414	Ethyl Benzene	1	0.00339	1.70e-6
50000	Formaldehyde	1	0.163	8.15e-5
67561	Methanol	1	3.33e-4	1.67e-7
78933	MEK	1	0.0164	8.20e-6
91203	Naphthalene	1	9.44e-4	4.72e-7
100425	Styrene	1	6.44e-4	3.22e-7
108883	Toluene	1	0.0164	8.20e-6
1330207	Xylenes	1	0.00679	3.40e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV18 STACK 1 EMS (lbs/yr)  
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.169	8.48e-5
106990	1,3-Butadiene	1		6.26e-4	3.13e-7
75070	Acetaldehyde	1		0.0242	1.21e-5
71432	Benzene	1		0.0066	3.30e-6
100414	Ethyl Benzene	1		0.00101	5.05e-7
50000	Formaldehyde	1		0.0485	2.43e-5
67561	Methanol	1		9.89e-5	4.95e-3
78933	MEK	1		0.00487	2.44e-6
91203	Naphthalene	1		2.80e-4	1.40e-7
100425	Styrene	1		1.91e-4	9.55e-8
108883	Toluene	1		0.00486	2.43e-6
1330207	Xylenes	1		0.00201	1.01e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV19 STACK 1 EMS (lbs/yr)  
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.169	8.48e-5
106990	1,3-Butadiene	1		6.26e-4	3.13e-7
75070	Acetaldehyde	1		0.0242	1.21e-5
71432	Benzene	1		0.0066	3.30e-6
100414	Ethyl Benzene	1		0.00101	5.05e-7
50000	Formaldehyde	1		0.0485	2.43e-5
67561	Methanol	1		9.89e-5	4.95e-8
78933	MEK	1		0.00487	2.44e-6
91203	Naphthalene	1		2.80e-4	1.40e-7
100425	Styrene	1		1.91e-4	9.55e-8
108883	Toluene	1		0.00486	2.43e-6
1330207	Xylenes	1		0.00201	1.01e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV20 STACK 1 EMS (lbs/yr)  
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.169	8.48e-5
106990	1,3-Butadiene	1		6.26e-4	3.13e-7
75070	Acetaldehyde	1		0.0242	1.21e-5
71432	Benzene	1		0.0066	3.30e-6
100414	Ethyl Benzene	1		0.00101	5.05e-7
50000	Formaldehyde	1		0.0485	2.43e-6
67561	Methanol	1		9.89e-5	4.95e-8
78933	MEK	1		0.00487	2.44e-6
91203	Naphthalene	1		2.80e-4	1.40e-7
100425	Styrene	1		1.91e-4	9.55e-8
108883	Toluene	1		0.00486	2.43e-6
1330207	Xylenes	1		0.00201	1.01e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV21 STACK 1 EMS (lbs/yr)  
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.169	8.48e-5
106990	1,3-Butadiene	1		6.26e-4	3.13e-7
75070	Acetaldehyde	1		0.0242	1.21e-5
71432	Benzene	1		0.0066	3.30e-6

EXHIBIT A

EXHIBIT C

100414	Ethyl Benzene	1	0.00101	5.05e-7
50000	Formaldehyde	1	0.0485	2.43e-5
67561	Methanol	1	9.39e-5	4.95e-8
78933	MEK	1	0.00487	2.44e-6
91203	Naphthalene	1	2.80e-4	1.40e-7
100425	Styrene	1	1.91e-4	9.55e-8
108883	Toluene	1	0.00486	2.43e-6
1330207	Xylenes	1	0.00201	1.01e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV22 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.169	8.48e-5
106990	1,3-Butadiene	1		6.26e-4	3.13e-7
75070	Acetaldehyde	1		0.0242	1.21e-5
71432	Benzene	1		0.0066	3.30e-6
100414	Ethyl Benzene	1		0.00101	5.05e-7
50000	Formaldehyde	1		0.0485	2.43e-5
67561	Methanol	1		9.89e-5	4.95e-8
78933	MEK	1		0.00487	2.44e-6
91203	Naphthalene	1		2.30e-4	1.40e-7
100425	Styrene	1		1.91e-4	9.55e-8
108883	Toluene	1		0.00486	2.43e-6
1330207	Xylenes	1		0.00201	1.01e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV23 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.169	8.48e-5
106990	1,3-Butadiene	1		6.26e-4	3.13e-7
75070	Acetaldehyde	1		0.0242	1.21e-5
71432	Benzene	1		0.0066	3.30e-6
100414	Ethyl Benzene	1		0.00101	5.05e-7
50000	Formaldehyde	1		0.0485	2.43e-5
67561	Methanol	1		9.89e-5	4.95e-8
78933	MEK	1		0.00487	2.44e-6
91203	Naphthalene	1		2.80e-4	1.40e-7
100425	Styrene	1		1.91e-4	9.55e-8
108883	Toluene	1		0.00486	2.43e-6
1330207	Xylenes	1		0.00201	1.01e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV24 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.169	8.48e-5
106990	1,3-Butadiene	1		6.26e-4	3.13e-7
75070	Acetaldehyde	1		0.0242	1.21e-5
71432	Benzene	1		0.0066	3.30e-6
100414	Ethyl Benzene	1		0.00101	5.05e-7
50000	Formaldehyde	1		0.0485	2.43e-5
67561	Methanol	1		9.89e-5	4.95e-8
78933	MEK	1		0.00487	2.44e-6
91203	Naphthalene	1		2.80e-4	1.40e-7
100425	Styrene	1		1.91e-4	9.55e-8
108883	Toluene	1		0.00486	2.43e-6
1330207	Xylenes	1		0.00201	1.01e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV25 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.169	8.48e-5
106990	1,3-Butadiene	1		6.26e-4	3.13e-7
75070	Acetaldehyde	1		0.0242	1.21e-5
71432	Benzene	1		0.0066	3.30e-6
100414	Ethyl Benzene	1		0.00101	5.05e-7

EXHIBIT A

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50000	Formaldehyde	1	0.0485	2.43e-5
67561	Methanol	1	9.89e-5	4.95e-8
78933	MEK	1	0.00487	2.44e-6
91203	Naphthalene	1	2.80e-4	1.40e-7
100425	Styrene	1	1.91e-4	9.55e-8
108883	Toluene	1	0.00486	2.43e-6
1330207	Xylenes	1	0.00201	1.01e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV26 STACK 1 EMS (lbs/yr)  
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.169	8.48e-5
106990	1,3-Butadiene	1		6.26e-4	3.13e-7
75070	Acetaldehyde	1		0.0242	1.21e-5
71432	Benzene	1		0.0056	3.30e-6
100414	Ethyl Benzene	1		0.00101	5.05e-7
50000	Formaldehyde	1		0.0485	2.43e-5
67561	Methanol	1		9.89e-5	4.95e-8
78933	MEK	1		0.00487	2.44e-6
91203	Naphthalene	1		2.80e-4	1.40e-7
100425	Styrene	1		1.91e-4	9.55e-8
108383	Toluene	1		0.00486	2.43e-6
1330207	Xylenes	1		0.00201	1.01e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV27 STACK 1 EMS (lbs/yr)  
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.169	8.48e-5
106990	1,3-Butadiene	1		6.26e-4	3.13e-7
75070	Acetaldehyde	1		0.0242	1.21e-5
71432	Benzene	1		0.0066	3.30e-6
100414	Ethyl Benzene	1		0.00101	5.05e-7
50000	Formaldehyde	1		0.0485	2.43e-5
67561	Methanol	1		9.89e-5	4.95e-8
78933	MEK	1		0.00487	2.44e-6
91203	Naphthalene	1		2.80e-4	1.40e-7
100425	Styrene	1		1.91e-4	9.55e-8
108883	Toluene	1		0.00486	2.43e-6
1330207	Xylenes	1		0.00201	1.01e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV28 STACK 1 EMS (lbs/yr)  
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.169	8.48e-5
106990	1,3-Butadiene	1		6.26e-4	3.13e-7
75070	Acetaldehyde	1		0.0242	1.21e-5
71432	Benzene	1		0.0066	3.30e-6
100414	Ethyl Benzene	1		0.00101	5.05e-7
50000	Formaldehyde	1		0.0485	2.43e-5
67561	Methanol	1		9.89e-5	4.95e-8
78933	MEK	1		0.00487	2.44e-6
91203	Naphthalene	1		2.80e-4	1.40e-7
100425	Styrene	1		1.91e-4	9.55e-8
108383	Toluene	1		0.00486	2.43e-6
1330207	Xylenes	1		0.00201	1.01e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV29 STACK 1 EMS (lbs/yr)  
SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.169	8.48e-5
106990	1,3-Butadiene	1		6.26e-4	3.13e-7
75070	Acetaldehyde	1		0.0242	1.21e-5
71432	Benzene	1		0.0066	3.30e-6
100414	Ethyl Benzene	1		0.00101	5.05e-7
50000	Formaldehyde	1		0.0485	2.43e-5

EXHIBIT A

67561	Methanol	1	9.89e-5	4.95e-3
78933	MEK	1	0.00487	2.44e-6
91203	Naphthalene	1	2.80e-4	1.40e-7
100425	Styrene	1	1.91e-4	9.55e-3
108883	Toluene	1	0.00486	2.43e-6
1330207	Xylenes	1	0.00201	1.01e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV30 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.169	8.48e-5
106990	1,3-Butadiene	1		6.26e-4	3.13e-7
75070	Acetaldehyde	1		0.0242	1.21e-5
71432	Benzene	1		0.0066	3.30e-6
100414	Ethyl Benzene	1		0.00101	5.05e-7
50000	Formaldehyde	1		0.0485	2.43e-5
67561	Methanol	1		9.89e-5	4.95e-6
78933	MEK	1		0.00487	2.44e-6
91203	Naphthalene	1		2.80e-4	1.40e-7
100425	Styrene	1		1.91e-4	9.55e-8
108883	Toluene	1		0.00486	2.43e-6
1330207	Xylenes	1		0.00201	1.01e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV31 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.169	8.48e-5
105990	1,3-Butadiene	1		6.26e-4	3.13e-7
75070	Acetaldehyde	1		0.0242	1.21e-5
71432	Benzene	1		0.0066	3.30e-6
100414	Ethyl Benzene	1		0.00101	5.05e-7
50000	Formaldehyde	1		0.0485	2.43e-5
67561	Methanol	1		9.89e-5	4.95e-8
78933	MEK	1		0.00487	2.44e-6
91203	Naphthalene	1		2.80e-4	1.40e-7
100425	Styrene	1		1.91e-4	9.55e-8
108883	Toluene	1		0.00486	2.43e-6
1330207	Xylenes	1		0.00201	1.01e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV32 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.169	8.48e-5
106990	1,3-Butadiene	1		6.26e-4	3.13e-7
75070	Acetaldehyde	1		0.0242	1.21e-5
71432	Benzene	1		0.0066	3.30e-6
100414	Ethyl Benzene	1		0.00101	5.05e-7
50000	Formaldehyde	1		0.0485	2.43e-5
67561	Methanol	1		9.89e-5	4.95e-8
78933	MEK	1		0.00487	2.44e-6
91203	Naphthalene	1		2.80e-4	1.40e-7
100425	Styrene	1		1.91e-4	9.55e-8
108883	Toluene	1		0.00486	2.43e-6
1330207	Xylenes	1		0.00201	1.01e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV33 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1					
CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.169	8.48e-5
106990	1,3-Butadiene	1		6.26e-4	3.13e-7
75070	Acetaldehyde	1		0.0242	1.21e-5
71432	Benzene	1		0.0066	3.30e-6
100414	Ethyl Benzene	1		0.00101	5.05e-7
50000	Formaldehyde	1		0.0485	2.43e-5
67551	Methanol	1		9.89e-5	4.95e-8

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78933	MEK	1	0.00487	2.44e-6
91203	Naphthalene	1	2.80e-4	1.40e-7
100425	Styrene	1	1.91e-4	9.55e-8
108883	Toluene	1	0.00486	2.43e-6
1330207	Xylenes	1	0.00201	1.01e-6

EMISSIONS FOR FACILITY FAC=1 DEV=\* PRO=\* STK=1 NAME=STRTV34 STACK 1 EMS (lbs/yr)

SOURCE MULTIPLIER=1

CAS	ABBREV	MULTIPLIER	BG (ug/m^3)	AVRG (lbs/yr)	MAX (lbs/hr)
9901	DieselExhPM	1		0.169	8.48e-5
106990	1,3-Butadiene	1		6.26e-4	3.13e-7
75070	Acetaldehyde	1		0.0242	1.21e-5
71432	Benzene	1		0.0066	3.30e-6
100414	Ethyl Benzene	1		0.00101	5.05e-7
50000	Formaldehyde	1		0.0485	2.43e-5
67561	Methanol	1		9.39e-5	4.95e-3
78933	MEK	1		0.00487	2.44e-6
91203	Naphthalene	1		2.80e-4	1.40e-7
100425	Styrene	1		1.91e-4	9.55e-8
108883	Toluene	1		0.00486	2.43e-6
1330207	Xylenes	1		0.00201	1.01e-6

Receptor Number	70-Year Adult Carcinogenic Risk # in a million	40-Year Worker Carcinogenic Risk # in a million	Chronic Hazard Index	Acute Hazard Index	UTM Coordinates	
					Easting	Northing
1	0.24	0.047	0.0061	0.037	564,662	4,187,014
2	0.20	0.040	0.0054	0.040	564,653	4,186,973
3	0.16	0.031	0.0041	0.029	564,691	4,187,007
4	0.028	0.0055	0.00075	0.015	564,579	4,187,160
5	0.027	0.0054	0.00073	0.015	564,595	4,187,157
6	0.026	0.0051	0.0007	0.014	564,611	4,187,155
7	0.025	0.0050	0.00068	0.014	564,626	4,187,153
8	0.024	0.0047	0.00064	0.013	564,639	4,187,150
9	0.022	0.0044	0.00061	0.013	564,652	4,187,148
10	0.021	0.0042	0.00058	0.012	564,666	4,187,145
11	0.020	0.0039	0.00054	0.012	564,681	4,187,142
12	0.019	0.0037	0.00051	0.011	564,695	4,187,139
13	0.018	0.0035	0.00049	0.011	564,708	4,187,137
14	0.017	0.0033	0.00047	0.010	564,722	4,187,135
15	0.016	0.0031	0.00044	0.0095	564,749	4,187,130
16	0.025	0.0049	0.00068	0.012	564,740	4,187,092
17	0.030	0.0060	0.00083	0.013	564,737	4,187,077
18	0.037	0.0073	0.0010	0.014	564,734	4,187,065
19	0.050	0.0099	0.0014	0.016	564,731	4,187,048
20	0.067	0.013	0.0018	0.018	564,729	4,187,035
21	0.089	0.018	0.0024	0.020	564,725	4,187,021
22	0.093	0.018	0.0025	0.021	564,722	4,187,006
23	0.086	0.017	0.0024	0.022	564,718	4,186,990
24	0.083	0.016	0.0023	0.023	564,715	4,186,974
25	0.084	0.017	0.0024	0.024	564,711	4,186,956



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EXHIBIT D

March 11, 2011

Mr. Joe McCarthy  
MacArthur Transit Community Partners, LLC  
345 Spear Street, Suite 700  
San Francisco, CA 94105

Subject: Construction Noise Reduction Plan for Phase 1 and 2 FDPs of the MacArthur Transit Village Project in Oakland, California

Dear Mr. McCarthy:

LSA Associates, Inc. (LSA) is pleased to submit this construction period Noise Reduction Plan for Phase 1 and Phase 2 Final Development Plans of the MacArthur Transit Village Project (Phase 1 and 2 FDPs)<sup>1</sup> in the City of Oakland (City), California. This report fulfills the requirements of the City's Standard Conditions of Approval NOISE-5 for the preparation of a site-specific Noise Reduction Plan, summarizes the results of the construction noise impact modeling and analysis for Phase 1 and 2 FDPs, and provides recommended feasible strategies to reduce construction noise impacts.

#### PURPOSE AND SCOPE

Noise impacts from implementation of the project were analyzed in the MacArthur Transit Village Project EIR dated January 2008. This Noise Reduction Plan for construction noise impacts has been prepared to meet the requirements of the City of Oakland's Standard Condition of Approval NOISE-5. The purpose of the Noise Reduction Plan is to demonstrate how noise associated with potential pier drilling and other extreme noise generators and construction activities associated with implementation of Phase 1 and 2 FDPs of the MacArthur Transit Village Project can be further reduced to ensure that maximum feasible noise attenuation is achieved. This Noise Reduction Plan summarizes the applicable noise limits, provides projected noise levels from construction activities, and outlines strategies consistent with the City's Standard Conditions of Approval to reduce construction noise levels to meet City standards.

For reference, the City's Standard Conditions of Approval that are applicable to this analysis are listed in Table 2 of this report. Per Condition NOISE-5, if any extreme noise generating construction activity will exceed 90 dBA  $L_{max}$ , a set of site-specific noise attenuation measures shall be prepared by a qualified acoustical consultant. The condition requires a plan for such measures that is based on the final design of the project be submitted for review and approval by the City prior to commencement of construction.

<sup>1</sup> These are the two FDPs applications currently on file with the City and the two construction phases of the MacArthur Transit Village Project that are anticipated to overlap to some extent and occur within the next two years. Consequently, the effects of both of these construction phases are considered in this analysis.

EXHIBIT D
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## NOISE TERMINOLOGY

Several noise measurement scales exist which are used to describe noise in a particular location. A *decibel* (dB) is a unit of measurement which indicates the relative intensity of a sound. The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3.0 dB or less are only perceptible in laboratory environments. Audible increases in noise levels generally refer to a change of 3.0 dB or more, as this level has been found to be barely perceptible to the human ear in outdoor environments. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense, 30 dB is 1,000 times more intense. Each 10-dB increase in sound level is perceived as approximately a doubling of loudness. Sound intensity is normally measured through the *A-weighted sound level* (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive.

Noise impacts can be described in three categories. The first is audible impacts, which refers to increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3.0 dB or greater, since this level has been found to be barely perceptible in exterior environments. The second category, potentially audible, refers to a change in the noise level between 1.0 and 3.0 dB. This range of noise levels has been found to be noticeable only in laboratory environments. The last category is changes in noise level of less than 1.0 dB, which are inaudible to the human ear. Only audible changes in existing ambient or background noise levels are considered potentially significant.

As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the sound level to attenuate or be reduced, resulting in a 6-dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise sensitive receptor of concern. There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level ( $L_{eq}$ ) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the  $L_{eq}$  and community noise equivalent level (CNEL) or the day-night average level ( $L_{dn}$ ) based on A-weighted decibels (dBA). CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly  $L_{eq}$  for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours).  $L_{dn}$  is similar to the CNEL scale but without the adjustment for events occurring during the evening hours. CNEL and  $L_{dn}$  are within one dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

Other noise rating scales of importance when assessing the annoyance factor include the maximum noise level ( $L_{max}$ ), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis are specified in terms of maximum levels denoted by  $L_{max}$  for short-term noise impacts.  $L_{max}$  reflects peak operating conditions and addresses the annoying aspects of intermittent noise.



## EXHIBIT D

**NOISE SENSITIVE RECEPTORS**

Noise sensitive receptors are defined in the City's Noise Element as land uses whose purpose and function can be disrupted or jeopardized by noise. Sensitive receptors include residences, schools, churches, hospitals, elderly care facilities, hotels and libraries and certain types of passive recreational open space. Understandably, noise is of special concern when it occurs near sensitive receptors.<sup>2</sup>

The closest sensitive receptors to the proposed construction site are the residential land uses located on MacArthur Boulevard that border the southern boundary of the construction site and the residential land uses on Telegraph Avenue that border the eastern boundary of the construction site. Although outpatient surgery centers are not specifically identified by the City as noise sensitive uses, this analysis treats the surgery center on Telegraph Avenue as a sensitive receptor. These three sensitive land use areas have been evaluated for potential noise impacts from construction activities associated with implementation of Phase 1 and 2 FDPs.

**PROJECTED CONSTRUCTION NOISE IMPACTS**

Construction noise impacts have been projected for Phase 1 and 2 FDPs based on project specific phasing and construction equipment details provided by the project construction engineer as part of the Construction Equipment Schedule dated January 28, 2011. The construction noise calculation spreadsheets are provided as Attachment A of this report. The Construction Equipment Schedule is provided in Attachment B. A summary of the projected noise levels is shown in Table I.

Noise levels were calculated for each of the three months with the highest number of pieces of equipment scheduled to be used (May, June, and September of 2011). Both the maximum noise level,  $L_{max}$  and the worst case hourly average noise level  $L_{eq}(h)$  were calculated for the three nearest sensitive land uses identified above. The calculated noise levels from construction activities have been made using the following formula:

$$L_{eq}(h) = E.L. + 10\text{Log}(U.F.) - 20\text{Log}(D/50) - 10\text{Log}(D/50) - A_{shielding}$$

Where:

E.L. = reference equipment noise emission level (based on  $L_{max}$  at 50 feet)

U.F. = equipment usage factor (percent in use per typical hour as a fraction of 100 percent)

D = distance between source and receiver in feet

G = ground effects constant

$A_{shielding}$  = attenuation provided by intervening barriers

The calculations use the general noise reference levels for each identified piece of construction equipment listed in Chapter 9 of the FHWA's Highway Construction Noise Handbook. The usage factor for the worst case hour calculation assumes that all pieces of equipment that would be used during that month would be operating at their full capacity during a typical hour. Those pieces of equipment that would be operating on-site, such as the 2000 Cat 330B Excavator, are assumed to operate 100 percent of the hour, while equipment that would never operate on-site for a full-hour in sequence,

<sup>2</sup> City of Oakland, 2005. *City of Oakland General Plan Noise Element*. June.

EXHIBIT D
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such as dump trucks which will only operate while arriving and leaving the site, are assumed to operate a maximum of a half-hour.

Anticipated construction activities for the months of May and June 2011 are projected to result in noise levels in excess of 90 dBA  $L_{max}$  at the residential land uses on MacArthur Boulevard that border the construction site. In addition, for the month of May, the anticipated construction activities are also projected to exceed 90 dBA  $L_{max}$  at the residential land uses on Telegraph Avenue that border the construction site. As shown in Table 1, projected construction noise levels at the surgery center land use would reach up to 89 dBA  $L_{max}$ .

The projected worst case hourly average  $L_{eq}(h)$  noise levels for anticipated construction activities would range up to 73 dBA  $L_{eq}(h)$  at the closest residential land uses, and up to 67 dBA  $L_{eq}(h)$  at the surgery center.

However, implementation of the noise reduction strategies outlined in the Standard Conditions of Approval would reduce these potential construction-related noise levels. In particular, compliance with Condition NOISE-5a, erection of temporary sound barriers along the property lines of impacted sensitive receptors would reduce these impacts. Therefore, the following site-specific noise reduction strategies shall be implemented as part of Phase 1 and 2 FDPs:

- Prior to initiation of on-site construction-related earthwork activities, a minimum 8 foot high temporary sound barrier shall be erected along the project property line abutting the residential sensitive land uses that are adjacent to the construction site on MacArthur Boulevard and Telegraph Avenue. The location of the temporary sound barriers is shown in Figure 1.
- Prior to initiation of on-site construction-related earthwork activities, a minimum 6 foot high temporary sound barrier shall be erected along the project property line abutting the outpatient surgery center land uses that is adjacent to the construction site on Telegraph Avenue.
- These temporary sound barriers shall be constructed with a minimum surface weight of 4 pounds per square foot and shall be constructed so that vertical or horizontal gaps are eliminated; these temporary barriers shall remain in place through the construction phase in which heavy construction equipment, such as excavators, dozers, scrapers, loaders, rollers, pavers, and dump trucks, are operating within 150 feet of the edge of the construction site by adjacent sensitive land uses.

Implementation of these site-specific noise reduction strategies are anticipated to reduce construction noise levels by a minimum of 8 dBA at the residential land uses on MacArthur Boulevard and Telegraph Avenue, and by a minimum of 5 dBA at the outpatient surgery center land use (see Table 1).

## EXHIBIT D

**Table 1: Summary of Projected Construction Noise Levels**

Receptor	Phase Month	Noise Levels Prior to Implementation of Noise Reduction Strategies (dBA)		Noise Levels With Implementation of Noise Reduction Strategies (dBA)	
		L <sub>max</sub> <sup>a</sup>	L <sub>eq</sub> (h)	L <sub>max</sub>	L <sub>eq</sub> (h) <sup>b</sup>
Residential on MacArthur Boulevard	May 2011	92	69	84	61
	June 2011	92	73	84	65
	September 2011	89	69	81	61
Residential on Telegraph Avenue	May 2011	92	70	84	62
	June 2011	78	65	70	57
	September 2011	78	62	70	54
Surgery Center on Telegraph Avenue	May 2011	89	67	84	62
	June 2011	74	60	69	55
	September 2011	71	61	66	56

<sup>a</sup> Projected L<sub>max</sub> is the loudest value.

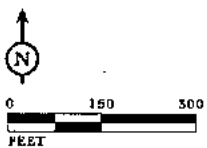
<sup>b</sup> Includes shielding reduction calculation for use of temporary sound barriers.

Source: LSA Associates, Inc. 2011



FIGURE 1

LSA



- ..... Project Site
- - - - - 6 Foot High Temporary Sound Barrier
- 8 Foot High Temporary Sound Barrier

MacArthur Transit Village Project  
Noise Reduction Plan

Temporary Sound Barrier Locations

EXHIBIT D

STANDARD CONDITIONS OF APPROVAL REQUIREMENTS

The City's Standard Conditions of Approval are summarized in Table 2. The table describes how applicable conditions will be implemented into Phase 1 and 2 FDPs.

Table 2: Applicable Standard Conditions of Approval

SCA Number <sup>a</sup>	Requirement	Implementation Action
NOISE-1	Days/Hours of Construction Operation. <i>Ongoing throughout demolition, grading, and/or construction.</i> The project applicant shall require construction contractors to limit standard construction activities as follows:	Will be complied with.
1a	Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pile driving and/or other extreme noise generating activities greater than 90 dBA limited to between 8:00 a.m. and 4:00 p.m. Monday through Friday.	Will be complied with.
1b	Any construction activity proposed to occur outside of the standard hours of 7:00 a.m. to 7:00 p.m. Monday through Friday for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened and such construction activities shall only be allowed with the prior written authorization of the Building Services Division.	Will be complied with.
1c	Construction activity shall not occur on Saturdays, with the following possible exceptions: <ul style="list-style-type: none"> <li>• Prior to the building being enclosed, requests for Saturday construction for special activities (such as concrete pouring which may require more continuous amounts of time), shall be evaluated on a case-by-case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened. Such construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division.</li> <li>• After the building is enclosed, requests for Saturday construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division, and only then within the interior of the building with the doors and windows closed</li> </ul>	Will be complied with.
1d	No extreme noise generating activities (greater than 90 dBA) shall be allowed on Saturdays, with no exceptions.	Will be complied with.
1e	No construction activity shall take place on Sundays or Federal holidays	Will be complied with.
1f	Construction activities include but are not limited to: truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non-enclosed area.	Will be complied with.
1g	Applicant shall use temporary power poles instead of generators where feasible.	Will be complied with.
NOISE-2	Noise Control. <i>Ongoing throughout demolition, grading, and/or construction.</i> To reduce noise impacts due to construction, the project applicant shall require construction contractors to implement a site-specific noise reduction program, subject to city review and approval, which includes the following measures:	This report is submitted.
2a	Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).	Will be complied with.
2b	Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used if such jackets are commercially	Will be complied with.

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	available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.	
2c	Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction.	Will be complied with.
2d	The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.	The strategies included in the plan will ensure that all feasible noise reduction controls will be implemented per Condition NOISE-5.
NOISE-3	Noise Complaint Procedures. <i>Ongoing throughout demolition, grading, and/or construction.</i> Prior to the issuance of each building permit, along with the submission of construction documents, the project applicant shall submit to the City Building Services Division a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include:	Will be complied with.
3a	A procedure and phone numbers for notifying the City Building Services Division staff and Oakland Police Department; (during regular construction hours and off-hours) shall be submitted to the Building Services Division.	Will be complied with.
3b	A sign posted on-site pertaining with permitted construction days and hours and complaint procedures and who to notify in the event of a problem. The sign shall also include a listing of both the City and construction contractor's telephone numbers (during regular construction hours and off-hours).	Will be complied with.
3c	The designation of an on-site construction complaint and enforcement manager for the project.	Will be complied with.
3d	Notification of neighbors and occupants within 300 feet of the project construction area at least 30 days in advance of extreme noise generating activities about the estimated duration of the activity.	Will be complied with. <sup>b</sup>
3e	A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.	Will be complied with.
NOISE-5	Pile Driving and Other Extreme Noise Generators. <i>Ongoing throughout demolition, grading, and/or construction.</i> To further reduce potential pier drilling, pile driving and/or other extreme noise generating construction impacts greater than 90 dBA, a set of site-specific noise attenuation measures shall be completed under the supervision of a qualified acoustical consultant. Prior to commencing construction, a plan for such measures shall be submitted for review and approval by the City to ensure that maximum feasible noise attenuation will be achieved. This plan shall be based on the final design of the project. A third-party peer review, paid for by the project applicant, may be required to assist the City in evaluating the feasibility and effectiveness of the noise reduction plan submitted by the project applicant. The criterion for approving the plan shall be a determination that maximum feasible noise attenuation will be achieved. A special inspection deposit is required to ensure compliance with the noise reduction plan. The amount of the deposit shall be determined by the Building Official, and the deposit shall be submitted by the project applicant concurrent with submittal of the noise reduction plan.	This report is submitted.
5a	Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings.	Will be complied with.
5b	Implement "quiet" pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions	Torque down or auger cast piles are planned to be used.
5c	Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site.	Not anticipated
5d	Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for	With implementation of reduction measures

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	example, and implement such measure if such measures are feasible and would noticeably reduce noise impacts.	impacts are not anticipated.
5e	Monitor the effectiveness of noise attenuation measures by taking noise measurements.	Will be complied with.

<sup>a</sup>The SCA Number equates to the numbering found in the Conditions of Approval for the MacArthur Transit Village Project, as approved by Planning Commission action on June 4, 2008 and subsequently amended by City Council action on July 7, 2008.

**NOISE REDUCTION PLAN**

**Site-Specific Strategies.** Projected construction noise levels could result in noise levels that exceed 90 dBA  $L_{max}$ . In order to reduce construction noise levels to the maximum extent feasible pursuant to Condition NOISE-5 for identified impacted land uses, the following site-specific noise reduction strategies shall be implemented as part of Phase 1 and 2 FDPs:

- Prior to initiation of on-site construction-related earthwork activities, a minimum 8-foot high temporary sound barrier shall be erected along the project property line abutting the residential sensitive land uses that are adjacent to the construction site on MacArthur Boulevard and Telegraph Avenue. The location of the temporary sound barriers is shown in Figure 1.
- Prior to initiation of on-site construction-related earthwork activities, a minimum 6-foot high temporary sound barrier shall be erected along the project property line abutting the outpatient surgery center land uses that is adjacent to the construction site on Telegraph Avenue.
- These temporary sound barriers shall be constructed with a minimum surface weight of 4 pounds per square foot and shall be constructed so that vertical or horizontal gaps are eliminated; these temporary barriers shall remain in place through the construction phase in which heavy construction equipment, such as excavators, dozers, scrapers, loaders, rollers, pavers, and dump trucks, are operating within 150 feet of the edge of the construction site by adjacent sensitive land uses.

These noise reduction strategies will reduce construction noise during the loudest periods of construction for Phase 1 and 2 FDPs as shown in Table 1.

**Standard Conditions of Approval.** In addition to these site-specific noise reduction strategies, the project contractor shall comply with all the general noise reduction strategies of Conditions NOISE-1, -2, -3, and -5 listed in Table 2 of this report. Implementation of these strategies will further reduce construction noise impacts in the project vicinity.

**Supplemental Noise Reduction Strategies.** Further noise reduction could be achieved with implementation of the following supplemental noise reduction strategies.

Whenever feasible, the project contractor shall encourage implementation of the following strategies throughout all phases of construction:

- Use smaller or quieter equipment;
- Use electric equipment in lieu of gasoline or diesel powered equipment;
- Turn off all idling equipment when anticipated to not be in use for more than 5 minutes;
- Minimize drop height when loading excavated materials onto trucks;

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- Minimize drop height when unloading or moving materials on-site; and
- Sequence noisy activities to coincide with noisiest ambient hours.

### NOISE MONITORING PLAN

Noise monitoring is required for all construction activities that would be considered extreme noise generators, activities that would result in noise levels in excess of 90 dBA  $L_{max}$  as measured at the receiving property. As noted previously, anticipated construction activities for the months of May and June 2011 could result in noise levels in excess of 90 dBA  $L_{max}$  at the residential land uses on MacArthur Boulevard that border the construction site. The anticipated construction activities for the month of May may also exceed 90 dBA  $L_{max}$  (without implementation of recommended strategies) at the residential land uses on Telegraph Avenue that border the construction site. Therefore, a noise monitoring program is required to monitor the noise levels at these potentially impacted sensitive receptor locations.

In addition to monitoring for exceedances of the maximum noise level threshold, Condition NOISE-5e requires noise monitoring to measure the effectiveness of noise attenuation measures. The noise monitoring effort shall be conducted as follows:

- Noise measurements shall be conducted on a weekly basis during the phases associated with the anticipated activities for the months of May, June, and September, and shall be conducted by a qualified acoustical consultant or a person trained by such a qualified consultant.
- These measurements shall be taken during mid-morning and mid-afternoon hours when background noise levels are anticipated to be lowest so as to try to capture noise from only construction noise sources.
- The measurements shall be taken at distance greater than 10 feet from the temporary sound barriers on the receptor property in order to determine the effectiveness of the sound barrier.
- If exceedances are identified, then the on-site construction manager shall be notified and the equipment use shall be adjusted so that noise levels are reduced.

### CONCLUSION

With implementation of the site-specific noise reduction strategies outlined above, noise impacts from project-related construction activities would be reduced at impacted land uses. In addition, further noise reduction will be achieved with implementation of the strategies listed in the Standard Conditions of Approval and the supplemental noise reduction strategies outlined in this report. Furthermore, implementation of the noise monitoring program will ensure that potential noise impacts are monitored and action taken if exceedances are identified.

This report meets the requirements of Condition of Approval NOISE-5 for a site-specific noise reduction plan for Phase I and 2 FDPs.



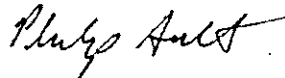
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Thank you for requesting LSA's services for this task.

Sincerely,  
LSA ASSOCIATES, INC.



David Clore, AICP  
Principal-in-Charge



Philip Ault, LEED-AP  
Noise & Air Quality Specialist/Project  
Manager

Attachments:

- Attachment A - Constmction Noise Calculation Tables
- Attachment B - Construction Equipment Schedule and Key

**ATTACHMENT A:  
CONSTRUCTION NOISE CALCULATION TABLES**

Phase work for May 2011: Environmental Remediation and BART Garage Earthwork

Receptor: Residential on MacArthur Boulevard

Reference (dBA) 50 ft Lmax	Usage factor	Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements			Noise Level Calculation with Noise Attenuation Requirements Implemented					
		Distance to Receptor (ft)	Ground Effect	Shielding (dBA)	Calculated (dBA) Lmax	Leq	0.1*Leq	entLeq		
A	2000 Cat 330B Excavator	50	180	0.52	81	66.96118	5.99117698	4990197.084		
B	2005 Linkbelt 330 LX Excavator	50	180	0.52	85.436975	75.41868	7.541867875	13863333.5		
C	2006 Bobcat S300 Skid steer	79								
D	Xtreme XFR-1245 Forklift	75								
E	DeLong RH26	66								
F	Drill Head Motor	66								
G	TEREX Back Hoe Loader	84								
H	48 m³ Puzosmeter Boom Pump	84								
J1	1999 Mack Dump truck	80	0.5	50	180	0.52	88	70.97089	7.097087702	12505115.38
J2	1999 Mack Dump truck	84	0.5	30	120	0.52	92.436975	75.40838	7.540837875	84740528.83
K	Fork Lift - Hyster H80XL	75								
M	Ingersoll Rand Compressor	85								
N	Lmk Belt 75 ton hydro	76								
P	JLG 600 series - 60 ft boom	75								
Q	Delivery Strike Truck - F-450 Super Duty	85								
R	Pasco PH600B	75								
S	Drumstick 1000 trencher	80								
T	TEREX Back Hoe Loader	85								
U	Hitachi Excavator - EX-550LC-5	91								
V	Dynapac (jumping jack) - LT7000	87								
W	SIHL - cut-off saw	70	0.5	30	120	0.52	74.436975	57.40838	5.740837875	55060185.13
X	Lincoln Commander 500 welder	73								
Y	Concrete walk behind saw - EDCO 3S-20	90								
Z1	SAKAI - dirt roller	80	1	50	180	0.52	80	65.38119	6.598117898	3883854.44
Z2	SAKAI - dirt roller	80	1	30	120	0.52	84.436975	78.41868	7.841867875	11012037.23
AA	McNeil Ready-mix Concrete truck	79								
AB	Cement Finisher - Multiquip	80								
AC	John Deere Skip loader - 210LE	88								
AD	Caterpillar grader - 140H	85								
AE	CAT 665F wheel loader	88								
AF	Water truck - Starling LT8500	85	0.5	50	180	0.52	85	67.97088	6.797087702	6267404.173
AG	CAT D8R - wheel - Bull Dozer	88								
AH	CAT 1055D paver	77	0.5	50	180	0.52	77	69.97088	5.997087702	493318.6205
Environmental Remediation		30	150					Sum	14887555.18	
BART Garage Earthwork		30	120					Sum/12	7407292.425	
								10*Leq(Sum)	62.89654508	
								Leq(h)	61	

\*Calculated Lmax is the Loudest value.

Usage factor	Distance to Receptor (ft)	Ground Effect	Shielding (dBA)	Noise Level Calculation with Noise Attenuation Requirements Implemented				Attenuation technique implemented	
				Calculated (dBA) Lmax	Leq	0.1*Leq	entLeq		
1	50	180	0.52	8	73	58.98118	5.99117698	790892.9387	Temporary 8 ft sound barrier
1	30	120	0.52	8	77.43697	68.41868	6.841867875	2197190.289	Temporary 8 ft sound barrier
0.5	50	180	0.52	8	80	62.97088	6.297087702	1981927.22	Temporary 8 ft sound barrier
0.5	30	120	0.52	8	84.43697	87.40838	8.740837875	5506018.613	Temporary 8 ft sound barrier
0.5	30	120	0.52	8	66.43697	49.40838	4.940837875	87264.51418	Temporary 8 ft sound barrier
1	50	180	0.52	9	72	57.98118	5.798117898	628226.5919	Temporary 8 ft sound barrier
1	30	120	0.52	8	78.43697	82.41868	8.241867875	1745290.284	Temporary 8 ft sound barrier
0.5	50	180	0.52	8	77	59.97088	5.997087702	993316.8208	Temporary 8 ft sound barrier
0.5	50	180	0.52	8	69	51.97088	5.197087702	157430.075	Temporary 8 ft sound barrier
Lmax*					88			Sum	14887555.18
								Sum/12	1173963.262
								10*Leq(Sum)	62.89654508
								Leq(h)	61

\*Calculated Lmax is the Loudest value.

Phase work for June 2011: Piles and Grade Beams/Pile Caps

Receptor: Residential on MacArthur Boulevard

Reference (dBA) 50 ft Lmax	Usage factor	Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements			Noise Level Calculation with Noise Attenuation Requirements Implemented					
		Distance to Receptor (ft)	Ground Effect	Shielding (dBA)	Calculated (dBA) Lmax	Leq	0.1*Leq	entLeq		
A	2000 Cat 330B Excavator	50								
B	2005 Linkbelt 330 LX Excavator	50								
C	2006 Bobcat S300 Skid steer	79								
D1	Xtreme XFR-1245 Forklift	75	1	30	120	0.52	79.436975	65.41868	6.541867875	14823118.32
E	DeLong RH26	66	1	30	120	0.52	88.436975	74.41868	7.441867875	27660998.89
F	Drill Head Motor	66	1	30	120	0.52	88.436975	74.41868	7.441867875	27660998.89
G	TEREX Back Hoe Loader	84	1	30	120	0.52	92.436975	78.41868	7.841867875	69481257.66
H1	48 m³ Puzosmeter Boom Pump	84	1	30	120	0.52	88.436975	74.41868	7.441867875	27660998.89
J	1999 Mack Dump truck	80	0.5	30	120	0.52	92.436975	75.40838	7.540837875	34740928.83
K	Fork Lift - Hyster H80XL	75								
M	Ingersoll Rand Compressor	85								
N	Lmk Belt 75 ton hydro	76								
P	JLG 600 series - 60 ft boom	75								
Q	Delivery Strike Truck - F-450 Super Duty	85	0.5	30	120	0.52	89.436975	72.40838	7.240837875	17411559.88
R	Pasco PH600B	75								
S	Drumstick 1000 trencher	80								
T	TEREX Back Hoe Loader	85								
U	Hitachi Excavator - EX-550LC-5	91								
V	Dynapac (jumping jack) - LT7000	87								
W	SIHL - cut-off saw	70								
X	Lincoln Commander 500 welder	73								
Y	Concrete walk behind saw - EDCO 3S-20	90	0.5	30	120	0.52	77.436975	60.40838	6.040837875	1098595.144
Z1	SAKAI - dirt roller	80								
Z2	SAKAI - dirt roller	80								
AA1	McNeil Ready-mix Concrete truck	79	0.5	30	120	0.52	83.436975	66.40838	6.640837875	4373586.046
AA2	McNeil Ready-mix Concrete truck	79	0.5	30	120	0.52	83.436975	66.40838	6.640837875	4373586.046
AB	Cement Finisher - Multiquip	80								
AC	John Deere Skip loader - 210LE	88								
AD	Caterpillar grader - 140H	85								
AE	CAT 665F wheel loader	88								
AF	Water truck - Starling LT8500	85								
AG	CAT D8R - wheel - Bull Dozer	88								
AH	CAT 1055D paver	77								
Distance to receptor:		Closest	Average		Lmax*	92		Sum	217644488	
BART Garage Piles, Grade Beams/Pile Caps		30	120					Sum/12	18137040.5	
								10*Leq(Sum)	72.5818684	
								Leq(h)	73	

\*Calculated Lmax is the Loudest value.

Usage factor	Distance to Receptor (ft)	Ground Effect	Shielding (dBA)	Noise Level Calculation with Noise Attenuation Requirements Implemented				Attenuation technique implemented	
				Calculated (dBA) Lmax	Leq	0.1*Leq	entLeq		
1	30	120	0.52	8	71.43697	57.41868	5.741867875	551909.2474	Temporary 8 ft sound barrier
1	30	120	0.52	8	90.43697	68.41868	6.841867875	438370.962	Temporary 8 ft sound barrier
1	30	120	0.52	8	80.43697	68.41868	6.841867875	438370.962	Temporary 8 ft sound barrier
1	30	120	0.52	8	84.43697	70.41868	7.041867875	11012037.23	Temporary 8 ft sound barrier
1	30	120	0.52	8	80.43697	66.41868	6.641867875	438370.962	Temporary 8 ft sound barrier
0.5	30	120	0.52	8	84.43697	67.40838	6.740837875	5506018.613	Temporary 8 ft sound barrier
0.5	30	120	0.52	8	81.43697	44.40838	4.440837875	275958.237	Temporary 8 ft sound barrier
0.5	30	120	0.52	8	68.43697	51.40838	5.140837875	174115.5966	Temporary 8 ft sound barrier
0.5	30	120	0.52	8	75.43697	58.40838	5.840837875	693166.675	Temporary 8 ft sound barrier
0.5	30	120	0.52	8	75.43697	58.40838	5.840837875	693166.675	Temporary 8 ft sound barrier
Lmax*					88			Sum	34541673.22
								Sum/12	2878469.435
								10*Leq(Sum)	84.9818464
								Leq(h)	85

\*Calculated Lmax is the Loudest value.

EXHIBIT D

Phase work for Sept 2011: Grade Beams/Pile Caps, Vertical Concrete, Utilities, BART Plaza

Receptor: Residential on MacArthur Boulevard

Reference (dBA) 58 ft	Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements																		
	Usage	Distance to Receptor	Ground			Shielding (dBA)	Calculated (dBA)												
			Closest	Average	Effect		Lmax	Leq	0.1*Leq	antiLog									
A	2000 Cat 330B Excavator	81																	
B1	2005 Linkbelt 330 LX Excavator	81	1	175	196	0.52	70.118639	66.10517	6.61051719	4078657.056									
B2	2005 Linkbelt 330 LX Excavator	81	1	590	720	0.52	59.56236	51.80927	5.18092652	151679.3713									
B3	2005 Linkbelt 330 LX Excavator	81	1	155	205	0.52	71.172766	65.55785	6.555784681	3595710.192									
C1	2006 Bobcat S300 Skid steer	79	1	175	195	0.62	68.118639	64.10517	6.41051719	2573458.625									
C2	2006 Bobcat S300 Skid steer	79	1	590	720	0.52	57.56236	49.80927	4.98092652	95703.21334									
C3	2006 Bobcat S300 Skid steer	79	1	155	205	0.52	68.172766	63.55735	6.355734681	2268739.754									
D	Ktreme XFR-1245 Forklift	75	1	30	120	0.52	79.436975	65.41868	6.54186761	3482311.932									
E	Delmag RH26	84																	
F	Drill Head Motor	84																	
G1	TEREX Back Hoe Loader	88	1	590	720	0.52	66.56236	58.80927	5.88092652	760197.6451									
G2	TEREX Back Hoe Loader	88	1	155	205	0.52	78.172766	72.55785	7.255784681	18021240.44									
H1	48 meter Putzmeister Boom Pump	84	1	30	120	0.52	88.436975	74.41868	7.44186761	27660986.89									
J1	1999 Mack Dump truck	88	0.5	590	720	0.52	66.56236	55.79897	5.579896524	380098.8225									
J2	1999 Mack Dump truck	88	0.5	155	205	0.52	76.172766	69.54755	6.954754685	9010620.22									
K	Fork Lid - Hydrator H80XL	75	1	30	120	0.52	79.436975	65.41868	6.54186761	3482311.932									
M1	Ingersoll Rand Compressor	85	1	175	195	0.52	74.118639	70.10517	7.01051719	10245123.32									
M2	Ingersoll Rand Compressor	85	1	590	720	0.52	63.56236	55.80927	5.58092652	381001.3547									
M3	Ingersoll Rand Compressor	85	1	155	205	0.52	75.172766	69.55765	6.955764681	9032015.642									
N	Link Belt 75 ton hydro	76																	
P	JLG 600 series - 60 ft boom	75																	
Q1	Delivery Stake Truck - F-450 Super Duty	85	0.5	30	120	0.52	89.436975	72.40838	7.240837675	17411559.66									
Q2	Delivery Stake Truck - F-450 Super Duty	85	0.5	30	120	0.52	89.436975	72.40838	7.240837675	17411559.66									
Q3	Delivery Stake Truck - F-450 Super Duty	85	0.5	175	195	0.52	74.118639	67.09487	6.709487195	5122681.653									
R	Pacop PH 6000	75																	
S	Ditchwitch 1030 trencher	80																	
T	TEREX Back Hoe Loader	88																	
U	Heachi Excavator - EX-550LC-S	91																	
V	Dymarc (jumping jack) - LT7000	87	0.5	175	195	0.52	76.118639	69.08487	6.909487195	8118713.102									
W1	STIHL - cut-off saw	70	0.5	175	195	0.52	59.118639	52.09487	5.209487195	161989.623									
W2	STIHL - cut-off saw	70	0.5	590	720	0.52	48.58236	37.79897	3.779896524	6024.190363									
W3	STIHL - cut-off saw	70	0.5	155	205	0.52	60.172766	61.54755	6.154754685	142608.7065									
X	Lincoln Commander 500 welder	73																	
Y	Concrete walk behind saw -EDCO SS-20	90																	
Z	SAKAI - dirt roller	80																	
AA1	McHale Ready-mix Concrete truck	79	0.5	30	123	0.52	83.436975	66.40838	6.540837675	4373586.046									
AA2	McHale Ready-mix Concrete truck	79	0.5	30	120	0.52	83.436975	66.40838	6.540837675	4373586.046									
AA3	McHale Ready-mix Concrete truck	79	0.5	175	195	0.52	68.118639	61.09487	6.109487195	1286729.313									
AB	Cement Finisher - Multiquip	80																	
AC	John Deere Skip loader - 210LE	88																	
AD	Caterpillar grader - 140H	85																	
AE	CAT 966F wheel loader	86																	
AF	Water truck - Sterling LT500	85																	
AG	CAT D8R - diesel - Bull Dozer	88																	
AH	CAT 1055D paver	77																	

Usage	Distance to Receptor	Noise Level Calculation with Noise Attenuation Requirements Implemented									
		Closest	Average	Effect	(dBA)	Calculated (dBA)				Attenuation technique implemented	
						Lmax	Leq	0.1*Leq	antiLog		
1	175	195	0.52	8	62.11864	58.10517	5.61051719	646423.5803	Temporary 8 ft sound barrier		
1	590	720	0.52	8	51.56236	43.80927	4.38092652	24039.5603	Temporary 8 ft sound barrier		
1	155	205	0.52	8	63.17277	57.55785	5.755784681	569881.6605	Temporary 8 ft sound barrier		
1	175	195	0.52	8	60.11864	56.10517	5.51051719	407865.7056	Temporary 8 ft sound barrier		
1	590	720	0.62	6	49.56236	41.80927	4.18092652	15167.93713	Temporary 8 ft sound barrier		
1	156	205	0.52	6	61.17277	55.55765	5.555784681	359571.0192	Temporary 8 ft sound barrier		
1	30	120	0.52	8	71.43697	57.41868	5.74186761	551909.2474	Temporary 8 ft sound barrier		
1	590	720	0.52	8	58.56236	50.80927	5.06092652	120483.2073	Temporary 8 ft sound barrier		
1	155	205	0.52	8	70.17277	64.55785	6.455784681	2856174.129	Temporary 8 ft sound barrier		
1	30	120	0.52	9	80.43697	66.41868	6.54186761	4383970.982	Temporary 8 ft sound barrier		
0.5	590	720	0.52	6	58.56236	47.79897	4.779896524	60241.60363	Temporary 8 ft sound barrier		
0.5	155	205	0.52	8	70.17277	61.54755	6.154754685	1426087.065	Temporary 8 ft sound barrier		
1	30	120	0.52	8	71.43697	57.41868	5.74186761	551909.2474	Temporary 8 ft sound barrier		
1	175	195	0.52	8	66.11864	62.10517	6.21051719	1623742.62	Temporary 8 ft sound barrier		
1	590	720	0.52	8	55.56236	47.80927	4.78092652	60384.64535	Temporary 8 ft sound barrier		
1	155	205	0.52	8	67.17277	61.55785	6.155784681	1431478.011	Temporary 8 ft sound barrier		
0.5	30	120	0.52	8	81.43697	84.40838	6.440837675	2759548.237	Temporary 8 ft sound barrier		
0.5	30	120	0.52	8	81.43697	84.40838	6.440837675	2759548.237	Temporary 8 ft sound barrier		
0.5	175	195	0.52	8	66.11864	59.09487	5.909487195	811971.3102	Temporary 8 ft sound barrier		
0.5	175	195	0.52	8	68.11864	61.09487	6.109487195	1286729.313	Temporary 8 ft sound barrier		
0.5	175	195	0.52	8	51.11864	44.09487	4.409487195	25673.6207	Temporary 8 ft sound barrier		
0.5	590	720	0.52	6	40.56236	29.79897	2.979896524	954.765075	Temporary 8 ft sound barrier		
0.5	155	205	0.52	8	52.17277	43.54755	4.354754685	22633.65467	Temporary 8 ft sound barrier		
0.5	30	120	0.52	9	75.43697	58.40838	5.840837675	693166.675	Temporary 8 ft sound barrier		
0.5	30	120	0.52	6	75.43697	58.40838	5.840837675	693166.675	Temporary 8 ft sound barrier		
0.5	175	195	0.52	8	60.11864	53.09487	5.309487195	203932.6528	Temporary 8 ft sound barrier		

\*Calculated Lmax is the Loudest value.

Phase work for May 2011: Environmental Remediation and BART Garage Earthwork

Receptor: Residential on Telegraph

Reference (NBA) 20 ft	Usage Factor	Distance to Receptor			Ground Effect	Shielding (dBA)	Calculated (dBA)			Attenuation	
		Closest	Average	Farthest			Lmax	Leq	0.1% Leq		
A	2000 Cat 330B Excavator	81	30	105	0.43		85.43697493	73.17007114	7.317007	20749475.00	
B	2005 Linkbelt 330 LX Excavator	81	1	155	250	0.43	71.17276912	64.01502889	6.401503	2620093.89	
C	2005 Bobcat 930B Backhoe	79									
D	Skinner XFR-1245 Forklift	75									
E	DeLong RH-26	84									
F	Drill Head Motor	84									
G	TEREX Back Hoe Loader	88									
H	48 meter Putzmeister Boom Pump	84									
I	1080 Mack Dump Truck	88	0.5	30	105	0.43	82.43697493	71.15877118	7.158771	51098860	
J	1080 Mack Dump Truck	88	0.5	155	250	0.43	78.17276912	66.00472884	6.00473	6316447.544	
K	Fork Lift - Hyster H80XL	75									
M	Ingersoll Rand Compressor	85									
N	Link Belt 75 ton hydro	76									
P	JLG 600 series - 60 ft boom	75									
Q	Delivery Stake Truck - F-450 Super Duty	85									
R	Papco PH 6000	75									
S	Ditch Witch 1030 trencher	80									
T	TEREX Back Hoe Loader	88									
U	Hitachi Excavator - EX-560LC-6	81									
V	Dynapac (jumping jack) - L77000	87									
W	STHE - cut-off saw	73	0.5	155	250	0.43	60.17276912	50.00472884	5.000473	100108.0471	
X	Lincoln Commander 500 welder	73									
Y	Concrete walk behind saw - EDGO S.E.-20	90									
Z1	SAKAI - dirt roller	80	1	50	105	0.43	80	72.17007114	7.317007	16481813.85	
Z2	SAKAI - dirt roller	80	1	155	250	0.43	70.17276912	63.01502889	6.301503	3002178.843	
AA	McHale Ready-mix Concrete truck	79									
AB	Concrete Finisher - Multiquip	80									
AC	John Deere Site loader - 210LE	88									
AD	Compactor grader - 140H	85									
AE	CAT 966F wheel loader	86	0.5	30	105	0.43	80.43697493	74.15877118	7.415877	38000182.42	
AF	Water truck - Sterling L78500	88									
AG	CAT D8R - diesel - Bull Dozer	88									
AH	CAT 105SD paver	77	0.5	30	105	0.43	81.43697493	66.15877118	6.158771	4190591.403	
Environmental Remediation		Distance to receptor:		Closest	Average	Farthest	Lmax		Sum	Sum(L2)	Sum(L2) / 10^L
BART Garage Earthwork				30	105				82	39238778.3	17216.80
				155	250		10^L		Sum(L2)	39238778.3	52.35956
							Leq(h)		70		63

\*Calculated Lmax is the Loudest value.

Usage Factor	Distance to Receptor			Ground Effect	Shielding (dBA)	Calculated (dBA)			Attenuation technique		
	Closest	Average	Farthest			Lmax	Leq	0.1% Leq			
1	30	105	0.43			8	77.43697	65.17007	6.517007	3264670 Temporary 8 ft sound barrier	
1	155	250	0.43			8	63.17277	56.01503	6.01503	399487.2 Temporary 8 ft sound barrier	
0.5	30	105	0.43			8	64.43697	60.15877	6.015877	454064.7 Temporary 8 ft sound barrier	
0.5	155	250	0.43			8	70.17277	60.00473	6.00473	1091069 Temporary 8 ft sound barrier	
0.5	155	250	0.43			8	62.17277	47.00473	4.200473	15866.2 Temporary 8 ft sound barrier	
1	50	105	0.43			6	72	84.17007	6.417007	2812204 Temporary 8 ft sound barrier	
1	155	250	0.43			8	62.17277	53.01503	5.01503	317324 Temporary 8 ft sound barrier	
0.5	30	105	0.43			8	81.43697	80.15877	6.515877	4130257 Temporary 8 ft sound barrier	
0.5	30	105	0.43			8	73.43697	58.15877	5.815877	654600.7 Temporary 8 ft sound barrier	
		Distance to receptor:		Closest	Average	Farthest	Lmax		Sum	Sum(L2)	Sum(L2) / 10^L
				30	105				84	266103.4	17216.80
				155	250		10^L		Sum(L2)	39238778.3	52.35956
							Leq(h)		63		63

\*Calculated Lmax is the Loudest value.

Phase work for June 2011: Piles and Grade Beams/Pile Caps

Receptor: Residential on Telegraph

Reference (NBA) 20 ft	Usage Factor	Distance to Receptor			Ground Effect	Shielding (dBA)	Calculated (dBA)			Attenuation	
		Closest	Average	Farthest			Lmax	Leq	0.1% Leq		
A	2000 Cat 330B Excavator	81									
B	2005 Linkbelt 330 LX Excavator	81									
C	2005 Bobcat 930B Backhoe	79									
D	Skinner XFR-1245 Forklift	75	1	155	250	0.43	65.17276912	58.01502889	5.01503	43144.8742	
E	DeLong RH-26	84	1	155	250	0.43	74.17276912	67.01502889	6.701503	628246.118	
F	Drill Head Motor	84	1	155	250	0.43	74.17276912	67.01502889	6.701503	628246.118	
G	TEREX Back Hoe Loader	88	1	155	250	0.43	78.17276912	71.01502889	7.101503	1282285.229	
H	48 meter Putzmeister Boom Pump	84	1	155	250	0.43	74.17276912	67.01502889	6.701503	628246.118	
I	1080 Mack Dump Truck	88	0.5	135	250	0.43	78.17276912	66.00472884	6.000473	6316447.544	
K	Fork Lift - Hyster H80XL	75									
M	Ingersoll Rand Compressor	85									
N	Link Belt 75 ton hydro	76									
P	JLG 600 series - 60 ft boom	75									
Q	Delivery Stake Truck - F-450 Super Duty	85	0.5	155	250	0.43	73.17276912	65.00472884	6.500473	3165722.671	
R	Papco PH 6000	75									
S	Ditch Witch 1030 trencher	80									
T	TEREX Back Hoe Loader	88									
U	Hitachi Excavator - EX-560LC-6	81									
V	Dynapac (jumping jack) - L77000	87									
W	STHE - cut-off saw	73									
X	Lincoln Commander 500 welder	73	0.5	155	250	0.43	63.17276912	53.00472884	5.000473	189743.8006	
Y	Concrete walk behind saw - EDGO S.E.-20	90									
Z1	SAKAI - dirt roller	80									
Z2	SAKAI - dirt roller	80									
AA	McHale Ready-mix Concrete truck	79	0.5	155	250	0.43	60.17276912	50.00472884	5.000473	785183.8325	
AA2	McHale Ready-mix Concrete truck	79	0.5	155	250	0.43	60.17276912	50.00472884	5.000473	785183.8325	
AB	Concrete Finisher - Multiquip	80									
AC	John Deere Site loader - 210LE	88									
AD	Compactor grader - 140H	85									
AE	CAT 966F wheel loader	86									
AF	Water truck - Sterling L78500	88									
AG	CAT D8R - diesel - Bull Dozer	88									
AH	CAT 105SD paver	77									
Environmental Remediation		Distance to receptor:		Closest	Average	Farthest	Lmax		Sum	Sum(L2)	Sum(L2) / 10^L
BART Garage Piles, Grade Beams/Pile Caps				155	250				78	39238778.3	17216.80
							10^L		Sum(L2)	39238778.3	52.35956
							Leq(h)		63		63

\*Calculated Lmax is the Loudest value.

Usage Factor	Distance to Receptor			Ground Effect	Shielding (dBA)	Calculated (dBA)			Attenuation technique		
	Closest	Average	Farthest			Lmax	Leq	0.1% Leq			
1	155	250	0.43			6	67.17277	50.01503	5.001503	100381.7 Temporary 8 ft sound barrier	
1	155	250	0.43			6	66.17277	49.01503	4.901503	78706.8 Temporary 8 ft sound barrier	
1	155	250	0.43			6	68.17277	50.01503	5.001503	78706.8 Temporary 8 ft sound barrier	
1	155	250	0.43			6	70.17277	53.01503	5.301503	2802179 Temporary 8 ft sound barrier	
1	155	250	0.43			6	68.17277	50.01503	5.001503	78706.8 Temporary 8 ft sound barrier	
0.5	155	250	0.43			8	67.17277	57.00473	5.700473	501733.3 Temporary 8 ft sound barrier	
0.5	155	250	0.43			8	65.17277	45.00473	4.500473	31657.23 Temporary 8 ft sound barrier	
0.5	155	250	0.43			8	61.17277	51.00473	5.100473	126020.7 Temporary 8 ft sound barrier	
0.5	155	250	0.43			8	61.17277	51.00473	5.100473	126020.7 Temporary 8 ft sound barrier	
		Distance to receptor:		Closest	Average	Farthest	Lmax		Sum	Sum(L2)	Sum(L2) / 10^L
				155	250				78	4280310	17216.80
							10^L		Sum(L2)	39238778.3	52.35956
							Leq(h)		63		63

\*Calculated Lmax is the Loudest value.

Phase work for Sept 2011: Grade Beams/Pile Caps, Vertical Concrete, Utilities, BART Plaza

Reschedule in green

Table with columns: Reference, Usage, Estimated to Receive, Estimated Effort, Linear, Area, Unit, Rate, and Remarks. Includes detailed task descriptions like '2006 Cat 330B Excavator' and '2006 Cat 330B Loader'.

Table with columns: Usage Factor, Estimated to Receive, Estimated Effort, Linear, Area, Unit, Rate, and Remarks. This table continues the task list from the previous table.

Summary table for the first section with columns: Linear, Area, Unit, Rate, and Remarks.

Summary table for the second section with columns: Linear, Area, Unit, Rate, and Remarks.

Phase work for May 2011: Environmental Remediation and Bart Garage Earthwork

Receptor: Surgery Center and Telegraph

Reference dB(A) 50 ft Lmax	Usage Factor	Distance to Receptor			Ground Effect	Shielding (dBA)	Calculated (dBA)				
		Closest	Average	Farthest			Linear	Leq	0.1 Leq	and Leq	
A	2000 Cat 330B Excavator	81	1	30	140	0.43	85.43697499	70.13405864	7.013406	10313497.9	
B	2005 Linkbelt 330 LX Excavator	81	1	250	390	0.43	67.02058881	59.32210115	5.83221	839480.502	
C	2005 Bobcat 5300 Skid steer	79									
D	Krauss XFR-1245 Forklift	75									
E	DeLong RH26	84									
F	Shih Head Motor	84									
G	TEREX Back Hoe Loader	88									
H	48 meter Putzmeister Boom Pump	84									
J1	1889 Mack Dump truck	86	0.5	100	140	0.43	61.97840209	74.12375360	7.412376	25644987.4	
J2	1889 Mack Dump truck	86	0.5	250	390	0.43	74.02058881	63.322118012	5.332118	2143778.53	
K	Fox L.A. - Hydrat H800L	75									
M	Ingersoll Rand Compressor	85									
N	Low Ball 75 ton hydro	76									
P	A.G 600 aerial - 60 ft boom	75									
Q	Delivery Stake Truck - F-450 Super Duty	85									
R	Paccar PH 6000	75									
S	Ditchwitch 1030 trencher	80									
T	TEREX Back Hoe Loader	88									
U	Hitch Excavator - EX-550LC-5	81									
V	Dynapac (pumpjack) - L17000	87									
W	STHL - cut-off saw	70	0.5	250	390	0.43	56.02058881	48.3118012	4.831118	33978.6154	
X	Liscott Commander 500 welder	73									
Y	Concrete walk behind saw - EDCO 55-20	80									
Z1	SAKAI - dirt roller	80	1	50	140	0.43	80	88.13405864	8.813406	8192302.57	
Z2	SAKAI - dirt roller	80	1	250	390	0.43	66.02058881	56.32210115	5.32211	679532.317	
AA	McHauls Ready-mix Concrete truck	78									
AB	Cement Finisher - Milwaukee	80									
AC	John Deere 510 loader - 210LE	88									
AD	Caterpillar grader - 140H	85									
AE	CAT 966F wheel loader	88									
AF	Water truck - Sterling LT800	85	0.5	30	140	0.43	88.43687498	71.12375360	7.123756	12953167.7	
AG	CAT 980 - wheel - Bul Dozer	88									
AH	CAT 1055D paver	77	0.5	30	140	0.43	61.43687498	63.12375360	6.312376	2052976.73	
Environmental Remediation and Bart Garage Earthwork		Distance to receptor:		Closest	Average	Lmax	78	Sum	62066613.2		
				250	390			Sum	575803.8		
								10 Leq (Sum)	67.263913		
								Leq (h)	67		

\*Calculated Lmax is the Loudest value.

Usage Factor	Distance to Receptor	Ground Effect	Shielding (dBA)	Calculated (dBA)				Attenuation technique implemented			
				Linear	Leq	0.1 Leq	and Leq				
1	30	140	0.43	5	60.43697	65.13406	6.513406	3261414	Temporary 6 ft sound barrier		
1	250	390	0.43	5	67.0206	54.3221	5.43221	270529.7	Temporary 6 ft sound barrier		
0.5	100	140	0.43	5	76.8784	68.12376	6.812376	8172889	Temporary 6 ft sound barrier		
0.5	250	390	0.43	5	68.0206	56.3116	5.63116	677822.8	Temporary 6 ft sound barrier		
0.5	250	390	0.43	5	51.0206	40.3116	4.03116	10744.35	Temporary 6 ft sound barrier		
1	50	140	0.43	5	75	84.13406	8.413406	2599634	Temporary 6 ft sound barrier		
1	250	390	0.43	5	61.0206	53.3221	5.3221	21488.7	Temporary 6 ft sound barrier		
0.5	30	140	0.43	5	84.43687	66.12376	6.612376	4098151	Temporary 6 ft sound barrier		
0.5	30	140	0.43	5	76.43687	58.12376	5.812376	62186.2	Temporary 6 ft sound barrier		
		Distance to receptor:		Closest	Average	Lmax	88	Sum	1954432		
				250	390			Sum	168703		
								10 Leq (Sum)	67.263913		
								Leq (h)	67		

\*Calculated Lmax is the Loudest value.

Phase work for June 2011: Piles and Grade Beams/Pile Caps

Receptor: Surgery Center and Telegraph

Reference dB(A) 50 ft Lmax	Usage Factor	Distance to Receptor			Ground Effect	Shielding (dBA)	Calculated (dBA)				
		Closest	Average	Farthest			Linear	Leq	0.1 Leq	and Leq	
A	2000 Cat 330B Excavator	81									
B	2005 Linkbelt 330 LX Excavator	81									
C	2005 Bobcat 5300 Skid steer	79									
D1	Krauss XFR-1245 Forklift	75	1	250	390	0.43	61.02058881	53.32210115	5.33211	214688.806	
D2	DeLong RH26	84	1	250	390	0.43	70.02058881	62.32210115	6.23211	1705908.01	
E	Shih Head Motor	84	1	250	390	0.43	70.02058881	62.32210115	6.23211	1706908.01	
F	TEREX Back Hoe Loader	88	1	250	390	0.43	74.02058881	66.32210115	6.32211	4287556.06	
G	48 meter Putzmeister Boom Pump	84	1	250	390	0.43	70.02058881	62.32210115	6.23211	1705908.01	
H1	1889 Mack Dump truck	86	0.5	250	390	0.43	74.02058881	63.322118012	6.33118	2143778.53	
J	Fox L.A. - Hydrat H800L	75									
M	Ingersoll Rand Compressor	85									
N	Low Ball 75 ton hydro	76									
P	A.G 600 aerial - 60 ft boom	75									
Q	Delivery Stake Truck - F-450 Super Duty	85	0.5	250	390	0.43	71.02058881	60.2118012	6.02118	3074434.63	
R	Paccar PH 6000	75									
S	Ditchwitch 1030 trencher	80									
T	TEREX Back Hoe Loader	88									
U	Hitch Excavator - EX-550LC-5	81									
V	Dynapac (pumpjack) - L17000	87									
W	STHL - cut-off saw	70									
X	Liscott Commander 500 welder	73	0.5	250	390	0.43	58.02058881	48.3118012	4.831118	67782.2912	
Y	Concrete walk behind saw - EDCO 55-20	80									
Z1	SAKAI - dirt roller	80									
Z2	SAKAI - dirt roller	80									
AA1	McHauls Ready-mix Concrete truck	78	0.5	250	390	0.43	65.02058881	54.3118012	5.43118	288485.653	
AA2	McHauls Ready-mix Concrete truck	78	0.5	250	390	0.43	65.02058881	54.3118012	5.43118	288485.653	
AB	Cement Finisher - Milwaukee	80									
AC	John Deere 510 loader - 210LE	88									
AD	Caterpillar grader - 140H	85									
AE	CAT 966F wheel loader	88									
AF	Water truck - Sterling LT800	85									
AG	CAT 980 - wheel - Bul Dozer	88									
AH	CAT 1055D paver	77									
Environmental Remediation and Bart Garage Earthwork		Distance to receptor:		Closest	Average	Lmax	78	Sum	13448846.8		
				250	390			Sum	1162745.71		
								10 Leq (Sum)	60.495070		
								Leq (h)	60		

\*Calculated Lmax is the Loudest value.

Usage Factor	Distance to Receptor	Ground Effect	Shielding (dBA)	Calculated (dBA)				Attenuation technique implemented			
				Linear	Leq	0.1 Leq	and Leq				
1	250	390	0.43	5	58.0206	48.3221	4.83211	67853.23	Temporary 6 ft sound barrier		
1	250	390	0.43	5	65.0206	57.3221	5.73211	558771.7	Temporary 6 ft sound barrier		
1	250	390	0.43	5	65.0206	57.3221	5.73211	558771.7	Temporary 6 ft sound barrier		
1	250	390	0.43	5	68.0206	61.3221	6.13211	135564.7	Temporary 6 ft sound barrier		
1	250	390	0.43	5	65.0206	57.3221	5.73211	558771.7	Temporary 6 ft sound barrier		
0.5	250	390	0.43	5	68.0206	61.3116	6.13116	87782.2	Temporary 6 ft sound barrier		
0.5	250	390	0.43	5	66.0206	55.3116	5.53116	398758.2	Temporary 6 ft sound barrier		
0.5	250	390	0.43	5	60.0206	48.3116	4.83116	83545.4	Temporary 6 ft sound barrier		
0.5	250	390	0.43	5	60.0206	48.3116	4.83116	83545.4	Temporary 6 ft sound barrier		
		Distance to receptor:		Closest	Average	Lmax	88	Sum	4242831		
				250	390			Sum	359430.8		
								10 Leq (Sum)	55.49507		
								Leq (h)	55		

\*Calculated Lmax is the Loudest value.

Phase work for Sept 2011: Grade Beams/Pile Caps, Vertical Concrete, Utilities, BART Plaza

Receptor: Surgery Center on Telegraph

Reference (dB(A) 50 ft)	Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements									
	Usage factor	Distance to Receptor		Ground Effect	Shielding (dBA)	Calculated (dB(A))				
		Closest	Average			Lmax	Lavg	0.1*Leq	avgLeq	
A	2000 Cat 300B Excavator	81		315	325	0.43	85.01318801	51.24820543	6.124621	1232358.8
B1	2005 Linkbelt 330 L/A Excavator	81	1	370	480	0.43	83.81526581	57.13060904	5.713061	5110512.86
B2	2005 Linkbelt 330 L/A Excavator	81	1	430	560	0.43	82.31000298	55.50400205	5.5504	385148.003
B3	2005 Linkbelt 330 L/A Excavator	81	1	430	560	0.43	82.31000298	55.50400205	5.5504	385148.003
C1	2006 Bobcat S300 Skid steer	79	1	315	325	0.43	83.01318801	59.24820543	5.824821	840889.31
C2	2006 Bobcat S300 Skid steer	79	1	370	480	0.43	81.81838581	55.13060904	5.513061	325897.408
C3	2006 Bobcat S300 Skid steer	79	1	430	560	0.43	80.31000298	53.50400205	5.3504	224078.508
D	Xtreme XFR-1245 Forklift	75	1	250	390	0.43	81.02095991	53.32210115	5.33221	214886.888
E	Dalmag R126	84								
F	Drill Head Motor	84								
G1	TEREX Back Hoe Loader	88	1	370	480	0.43	70.61536581	54.13080064	6.413081	2588095.11
G2	TEREX Back Hoe Loader	88	1	430	560	0.43	69.31003098	62.50400205	6.2504	177918.86
H1	48 meter Putzmeister Boom Pump	84	1	250	390	0.43	70.02095991	82.32210115	8.23221	1708908.01
J1	1999 Mack Dump truck	88	0.5	370	480	0.43	70.61536581	61.12050908	6.112051	1264347.56
J2	1999 Mack Dump truck	88	0.5	430	560	0.43	69.31003098	58.48370208	5.84837	889964.43
K	Fork Lift - Hyster H80XL	75	1	250	390	0.43	61.02095991	53.32210115	5.33221	214886.888
M1	Ingersoll Rand Compressor	86	1	315	325	0.43	89.01318801	85.24820543	8.524821	3346728.57
M2	Ingersoll Rand Compressor	85	1	378	480	0.43	87.81536581	61.13080064	6.113081	1267438.94
M3	Ingersoll Rand Compressor	85	1	438	580	0.43	86.31003098	58.50400205	5.50504	692072.61
N	Link Bed 75 ton hydro	76								
P	JLG 900 series - 60 ft boom	75								
Q1	Delivery Stake Truck - F-450 Super Duty	85	0.5	250	390	0.43	71.02095991	60.3118012	6.03118	1074434.83
Q2	Delivery Stake Truck - F-450 Super Duty	85	0.5	250	390	0.43	71.02095991	60.3118012	6.03118	1074434.83
Q3	Delivery Stake Truck - F-450 Super Duty	85	0.5	315	325	0.43	69.01216901	62.23590548	6.223591	1673354.49
R	Proco P11 6000	75								
S	Deere 1000 Brancher	89								
T	TEREX Back Hoe Loader	88								
U	Hitachi Excavator - EX-550LC-5	81								
V	Dynapac (jumping jack) - LTR000	87	0.5	315	325	0.43	71.01216901	64.23590548	6.423591	2852103.88
W1	STPA - cut-off saw	70	0.5	315	325	0.43	54.01318801	47.23590548	4.723591	82918.4813
W2	STPA - cut-off saw	70	0.5	378	480	0.43	52.81538581	45.12050908	4.512051	29514.0283
W3	STPA - cut-off saw	70	0.5	430	580	0.43	51.31003098	41.49370208	4.14937	14104.3064
X	Lincoln Commander 500 uplifter	73								
Y	Concrete walk behind saw - DCCO ES-20	80								
Z	SAKAI - dirt roller	80								
AA1	McHuesle Ready-mix Concrete truck	79	0.5	250	390	0.43	85.02095991	54.3118012	5.43118	289885.853
AA2	McHuesle Ready-mix Concrete truck	79	0.5	250	390	0.43	85.02095991	54.3118012	5.43118	289885.853
AA3	McHuesle Ready-mix Concrete truck	79	0.5	315	325	0.43	83.01318801	58.23590548	5.823591	426336.165
AB	Cement Finisher - Midasup	80								
AC	John Deere Skip loader - 210LE	88								
AD	Caterpillar grader - 140H	88								
AE	CAT 966F wheel loader	88								
AF	Water truck - Sterling L78500	86								
AG	CAT D8R - diesel - 608 Dozer	88								
AH	CAT 1085D paver	77								
Distance to receptor:		Closest	Average							
BART Garage Grade Beams/Pile Caps, Vertical Concrete		250	390				Sum	15457382.4		4888067
Frontage Road Utilities		315	325				Sum	1268116		107130
Bart Plaza Demo		370	480				10*Leq (Sum)	61,0995498		59,099155
W Misc/Other Demg		430	580				Leq (H)	61		56
Calculated Lmax is the Loudest value.										

Usage factor	Noise Level Calculation with Noise Attenuation Requirements Implemented								Attenuation techniques implemented	
	Distance to Receptor		Ground Effect	Shielding (dBA)	Calculated (dB(A))					
	Closest	Average			Lmax	Lavg	0.1*Leq	avgLeq		
1	315	325	0.43	5	60.01318	66.24821	5.824821	421382.2	Temporary 8 ft sound barrier	
1	370	480	0.43	5	58.81537	52.13061	5.213061	163385.8	Temporary 8 ft sound barrier	
1	430	560	0.43	5	57.31003	50.504	5.0504	112382.3	Temporary 8 ft sound barrier	
1	315	325	0.43	5	58.01319	54.24821	5.424821	285881.1	Temporary 8 ft sound barrier	
1	370	480	0.43	5	53.51537	50.13061	5.013061	103057.8	Temporary 8 ft sound barrier	
1	430	560	0.43	5	55.21003	48.504	4.8504	70859.5	Temporary 8 ft sound barrier	
1	250	390	0.43	5	66.0206	48.3221	4.83221	87953.23	Temporary 8 ft sound barrier	
1	370	480	0.43	5	65.51537	59.13061	5.813061	818817.3	Temporary 8 ft sound barrier	
1	430	560	0.43	5	64.31003	57.504	5.7504	582858.6	Temporary 8 ft sound barrier	
1	250	390	0.43	5	65.0206	57.3221	5.73221	538771.7	Temporary 8 ft sound barrier	
0.5	370	480	0.43	5	65.61537	56.12061	5.612061	429308.8	Temporary 8 ft sound barrier	
0.5	430	560	0.43	5	61.31003	54.4037	5.4037	281428.8	Temporary 8 ft sound barrier	
1	250	390	0.43	5	65.0206	48.3221	4.83221	87953.23	Temporary 8 ft sound barrier	
1	315	325	0.43	5	64.01319	60.24821	6.024821	1058328	Temporary 8 ft sound barrier	
1	370	480	0.43	5	62.81537	58.13061	5.813061	418286.6	Temporary 8 ft sound barrier	
1	430	580	0.43	5	61.31003	54.504	5.4504	282996.1	Temporary 8 ft sound barrier	
0.5	250	390	0.43	5	66.0206	55.3118	5.53118	338785.2	Temporary 8 ft sound barrier	
0.5	250	390	0.43	5	66.0206	55.3118	5.53118	338785.2	Temporary 8 ft sound barrier	
0.5	315	325	0.43	5	64.01319	57.2381	5.72381	528184.3	Temporary 8 ft sound barrier	
0.5	315	325	0.43	5	66.01319	58.2381	5.82381	838668.8	Temporary 8 ft sound barrier	
0.6	315	325	0.43	5	49.01318	42.2381	4.22381	18733.54	Temporary 6 ft sound barrier	
0.5	370	480	0.43	5	37.81537	38.12051	3.812051	8487.105	Temporary 6 ft sound barrier	
0.5	430	580	0.43	6	46.31003	36.4037	3.64037	4480.248	Temporary 6 ft sound barrier	
0.5	250	390	0.43	5	60.0206	48.3118	4.83118	65345.4	Temporary 8 ft sound barrier	
0.5	250	390	0.43	5	60.0206	48.3118	4.83118	65345.4	Temporary 8 ft sound barrier	
0.6	315	325	0.43	5	58.01318	51.2381	5.12381	132620.1	Temporary 8 ft sound barrier	
Distance to receptor:		Closest	Average							
BART Garage Grade Beams/Pile Caps, Vertical Concrete		250	390				Sum	15457382.4		4888067
Frontage Road Utilities		315	325				Sum	1268116		107130
Bart Plaza Demo		370	480				10*Leq (Sum)	61,0995498		59,099155
W Misc/Other Demg		430	580				Leq (H)	61		56
Calculated Lmax is the Loudest value.										



**ATTACHMENT B:  
CONSTRUCTION EQUIPMENT SCHEDULE AND KEY**

See Exhibit I



**WILSON IHRIG & ASSOCIATES**  
ACOUSTICAL AND VIBRATION CONSULTANTS  
CALIFORNIA      NEW YORK      WASHINGTON

**EXHIBIT A**

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10 March 2011

MacArthur Transit Community Partners LLC  
c/o Art May  
Keystone Development Company  
5858 Horton Street  
Suite 170  
Emeryville, California 94608

Subject:      MacArthur Transit Village  
                  Vibration from Construction

Dear Mr. May:

#### Summary

The following are key points from our review of the information provided<sup>1</sup> regarding the proposed MacArthur Transit Village Project (MTV Project):

- Vibration impacts of the proposed MTV Project were analyzed in the MacArthur Transit Village Project EIR dated January 2008 and no significant impacts were identified based on the City's thresholds for vibration and the City's standard condition of approval for vibration.
- Based on the Surgery Center assertion that the MTV Project construction would have significant vibration impacts on the operations at the Surgery Center, the Project Sponsor has requested Wilson Ihrig & Associates (WIA) to review the proposed Construction Equipment Schedule using the FTA criteria referenced by the Surgery Center.
- We understand that as part of the Construction Equipment Schedule for Phases 1 and 2, the Project Sponsor has committed to the use of reduced-vibratory construction methods (as described below) to minimize the effects of construction equipment working adjacent to the Surgery Center.
- With the implementation of vibration-reduction methods that the Project Sponsor has detailed as part of the Construction Equipment Schedule for Phases 1 and 2, the vibration generated by the construction activities would not exceed the FTA criteria referenced by the Surgery Center.
- WIA recommends that vibration monitoring be conducted at the Surgery Center to document the baseline conditions during operations prior to construction and that vibration at the facilities be monitored during key periods of construction that are subject to vibration to verify that the Construction Equipment Schedule measures are sufficient to ensure that vibration levels do not exceed the FTA criteria.

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<sup>1</sup> Construction Equipment Schedule dated January 28, 2011, Illustrative Plan (L-1.0) dated 9.16.2010 and Vesting Tentative Tract Map No. 8047 (T-4) dated 10-25-10.

### Discussion

As requested, we have reviewed the MTV Project Construction Equipment Schedule for Phases 1 and 2 to develop a response to the letter prepared by Timothy G. Brown and Robert P. Alvarado of Charles M. Salter Associates (CSA) and submitted to Ed Erwin of Alta Bates Summit Medical Center on 12/21/10. The letter raised concerns about the vibration impacts of construction activities on the Surgery Center located at 3875 Telegraph Avenue and suggested that certain FTA vibration criteria could be exceeded based on certain assumptions about the types of construction equipment that would be used.

### Project Conditions

The City's standard condition of approval for construction-related vibration was included in the MTV Project Conditions (see COA NOISE-6). Our evaluation and recommendation fulfill part of the requirements of this condition.

### Short-term Vibration

The December 21, 2010 letter from CSA asserts that the MTV Project could have a potentially significant vibration impact on the Surgery Center based on the assumption that construction adjacent to the Surgery Center would include the use of pile driving, hydraulic breakers, drilled piers, rammed aggregate piers, and vibratory compaction. The letter cites the Federal Transit Administration (FTA) vibration impact criteria<sup>2</sup> for General Assessment and Detailed Analysis.

The Detailed Analysis criteria cited by the Surgery Center are appropriate for an engineering-level analysis where detailed information on the vibration propagation properties of the ground and the source vibration are available. A vibration impact that is identified using the General Assessment criteria is sometimes cleared once the engineering analysis is performed and compared to the Detailed Analysis Criteria. Thus, the General Assessment evaluation and criteria are considered to be more conservative and we have used them in our analysis.

The following are the FTA criteria:

- Category 1: Buildings where vibration would interfere with interior operations
  - The criterion is based on what is acceptable for most moderately sensitive equipment such as optical microscopes.
  - The sensitivity of the equipment and surgery activities at the Surgery Center has not been confirmed.
  - Criterion: 65 VdB
- Category 2: Buildings where people normally sleep
  - The Surgery Center is an outpatient facility and this criterion would not apply as patients do not spend the night or sleep for any significant period of time; they only spend time in the recovery room to awaken from anesthesia.
  - Criteria:
    - 72 VdB for frequent events (70 or more per day)
    - 75 VdB for occasional events (30 to 70 per day)
    - 80 VdB for infrequent event (fewer than 30 per day)
- Category 3: Institutional land uses with primarily daytime use
  - If the surgical equipment and methods at the Surgery Center are not sufficiently sensitive to warrant the use of the Category I criterion, these would be applied
  - Criteria:

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<sup>2</sup> FTA, *Transit Noise and Vibration Impact Assessment*, May 2006.

- 75 VdB for frequent events (70 or more per day)
- 78 VdB for occasional events (30 to 70 per day)
- 83 VdB for infrequent event (fewer than 30 per day)

For reference, the vibration level generated by a person walking within the same room can be on the order of 60 to 65 VdB, and the vibration from a bus or truck at city speeds hitting a bump on a street 25 feet away is on the order of 80 VdB. A 3 ton truck traveling at 35 mph on a smooth road would generate vibration less than 60 VdB at a distance of 25 feet. Although the sensitivity of the Surgery Center equipment has not been confirmed, the analysis below demonstrates that the MTV Project Construction would not exceed the Category 1 criterion.

#### Construction Equipment Schedule

We have reviewed the Construction Equipment Schedule for Phases 1 and 2 (dated January 28, 2011). The Project Sponsor has committed to limit the use of reduced-vibratory construction methods, as needed, in the vicinity of the Surgery Center, to minimize the effects of construction equipment and ensure the FTA Category 1 criterion is not exceeded. Contrary to the assumptions made in the CSA letter, the Construction Equipment Schedule does not include the use of pile driving, hydraulic breakers, drilled piers, or aggregate piers adjacent to the Surgery Center.

The construction methods contained in the Construction Equipment Schedule and potential vibration levels include:

- No driven/impact piles used
  - The construction of Phases 1 and 2 would not utilize piles driven into the ground by a hammer (pile driving).
  - The foundations for the BART parking garage are contemplated as augur cast or torque down piles and the foundation for the proposed Phase 2 residential structure would be a poured in place mat slab.
- Limited demolition
  - The demolition work near the Alta Bates Surgery Center would be to remove asphalt, thus no jackhammers or comparable equipment would be required.
  - Excavators would be used to remove the asphalt.
- Compaction Methods
  - The MTV Project plans to use large vibrating roller compactors for compacting soil, road base, and asphalt at certain locations throughout most of the project site.
    - This equipment would generate a vibration level on the order of 94 VdB at a distance of 25 feet.
  - Smaller vibrating rolling compactors, vibrating plate compactors, and/or jumping jack compactors would also be utilized as necessary, based on the monitoring described below, to ensure the FTA Category 1 criterion is not exceeded at the Surgery Center.
    - These types of equipment would generate less vibration than a large vibrating roller compactor, possibly comparable to the vibration generated by a small bulldozer, which would typically generate a vibration level on the order of 58 VdB at a distance of 25 feet, well below any of the thresholds described above.

- o For compaction work adjacent to the Surgery Center, the Project Sponsor has included in the Construction Equipment Schedule options to employ one or more of the following strategies if monitoring shows that additional methods are necessary to avoid interference with operation of the Surgery Center:
  - Use of sheep foot non-vibrating compactors.
  - Use of non-vibrating roller compactors.
  - Scheduling vibrating roller compaction after surgical hours and/or on weekends, subject to City review and approval.
  - Use of alternate fill materials that require no or minimal induced compaction.

These methods would generate less vibration than a large vibrating roller compactor, possibly comparable to the vibration generated by a small bulldozer, which would typically generate a vibration level on the order of 58 VdB at a distance of 25 feet.

#### Conclusions

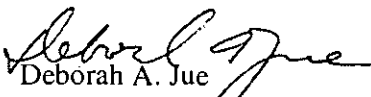
Anticipated vibration from construction activities for the MTV Project would not exceed the Category 1 criterion at the Surgery Center.

Pursuant to Standard Condition of Approval NOISE-6, WIA recommends that (1) the contractors implement the Construction Equipment Schedule elements described above and (2) vibration monitoring be conducted at the Surgery Center to document the baseline conditions during operations prior to construction and to monitor the vibration at the facilities during the key periods of construction that are subject to vibration to verify that construction-related vibration is not exceeding the FTA category 1 criterion. The key periods of construction would occur when the equipment discussed above are in operation (e.g., vibratory roller compactor, vibrating plate compactors, and/or jumping jack).

Please let us know if you have any questions on this information.

Very truly yours,

WILSON, IHRIG & ASSOCIATES, INC.

  
Deborah A. Jue  
Associate Principal

assure City that the Project will be developed within a reasonable time period, Developer shall complete each Phase in accordance with the Phasing Plan set forth below.

3.3.1 City Right to Terminate Agreement. City shall have the right to Terminate this Agreement by written notice to Developer if City determines that, if for any reason other than due to Force Majeure, despite such Developer's reasonable efforts and other factors, including market and economic conditions as of the time in question for the uses contemplated for the Project, appropriate mix of uses and use categories, return on investment and similar criteria, Developer has not complied with the Phasing Plan.

3.3.2 Meet and Confer and Cure Period. In the event of any alleged failure to comply with the Phasing Plan, City and Developer shall follow the notice, meet and confer and cure processes set forth in Article VIII. City's sole and exclusive remedy in the event of Developer's breach of its obligations under this Article 3 shall be to Terminate this Agreement; however, any such Termination shall not relieve Developer of obligations under this Agreement that survive Termination (such as Indemnity obligations), accrued obligations under this Agreement, and obligations to comply with City Approvals, Subsequent Approvals, Governmental Agency Approvals and other Laws.

3.3.3 Phasing Plan. The Phasing Plan for the Project is as follows and illustrated on Illustrative Exhibit D. To the extent there is a conflict or inconsistency between this section 3.3.3 and Illustrative Exhibit D, this section 3.3.3 shall prevail:

(a) Developer shall submit a Final Development Plan ("FDP") application for Phase 1, comprising the BART Garage, to be constructed on parcel E, site remediation, the BART Plaza improvements, Internal Drive, the Frontage Road improvements, and the portion of Village Drive that extends from the Frontage Road to the Internal Drive all as

shown on Exhibit C, Master Development Plan, no later than one year after the Adoption Date and shall make regular and consistent progress toward approval of the FDP within one year after the initial submittal date of the FDP application. Construction of Phase I shall Commence in Earnest within one year after approval of the FDP for Phase I. The target outside approval date for the FDP shall be one year after the initial submittal date of the FDP application. In the event that approval of the FDP is not obtained by the target outside approval date, then the time for construction of Phase I to Commence in Earnest shall be extended one (1) day for each day after the target outside approval date until FDP approval is obtained. Developer's obligation with respect to Phase I shall be conditioned upon, and the above-referenced deadline for submittal of an FDP and Commencement in Earnest shall be extended until, satisfaction of the following conditions, all in accordance with the OPA: (i) execution of a ground lease by Developer and BART for the BART Garage, (ii) with respect to the obligations of Developer hereunder with respect to the BART Plaza only, execution of an agreement granting Developer the right to enter the BART Plaza and construct the Plaza improvements thereon; (iii) conveyance to Developer of a fee interest or right to enter and construct with respect to the property on which the roadway improvements described above are to be built, (iv) the award and disbursement of \$37,300,000 of the TOD Housing Program and the Infill Infrastructure Grant Program under California Proposition 1C, the Housing and Emergency Shelter Trust Fund Act of 2006 funds to the Project ("Prop 1C Funds") and, with respect to the obligations of Developer hereunder with respect to the BART Plaza, the award of funds sufficient to construct the BART Plaza improvements, and (v) the pass-through of the funds described in 3.3.3(a)(iv) to Developer in accordance with the OPA. Notwithstanding the foregoing, except in the event of Litigation Force Majeure, in no

event shall the above deadlines be extended for more than three (3) years for any reason, including, without limitation, Force Majeure other than Litigation Force Majeure

(b) Developer shall submit an FDP application for Phase 2, comprising the affordable rental development to be constructed on parcel D shown on Exhibit C, no later than three (3) years after the Adoption Date and shall make regular and consistent progress toward approval of the FDP within one year after the initial submittal date of the FDP application for Phase 2. Construction of Phase 2 shall Commence in Earnest within one year after approval of the FDP for Phase 2. The target outside approval date for the FDP shall be one year after the initial submittal of the Phase 2 FDP application. In the event that approval of the Phase 2 FDP is not obtained by the target outside approval date, then the time for construction of Phase 2 to Commence in Earnest shall be extended one (1) day for each day after the target outside approval date until Phase 2 FDP approval is obtained. Developer's obligation with respect to Phase 2, and the deadline for Commencement in Earnest of Phase 2 set forth above shall be extended until the earlier to occur of (i) execution by Developer and BART of a ground lease for parcel D and receipt by Developer of subsidy funds sufficient to construct Phase 2, in accordance with the OPA; or (ii) ten (10) years after the Adoption Date. In no event shall such ten (10) year deadline be extended for any reason including, without limitation, Force Majeure.

(c) Developer shall submit an FDP application for Phase 3, comprising the mixed-use market rate development to be constructed on parcel A shown on Exhibit C, including without limitation, the new hardscape public plaza along Frontage Drive in front of the building to be constructed on Parcel A as shown on Exhibit C, no later than three (3) years after the Adoption Date subject to a one-year extension at the reasonable request of Developer (if Developer reasonably believes that it is not Feasible to construct due to market



conditions), and shall make regular and consistent progress toward approval of the FDP for Phase 3 within one year after the initial submittal date of the FDP application for Phase 3. Constmction of Phase 3 shall Commence in Eamest within one year after approval of the Phase 3 FDP. The target outside approval date for the FDP shall be one year after the initial submittal date of the Phase 3 FDP application. In the event that approval of the Phase 3 FDP is not obtained by the target outside approval date, then the time for constmction of Phase 3 to Commence in Eamest shall be extended one (1) day for each day after the target outside approval date until FDP approval is obtained.

(d) Developer shall submit an FDP application for Phase 4, comprising the mixed-use market rate development to be constructed on parcel B shown on Exhibit C, no later than eight (8) years after the Adoption Date, and shall make regular and consistent progress toward approval of the FDP for Phase 4 within one year after the initial submittal date of the Phase 4 FDP application. Construction of Phase 4 shall Commence in Eamest within one year after approval of the Phase 4 FDP. The target outside approval date for the FDP shall be one year after the initial submittal of the Phase 4 FDP application. In the event that approval of the FDP is not obtained by the target outside approval date, then the time for construction of Phase 4 to Commence in Eamest shall be extended one (1) day for each day after the target outside approval date until FDP approval is obtained.

(e) Developer shall submit an FDP application for Phase 5, comprising the mixed-use market rate development to be constructed on parcel C shown on Exhibit C, no later than 10 (ten) years after the Adoption Date and shall make regular and consistent progress toward approval of the FDP for Phase 5 within one year after the initial submittal date of the Phase 5 FDP application. Construction of Phase 5 shall Commence in

Earnest within one year after approval of the Phase 5 FDP. The target outside approval date for the FDP shall be one year after the initial submittal of the Phase 5 FDP application. In the event that approval of the FDP is not obtained by the target outside approval date, then the time for construction of Phase 5 to Commence in Earnest shall be extended one (1) day for each day after the target outside approval date until FDP approval is obtained.

(f) Notwithstanding the timeframes set forth in subsections 3.3.3 (a) through (e) above, no target outside approval with respect to any Phase shall be extended unless Developer, with respect to such Phase, (i) uses reasonable good faith efforts to cause all FDP applications to comply with Section 17.140.040 of the City Planning Code; (ii) timely submits all FDP applications that contain all the requirements listed in of the City's Basic Application for Development Review, the City's Supplemental Submittal Requirements for a Planned Unit Development and Conditions of Approval related to the FDP (provided that in the event of Developer's failure to comply with this clause (ii), the extension of the target outside approval date will not be denied, but will be reduced by the number of days between the due date for the FDP application and the date upon which Developer submits an FDP application in compliance with this clause (ii)); and (iii) uses good faith efforts to make regular and consistent progress toward approval of the FDP, as evidenced by Developer's timely response to City's reasonable requests for information and meetings. If City does not believe Developer is eligible for any extensions of the target outside approval dates, or that any such extension should be shortened pursuant to (f)(ii), it shall immediately notify Developer in writing and initiate the dispute resolution procedures in Article VIII. Developer shall not be denied any such extension nor shall such extension be shortened absent such immediate written notice from City.

(g) If Agency does not issue the non-housing tax increment bonds and disburse the proceeds thereof to Developer in accordance with the OPA (by July 1, 2011), then all dates for submittal of complete FDP applications (other than the date for submittal of the FDP application for Phase I) and all dates for construction to Commencement in Earnest set forth in section 3.3.3 and the expiration of the Term of this Agreement shall be extended for a number of days equal to the number of days from July 1, 2011 until the Agency has issued such bonds and disbursed the proceeds thereof to Developer. If Agency fails to issue such bonds and disburse the proceeds thereof by July 1, 2014 and Developer exercises its right under the OPA to terminate the OPA, Developer shall also have the right to terminate this Agreement by written notice to City.

(h) Notwithstanding the timeframes set forth above, Developer shall, if feasible, make reasonable, good faith efforts to proceed with all phases as expeditiously as possible and to have full build-out of the Project be completed as early as possible.

(i) If, at the expiration of the Term, Developer has fully complied with the Phasing Schedule but construction of the Project is not complete, and notwithstanding the meet and confer process set forth above in Section 3.3.2, Developer shall be allowed to complete any Phase that Developer has Commenced in Earnest prior to the expiration of the Term pursuant to Section 2.4 of this Agreement.

3.4 Development Sequence. The foregoing five Phases may occur sequentially, however, they may also move forward concurrently, or, except for Phases 1 and 2, out of sequence, as conditions require in Developer's sole discretion. For example, Phase 4 could be the third Phase developed within the time prescribed above for development of Phase 3, and

# EXHIBIT A

## EXHIBIT D (MacArthur Transit Village)

### Illustrative Phasing Plan\*

RELATIVE SCHEDULE	2009 Estimated Dates
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#### CONTROLLING DATES

A.	Discretionary Approvals for Entitlement	July -2008	
B.	OPA Executed & Approved	July -2009	
C.	Start Land Acquisition	August -2009	
D.	Complete Land Acquisition	TBD	

#### 1. HORIZONTAL DEVELOPER

i.	Submit application for final development plan approvals for Phase I	1 year after approval of OPA	July 2010
	Target Outside Approval Date	1 year after submittal of Phase I FDP	July 2011
ii.	Commence construction of Phase I	1 year after FDP approval	July 2012
iii.	Complete construction of Phase I	2 years after commencement of construction	July 2014

#### 2. BELOW MARKET RATE HOUSING DEVELOPER

Stage 2			
i.	Submit applications for final development plan for Phase II	3 years after approval of OPA	July 2012
	Target Outside Approval Date	1 year after submittal of Phase II FDP	July 2013
	Secure Affordable Housing funding commitments		July 2013
ii.	Commence construction of Phase II	1 year after FDP Approval	July 2014
iii.	Complete construction of Phase II	2 years after commencement of construction	July 2016

#### 3. MARKET RATE DEVELOPER

Stage 3			
i.	Submit application for final development plan approvals for Phase III	3 years after approval of OPA	July 2012
	Target Outside Approval Date	1 year after submittal of Phase III FDP	July 2013
ii.	Commence construction of Phase III	1 year after FDP Approval [without extension]	July 2014
iii.	Complete construction of Phase III	2 years after commencement of construction	July 2016
Stage 4			
i.	Submit application for final development plan approvals for Phase IV	8 years after approval of OPA	July 2017
	Target Outside Approval Date	1 year after submittal of Phase IV FDP	July 2018
ii.	Commence construction of Phase IV	1 year after FDP Approval	July 2019
iii.	Complete construction of Phase IV	2 years after commencement of construction	July 2021
Stage 5			
i.	Submit application for final development plan approvals for Phase V	10 years after approval of OPA	July 2019

**EXHIBIT A**

	Target Outside Approval Date	1 year after submittal of Phase V FDP	July 2020
ii.	Commence construction of Phase V	1 year after FDP Approval	July 2021
iii.	Complete construction of Phase V	2 years after commencement of construction	July 2023

\*This is an Illustrative Phasing Plan; see section 3.3.3 for controlling language.

## Holland & Knight

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David L. Press  
415.743.4314  
david.press@hkllp.com

December 21, 2010

VIA E-MAIL  
AND U.S. MAIL

President Jane Brunner and Council Members  
City Council  
City of Oakland  
One Frank H. Ogawa Plaza  
Oakland, CA 94612

Re: MacArthur Transit Village Project ("Project")  
Surgery Center at 3875 Telegraph Avenue

Dear President Brunner and Council Members:

Our office was recently retained by Alta Bates Summit Medical Center Surgery Property Company LLC. The Surgery Center at Alta Bates Summit Medical Center, including Alta Bates Summit Medical Center, a Sutter Health affiliate, in connection with the above matter. Our clients are the ground lessee and operator of the Surgery Center located immediately adjacent to the Project at 3875 Telegraph Avenue. The purpose of this letter is to set forth our clients' concerns regarding significant impacts on the operations, services, and patient care at the Surgery Center resulting from the recent change in the Project to remove the Surgery Center property from the Project. Given these new significant impacts and the mandates of the California Environmental Quality Act (CEQA), we hereby request, on behalf of our clients, that the City Council defer its approval of the Project's Stage One Final Development Plan, Vesting Tentative Tract Map and any other entitlements until such new Project impacts on the Surgery Center can be adequately studied and mitigated in a Subsequent EIR for the modified Project.

The Project, as originally proposed and analyzed in the previously certified Environmental Impact Report (EIR), included the Surgery Center property (also referred to as a portion of "Block C") within the Project boundaries and development, including demolition of the Surgery Center and replacement with mixed use-residential and retail uses. However, it appears that the Project was recently changed to exclude the Surgery Center site from the Project.

<sup>1</sup> The documents prepared for City staff reports contain inconsistent Project descriptions. For example, as recently as November 3, 2010, the Surgery Center is listed as part of the Project by Assessor's Parcel Number in the Planning Commission Staff Report and associated map. However, in that same November 3, 2010 Staff Report, a change to the Project is listed as not requiring the acquisition of 3875 Telegraph Avenue (the Surgery Center property). A key pillar of CEQA is a consistent project description. *County of Inyo v. City of Los Angeles* (1977) 71 CA3d 183.

President Jane Brunner and Council Members  
December 21, 2010  
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It appears that neither the EIR nor any subsequent environmental analysis<sup>2</sup> has addressed the impacts on the Surgery Center as an ongoing operation because all along the environmental review for the Project has been premised on the Surgery Center being demolished during the course of the Project and no longer continuing operations. As discussed in the attached reports, the EIR does include an alternative which reduces the Project site to only include the parcels currently developed with the BART surface parking lots. Thus, under this alternative, the Surgery Center, along with other properties, was removed from the Project. However, the EIR did not analyze the Project's impacts on the properties removed from the Project.

2

When the Project proponents unilaterally, and without prior notice to our clients, removed the Surgery Center site from the Project, additional environmental review under CEQA should have been performed to analyze the Project's impacts on the continuing operations at the Surgery Center. The impacts from the Project that are of particular concern to our clients include, but are not necessarily limited to, noise, vibration, dust and diesel particulate matter.

3

The Surgery Center's operations, services, and patient care are uniquely sensitive receptors to such effects. The Surgery Center performs several sensitive surgeries including (i) approximately 50 neurosurgical procedures (laminectomies, nerve repairs) as well as ENT procedures (middle ear reconstructions, typanoplasties, myringotomies with tubes, microdirect larygoscopies with removal of vocal cord lesions) using an operating microscope, (ii) approximately 185 eye surgeries per year, and (iii) hand procedures and pediatric urology cases using surgical loops (glasses fitted with magnifying lenses for delicate surgery). The Surgery Center uses sensitive equipment including (i) Arthroscopy monitors that display surgical images used in at least 50% of surgeries, and (ii) X-ray imaging with C-arms (fluoroscopy units) which are used for all interventional pain cases (approximately 1,800 cases per year) and for surgeries.

4

The Project proponent's singular effort to address the removal of the Surgery Center property from the Project was summarily encapsulated in a footnote to the October 26, 2010 Memorandum from Art May, MacArthur Transit Community Partners, LLC (MTCP) to Catherine Payne, CEDA - Planning regarding Substantial Conformance with the PDP Approval. For the first time, that Memorandum acknowledges that the Surgery Center property will in fact be removed from the Project. In a footnote on page five of the Memorandum, the Project proponent dismisses the Project's impacts on the Surgery Center by concluding that:

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At this time, the VTTM does not include the Surgery Center property because MTCP does not have control of these properties. It is expected that the VTTM will be amended to include these properties when MTCP retains site control. This

<sup>1</sup> the Project is listed as not requiring the acquisition of 3575 Telegraph Avenue (the Surgery Center property). A key pillar of CEQA is a consistent project description. (*County of Inyo v. City of Los Angeles* (1977) 71 CA3d 183)

<sup>2</sup> Such analysis appears to be comprised of a October 25, 2010 Memorandum from Lynette Dias, AICP to Catherine Payne, Planner regarding CEQA Compliance for MacArthur BART Transit Village Phase 1 FDP and Phase 3 Vesting Tentative Map; and a October 26, 2010 Memorandum from Art May, MTCP to Catherine Payne, CEDA - Planning regarding Substantial Conformance with the PDP Approval.

President Jane Brunner and Council Members  
 December 21, 2010  
 Page 3

circumstance does not preclude development of Phase I as the site development does no effect [sic] the Surgery Center parcel. [emphasis added.]

5  
 Cont.

No basis is provided for this conclusion and there can be no such basis. To date, the record indicates that no environmental review has been performed to analyze and mitigate the particular impacts on the Surgery Center property resulting from its removal from the Project. Furthermore, the Memorandum incorrectly concludes that there will be "no change in the project site." (October 26, 2010 Memorandum, at p. 7)

The October 25, 2010 Memorandum from Lynette Dias, AICP to Catherine Payne, Planner regarding CEQA Compliance for MacArthur BART Transit Village Phase I FDP and Phase I Vesting Tentative Map, does not specifically mention or address the removal of the Surgery Center property from the Project. In fact, without any independent analysis, this CEQA Compliance Memorandum simply cites the October 26, 2010 Memorandum, discussed above, that there is "no change in the project site." (October 25, 2010 Memorandum, at p. 2)<sup>1</sup>

As set forth in the attached reports prepared by well-recognized experts,<sup>4</sup> there are significant impacts resulting from the removal of the Surgery Center from the Project including, but not limited to:

6

- noise impacts on patients,
- vibration impacts on sensitive medical operations and equipment, and
- dust and diesel particulate matter impacts on respiratory and cardiovascular patients uniquely sensitive to air pollution.

Furthermore, according to operating physicians at the Surgery Center, there are additional significant impacts including, but not limited to:

- dust contamination of sterile medical devices, and
- diesel particulate matter and fume impacts on patients and employees at the Surgery Center, including headaches and nausea.

These impacts on the Surgery Center are not limited to Phase I of the Project. These impacts will continue throughout the approximately seven (7) year build-out of the Project.

Under the clear mandates of CEQA, the City Council cannot approve the Project's Stage One Final Development Plan and Vesting Tentative Tract Map until a Subsequent EIR is prepared analyzing the impacts of the entire modified Project on the Surgery Center. Pursuant to CEQA, a Subsequent EIR is required: (i) when substantial changes are proposed in the Project with new

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<sup>1</sup> The October 25, 2010 memorandum does reference the later October 26, 2010 memorandum.

<sup>4</sup> December 21, 2010 Charles M. Salter Associates, Inc. Noise and Vibration Report; and December 21, 2010, Hingworth & Rodkin, Inc. Air Quality Report.



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 December 21, 2010  
 Page 4

significant environmental effects or a substantial increase in the severity of previously identified significant effects, (ii) substantial changes occur with respect to the circumstances under which the project is undertaken with new significant environmental effects or a substantial increase in the severity of previously identified significant effects, or (iii) new information of substantial importance shows that the project will have one or more significant effects, previously examined significant effects will be substantially more severe, previously rejected mitigation measures or alternatives are now feasible, or mitigation measures and alternatives which are considerably different than those previously analyzed. (CEQA Guidelines §15162(a))

7  
 Cont.

Under these CEQA requirements, the removal of the Surgery Center property from the Project is a change in the Project that requires a Subsequent EIR.<sup>5</sup> The new significant impacts described in the attached reports and summarized above constitute substantial evidence that clearly triggers the requirement for preparation, circulation, and certification of a Subsequent EIR. Even though only one of the three triggers for a Subsequent EIR must be met, the current situation actually meets all three triggers. The removal of the Surgery Center property is a substantial change to the Project with new significant environmental effects on the Surgery Center. Additionally, the continued operations of the Surgery Center adjacent to the Project is a substantial change with respect to the circumstances under which the Project is undertaken with new significant environmental effects on the Surgery Center. Furthermore, the new information that the Surgery Center property has been removed from the Project is of substantial importance and shows that the Project will have significant effects on the Surgery Center. (e.g., see *Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agric. Ass'n* (1986) 42 C3d 929, post-EIR changes to proposed project, including changes in the size of the site and orientation of the project, were sufficiently important to require evaluation in a Subsequent or Supplemental EIR.)

Therefore, under these circumstances, a Subsequent EIR is required to fully analyze and mitigate significant impacts on the Surgery Center before the City Council may approve the Project's Stage One Final Development Plan and Vesting Tentative Tract Map. The Subsequent EIR will require the same notice and public review periods as the Project's Draft EIR. (CEQA Guidelines §15162(d))

Additionally, with respect to the entitlements and the removal of the Surgery Center from the Project, given the removal of a significant portion of the Project site (a portion of Block C<sup>6</sup>), the Final Development Plan does not satisfy the City's requirement that final development plans "conform in all major respects" with the approved preliminary development plan. Similarly, the City cannot find that the Stage One Final Development Plan "conforms in all substantial respects" to the previously approved Preliminary Development Plan. (City Municipal Code §17.140.040, §17.140.060) Moreover, a planned unit development permit may only be granted if "the location, design, and size are such that the development can be well integrated with its surroundings, and, in the case of a departure in character from surrounding uses, that the location

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<sup>5</sup> A Supplemental EIR is not appropriate in this situation because the changes to the Project are not minor. (CEQA Guidelines §15163)

<sup>6</sup> Block C was planned and analyzed to include approximately 12,500 square feet of commercial space and 187 market-rate residential units and 8 affordable units.

President Jane Brunner and Council Members  
December 21, 2010  
Page 5

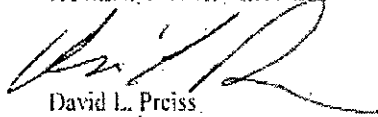
and design will adequately reduce the impact of the development." (City Municipal Code §17.140.080) For reasons noted above, the location of the Project is not currently well integrated with its surroundings, which include the Surgery Center.

Also, the City Council cannot presently approve the currently proposed Vesting Tentative Tract Map because the Project is likely to cause serious public health and safety problems related to its significant impacts on patients at the Surgery Center. (City Municipal Code §16.08.030) As noted in the attached reports, the City of Oakland's standard conditions of approval applicable to the Project, standing alone, also are not adequate to address these unique impacts to the Surgery Center.

Thank you in advance for your consideration of these comments. In light of these concerns, we also reiterate our previous request for a continuance of your consideration of these newest entitlements until appropriate CEQA review can be completed. In the meantime, feel free to contact the undersigned or Stacey Wells of Alta Bates Summit Medical Center at (510) 869-8227.

Sincerely yours,

HOLLAND & KNIGHT LLP



David L. Preiss

DLP:s1

- cc: Clerk of the City Council
- Catherine Payne, City Planner
- Mark Wald, Deputy City Attorney
- Arthur May, Keystone Development Group
- Joseph Forbes McCarthy, BUILD
- Clients

Attached: December 21, 2010 Charles M. Salter Associates, Inc. Noise and Vibration Report; and  
December 21, 2010 Illingworth & Rodkin, Inc. Air Quality Report.

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**ILLINGWORTH & RODKIN, INC.**  
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December 21, 2010

Ed Ervin  
 Director, Real Estate  
 Alta Bates Summit Medical Center  
 2880 Gateway Oaks, 2nd Floor  
 Sacramento, CA 95833

VIA E-Mail: David.Preiss@hklaw.com

SUBJECT: MacArthur Transit Village in Oakland, California - Comments on Air Quality Impacts to Surgery Center

Dear Mr. Ervin:

As you know, we were hired to determine whether recent changes to the MacArthur Transit Village project (Project) will have any significant air quality impacts on the property, operations and patient care at the Surgery Center of Alta Bates & Summit Medical Center located immediately adjacent to the Project at 3875 Telegraph Avenue (Surgery Center). We have concluded that the changes to the Project, that remove the Surgery Center property from the Project, will have such significant effects on the Surgery Center. These effects could last the entire duration of construction, estimated at approximately 7 years.

We reviewed recent changes to the MacArthur Transit Village Project that removed the Surgery Center from the planned development in regard to impacts associated with air quality. This included review of the Oakland City Staff Report for the December 14, 2010 Community and Economic Development Agency hearing regarding this project, specifically Attachment F (CEQA Memo)<sup>1</sup> and Attachment G (Conformance Memo)<sup>2</sup>. The Draft Environmental Impact Report (DEIR) for the MacArthur BART Transit Village Project addressed air quality impacts from the project, assuming development of the entire project. Air quality impacts to the Surgery Center, which was formerly a portion of Block C of the project, were not addressed. The applicant is currently seeking approval from the City for the Stage I Final Development Permit (FDP) and Vesting Tentative Tract map for the project. However, adequate review of the construction air quality impacts upon the Surgery Center from Stage I and the balance of the Project has not been conducted.

The 2008 DEIR evaluated air quality impacts associated with the proposed project. As part of this analysis, construction air quality impacts were addressed through the application of Conditions of Approval that identified generic dust control measures recommended by the Bay Area Air Quality Management District (BAAQMD). The DEIR air quality analysis did not identify any sensitive receptors

<sup>1</sup> Memorandum from Lynette Dias, AICP to Catherine Payne dated October 25, 2010. Re: CEQA Compliance for MacArthur BART Transit Village Phase I FDP and Phase I Vesting Tentative Map

<sup>2</sup> Memorandum from Ari May MTCP to Catherine Payne dated October 26, 2010. Re: MacArthur Transit Village Project Phase I FDP and Vesting Tentative Tract Map - Substantial Conformance with the PDP Approval

Ed Erwin  
 Alta Bates Summit Medical Center  
 December 21, 2010  
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adjacent to the project, since all sensitive receptors were buffered from the project. As a result, localized air quality impacts from construction equipment exhaust were not addressed. According to page 68 of the DEIR "Demolition and Construction Schedule," the Project will be constructed over approximately seven (7) years.

The proposed action would develop a portion of the site and realign internal roadways. As a result, the Surgery Center located at 3875 Telegraph Avenue would remain, but be immediately adjacent to the construction activities on two sides. As a result, dust and diesel equipment exhaust from construction activities would affect surgeries and patient care. The DEIR and CEQA evaluation for this current action did not identify the new construction air quality impacts that would affect the Surgery Center.

The proposed action would leave the Surgery Center immediately adjacent to construction activities associated with development of the project, as proposed in the current Phase I FDP and Phase I Vesting Tentative Map as well as the subsequent stages of the Project. The Surgery Center is considered a sensitive receptor, as it would fall under the category of a hospital. The Surgery Center includes patients who may be experiencing cardiovascular and respiratory distress as a result of procedures performed at the Surgery Center. As a result, some of these patients would be very sensitive to the impacts of air pollution. Construction activities that produce diesel exhaust and dust would occur adjacent to the facility. The DEIR, while not taking into account that construction activities would occur so close to a sensitive receptor, merely prescribed standard dust control measures as conditions of approval (pages 235 and 236 of the DEIR). The DEIR did not address local impacts of construction equipment exhaust to sensitive receptors. Pages 478 through 480 of the DEIR did address the Mitigated Reduced Building/Site Alternative (which reduced the Project site area to only include the parcels currently developed with the BART surface parking lots), but never assumed a sensitive receptor (i.e., the Surgery Center) would exist adjacent to the project construction. As a result, the air quality analysis for the alternative project concluded "the air quality impacts would be less than the proposed project." This conclusion is erroneous since the alternative where the Surgery Center remains in place throughout the life of the Project is a very sensitive receptor in close proximity to construction activities. Construction so close to the Surgery Center brings up two air quality issues: (1) acute impacts from increased dust and (2) acute impacts from increased exposure to diesel particulate matter.

The impacts from dust are merely addressed through standard conditions of approval that are meant to reduce dust through the application of generic dust control measures. These measures do not include any assurances that dust would be reduced to a level that would not result in significant exposures at the Surgery Center. Measure "d)" on page 235 would designate a person to monitor the dust control program, but there is no person that could suspend construction if the program is not working.

Although adverse effects of acute exposures to diesel particulate matter have been known since at least 2000, the DEIR or recent CEQA analysis for the project neglect to address these impacts to the adjacent Surgery Center. As reported by the BAAQMD<sup>3</sup>, "The vast majority of premature deaths associated with air pollution - more than 90% - are related to exposure to fine particulate matter (PM<sub>2.5</sub>). Most of the deaths associated with PM<sub>2.5</sub> are related to cardiovascular and respiratory problems." Sources of PM<sub>2.5</sub> include dust and exhaust. A source of PM<sub>2.5</sub> emission is from construction equipment and the dust

<sup>3</sup> BAAQMD, 2010, Bay Area 2010 Clean Air Plan (page 1-17), September.

Ed Erwin  
 Alta Bates Summit Medical Center  
 December 21, 2010  
 Page 3

generated by demolition and grading activities. Surgery Center patients would be exposed to these emissions that were not addressed for the revised project.

In May 2010, the BAAQMD issued screening tables for evaluating impacts of air toxics during construction<sup>1</sup>. These guidelines identify screening distances for cancer and non-cancer risks. Cancer risks and PM<sub>2.5</sub> exposures are based on chronic exposures. However, the tables also included minimum distances associated with acute exposures. For a construction of a commercial project ranging in size from 4.6 to 13.8 acres, these screening tables recommend a minimum buffer of 85 meters from the construction fence line. This would buffer the acute hazards posed by Acrolein, which is one of the most toxic TACs associated with diesel exhaust based on its non-cancer toxicity value. As previously mentioned, the Surgery Center would be located immediately adjacent to the construction site. It appears that there is a high potential for patients at the surgery center to be significantly exposed to TACs during construction, on an acute basis. This issue was not addressed in the DEIR or the subsequent environmental analysis for the proposed action. There are no mitigation measures or conditions of approval identified by the City to reduce these exposures. While the DEIR significance criteria identify "ground level concentrations of non-carcinogenic TACs such that the Hazard Index would be greater than 1 for the MEI" as significant, the DEIR or subsequent summary environmental analysis do not evaluate the potential for this effect.

Additional review of the air quality impacts to the Surgery Center is warranted along with the identification of mitigation measures to prevent significant impacts. Such mitigation measures may include, but are not limited to controls on equipment exhaust, limits on construction activities that coincide with surgeries, and identification of trigger levels that would suspend construction activities when emissions may adversely affect sensitive operations at the Surgery Center. In addition, BAAQMD recently identified suggested mitigation measures to reduce emissions of diesel equipment exhaust that they recommend for construction sites<sup>2</sup>. These should also be considered for the project.

This concludes our review of the air quality impacts to the Surgery Center at 3825 Telegraph near the planned MacArthur Transit Village in Oakland, CA. Please contact us if you have any further questions or concerns about this matter.

Respectfully,



James A. Reyff  
 Hillingworth & Rodkin, Inc.

Attachment 1: Hillingworth & Rodkin, Inc. Bio  
 Attachment 2: Resume of James Reyff

10471

<sup>1</sup> BAAQMD, 2010. Screening Tables for Air Toxics Evaluation During Construction. May.

<sup>2</sup> BAAQMD, 2010. BAAQMD/CEQA Air Quality Guidelines. June.

**ILLINGWORTH & RODKIN, INC.**  
 Acoustics • Air Quality

Attachment 1  
 Illingworth & Rodkin Bio

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### AIR QUALITY

In 1995 Illingworth & Rodkin, Inc. was expanded to include air quality and meteorological capabilities. The bulk of the firm's air quality work involves environmental air quality studies that are in support of both private and public projects. Air quality studies for land use projects to support Environmental Impact Reports are most common. Types of projects include specific plans for a variety of land use types, office centers, construction activities, wastewater treatment facilities, waste management facilities, quarries, and other industrial facilities. The firm also assists local communities in developing air quality policies for incorporation into General Plans.

For air quality, many projects involve the analysis of air quality impacts from both direct and indirect sources of air pollutants. Indirect sources include transportation facilities, which Illingworth & Rodkin's staff has considerable experience evaluating. Through years of conducting environmental noise and air quality studies for local, state and federal agencies, the firm has developed considerable experience in dealing with both the technical and policy issues involved with air quality. While transportation projects can involve considerable air quality technical aspects, the regulatory challenges can be quite complex. This is especially true in the case with federal projects, where SIP conformity issues arise. Illingworth & Rodkin Inc.'s staff have dealt successfully with these issues on a wide variety of projects ranging from large new freeway projects to simple urban intersection modifications. Conformity issues can be the largest hurdles for urban projects, especially those that involve federal action. Illingworth & Rodkin, Inc. has the right staff experience to tackle both the technical and regulatory air quality issues in both a quality and cost-effective manner.

The firm also conducts assessments to evaluate the air pathway health risk from common toxic air contaminants. This includes analysis of contaminants and PM<sub>2.5</sub> from traffic and construction equipment as well as common stationary sources.

#### Environmental Studies

- Assessments for environmental studies (EIR, IS, EIS, EA)
- Transportation projects
- New residential developments
- Control plans and ordinances
- Ordinance compliance
- Conformity determinations
- Peer Review

#### Computer Modeling

- Air Pollutant emissions estimation using EMPAC2002, Mobile, AP-42
- Microscale air quality traffic modeling using CALINE4, CAL3QHC
- Stationary air pollution source modeling using EPA-approved models (e.g., SCREEN3 and ISCST)
- Analysis of meteorological data

#### Field Monitoring

- Aerometrics and Air toxics
- Meteorological conditions
- Fence line monitoring (e.g., particulates)

Attachment 2

Resume of James Reyff

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**JAMES A. REYFF**

Mr. Reyff is a Meteorologist with expertise in the areas of air quality and acoustics. His expertise includes meteorology, air quality emissions estimation, transportation/land use air quality studies, air quality field studies, and environmental noise studies. He is familiar with federal, state and local air quality and noise regulations and has developed effective working relationships with many regulatory agencies.

During the past 22 years, Mr. Reyff has prepared Air Quality Technical Reports for over 10 major Caltrans highway projects and conducted over 100 air quality analyses for other land use development projects. These projects included carbon monoxide microscale analyses, the calculation of project emissions (e.g., ozone precursor pollutants, fine particulate matter, and diesel particulate matter), seasonal field monitoring, and preparation of air quality conformity determinations. Mr. Reyff advised decisions of federal and local air quality agencies regarding impact assessment methodologies and air quality conformity issues. He has conducted air quality evaluations for specific plans and General Plan updates. Recently, he prepared the air quality analysis for the NASA Ames Research Park, which included a Federal SIP Conformity analysis.

Mr. Reyff has been responsible for a variety of meteorological and air quality field investigations in support of air permitting and compliance determinations. He has conducted air quality analyses of diesel generators in support of regulatory permitting requirements and environmental compliance issues. Mr. Reyff has designed and implemented meteorological and air quality monitoring programs throughout the Western United States including Alaska. Programs include field investigations to characterize baseline levels of air toxics in rural areas, as well as regulatory air quality and meteorological monitoring. He was the Meteorologist involved in a long-term monitoring program at the Port of Oakland that evaluated meteorological conditions and fine particulate matter concentrations in neighborhoods adjacent to the Port.

Mr. Reyff has conducted over 15 major acoustical technical studies for transportation systems. He has managed several research studies for Caltrans including a noise study that evaluated long-range diffraction and reflection of traffic noise from sound walls under different meteorological conditions. Mr. Reyff has also evaluated noise from power plants, quarries and other industrial facilities. He has also been actively involved in research regarding underwater sound effects from construction on fish.

**PROFESSIONAL EXPERIENCE**

1995-Present	Illingworth & Rodkin, Inc.
Project Scientist	Petaluma, California
1989-1995	Woodward-Clyde Consultants (URS)
Project Meteorologist	Oakland, California
1988-1989	Oceanrontes (Weather News)
Post Voyage Route Analyst	Sunnyvale, California

**EDUCATION**

1986 San Francisco State University  
B.S., Major: Geoscience (Meteorology)

**PROFESSIONAL SOCIETIES**

American Meteorological Society                      Institute of Noise Control Engineering

**AWARDS**

FHWA Environmental Excellence Award - 2005  
Caltrans Excellence in Transportation, Environment - 2005

Charles M Sutter Associates Inc.

21 December 2010

Ed Erwin  
Director, Real Estate  
Alta Bates Summit Medical Center  
2880 Gateway Oaks, 2nd Floor  
Sacramento, CA 95833  
Via E-mail: erwine@sutterhealth.org

Subject: MacArthur Transit Village Project - Oakland, CA  
Potential Noise and Vibration Impacts on Surgery Center  
Located at 3875 Telegraph Avenue

Dear Mr. Erwin:

We have been retained to determine whether recent changes to the MacArthur Transit Village project (Project) will have any significant impacts on the property, operations and patient care at the Surgery Center of Alta Bates & Summit Medical Center, located immediately adjacent to the Project at 3875 Telegraph Avenue (Surgery Center) particularly with respect to noise and vibration. We have concluded that the recently revised Project, that removes the Surgery Center property from the Project, will have such significant effects on the Surgery Center throughout the approximately seven (7) years of Project construction.

We have completed our review of the various documents prepared for the MacArthur Transit Village project located in Oakland, California. Included in our review is the Noise and Vibration section of the Draft Environmental Impact Report (DEIR) and the Agenda Report dated 14 December 2010 from the City of Oakland, City and Economic Development Agency (CEDA).

Based on our review, potentially significant noise and vibration impacts that could adversely affect The Surgery Center of Alta Bates & Summit Medical Center have not been addressed. Further analysis of project generated noise and vibration, impacts, and mitigation including continuous on-site noise and vibration monitoring, would be required. This letter summarizes our findings.



Ed Erwin  
21 December 2010  
Page 2

## Discussion

### *Noise Impacts*

As you know, the purpose of an EIR is to determine potentially significant impacts resulting from the development of the proposed project, and to provide mitigation measures as needed. We understand that since publication of the DEIR, the Surgery Center of Alta Bates & Summit Medical Center (a portion of "Block C" as shown on the DEIR Conceptual Site Plan, APN 012-0968-003-01, zoned C-28) will no longer be included in the Project. Therefore, the estimated seven years of continuous Project construction could generate significant impacts on the Surgery Center.

Our review of the City's Noise Element of the General Plan indicates that the City interprets a "Hospital" land-use as a noise sensitive receptor, "...whose purpose and function can be disrupted or jeopardized by noise... Understandably, noise is of special concern when it occurs near sensitive receptors."<sup>1</sup> Moreover, the City classifies hospital land-uses among nursing homes, libraries, residences, classrooms, and theaters as being most sensitive to noise.

Based on our discussion with management at the Surgery Center, we conclude that activities at the Surgery Center would be just as sensitive to noise as those at a full-service hospital. The Surgery Center is home to sensitive procedures and patients undergoing nerve repair, ear reconstruction, eye surgery, neurosurgery (laminectomy), vocal cord surgery, and pediatric urology. Such procedures occur several hundred times per year. Post-anesthesia recovery, pre-operative, and pain management patients on cardiac monitors occupy various portions of the building including along the exterior façade adjacent to the project site. Specialized equipment such as arthroscopy monitors, fluoroscopy imaging units, and operating microscopes are in common use. Such activities appear to be consistent with the City's specification of hospital land-uses being noise sensitive. Without mitigation, increased noise levels generated by Project construction could adversely affect the health, sleep, and recovery of patients at the Surgery Center, it could also interfere with speech intelligibility and communication between patients and medical staff, and between surgeons and staff during medical procedures.

### *Vibration Impacts*

The DEIR establishes the Federal Transit Administration (FTA) as a source for assessing potential vibration impacts.<sup>2</sup> Included are thresholds for significant impacts based on "events", the number of vibration occurrences per day. The thresholds are based on perception and annoyance in residential buildings which are of course one concern at the

<sup>1</sup> City of Oakland, *Noise Element of the 2005 General Plan*, p. 4

<sup>2</sup> Federal Transit Administration, *Transit Noise and Vibration Impact Assessment (FTA-VI-90-1003-06)*, May 2006

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project site. In addition, the DEIR includes the FTA criteria for limiting potential building damage due to construction generated vibration. Had the Surgery Center site been listed as an adjacent sensitive receptor at the time of writing, it would have been required per CEQA to include the FTA recommended criteria for typical hospitals and/or hospitals with vibration sensitive equipment as shown in Table 1, below. An analysis methodology is provided in the same FTA document along with construction vibration levels and calculations to estimate vibration levels at various setback distances that could include the hospital.

**Table 1 (Adapted from FTA Tables 8-1 and 8-3)**  
**Ground-Borne Vibration Impact Criteria**

Land-Use Category	Frequent Events	Occasional Events	Infrequent Events
Hospitals with vibration-sensitive equipment	65 VdB	65 VdB	65 VdB
Hospitals	72 VdB	75 VdB	80 VdB
Criterion	Description of Use		
72 VdB	Operating Rooms: Vibration not perceptible; but ground-borne noise may be audible inside quiet rooms. Suitable for medium-power optical microscopes (100X) and other equipment of low sensitivity.		
66 VdB	Adequate for medium- to high-power optical microscopes (400X); microbalances, optical balances, and similar specialized equipment.		
60 VdB	Sensitive operating rooms (e.g. microsurgery, eye surgery, neurosurgery, etc.). Adequate for high-power optical microscopes (1000X), inspection and lithography equipment to 3 micron line widths.		
54 VdB	Generic vibration specification for magnetic resonance imagers (MRI). Appropriate for most lithography and inspection equipment to 1 micron detail size.		
48 VdB	Suitable in most instances for the most demanding equipment, including electron microscopes operating to the limits of their capability.		
42 VdB	The most-demanding criterion for extremely vibration-sensitive equipment.		

It is unclear at this time what methods will be used for demolition and construction. However, typical to construction of the proposed Project would include the use of pile driving, hydraulic breakers, drilled piers, rammed aggregate piers, vibratory compaction, or other methods that could generate significant impact at adjacent receptors. Vibration

3. Amick, H., et al., Proceedings of International Society for Optical Engineering (SPIE), Vol. 1619: Design of Stiff, Low-Vibration Floor Structures, November 4-6, 1991, pp. 188-191.

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levels generated by such devices and activities are summarized in the FTA document, but missing from any project analyses. Without mitigation, vibration levels generated by Project construction could adversely affect critical medical procedures at the Surgery Center. It could also be perceptible and annoying to recovering patients and staff, and interfere with the proper use of medical equipment including imaging systems and image quality.

*Standard Conditions of Approval*

The DEIR establishes the City of Oakland Planning Code, City of Oakland Municipal Code, City of Oakland Noise Element, and City of Oakland Standard and Uniformly Applied Conditions of Approval as sources for assessing potential noise impacts. Included in the City's codes are limits for average and maximum noise levels generated by construction activities that could affect adjacent land-uses. For reference, the DEIR lists them in the following Table 2 (adapted from Table IV.E-7):

<b>Table 2: (Table IV.E-7)</b>		
<b>City of Oakland Construction</b>		
<b>Noise Standards at Receiving Property Line, dBA</b>		
<b>(OMC Section 17.120.050)</b>		
	<b>Daily 7am to 7pm</b>	<b>Weekends 9am to 8pm</b>
<b>Short-Term Operation (Less than 10 days)</b>		
Residential	80	65
Commercial, Industrial	85	70
<b>Long-Term Operation (10 days or more)</b>		
Residential	65	55
Commercial, Industrial	70	60

The City's Condition of Approval (COA) Noise-1 also limits "extreme noise generating activities" to weekdays, 8am through 4pm. COA-5 continues to require noise measurements to monitor the effectiveness of noise attenuation procedures prepared under the supervision of a qualified acoustical consultant.

The Cumulative Noise and Vibration Impacts analysis in the DEIR also refers to the City of Oakland Standard and Uniformly Applied Conditions of Approval and projects within the vicinity of the project site. In particular, it cites the Kaiser Permanente project located at the intersection of MacArthur Boulevard and Broadway which has incorporated an

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on-site continuous noise monitoring program that allows a comparison of construction generated noise levels to project standards.

The City's Standard Conditions of Approval for noise and vibration alone do not adequately address the particular impacts on the Surgery Center. These Standard Conditions of Approval focus on typical uses, not highly sensitive receptors. For example, only COA-6 addresses vibration impacts, and does so by limiting the scope to damage thresholds at historic structures. It does not include other vibration sensitive uses such as the Surgery Center which is home to vibration sensitive patients and equipment. Additional study and analysis is necessary to determine the appropriate noise and vibration mitigation for the Surgery Center due to significant impacts generated by the Project.

#### *DEIR Alternative*

The DEIR provides the required section for analyzing project alternatives. Included is the scenario for a Mitigated Reduced Building/Site Alternative, which excludes the Surgery Center from being part of the project. To date, no analysis has been provided which evaluates potentially significant impacts at the Surgery Center generated by the Project. It is notably absent from the 14 December 2010 Agenda Report. Per CEQA, additional environmental review for project alternatives must be performed to address impacts that could affect surrounding land uses and provide mitigation measures as needed.

#### *The Project Sponsor's Letter*

The 26 October 2010 letter from MacArthur Transit Community Partners, LLC (MTCP – the project sponsor to Catherine Payne, CEDA - Planning), acknowledges that the vesting tentative tract map (VITM) does not include the Surgery Center since MTCP does not have control of the property. The letter continues to state that the VITM will be amended to include the Surgery Center once MTCP retains site control. It states, "This circumstance does not preclude development of Phase I as the site development does no effect [sic] the Surgery Center parcel."<sup>4</sup> It appears that based on that assumption, the 17 November 2010 letter prepared by Urban Planning Partners Inc. (UPP – project planning consultant) concludes that refinements to the project are minor and that no substantial changes, circumstances, or new information of importance has been generated since certification of the EIR<sup>3</sup> (June/July 2008). The aforementioned comments are not consistent with continued operation of the Surgery Center. It should also be noted that while a traffic consultant's comments were provided along with these two letters, we were not able to find a letter, quotation, summary, or follow-up analysis provided by a qualified firm providing services in acoustics.

<sup>3</sup> City of Oakland, *Agenda Report*, 14 December 2010 (oak024541.pdf), p. 344

<sup>4</sup> *ibid.*, p. 334

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Based on the project sponsor and planning team's oversight of an adjacent noise and vibration sensitive receptor (i.e., the Surgery Center), CEDA staff concludes in the 14 December 2010 Agenda Report there is nothing that would require subsequent or supplemental environmental review, since there are no new significant or substantial increases in the severity of environmental effects.<sup>6</sup> Again, the conclusion is not based on an analysis that includes continued use of the Surgery Center.

#### *Conclusion*

In summary, the sources listed above which have been established as a basis for noise and vibration assessment and analysis, did not consider the Surgery Center as a noise and vibration sensitive receptor needing to be evaluated for potential impacts and mitigation. The modified Project without the Surgery Center will have significant noise and vibration impacts on the Surgery Center during the approximately seven (7) years of Project construction. Because no environmental study has been performed, per CEQA, further impact analysis is necessary to determine appropriate mitigation measures to protect the ongoing uses at the Surgery Center.

This concludes our current comments. Please do not hesitate to call us with any questions.

Sincerely,

Charles M. Salter Associates, Inc.



Timothy G. Brown  
Principal Consultant



Robert P. Alvarado  
Senior Vice President

<sup>6</sup> *Ibid.*, p. 5

C H A R L E S M S A L T E R A S S O C I A T E S P C

**CHARLES M. SALTER, P.E.**  
President

**PROFESSIONAL EXPERIENCE:**

Mr. Salter has practical acoustical engineering for over 40 years. With educational backgrounds in architecture, planning, engineering, and business, Mr. Salter has conducted a wide range of consulting in the areas of architectural acoustics, noise control engineering, and environmental noise impact. He has had project responsibility for various facility types including offices, schools, churches, theaters, residences, hospitals, and civic buildings.

**PUBLICATIONS**

Coauthor *ACOUSTICS: Architecture, Engineering, the Environment*. (1998 William Stout Publisher)

**HONORS**

Fellow of the Society, Acoustical Society of America, 2006

Received "for contributions to the teaching of architectural acoustics and to its practical applications."

Allied Professions Honor Award, American Institute of Architects, California Council, 1998

Received "in recognition of unique dedication and focused drive to enhance, support and significantly contribute to the advancement of architectural practice. The extensive knowledge displayed as an acoustical consultant, author and educator creates an invaluable balance that bridges the language among various disciplines. The three decades as an innovator, practitioner and mentor, has been instrumental in increasing awareness of crucial acoustical considerations in architectural design. The level of personal commitment, coupled with industrious contributions, merit the highest admiration from the profession of architecture."

**TEACHING EXPERIENCE**

2004-Present	Lecturer in Acoustics, UC Berkeley
2000-2004	Adjunct Professor, UC Berkeley
1998-2001	Adjunct Professor, California College of Arts & Crafts
1973-2000	Lecturer in Acoustics, UC Berkeley

**PROFESSIONAL REGISTRATION:**

California: M.E. No. 16460 (1974)  
Nevada: N.E. No. 3963 (1974)  
Institute of Noise Control Engineering, Board Certified (1975)

**PROFESSIONAL AFFILIATIONS**

Associate Member, American Institute of Architects  
Technical Advisory Committee Member, United States Green Building Council

**EDUCATION**

Boston College M.B.A., Major - Finance, 1972  
MIT B.S. Art and Design, Major - Architecture, Minor - City Planning, 1969  
Tufts University B.S.C.E., Major - Structural Engineering, Minor - Economics, 1965

Charles M. Saller Associates, Inc.

**ROBERT P. ALVARADO**  
Senior Vice President

**PROFESSIONAL EXPERIENCE**

Mr. Alvarado has been an acoustical consultant with Charles M. Saller Associates, Inc. since 1996. He specializes in environmental noise studies, architectural acoustics, HVAC noise and vibration control, building vibration, and environmental noise mitigation. His experience includes exhibit spaces, civic facilities, mixed-use developments, offices, retail spaces, and educational facilities.

Mr. Alvarado's project management experience includes:

- John Muir Neuroscience Institute EIR, Walnut Creek, CA
- Kaiser Permanente Oakland EIR, Oakland, CA
- Queen of the Valley North Building EIR, Napa, CA
- Bay Meadows Mixed-Use EIR, San Mateo, CA
- Solana Beach Train Station Mixed-Use EIR, Solana Beach, CA
- Magnolia Park EIR, Oakley, CA
- Park and Belongs Residential Development EIR, San Jose, CA
- Marina Bay Live-Work Development EIR, Richmond, CA
- 13th Powell Street Mixed-Use, San Francisco, CA
- Santana Row Mixed-Use, San Jose, CA
- San Francisco Rock and Roll Hall of Fame Mixed-Use, San Francisco, CA
- Energy Foundation, San Francisco, CA
- Santa Cruz State Courts, Santa Cruz, CA
- Ferry Building Renovation, San Francisco, CA
- One, Two, and Three Embarcadero Center, San Francisco, CA
- Hilton Grand Vacation Club Flamingo Renovation, Las Vegas, NV
- Sea Ranch Lodge, Sea Ranch, CA
- Ritz-Carlton Marassi Mega Beach Resort, El Alamein, Egypt
- DEEC Corporate Offices, Palo Alto, CA
- Equity Office Properties, San Francisco, CA
- GSA Public Service Building, Oakland, CA
- Polaris Amphitheater, Columbus, OH
- Magic World Amphitheater, Dubai

**PUBLICATIONS**

Coauthor *ACOUSTICS: Architecture, Engineering, the Environment*, (1998 Wilkoin Steur Publisher).

**PROFESSIONAL AFFILIATIONS**

American Institute of Architects, Associate Member  
UC Berkeley Center for the Built Environment, Research Team

**EDUCATION**

University of California at Berkeley, B.A. Architecture  
Stanford University, AEC Program, Graduate School of Engineering

**TEACHING EXPERIENCE**

1998-Present UC Berkeley, Guest Lecturer "Acoustic Computer Modeling"  
1998-Present Stanford University, Graduate School of Engineering, Guest Lecturer, Professional Mentor

CHARLES M. SALTER ASSOCIATES, INC.

**TIMOTHY G. BROWN**  
Principal Consultant**PROFESSIONAL EXPERIENCE**

Mr. Brown has been an acoustical consultant with Charles M. Salter Associates, Inc. since 2004. He specializes in the areas of environmental and architectural acoustics and vibration. His projects include the testing and analysis of transportation and construction induced noise and vibration near public and private developments including residential, commercial, utility, medical, research, and technology facilities. He also has experience with noise and vibration relating to architectural, mechanical, electrical, and acoustically sensitive equipment.

Mr. Brown's experience includes the following projects:

- Daly City Noise Element Update, Daly City, CA
- San Francisco Recycling and Disposal Impact Assessment, San Francisco, CA
- Bay Meadows Redevelopment Noise and Vibration Assessment, San Mateo, CA
- New Crystal Springs Bypass Tunnel Noise and Vibration, San Mateo County, CA
- Kierner Business Park EIR, Modesto, CA
- Villages of Patterson EIR, Patterson, CA
- Tivoli Specific Plan EIR, Modesto, CA
- Bay Division Pipeline No. 5 Noise and Vibration Study, Bay Area, CA
- San Francisco Recycling and Disposal Impact Assessment, San Francisco, CA
- United State Post Office, Oakland and San Francisco, CA
- Lockheed Martin Missiles and Space, Sunnyvale, CA
- Solana Beach Railway Station, Solana Beach, CA
- Fruitvale BART Station Interagency Engine Generator, Oakland, CA
- One Rincon Hill Construction Noise and Vibration Survey, San Francisco, CA
- Anchorage at Marina Bay Quota Zone Implementation Assessment, Richmond, CA
- Sutter Health Camino Medical Group MRI Vibration Screening, Mountain View, CA
- Skywalker Ranch Screening Room Vibration Study, Niles, CA
- Pixar Animation Studios Construction Vibration Assessment, Emeryville, CA
- Livermore Performing Arts Center Noise and Vibration Assessment, Livermore, CA
- Stanford University Geophysics Laboratory Noise Study, Stanford, CA
- Gateway Community Development Project Railway Impact Analysis, Oakland, CA
- UCSF San Francisco MRI Vibration Study and Impact Assessment, San Francisco, CA
- Hellman Laboratory Relocation, Berkeley, CA

**PROFESSIONAL AFFILIATIONS**

- Acoustical Society of America (ASA)
- Institute of Noise Control Engineers (INCE)
- Structural Engineers Association of Northern California (SEAONC)
- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)

**EDUCATION**

- University of California, Berkeley, M.S., Civil Engineering, 2001
- University of California, Davis, B.S. with High Honors, Civil Engineering, 2000



## Summary of Negotiations with the Surgery Center

- 3/28/08 Meeting between MTCP and Victor Meinke (Alta Bates Surgery Center representative) about the MTV Project and acquisition of the Surgery Center site.
- 7/1/08 –  
2/14/09 Various communications between MTCP and Victor Meinke and consultants regarding financial issues.
- 4/21/09 Letter of Intent from MTCP to the Surgery Center regarding purchase.
- 12/4/09 Meeting between MTCP and Surgery Center team.
- 1/6/10 Letter from Alta Bates Summit to MTCP requesting updated plans and a new proposal.
- 4/21/10 MTCPs' community meeting and presentation discussing the Phase/Stage 1 revised site design, garage plan, and development schedule. Meeting was attended by Surgery Center representative (Victor Meinke).
- 6/2/10 Letter from MTCP to Alta Bates Summit including a copy of the revised site plan showing the Surgery Center site as part of the MTV Project. Letter noted that acquisition of Surgery Center would not be required for the Phase/Stage 1 development. Letter also noted MTCP is still interested in the property acquisition. (See Attached letter.)
- 12/1/10 Meeting between MTCP (Art May & Joe McCarthy) and Alta Bates Summit (COO Charles Prosper and Dr. Glen Gormanzano) to discuss the status of the project, the plan revisions, schedule, and acquisition.



June 2, 2010

Mr. Victor E. Meinke  
Vice President Business Development  
Alta Bates Summit Medical Center  
350 Hawthorne Avenue  
Oakland CA 94609

Re: Project Update for MacArthur Transit Village

Dear Victor:

The purpose of this letter is provide you with a project update on MacArthur Transit Village Project ("MTV") in Oakland, Ca.

MacArthur Transit Community Partners, LLC ("MTCP") is proceeding with the design of the Bart replacement parking structure and master site work ("Phase 1") plus the acquisition of several parcels on MacArthur Boulevard and Telegraph Avenue which will facilitate the commencement of construction for Phase 1 in late 2010. The master site plan and design for the Bart replacement parking structure was reviewed by Oakland Design Review Committee on May 26, 2010 with our next review by the Oakland Planning Commission in late July 2010:

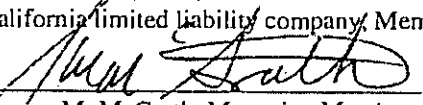
At our meeting on December 4, 2009, we realized it would be difficult to achieve a timely consensus to acquire the East Bay Surgery Center ("Surgery Center Property") from the various stakeholder of the EBOS, Sutter Health Alta Bates Summit Medical Center Surgery Property Company, LLC, and The Surgery Center of Alta Bates Summit Medical Center, LLC (collectively "Surgery Center") to facilitate our construction schedule. As a result, we have realigned Village Drive to intersect with the existing 39<sup>th</sup> Street at Telegraph Avenue which allows MTCP to proceed with the construction of Phase 1 with no requirement to acquire the Surgery Center Property which is now depicted as C-3 on the proposed Final Development Plan ("FDP"). We have attached for your information and review the proposed FDP for Phase I which modifies slightly the approved Preliminary Development Plan ("PDP").

The proposed FDP will allow the Surgery Center to continue its operations without any disruption to the Surgery Center Property. MTCP is still very interested in acquiring the Surgery Center Property at a purchase price and timing that will work for all parties. Please let us know if you have any questions regarding the proposed FDP.

Sincerely,

**MACARTHUR TRANSIT COMMUNITY PARTNERS, LLC,**  
a California limited liability company

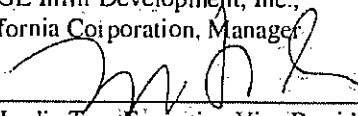
By: MPI MacArthur, LLC,  
a California limited liability company, Member

By:   
Terrence M. McGrath, Managing Member

By: BUILD Equity Investments (MacArthur Transit Community) LLC,  
a California limited liability company, Managing Member

By: BRIDGE Urban Infill Land Development, LLC,  
a Delaware limited liability company, Member

By: BRIDGE Infill Development, Inc.,  
a California Corporation, Manager

By:   
Lydia Tan, Executive Vice President



# Howard S. Wright Constructors

## MTV - PHASE I & II CONSTRUCTION EQUIPMENT SCHEDULE SOUND - AIR QUALITY STUDY

January 28, 2011

### DEMOLITION

**A** Equipment 2000 Cat 330B Excavator  
 Size Approx. 80,000 Lbs  
 Engine 236HP  
 Usage: Duration of project – 8 hours per day, – Possible overlap  
 CARB EIN #: KC3V93

**B** Equipment 2005 Linkbelt 330 LX Excavator  
 Size Approx. 80,000 Lbs  
 Engine 247 HP  
 Usage: Duration of project – 8 hours per day, – Possible overlap  
 CARB EIN #: GA5L83

**C** Equipment 2006 Bobcat S300 Skid steer  
 Size Approx. 9,400 Lbs  
 Engine Engine HP: 81 HP  
 Usage: Duration of project – 8 hours per day, – Possible overlap  
 CARB EIN #: UK4X33

**W** Equipment STIHL - cut-off saw  
 Size 22 lbs  
 Engine 6.4 hp  
 Usage: Cutting of steel and concrete sporadically  
 CARB EIN #: UK4X33

### FOUNDATION

**D** Equipment Xtreme XFR-1245 Telescoping Forklift  
 Size 35,700 lbs; lift capacity 12,000 lbs  
 Engine 2300 rpm  
 Usage: to unload piles - 2 hrs per day  
 CARB EIN #: XRI245020991378

**E** Equipment Delmag RH26 (Requirement to RH28) mounted on Leiberherr Carrier  
 Size 182,000 lbs  
 Engine 500 hp  
 Usage: Duration of project - 8 hrs per day  
 CARB EIN #: 567

**F** Equipment 210,000 ft lb Drill Head Motor; 70' Mast attached to Delmag  
 Size  
 Engine Hydraulic - runs off Delmag engine  
 Usage: Drill to install screw down Pile - 8 hrs per day  
 CARB EIN #:

**AA** Equipment McNeilus Ready-mix Concrete truck  
 Size 10.5 cy capacity  
 Engine 350 hp  
 Usage: transport ready mix concrete to jobsite - pour day  
 CARB EIN #:

#### GRADE BEAM/ PILE CAPS

**G** Equipment TEREX Back Hoe Loader  
 Size 18,000 lbs  
 Engine 100 hp (70 kw)  
 Usage: 8 hours a day - overlap with Dump truck  
 CARB EIN #:

**H** Equipment 48 meter Putzmeister Boom Pump  
 Size 48 meter boom - 12x8'-6"x40'  
 Engine 2000 Diesel Mack - 400 Hp  
 Usage: Concrete placing - horizontal and vertical CIP concrete - 8 hrs per pour day  
 CARB EIN #:

**J** Equipment 1999 Mack RD688S Tri-Axel Dump truck  
 Size 44,000 lbs  
 Engine 450 HP - diesel  
 Usage: Hauling of spoils  
 CARB EIN #:

#### VERTICAL CONCRETE

**K** Equipment Fork Lift - Hyster H80XL  
 Size 8,000 lbs  
 Engine Propane  
 Usage: Moving of forms  
 CARB EIN #:

**Q** Equipment Delivery Stake Truck - F-450 Super Duty  
 Size 16000 lbs  
 Engine 235 HP - Diesel  
 Usage: Deliveries  
 CARB EIN #:

**M** Equipment      Ingersoll Rand Compressor  
 Size                2,310 lbs  
 Engine             80 HP  
 Usage:            Blowing decks - chipping of concrete  
 CARB EIN #:

**AB** Equipment      Cement Finisher - Multiquip  
 Size                46 inch diameter  
 Engine             8 hp  
 Usage:            Finish concrete slabs  
 CARB EIN #:

### EXTERIOR SKIN

**N** Equipment      HTC-8675 Series II Link Belt 75 ton hydro  
 Size                12'x8'-6"x49'-0" - 85,276 lbs  
 Engine             445 HP diesel  
 Usage:            Hoist steel frames and precast on exterior  
 CARB EIN #:

**P** Equipment      JLG 600 series - 60 ft boom  
 Size                60 ft boom - 24,000 lbs  
 Engine             82 HP - gas  
 Usage:            Installation of exterior screen - 8 hrs per day  
 CARB EIN #:

**Q** Equipment      Delivery Stake Truck - F-450 Super Duty  
 Size                16000 lbs  
 Engine             235 HP - Diesel  
 Usage:            Deliveries  
 CARB EIN #:

**X** Equipment      Lincoln Commander 500 welder  
 Size  
 Engine             12 kw diesel generator  
 Usage:            welding of precast panels and steel frames  
 CARB EIN #:

### MAN HOIST

**R** Equipment      Pecco PH 6000  
 Size                Car size - (5'x12-6"x9'0) - Mast 60 feet tall - total weight 20,000 lbs  
 Engine             2-20 hp - 480 V- 3 phase - 60 hz  
 Usage:            9 hours a day - 6 months  
 CARB EIN #:      Electric motor

## SITWORK

<b>S</b>	Equipment	Ditchwitch 1030 trencher
	Size	
	Engine	11 hp
	Usage:	trench for irrigation water lines and control wires
	CARB EIN #:	
<b>T</b>	Equipment	TEREX Back Hoe Loader
	Size	18,000 lbs
	Engine	100 hp (70 kw)
	Usage:	8 hours a day - overlap with Dump truck
	CARB EIN #:	
<b>U</b>	Equipment	Hitachi Excavator - EX-550LC-5
	Size	125,200 lbs
	Engine	HP 361
	Usage:	Excavation of underground utilities
	CARB EIN #:	
<b>V</b>	Equipment	Dynapac (jumping jack) - LT7000
	Size	168 lbs
	Engine	3.9 HP
	Usage:	Compacting of trenches
	CARB EIN #:	
<b>W</b>	Equipment	STIHL - cut-off saw
	Size	22 lbs
	Engine	6.4 hp
	Usage:	Cutting of steel and concrete sporadically
	CARB EIN #:	
<b>Y</b>	Equipment	Concrete walk behind saw -EDCO SS-20
	Size	425 lbs
	Engine	20 hp
	Usage:	Cutting of concrete slabs and parking lot - 1 to 2 days
	CARB EIN #:	
<b>Z</b>	Equipment	SAKAI - dirt roller
	Size	7.2 tons
	Engine	82 hp
	Usage:	Dirt compactor - 8 hrs per day
	CARB EIN #:	

AC	Equipment	John Deere Skip loader - 210LE
	Size	10,170 lbs - 1 CY
	Engine	78 HP
	Usage:	Move around dirt/ rock - make grade for pads
	CARB EIN #:	
AD	Equipment	Caterpillar grader - 140H
	Size	12'-14' blade - 32,460 lbs
	Engine	185 HP
	Usage:	Out road grade for paving
	CARB EIN #:	
AE	Equipment	CAT 966F wheel loader
	Size	46,778 lbs - 4 cy bucket
	Engine	220 HP
	Usage:	Move dirt and rock
	CARB EIN #:	
AF	Equipment	Water truck - Sterling LT8500
	Size	4,000 gal - 53,220 lbs
	Engine	450 HP
	Usage:	dust control and wet down grade
	CARB EIN #:	
AG	Equipment	CAT D8R - diesel - Bull Dozer
	Size	80,000 lbs
	Engine	305 HP
	Usage:	Push large amount of dirt - used to spread dirt out at remediation
	CARB EIN #:	
AH	Equipment	CAT 1055D paver
	Size	45,130 lbs
	Engine	224 HP - diesel
	Usage:	Used to pave asphalt roads and parking lot
	CARB EIN #:	

This schedule is a component of the Construction Management Plan required by the City of Oakland prior to the issuance of construction related permits

The construction technique proposed in areas adjacent to the Alta Bates Surgery Center may employ one or more of the following strategies

1. Use of sheep foot non-vibrating compactors
2. Use of non-vibrating roller compactors
3. Scheduling vibrating roller compaction after surgical hours or on weekends (subject to City approval)
4. Use of alternate fill materials that require no or minimal induced compaction
5. Use of smaller vibrating rolling, vibrating plate, or jumping jack compactors



# EXHIBIT I

MacArthur Transit Village  
Construction Equipment Schedule

Month	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	
Plant Installation	A 1-50% M-100%	B 1-50% M-100%																	
Environmental Remediation	R AP-50% I-50% Y-25%	B AF-50% I-25% Z-25%																	
BARF Graving Paving																			
Pilot																			
Gravel Blower / Pile Caps																			
Vertical Concrete																			
Excavator Main																			
New Blast Silo/rock																			
Transfer Road Dense & Earthwork																			
Milling																			
Filler & Silos/vents																			
BARF Pans																			
Dams																			
Concrete																			
Reinforcing / Trench Paving																			
Dams																			

EXHIBIT A

KEY  
 A 2000 Cat 130G Excavator  
 B 2000 Liebherr 950 LX Excavator  
 C 2006 Bobcat 5300 Skid Steer  
 D Extreme XP 1242 Pallet  
 E Bobcat M30  
 F Drill Hole Motor

This schedule is a component of the Construction Management Plan required by the City of Oakland prior to the issuance of Construction related permits.

EXHIBIT I

EXHIBIT A

1/7/2011

Mechanical Team Village  
Construction Equipment Schedule

Equipment	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	
Excavator																													
Backhoe																													
Generator																													
Compressor																													
Drill																													
Concrete pump																													
Formwork																													
Diaphragm																													
Rebar																													
Crane																													
Hoist																													
Generator																													
Concrete pump																													
Formwork																													
Diaphragm																													
Rebar																													
Crane																													
Hoist																													
Generator																													
Concrete pump																													
Formwork																													
Diaphragm																													
Rebar																													
Crane																													
Hoist																													
Generator																													
Concrete pump																													
Formwork																													
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## Attachment G: VMT Assessment





## DRAFT MEMORANDUM

Date: December 6, 2016  
To: Hayley Cox, Urban Planning Partners  
From: Sam Tabibnia  
**Subject: VMT Assessment for MacArthur Transit Village Parcel B Project**

*OK15-0081.01*

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This memorandum provides a vehicle miles traveled (VMT) assessment for the proposed MacArthur Transit Village Parcel B development in the City of Oakland. Fehr & Peers analyzed the Project's VMT based on the City of Oakland's CEQA Thresholds of Significance.

The project would consist of up to 402 multi-family residential units, 13,000 square feet of ground floor commercial space, and 260 parking spaces adjacent to the MacArthur BART Station.

Based on our assessment, the Project would be located in a low-VMT area, and is therefore presumed to not exceed VMT thresholds. The Project's impacts to VMT would be less than significant under 2020 and 2040 conditions. The rest of this memorandum presents more background and detail on the VMT analysis completed for this project.

### BACKGROUND

On September 21, 2016, the City of Oakland's Planning Commission directed staff to update the City of Oakland's California Environmental Quality Act (CEQA) Thresholds of Significance Guidelines related to transportation impacts in order to implement the directive from Senate Bill 743 (Steinberg 2013) to modify local environmental review processes by removing automobile delay, as described solely by level of service (LOS) or similar measures of vehicular capacity or traffic congestion, as a significant impact on the environment pursuant to CEQA. The recommendation aligns with draft proposed guidance from the Governor's Office of Planning and Research and the City's approach to transportation impact analysis with adopted plans and polices related to transportation, which promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.



Many factors affect travel behavior, including density of development, diversity of land uses, design of the transportation network, access to regional destinations, distance to high-quality transit, development scale, demographics, and transportation demand management. Typically, low-density development that is located at a great distance from other land uses, in areas with poor access to non-single occupancy vehicle travel modes generate more automobile travel compared to development located in urban areas, where a higher density of development, a mix of land uses, and travel options other than private vehicles are available.

Given these travel behavior factors, most of Oakland has a lower VMT/per capita and VMT/employee ratios than the nine-county San Francisco Bay Area region. In addition, some neighborhoods of the city have lower VMT ratios than other areas of the city.

## VEHICLE MILES TRAVELED ESTIMATE

Neighborhoods within Oakland are expressed geographically in transportation analysis zones, or TAZs. The Metropolitan Transportation Commission (MTC) Travel Model includes 116 TAZs within Oakland that vary in size from a few city blocks in the downtown core, to multiple blocks in outer neighborhoods, to even larger geographic areas in lower density areas in the hills. TAZs are used in transportation planning models for transportation analysis and other planning purposes.

The MTC Travel Model is a model that assigns all predicted trips within, across, or to or from the nine-county San Francisco Bay Area region onto the roadway network and the transit system, by mode (single-driver and carpool vehicle, biking, walking, or transit) and transit carrier (bus, rail) for a particular scenario.

The travel behavior from MTC Travel Model is modeled based on the following inputs:

- Socioeconomic data developed by the Association of Bay Area Governments (ABAG)
- Population data created using 2000 US Census and modified using the open source PopSyn software
- Zonal accessibility measurements for destinations of interest
- Travel characteristics and automobile ownership rates derived from the 2000 Bay Area Travel Survey
- Observed vehicle counts and transit boardings.



The daily VMT output from the MTC Travel Model for residential and office uses comes from a tour-based analysis. The tour-based analysis examines the entire chain of trips over the course of a day, not just trips to and from the project site. In this way, all of the VMT for an individual resident or employee is included; not just trips into and out of the person's home or workplace. For example: a resident leaves her apartment in the morning, stops for coffee, and then goes to the office. In the afternoon she heads out to lunch, and then returns to the office, with a stop at the drycleaners on the way. After work she goes to the gym to work out, and then joins some friends at a restaurant for dinner before returning home. The tour-based approach would add up the total amount driven and assign the daily VMT to this resident for the total number of miles driven on the entire "tour".

Based on the MTC Travel Model, the regional average daily VMT per capita is 15.0 under 2020 conditions and 13.8 under 2040 conditions, and the regional average daily VMT per worker is 21.8 under 2020 conditions and 20.3 under 2040 conditions

## THRESHOLDS OF SIGNIFICANCE

According to the interim *Update to CEQA Thresholds of Significance and Transportation Impact Study Guidelines* dated October 17, 2016, a project would have a significant effect on the environment if it would:

1. Conflict with a plan, ordinance, or policy addressing the safety or performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths (except for automobile level of service or other measures of vehicle delay); or
2. Cause substantial additional VMT per capita, per service population, or other appropriate efficiency measure; or
3. Substantially induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow lanes) or by adding new roadways to the network.

### *Thresholds of Significance for VMT*

The following are thresholds of significance related to substantial additional VMT:

- For residential projects, a project would cause substantial additional VMT if it exceeds existing regional household VMT per capita minus 15 percent.



- For office projects, a project would cause substantial additional VMT if it exceeds the existing regional VMT per employee minus 15 percent.
- For retail projects, a project would cause substantial additional VMT if it exceeds the existing regional VMT per employee minus 15 percent.

### *Screening Criteria*

VMT impacts would be less than significant for a project if any of the identified screening criteria are met:

1. Small Projects: The project generates fewer than 100 vehicle trips per day
2. Low-VMT Areas: The project meets map-based screening criteria by being located in an area that exhibits below threshold VMT, or 15 percent or more below the regional average, as illustrated on maps provided by MTC
3. Near Transit Stations: The project is located in a Transit Priority Area or within a one-half mile of a Major Transit Corridor or Stop<sup>1</sup> and satisfies the following:
  - Has a Floor Area Ratio (FAR) of more than 0.75
  - Does not include more parking for use by residents, customers, or employees of the project than other typical nearby uses, or more than required by the City in areas where there is a parking minimum
  - Is consistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Transportation Commission)

## IMPACT ANALYSIS

The Project would include up to 402 multi-family residential units and 13,000 square feet of ground floor commercial space. Since the project would provide less than 50,000 square feet of retail space, the retail is considered to be local serving and the VMT per worker criterion is used to screen the VMT for the commercial component of the project.

The Project satisfies the Low-VMT Area criterion (#2), as detailed below.

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<sup>1</sup> Major transit stop is defined in CEQA Section 21064.3 as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.





**Criterion #1: Small Projects**

The project would generate more than 100 trips per day and therefore does not meet criterion #1.

**Criterion #2: Low-VMT Area**

**Table 1** describes the 2020 and 2040 VMT for TAZ 976, the TAZ in which the project is located as well as applicable VMT thresholds of 15 percent below the regional average.

TABLE 1: DAILY VEHICLE MILES TRAVELED PER CAPITA						
Land Use	Bay Area				TAZ 976	
	2020		2040		2020	2040
	Regional Average	Regional Average minus 15%	Regional Average	Regional Average minus 15%		
Residential (VMT per Capita) <sup>1</sup>	15.0	12.8	13.8	11.7	7.3	6.7
Commercial (VMT per worker) <sup>2</sup>	21.8	18.5	20.3	17.3	18.3	16.7

1. MTC Model results at [analytics.mtc.ca.gov/foswiki/Main/PlanBayAreaVmtPerCapita](http://analytics.mtc.ca.gov/foswiki/Main/PlanBayAreaVmtPerCapita) and accessed in November 2016.  
 2. MTC Model results at [analytics.mtc.ca.gov/foswiki/Main/PlanBayAreaVmtPerWorker](http://analytics.mtc.ca.gov/foswiki/Main/PlanBayAreaVmtPerWorker) and accessed in November 2016.  
 Source: Fehr & Peers, 2016

As shown in **Table 1**, the 2020 and 2040 average daily VMT per capita and VMT per worker in the project TAZ is more than 15 percent below the regional averages. Therefore, it is presumed that the proposed project would not result in substantial additional VMT and project impacts with respect to VMT would be less-than-significant.

**Criterion #3: Near Transit Stations**

The Project would be located adjacent to the MacArthur BART Station and is within one-half mile of two frequent bus routes: Route 6 along Telegraph Avenue and Route 57 along 40th Street. However, the Project would not satisfy Criterion #3 because it would only meet two of the following three conditions for this criterion:

- The Project has an FAR greater than 0.75
- The Project would include 260 parking spaces for the project residents, which corresponds to 0.65 spaces parking spaces per unit. The City of Oakland Municipal Code



Section 117.116.060 requires a minimum of 0.5 spaces per unit for mutli-family residential developments in the S-15 zone. The project would provide parking in excess of the minimum required by the City Code.

- The Project is located within the MacArthur Transit Village Priority Development Area (PDA) as defined by Plan Bay Area, and is therefore consistent with the region's Sustainable Communities Strategy

The project would not satisfy Criterion #3 because it would provide on-site parking exceeding the minimum required by the City Code.

## CONCLUSION

The Project would satisfy the Low-VMT Area Criterion (#2) and is therefore presumed to have a less than significant impact on VMT.

Please contact Sam with questions or comments.

## Attachment H: Wind Assessment



## **Pedestrian-Level Winds Report**

Wind Tunnel Tests for

### **MACARTHUR BART TRANSIT VILLAGE**

Oakland, CA

CPP Project 9570

23 December 2016

Prepared for:

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## EXECUTIVE SUMMARY

This report documents a wind tunnel study of the MacArthur BART Transit Village - Parcel B development, to be located in Oakland, CA.

The purpose of the study is to assess the wind environment around the development in terms of pedestrian comfort and hazard relative to wind metrics specified in the City of Oakland's CEQA Thresholds of Significance (2013). This study has been prepared as an informational item to inform the City's review of the project independent of CEQA, as the City's wind threshold is only applicable to projects located in the Downtown or adjacent to a substantial water body (i.e., Oakland Estuary, Lake Merritt or San Francisco Bay).

The analysis considers three configurations: (1) Existing; (2) Existing-plus-Proposed; and (3) Cumulative-plus-Proposed. In addition, the effects of two wind reduction measures (Landscape Option 2 and Landscape Option 1 + Canopy described in the table at the end of this Executive Summary) were investigated for both the Existing-plus-Proposed and Cumulative configurations.

To meet the objectives of the study, a 1:260 scale model of the proposed MacArthur BART Transit Village Parcel B development, and nearby existing surroundings within a 1213-foot radius, was constructed and placed in CPP's boundary-layer wind tunnel. Measurements of wind speeds likely to be experienced by pedestrians at various points around the proposed development at ground-level were combined with wind statistics and compared to the thresholds the City utilizes for CEQA analyses. Wind comfort was also evaluated utilizing the Lawson Criteria, one of the most widely accepted sets of criteria for assessing the usability, with respect to the wind environment, of different locations for various purposes (e.g., for long-duration activities such as an outdoor café, or for shorter-duration purposes such as a walkway).

The parameters of the wind study and the two wind reduction measures assessed are summarized in the table at the end of this chapter. The study results are summarized below.

### *City CEQA Threshold*

- **Configuration A (Existing):** Wind speeds on the existing project site are currently low with no exceedances of the City's CEQA threshold of significance for wind hazard, or of the

commonly-used Lawson criterion for uncomfortable wind speeds at ground level locations. This configuration included existing buildings on-site and surrounding the site.

- **Configuration B (Existing-plus-Proposed Project):** Wind speeds increase when the proposed project is added to the existing conditions. Two locations at ground level near the northwest corner of the proposed development (locations 12 and 15), and one location on the southwest corner (location 7), are shown to exceed the City's CEQA threshold of significance for wind hazard under the Existing plus Proposed Project. To test the effectiveness of landscaping and/or a canopy near locations 15 and 27, Configuration B was tested with both Landscape Option 1 + Canopy and Landscape Option 2, which generally include trees along 39<sup>th</sup> Street and a canopy on the north elevation. The wind study with Landscape Option 2 shows no exceedances along the north side of the project (locations 15 and 27). Given the effect of the trees along the north and east sides on wind speeds at location 15, it is expected that similar measures (trees and/or a canopy) would reduce wind speeds so that no exceedances would occur.

- **Configuration C (Cumulative-plus-Proposed):** With the addition of the cumulative developments and landscaping, wind speed is expected to decrease at the majority of locations and with landscaping under both Landscape Option 1 + Canopy and Landscape Option 2, including additional similar measures around location 19 as discussed above, no exceedances are expected.

### *Wind Comfort Evaluation*

- **Configuration A (Existing):** Wind speeds at ground level are generally comfortable for seated individuals as well as pedestrians.

- **Configuration B (Existing-plus-Proposed Project):** Wind speeds at ground level on the east side of the proposed structure are expected to be suitable for seated or standing individuals. Locations near the north side of the proposed structure, and to the north across 39<sup>th</sup> Street, are expected to be windy but generally suitable for pedestrians walking directly between different locations. Landscape Option 2 is effective at reducing wind speeds to more comfortable levels on the north side of the proposed structure. Winds at the southwest corner of the proposed structure may be uncomfortable for pedestrians on occasion. The wind reduction measures employed in this study may help reduce wind speeds to a more comfortable level at this location.

- **Configuration C (Cumulative-plus-Proposed):** The comfort ratings at the ground level locations are similar to those in the Existing-plus-Proposed Project configuration. Comfort ratings



on the north side of the proposed structure are improved with the implementation of the wind reduction measures.

General information, including the wind climate analysis, is provided in Appendix A.

The following table summarizes the details for the wind tunnel studies:

**Summary of Test Parameters**

<i>General Information</i>	
Model scale	1:260
Surrounding model radius (full-scale)	1213 ft
Mean wind speed profile Power Law exponent	Built-up environment approach, $n = 0.23$
<i>Pedestrian Comfort Study Information</i>	
Number of points	18
<i>Testing Configuration(s)</i>	
Configuration A	Existing: the current, vacant site without the proposed structure (Figure 1a).
Configuration B	Existing-plus-Proposed: the current site with the proposed structure (Figure 1b).
Configuration C	Cumulative: the proposed structure and reasonably foreseeable projects (Figure 1c).
Landscape Option 1 + Canopy	Trees located on the north and east sides of the structure, and a canopy approximately 20' above grade on the north and northwest sides of the structure (Figure 2h, Figure 3c, d).
Landscape Option 2	Trees located in a staggered arrangement on the north side of the structure. Trees on the east side. (Figure 2i, Figure 3f, g).

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## 1. INTRODUCTION

This report documents a wind tunnel study of the MacArthur BART Transit Village - Parcel B development, to be located in Oakland, CA.

The purpose of the study is to assess the wind environment around the MacArthur BART Transit Village - Parcel B development in terms of pedestrian wind hazard relative to the metrics specified in the City of Oakland's CEQA wind threshold. Pedestrian wind comfort it also evaluated. This study has been prepared as an information item to inform the City's review of the project independent of CEQA. Per the City of Oakland's CEQA Thresholds of Significance (2013), wind analysis need be done only for projects with height of 100 feet or greater (measured to the roof) and for which one of the following conditions exist: (a) the project is located adjacent to a substantial water body (i.e., Oakland Estuary, Lake Merritt or San Francisco Bay); or (b) the project is located in Downtown.<sup>1</sup> A significant CEQA impact would occur if a project creates winds that exceed 36 mph for more than one hour during daylight hours during the year in public spaces (on- and off-site) or off-site private spaces.<sup>2</sup>

The proposed Parcel B project would exceed 100 feet in height, but the site is not located in the Downtown or adjacent to a substantial water body. As a result, a CEQA wind analysis is not required per the City's current CEQA Thresholds of Significance. Thus, the primary purpose of this study was to conduct a pedestrian-level wind hazard assessment for informational purposes only for the City and community, which will be included in the CEQA document as a non-CEQA informational item and will not be utilized in the assessment of CEQA impacts.

In addition, wind comfort was estimated at all test locations using standard Lawson criteria, one of the most widely accepted sets of criteria for assessing the usability, with respect to the wind environment, of different locations for various purposes.

---

<sup>1</sup> Downtown is defined in the Land Use and Transportation Element of the General Plan (page 67) as the area generally bounded by West Grand Avenue to the north, Lake Merritt and Channel Park to the east, the Oakland Estuary to the south and I-980/Brush Street to the west.

<sup>2</sup> Although impacts to on-site private spaces are considered a planning-related non-CEQA issue, such potential impacts still must be analysed by the wind analysis as well.<sup>3</sup> The rating of "Uncomfortable" is the word of the author (Lawson) and may not apply directly to any particular project. High wind areas are certainly not unacceptable all the time, just on windier days. The word uncomfortable, in our understanding, refers to acceptability of the site by pedestrians for typical pedestrian use; i.e., on the windiest days, pedestrians will not find the areas "acceptable" for walking and will tend to avoid such areas if possible.

The measured wind speeds were compared to the City's CEQA Threshold of Significance and, separately, to standard comfort criteria described below. An assessment of the acceptability of the wind environment around developments can inform designers about the suitability of outdoor areas for their intended uses. Where necessary, design modifications can be made, or wind reduction measures added, to address areas with the potential for excessive wind speeds.

This report includes wind tunnel test procedures, test results, and a discussion of test results obtained in the CPP, Inc. Wind Engineering Laboratory. Supplemental information pertaining to the results in this report can be found in Appendix A.

All data collection was performed in accordance with the American Society of Civil Engineers (ASCE) Standard 7-10 (2010), the ASCE Manual of Practice Number 67 on Wind Tunnel Studies of Buildings and Structures (1999), and the ASCE Standard 49-12 on Wind Tunnel Testing of Buildings and Other Structures (2012).

## 2. PEDESTRIAN-LEVEL WIND SPEED CRITERIA

### 2.1 California Environmental Quality Act (CEQA) Threshold of Significance

As discussed above, the project site is not in an area that is subject to the City’s CEQA wind thresholds. However, an assessment of the project in comparison to the City’s CEQA wind threshold is provided as an informational item. The City’s threshold for wind is when a project with a height of 100 feet or greater will cause winds that exceed 36 mph [16 m/s] for more than one hour during daylight hours during the year. The City only considers impacts to public spaces (on- and off-site) and off-site private spaces.

### 2.2 Lawson Criteria for Comfort

There are a number of wind speed criteria for outdoor wind comfort and safety. These criteria are based on the observation that pedestrians tolerate higher wind speeds for lesser periods of time. Thus, they provide a means of evaluating the acceptability of a wind environment to pedestrians. One of the most widely accepted sets of criteria was developed by Lawson (1990).

Lawson’s criteria allow planners to assess the usability, with respect to the wind environment, of different locations for various purposes, such as for long-duration activities (e.g., an outdoor café) or as ordinary walkways.

The categories for comfort are based on the larger of a mean or “gust-equivalent mean” wind speed ( $U_{GEM}$ ) that is exceeded 5% of the time (about eight hours per week on average). The gust-equivalent mean is the peak gust wind speed divided by 1.85. The wind speeds for each category are as follows:

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Comfort	
<4 m/s (<9 mph)	Pedestrian Sitting – generally for a long duration;
4-6 m/s (9–13 mph)	Pedestrian Standing – or sitting for a short time or exposure;
6-8 m/s (13–18 mph)	Pedestrian Walking;
8-10 m/s (18–22 mph)	Business Walking – objective walking from A to B, or for cycling;
>10 m/s (>22 mph)	Uncomfortable;

---

The perception of wind speeds within these comfort categories can vary by individual, so opinions regarding the local wind environment should be taken into account when evaluating the Lawson ratings.

### 2.3 Measurement Points

Wind speed measurements were made at a number of selected locations to evaluate pedestrian comfort and safety at the ground level around the project site. Mean (average) wind speed and turbulence intensity measurements were made at the model-scale equivalent of 1.5 to 2.1 m (5 to 7 ft) above the surface for 16 wind directions in 22.5° increments from 0° (north). Wind speeds were measured with proprietary, calibrated pressure probes.

The measurement points were chosen to determine the degree of pedestrian comfort or discomfort at locations where relatively severe conditions are frequently found, such as at building corners, near entrances and on adjacent sidewalks with heavy pedestrian traffic, in open plaza areas, and on amenity areas intended for recreational activity.

### 2.4 Wind Climate

To enable a quantitative assessment of the wind environment, the wind tunnel data were combined with wind frequency and direction information derived from data measured at the Oakland International Airport and adjusted to the site location. Appendix A provides a description and a graphical representation of the climate data. These data were combined statistically with the wind tunnel data to obtain cumulative probability distributions of wind speed for the full-scale site at each pedestrian measurement location. Data from only daylight hours (7:00 AM to 6:00 PM local) were used to obtain the probabilities of exceedance of the CEQA threshold, while data from all hours were used to obtain probabilities for evaluation against the Lawson criteria.

### 3. DISCUSSION OF RESULTS

#### 3.1 Summary

The assessments of pedestrian safety and comfort with respect to the CEQA Threshold of Significance (section 2.1), and the Lawson criteria (section 2.2), respectively, are presented in Figure 3, which contains color-coded markers indicating the measurement point on the site plan.

The primary conclusions of the study can be understood by reviewing Figure 3, with the following color-coded ratings in mind:

##### CEQA Threshold (border color of marker)

- Black border – wind speeds at the location *do not* exceed the threshold.
- Red border – wind speeds at the location exceed the threshold.

##### Wind Comfort (body color of marker)

- Red locations – measures to reduce wind speeds are generally recommended;<sup>3</sup>
- Orange and Yellow locations - measures to reduce wind speeds may be desirable based on intended use of the location;
- Green and Blue locations - measures to reduce wind speeds are not generally merited.

All measurements were initially made without landscaping in place in order to provide a worst-case assessment. The analysis was then rerun with two different landscaping options referred to as: (1) Landscape Option 1 + Canopy; and (2) Landscape Option 2 (Figures 2h, 3c, 2i and 3d), as the addition of landscaping features is likely to reduce the initially predicted wind speeds.

Again, Lawson’s criteria and the analysis are based on wind speeds that will occur 5% of the time. The criteria are based on experiences that suggest that if certain wind speeds are exceeded 5% of the time in outdoor areas then complaints are likely.

---

<sup>3</sup> The rating of “Uncomfortable” is the word of the author (Lawson) and may not apply directly to any particular project. High wind areas are certainly not unacceptable all the time, just on windier days. The word uncomfortable, in our understanding, refers to acceptability of the site by pedestrians for typical pedestrian use; i.e., on the windiest days, pedestrians will not find the areas “acceptable” for walking and will tend to avoid such areas if possible.



The perception of wind speeds within these comfort categories can vary by individual, so opinions regarding the local wind environment should be taken into account when evaluating the Lawson comfort ratings.

### 3.2 CEQA Threshold of Significance Evaluation (Ground-level Locations Only)

Exceedances of the CEQA threshold at public, ground-level spaces are discussed in this section.

#### 3.2.1 Configuration A (Existing)

No ground-level locations (all points 1-18) exceed the threshold of significance (Figure 3, Figure 4, Table 1).

#### 3.2.2 Configuration B (Existing-plus-Proposed)

Ground-level points 3, 7 and 15 exceed the threshold of significance (Figure 3b, Figure 4, Table 1a).

The remaining ground-level locations do not exceed the threshold. With the addition of the proposed structure, all three locations become sensitive to westerly winds. Points 3 and 7 are influenced by winds that are accelerated around the nearby building corner. Redirected downwash from the proposed tower may also contribute to wind speeds at all three of these locations.

#### 3.2.3 Configuration B (Existing-plus-Proposed) with Landscape Option 1 + Canopy

The addition of a canopy and trees (Figure 2h, Figure 3c) results in reduced wind speeds and hours of exceedance at points 3, 7 and 15, but these locations remain sensitive to westerly winds and still exceed the hazard criterion (Figure 3c, Figure 5, Table 2a).

#### 3.2.4 Configuration B (Existing-plus-Proposed) with Landscape Option 2

A change in the arrangement of trees on the north side of the structure (Figure 2i, Figure 3d) in Landscape Option 2 results in a notable reduction in wind speeds and a mean reduction of almost an hour in times of exceedance (Figure 3d, Figure 5, Table 2b). Wind speeds and times of exceedance at points 3 and 15 are reduced to below the hazard criterion, although point 7 still exceeds the criterion. This is not unexpected, as no wind reduction measures were tested near point 7. Point 7 is located in the loading accessway at the south end of the site, a location where few if any pedestrians are expected to travel and where similar reduction measures would be difficult to implement due to the limited size of the area and the necessity for vehicular access at

this location. For these reasons, the City has determined installation of landscaping to reduce wind speeds in this area is not feasible or necessary.

Per the condition of approval included below, **COA-WIND-1**, the project sponsor will be required to implement Landscape Option 2 to ensure the final landscape plans do not result in exceedances of the City's wind threshold at all points except point 7.

**COA-WIND-1: Landscaping shall be installed with the proposed project per Landscape Option 2 prior to issuance of certificate of occupancy.**

### *3.2.5 Configuration C (Cumulative-plus-Proposed)*

The addition of cumulative (future) structures alters the flow pattern near the north side of the proposed structure, resulting in exceedances, due to westerly winds, of the hazard criterion at point 2 (Figure 2, Figure 3, Figure 6, Table 3). Wind speeds at point 15 are reduced in this configuration and no longer exceed the hazard criterion. Wind speeds at points 3 and 7 remain relatively unchanged in the cumulative configuration and both still exceed the hazard criterion.

### *3.2.6 Configuration C (Cumulative-plus-Proposed) with Landscape Option 1 + Canopy*

The addition of trees and a canopy (Figure 2h, Figure 3f) causes a reduction in wind speeds on the north side of the proposed structure, resulting in reduced sensitivity to westerly winds at points 2 and 3 so that they no longer exceed the hazard criterion. Point 7 still exceeds the hazard criterion, but the time of exceedance is reduced by about 5 hours (Table 3a). This reduction may be due to increased resistance to wind flow, caused by the trees on the southeast of the proposed structure, through the passage on the south side of the proposed structure.

### *3.2.7 Configuration C (Cumulative-plus-Proposed) with Landscape Option 2*

Changing the arrangement of trees on the north side of the proposed structure (Figure 2i, Figure 3g) also results in a reduction in wind speeds, and times of exceedance, at several locations (Table 3b). The hazard criterion exceedances at points 2 and 3 are eliminated in this configuration, although the exceedance at point 7 remains. As above, it is expected that although no wind reduction measures were specifically assessed near point location 7, measures such as trees and/or a canopy, would reduce wind speeds below the threshold if implemented at this location.

### Wind Hazard Reduction Measures –Design and Landscaping Features

The simplest options to reduce wind speeds at ground level locations is to create windbreaks by the use of soft landscaping (dense shrubbery in planters, for example), or hard landscaping features such as porous architectural screens and/or partly enclosed shelters. Landscape Option 1

+ Canopy and Landscape Option 2 demonstrate the effectiveness of canopies and landscaping. An overview of the general effectiveness of measures often utilized are provided below to help inform the landscape design of the ground-level locations, terraces and other places that may exceed the recommended standards for wind comfort.

The type, height and spatial extent of a windbreak determine the size of the area that it will shelter. Windbreaks such as architectural screen or dense shrubbery that are about 20% porous (i.e., 80% closed) provide the largest regions of “good” protection, extending to about 10 heights downwind of the windbreak. In other words, a 20% porous windscreen that is 8 feet tall provides reasonable shelter up to about 80 feet downwind. Long, continuous windbreaks are preferred over short sections that may cause acceleration of the mean wind velocity between the gaps.

For a wall-type windbreak, the best protection is achieved when the wind blows perpendicular to the windbreak. The protected area moves and decreases as the wind direction changes from perpendicular. For this reason, windbreaks that wholly or partly surround targeted areas may be preferable as they can provide shelter over a range of directions. Short windbreaks lose their efficiency more rapidly when the wind direction deviates from perpendicular. Natural windbreaks (hedges and trees) have effects similar to artificial wind breaks of the same porosity and also tend to reduce wind acceleration around the corners of the windbreak.

### 3.3 Wind Comfort Evaluation

#### 3.3.1 Configuration A (Existing)

All measurement locations in the existing configuration (points 1-18) are located at ground-level and are rated Pedestrian Sitting to Pedestrian Standing. These ratings are consistent with a relatively mild wind climate. Measures to reduce wind speeds are not likely to be necessary.

#### 3.3.2 Configuration B (Existing-plus-Proposed) Ground Level Locations

With the exceptions of points 9 and 18, the wind climate at ground-level locations tends to deteriorate with the addition of the proposed structure (Figure 3b, Figure 4, Table 1). Locations rated Pedestrian Sitting (9) or Pedestrian Standing (5, 10-13 and 18) are expected to be comfortable for general pedestrian activities. If extended and/or seated activities, such as dining, will take place at or near these locations, architectural screens or dense shrubbery in planters could be used to reduce wind speeds to more suitable levels.

Points 1 and 4 on the north side of the proposed structure and points 6 and 8 on the south side are rated Pedestrian Walking. This rating indicates that these locations will, in general, be comfortable for strolling pedestrians.

A number of locations (2, 3 and 14-17) on the north side of the proposed structure are rated Business Walking, indicating that they will sometimes be perceived as windy, and may not be comfortable for seated or standing pedestrians.

Point 7, on the southwest corner of the proposed structure, is rated Uncomfortable and will sometimes be perceived as a windy location that is not suitable for pedestrians. As discussed in section 3.2.4, point 7 is located in the loading accessway at the south end of the site, a location where few if any pedestrians are expected to travel and where similar reduction measures would be difficult to implement due to the limited size of the area and the necessity for vehicular access at this location. For these reasons, the City has determined installation of landscaping to reduce wind speeds in this area is not feasible or necessary.

#### 3.3.3 Configuration B (Existing-plus-Proposed) Ground Level Locations with Landscape Option 1 + Canopy

In terms of wind comfort, the addition of the canopy and trees in Landscape Option 1 + Canopy has a minor effect on the ratings most locations. However, points 1,2 and 14 show improved comfort ratings in this configuration (Figure 3c, Figure 5).

### *3.3.4 Configuration B (Existing-plus-Proposed) Ground Level Locations with Landscape Option 2*

The arrangement of trees in Landscape Option 2 has roughly the same effect on wind comfort as Landscape Option 1 + Canopy, but also reduces the rating of point 3 from Business Walking to Pedestrian Walking (Figure 3d, Figure 5).

### *3.3.5 Configuration C (Cumulative-plus-Proposed)*

Wind comfort ratings in the Cumulative-plus-Proposed configuration are similar to those in the Existing-plus-Proposed configuration (Figure 3e, Figure 4). The comfort ratings of points 15 and 17 improved in comparison with the Existing-plus-Proposed configuration, while those at points 1 and 12 deteriorated.

### *3.3.6 Configuration C (Cumulative-plus-Proposed) Ground Level Locations with Landscape Option 1 + Canopy*

In comparison to the Cumulative-plus-Proposed configuration alone, the addition of trees and the canopy in this configuration improves comfort ratings at points 1, 2, 11, 12, and 14 (Figure 3e,f; Figure 6). The area to the north of the proposed structure becomes more suitable for strolling pedestrians in this configuration.

### *3.3.7 Configuration C (Cumulative-plus-Proposed) Ground Level Locations with Landscape Option 2*

The rearrangement of trees in this configuration results in improved comfort ratings at points 1, 2, 3, 11, 12, and 14 in comparison to the Cumulative-plus-Proposed configuration alone (Figure 3f, g; Figure 6). The effect of both interventions on wind comfort is roughly the same in the Cumulative-plus-Proposed configuration and with implementation of either wind speeds are reduced to levels acceptable for pedestrian walking or better at all but two points. Point 16 is acceptable for business walking and point 7 remains at an uncomfortable level. As discussed in section 3.2.4, point 7 is located in the loading accessway at the south end of the site, a location where few if any pedestrians are expected to travel and where similar reduction measures would be difficult to implement due to the limited size of the area and the necessity for vehicular access at this location. For these reasons, the City has determined installation of landscaping to reduce wind speeds in this area is not feasible or necessary.

## REFERENCES

- American Society of Civil Engineers (1999), *Wind Tunnel Studies of Buildings and Structures* (ASCE Manual of Practice Number 67).
- American Society of Civil Engineers (2010), *Minimum Design Loads for Buildings and Other Structures* (ASCE 7-10).
- American Society of Civil Engineers (2012), *Wind Tunnel Testing for Buildings and Other Structures* (ASCE 49-12).
- Lawson, T.V. (1990), “The Determination of the Wind Environment of a Building Complex before Construction,” Department of Aerospace Engineering, University of Bristol, Report Number TVL 9025.

## **FIGURES**





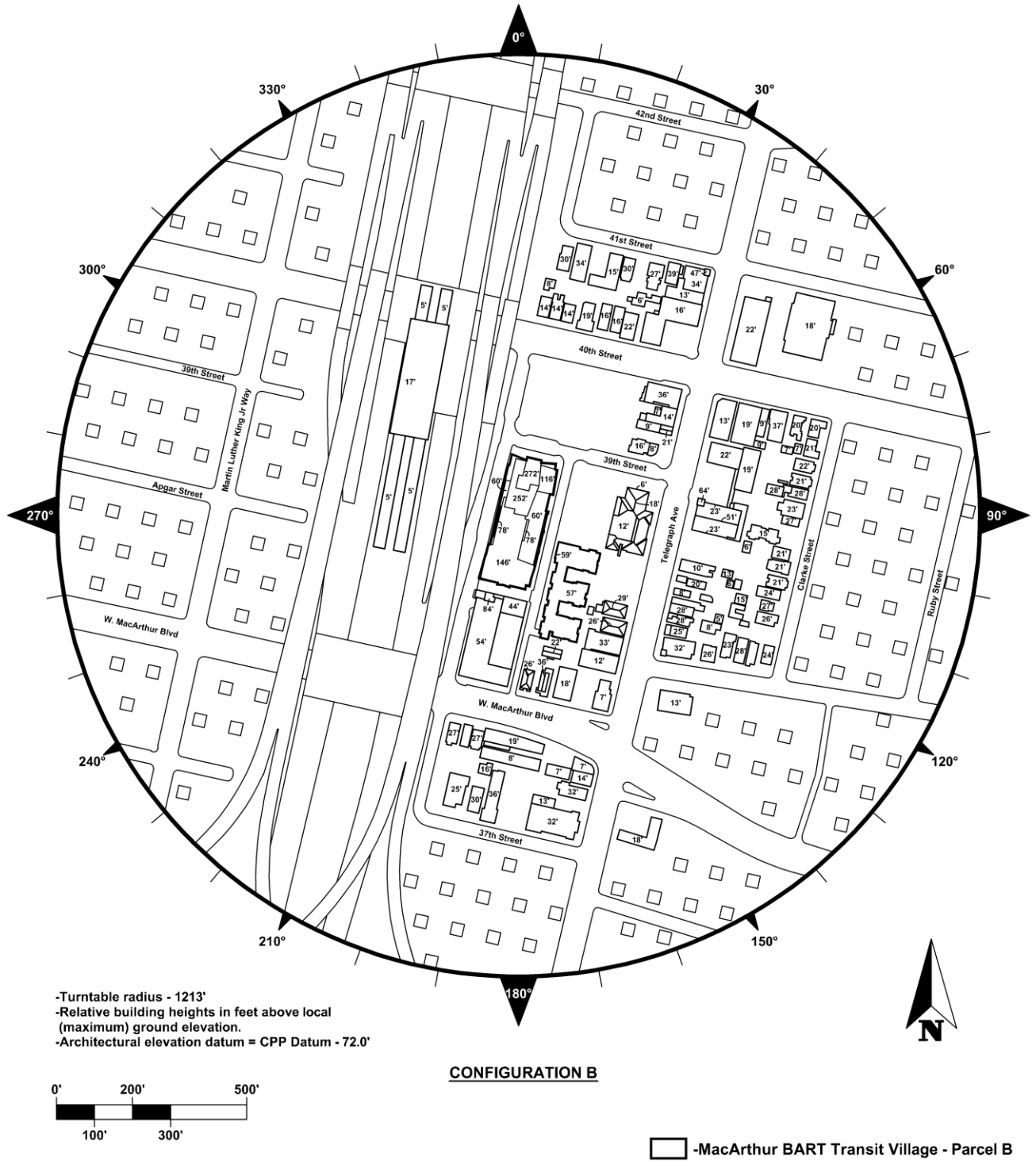


Figure 1b. Plan view of turntable – Configuration B (Existing-plus-Proposed).

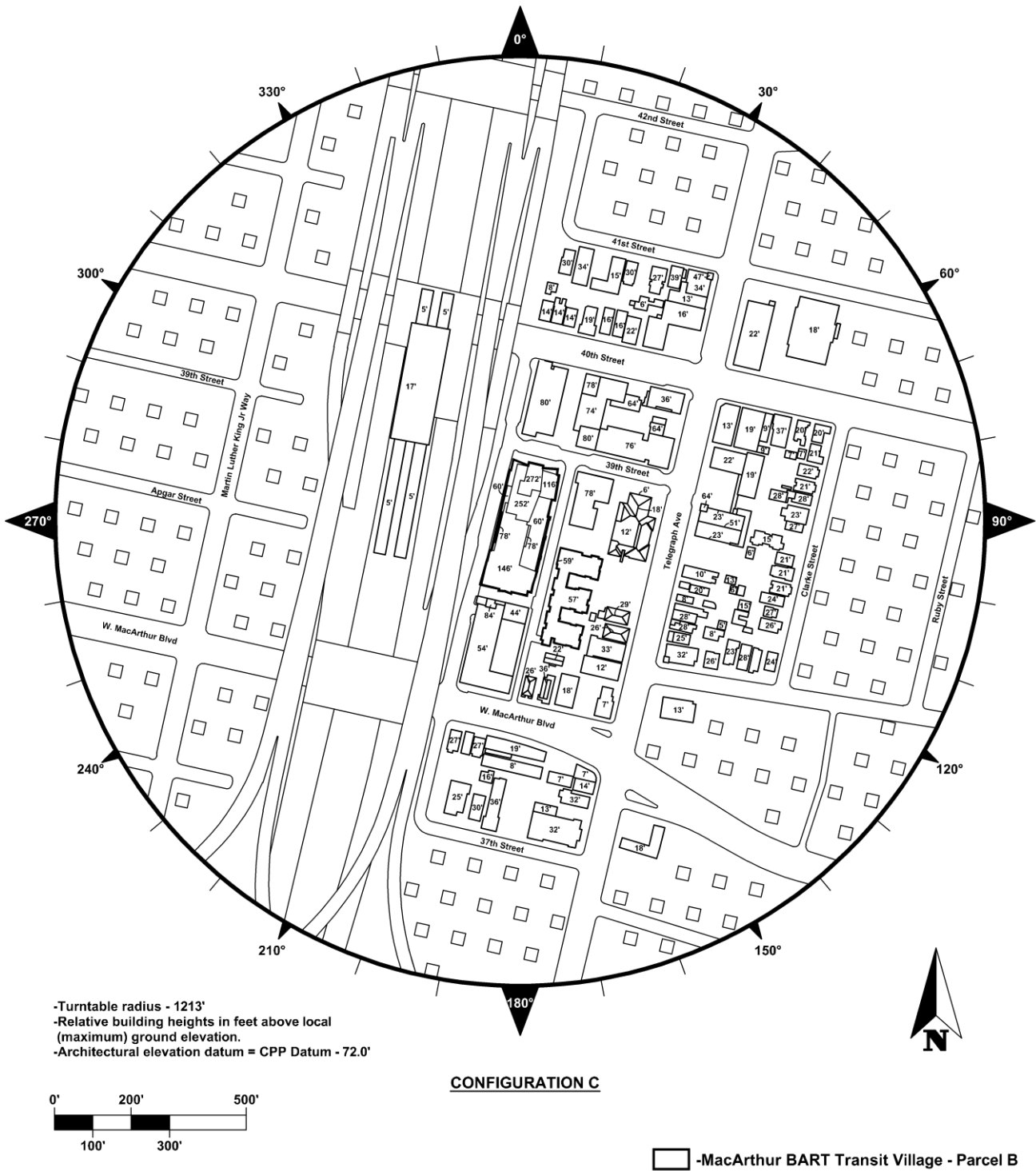
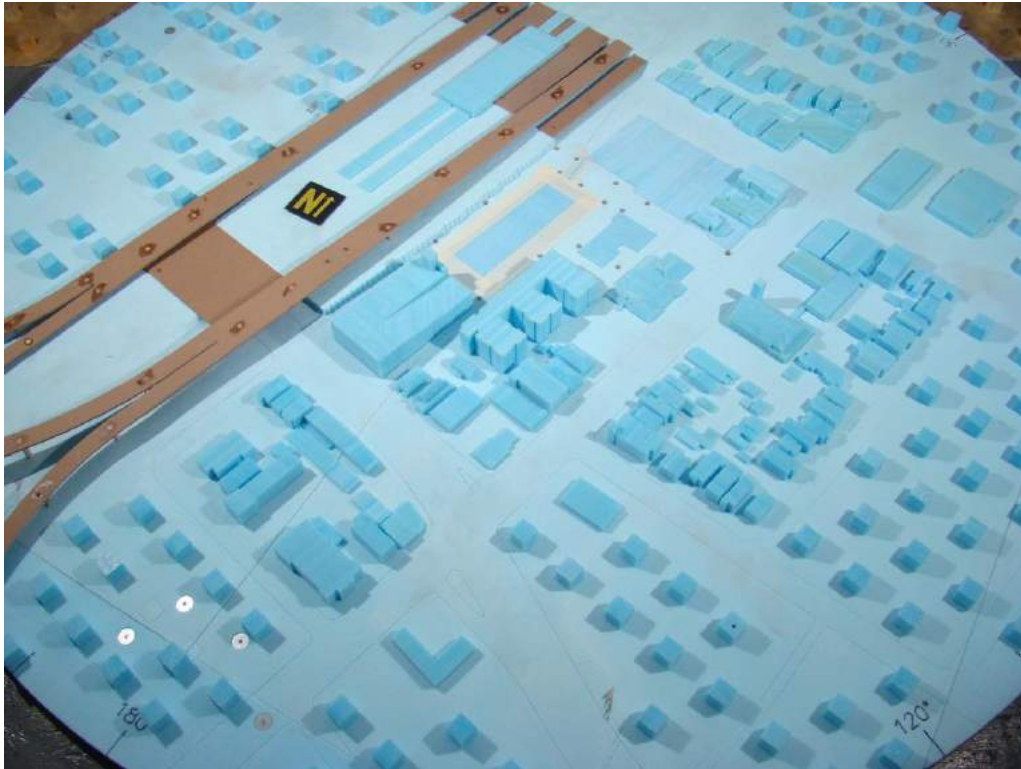


Figure 1c. Plan view of turntable – Configuration C (Cumulative).



Figure 2. Photographs of the completed model (Configuration B) in the wind tunnel: (a) View from the southeast, simulating northwesterly wind; (b) View from the north-northwest, simulating south-southeasterly wind. Note spires and trip at entrance to test section, and roughness elements on approach fetch to develop a turbulent boundary-layer flow.





c)



d)

Figure 2. Photographs of the completed model. Overhead views of the completed model in the wind tunnel: (c) Configuration A (Existing); (d) Configuration B (Existing-plus-Proposed).

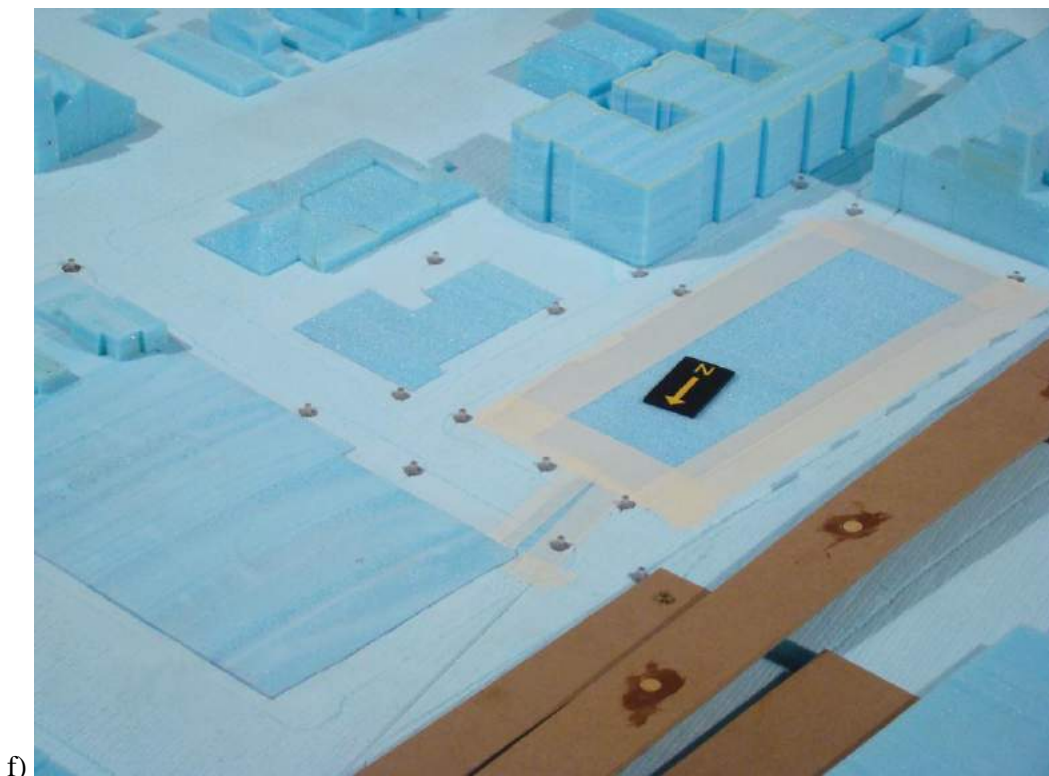
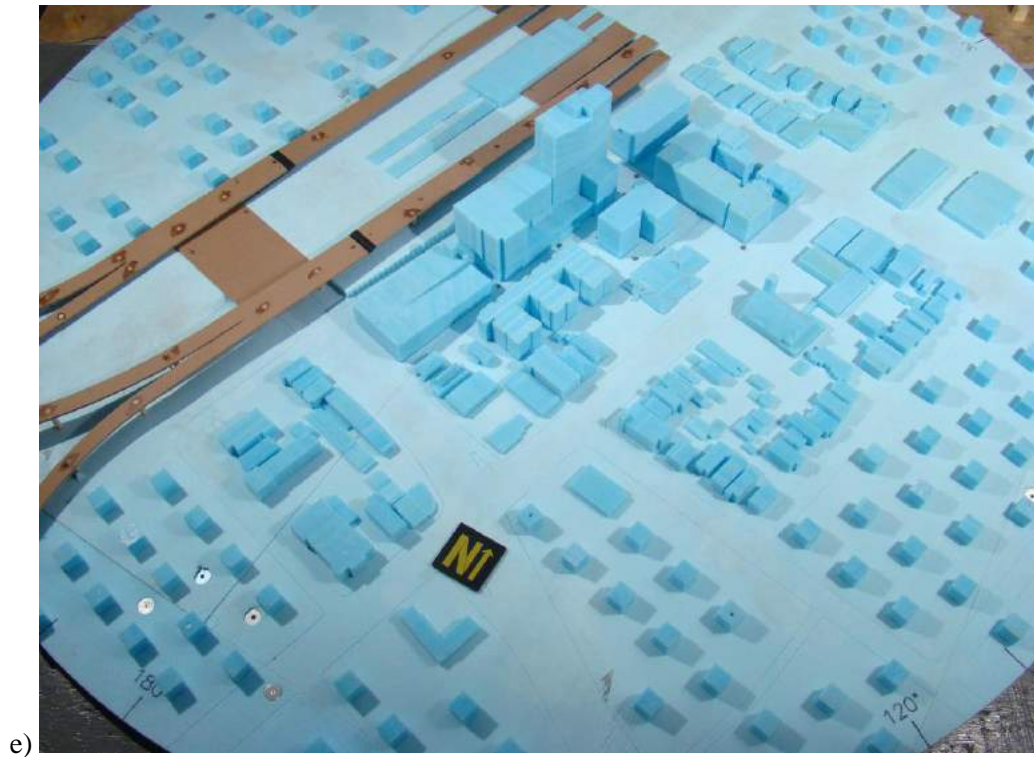


Figure 2. Photographs of the completed model in the wind tunnel: (e) Overhead view of Configuration C (Cumulative-plus-Proposed); (f) Close-up view of Configuration A (Existing).





g)



h)

Figure 2. Photographs of the completed model in the wind tunnel: (g) Close-up view of proposed structure; (h) Close-up view of proposed structure with Landscape Option 1 + Canopy.



i)

Figure 2. Photographs of the completed model in the wind tunnel: (i) Close-up view of proposed structure with Landscape Option 2.

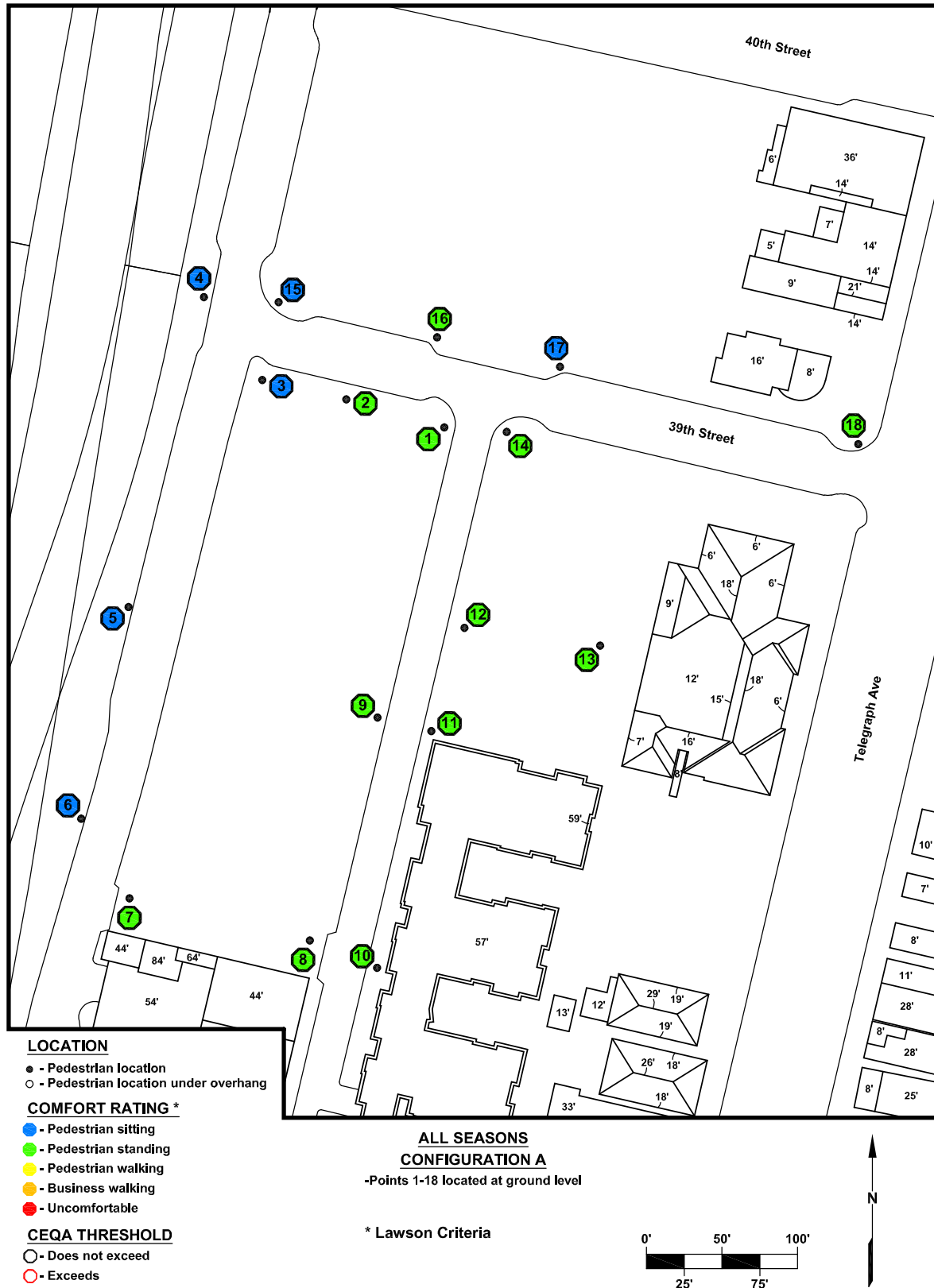


Figure 3a. Pedestrian wind speed measurement points with ratings – Configuration A (Existing).



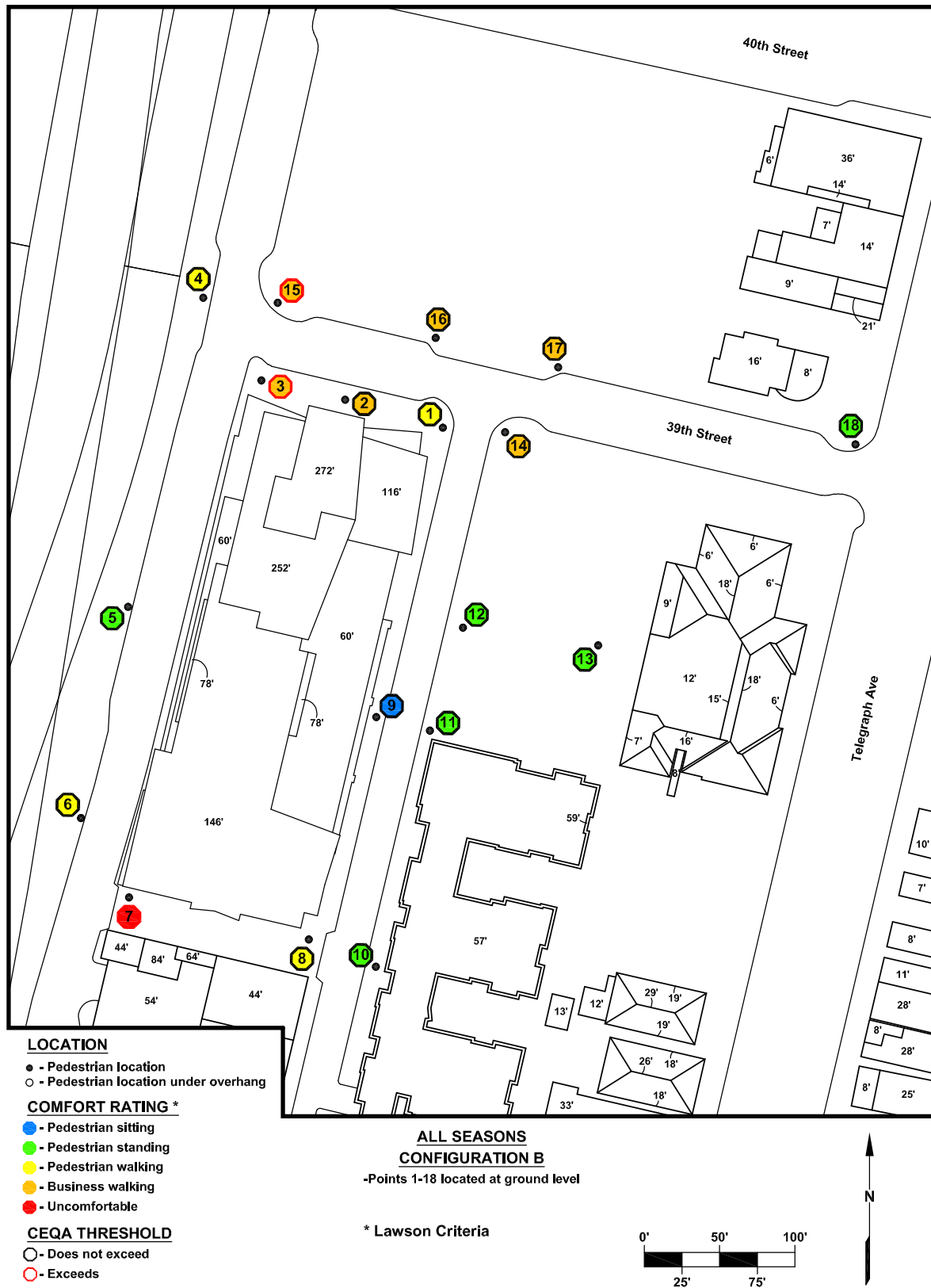


Figure 3b. Pedestrian wind speed measurement points with ratings – Configuration B (Existing-plus-Proposed).

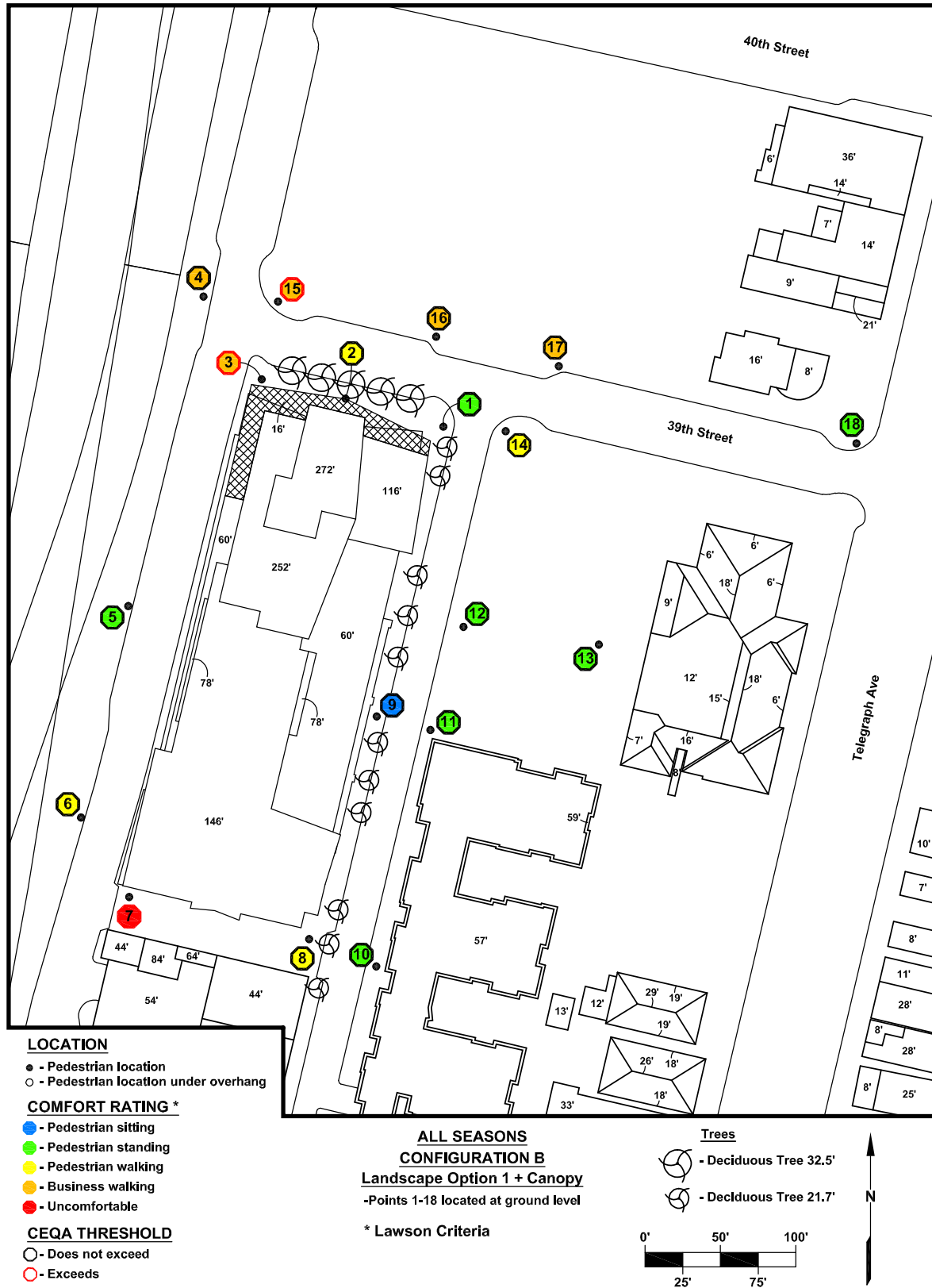


Figure 3c. Pedestrian wind speed measurement points with ratings – Configuration B (Existing-plus-Proposed) with Landscape Option 1 + Canopy.

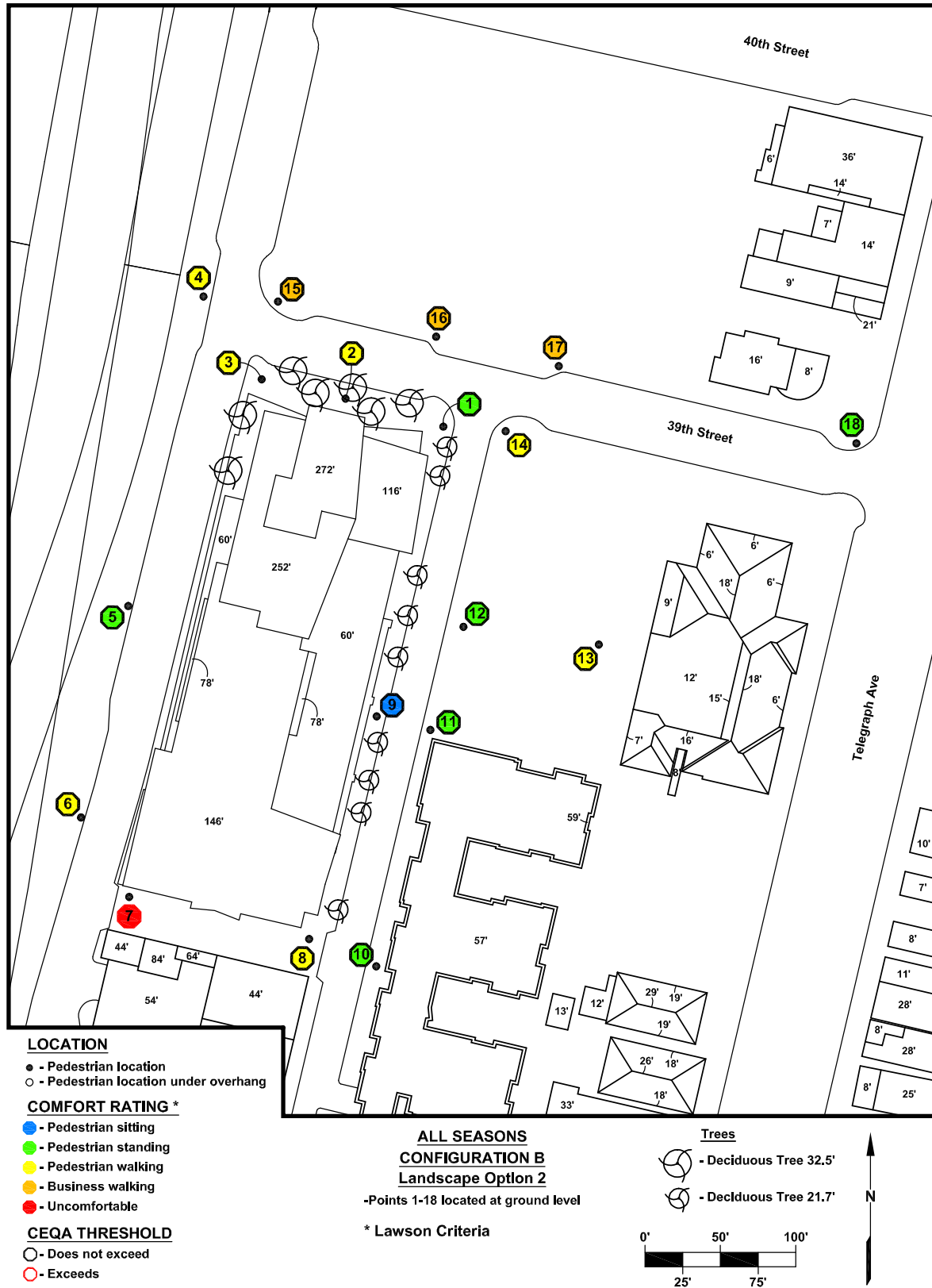


Figure 3d. Pedestrian wind speed measurement points with ratings Configuration B (Existing-plus-Proposed) with Landscape Option 2.

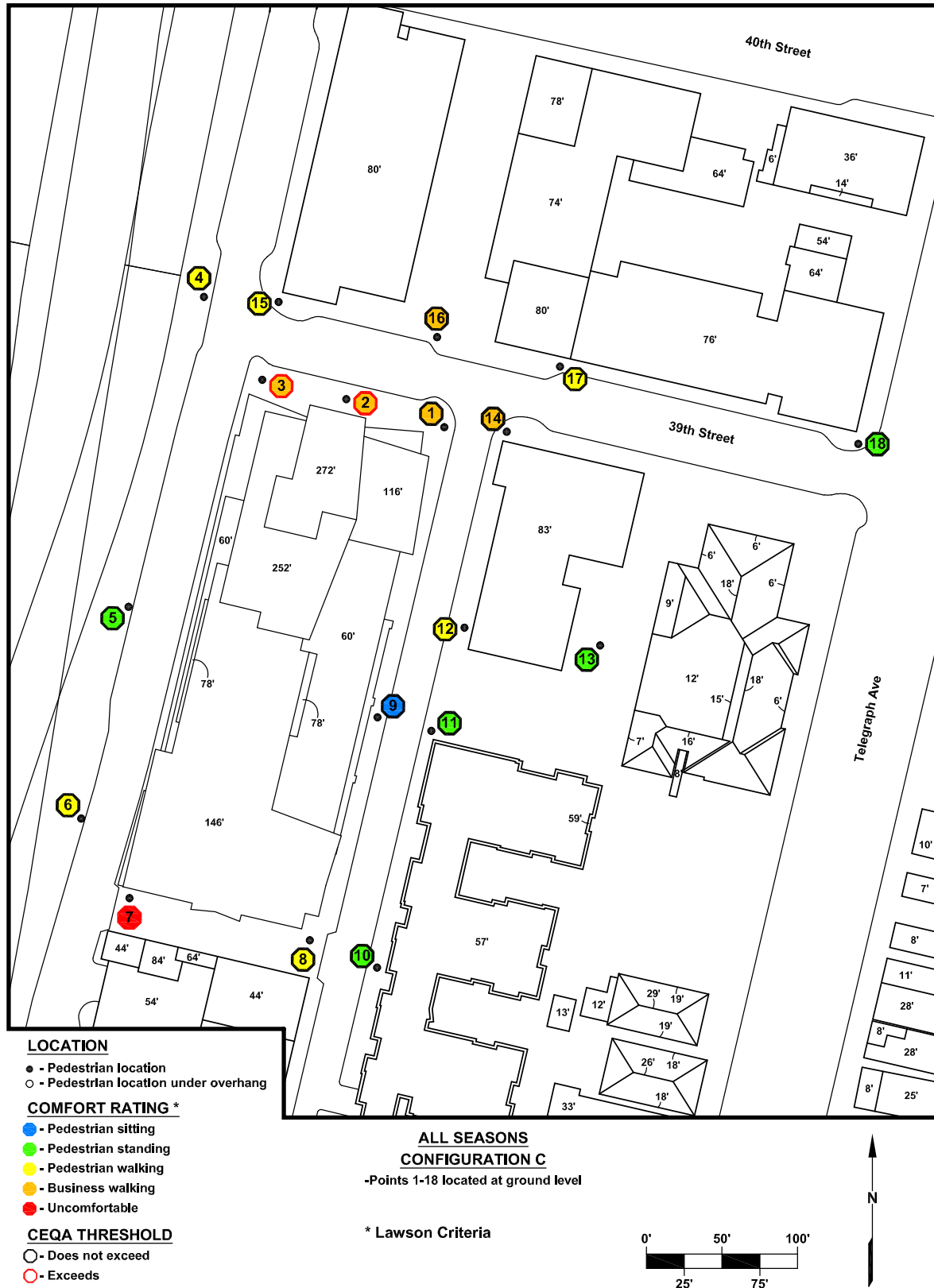


Figure 3e. Pedestrian wind speed measurement points with ratings – Configuration C (Cumulative-plus-Proposed).

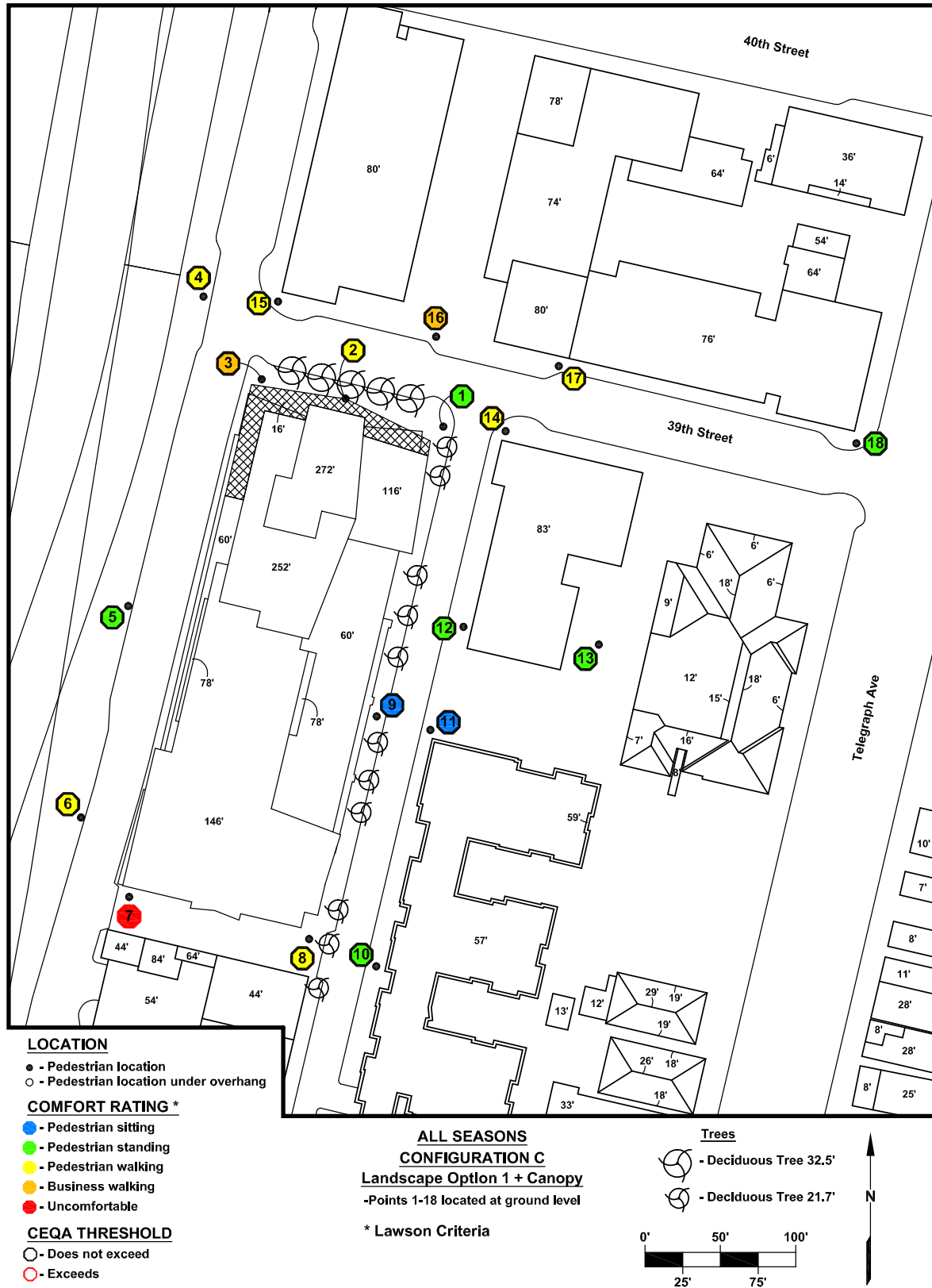


Figure 3f. Pedestrian wind speed measurement points with ratings – Configuration C (Cumulative-plus-Proposed) with Landscape Option 1 + Canopy.

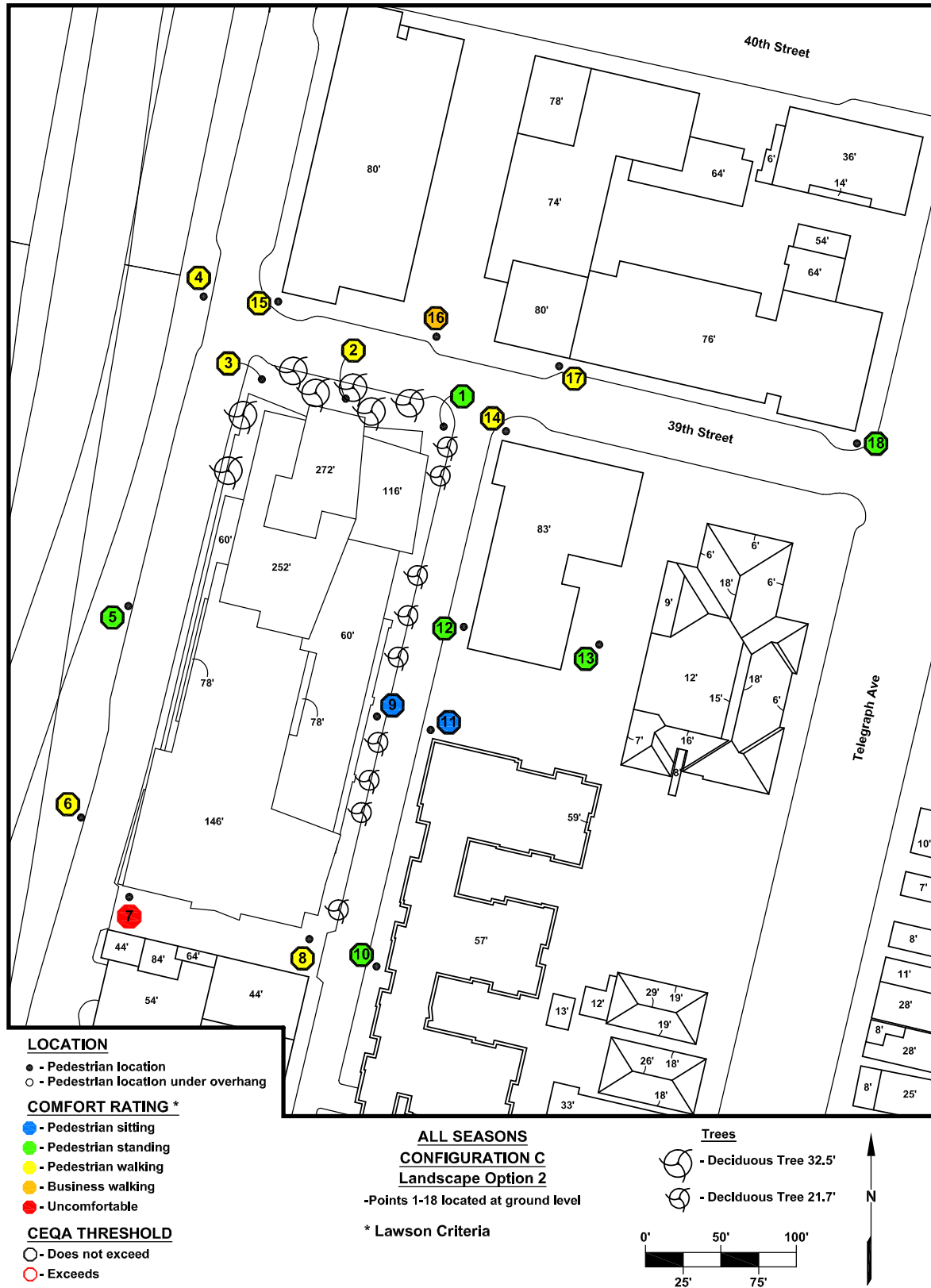


Figure 3g. Pedestrian wind speed measurement points with ratings at ground level locations – Configuration C (Cumulative-plus-Proposed) with Landscape Option 2.

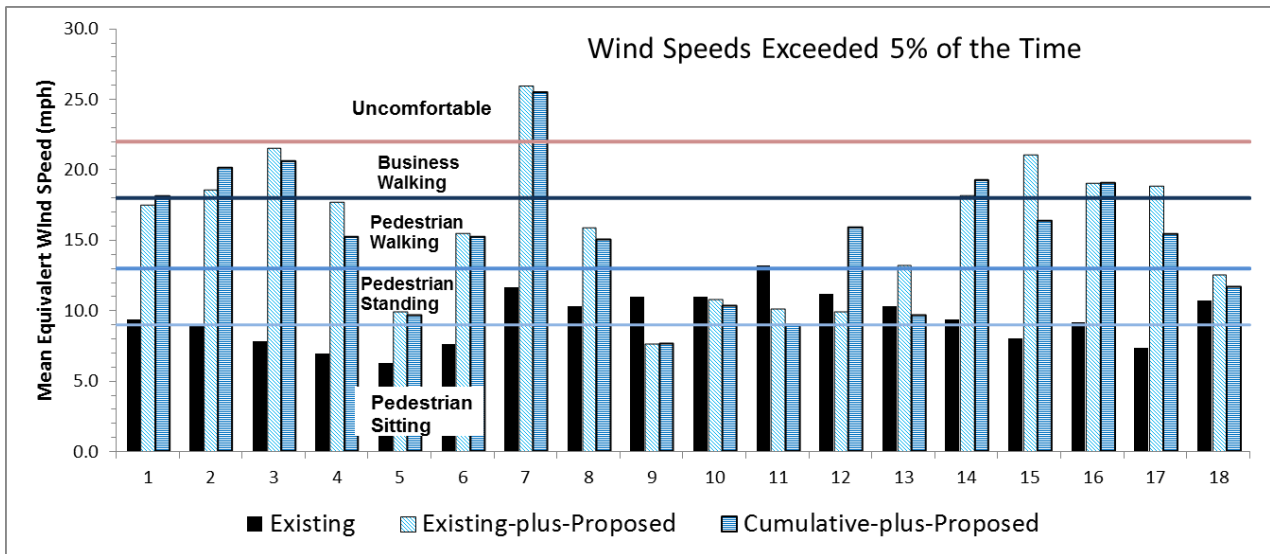
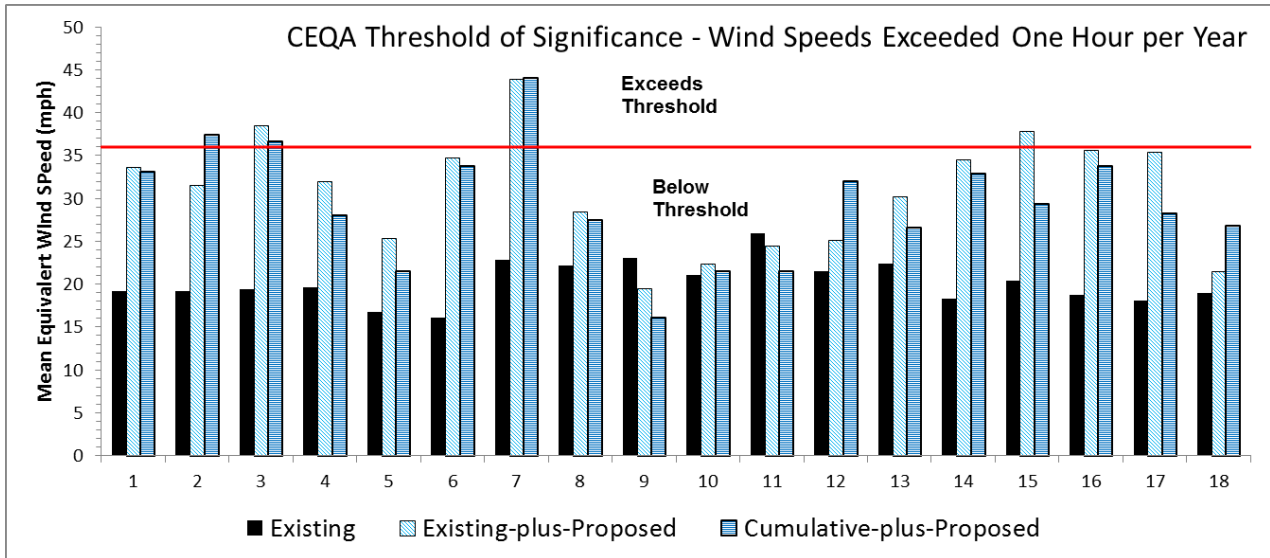


Figure 4. Comparison of equivalent mean wind speeds at ground level locations for the Existing, Existing-plus-Proposed and Cumulative-plus-Proposed configurations relative to the CEQA threshold (top) and Lawson criteria (bottom).



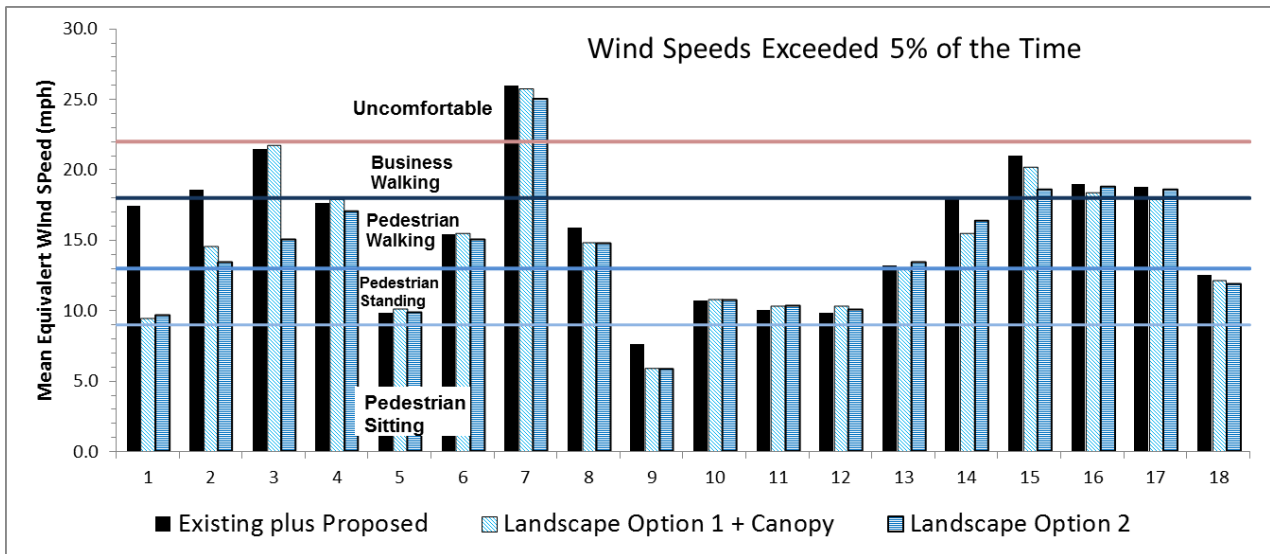
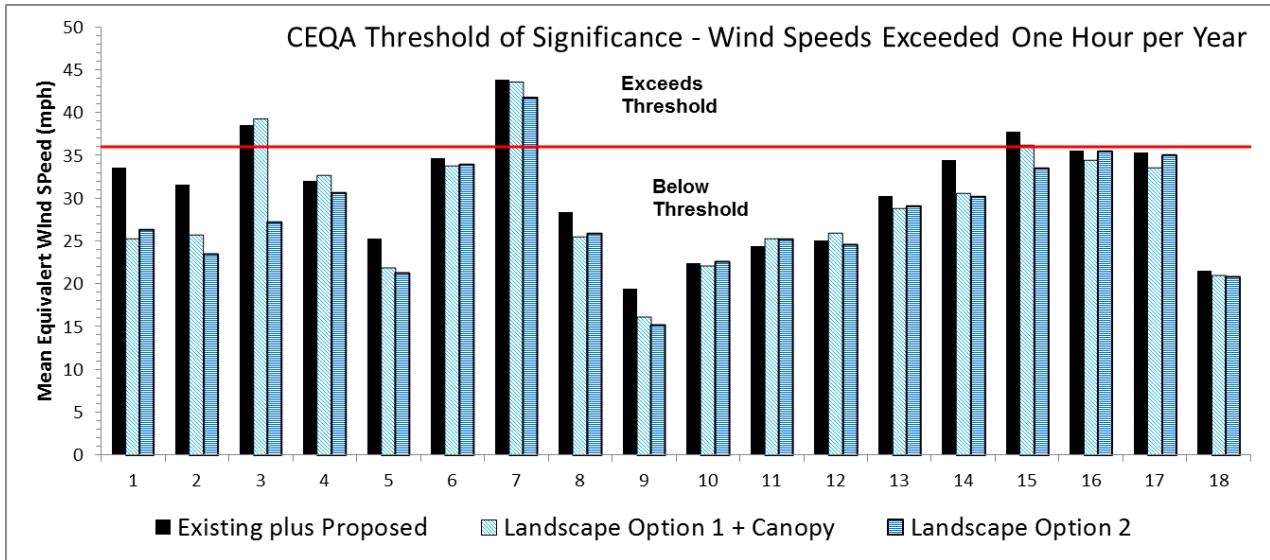


Figure 5. Configuration B (Existing-plus-Proposed). Comparison of the effects of Landscape Option 1 + Canopy and Landscape Option 2 on equivalent mean wind speeds at ground level locations relative to CEQA threshold (top) and Lawson criteria (bottom).



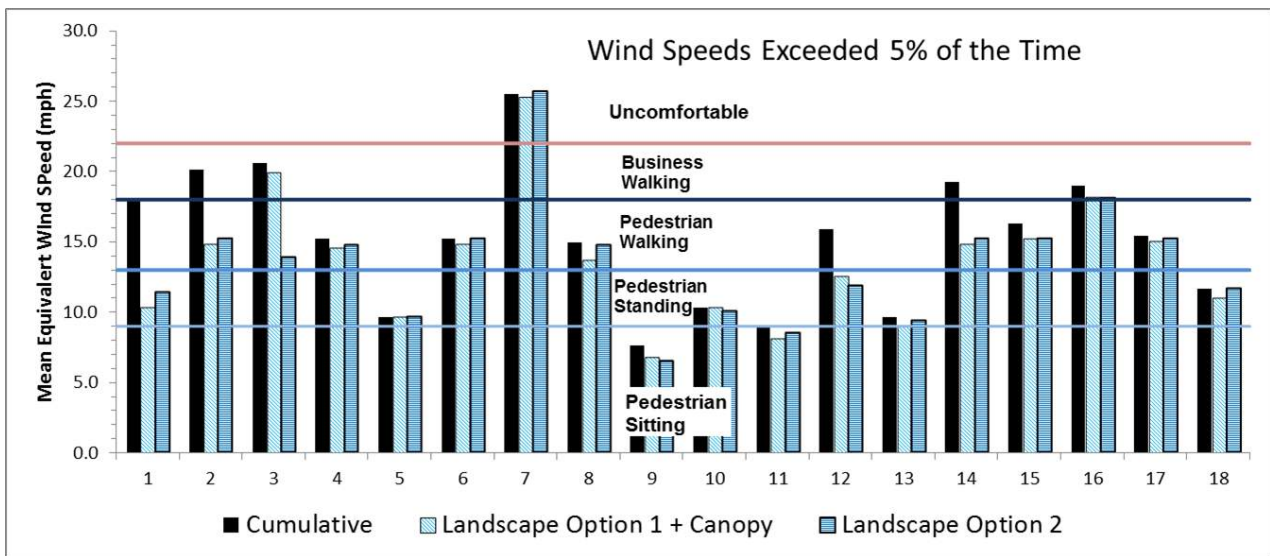
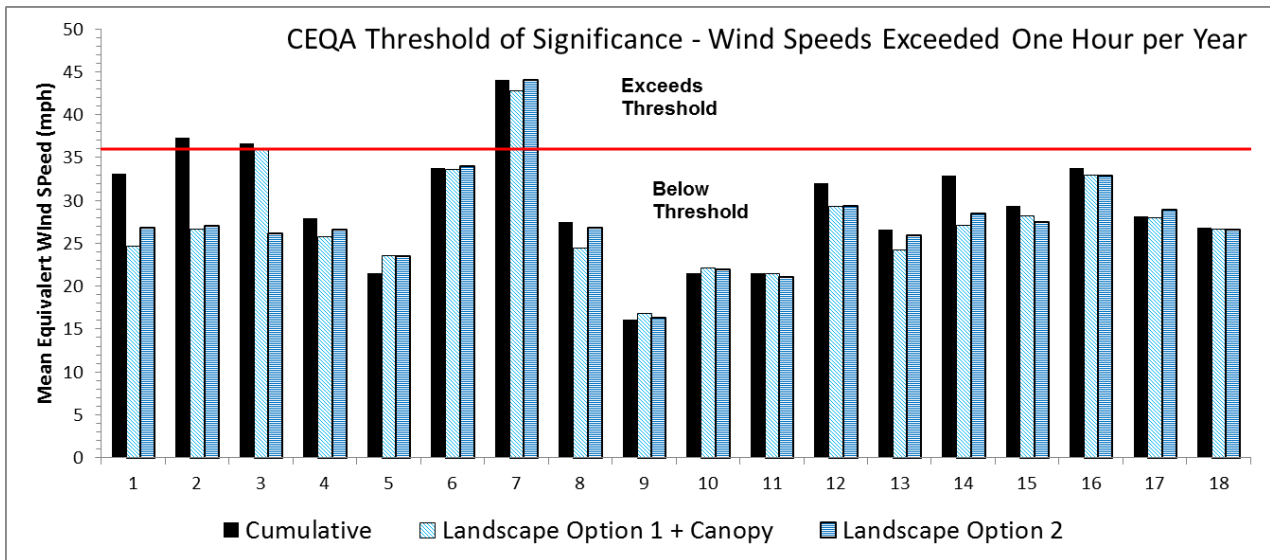


Figure 6. Configuration C (Cumulative-plus-Proposed). Comparison of the effects of Landscape Option 1 + Canopy and Landscape Option 2 on equivalent mean wind speeds at ground level locations relative to CEQA threshold (top) and Lawson criteria (bottom).

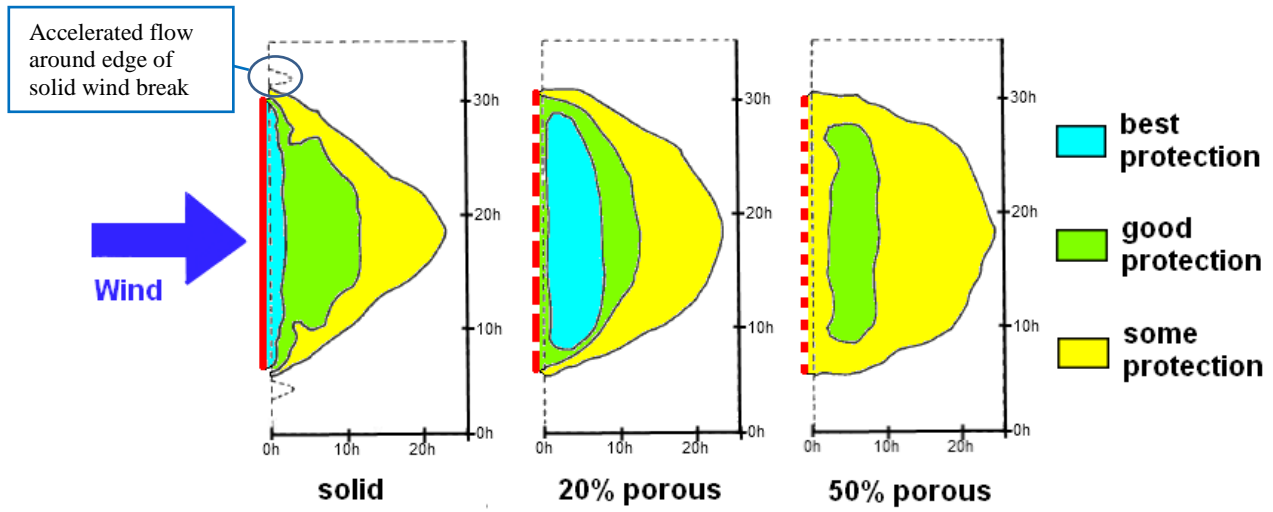


Figure 7. Plan view of sheltered area downwind of a vertical wind break (adapted from Gandemer, 1981).



Figure 8. Aerial view of Landscape Option 1 + Canopy (top) and Landscape Option 2 (bottom).

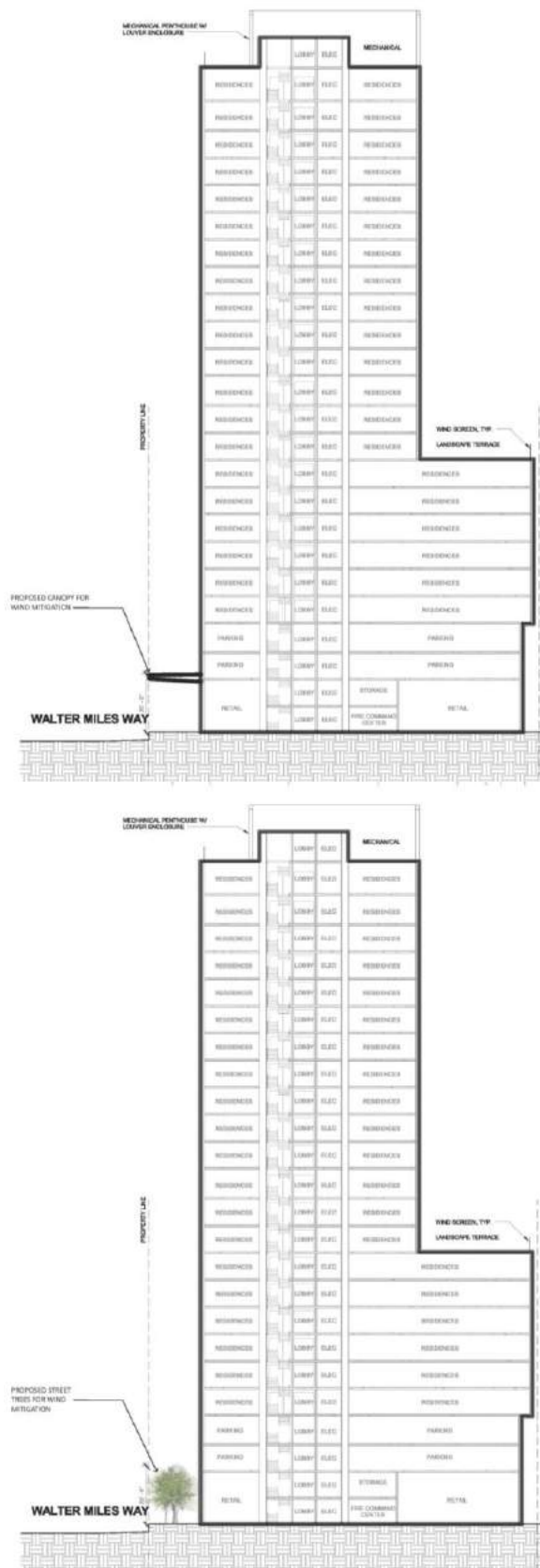


Figure 9. Section view from south of building showing Landscape Option 1 + Canopy (top) and Landscape Option 2 (bottom).

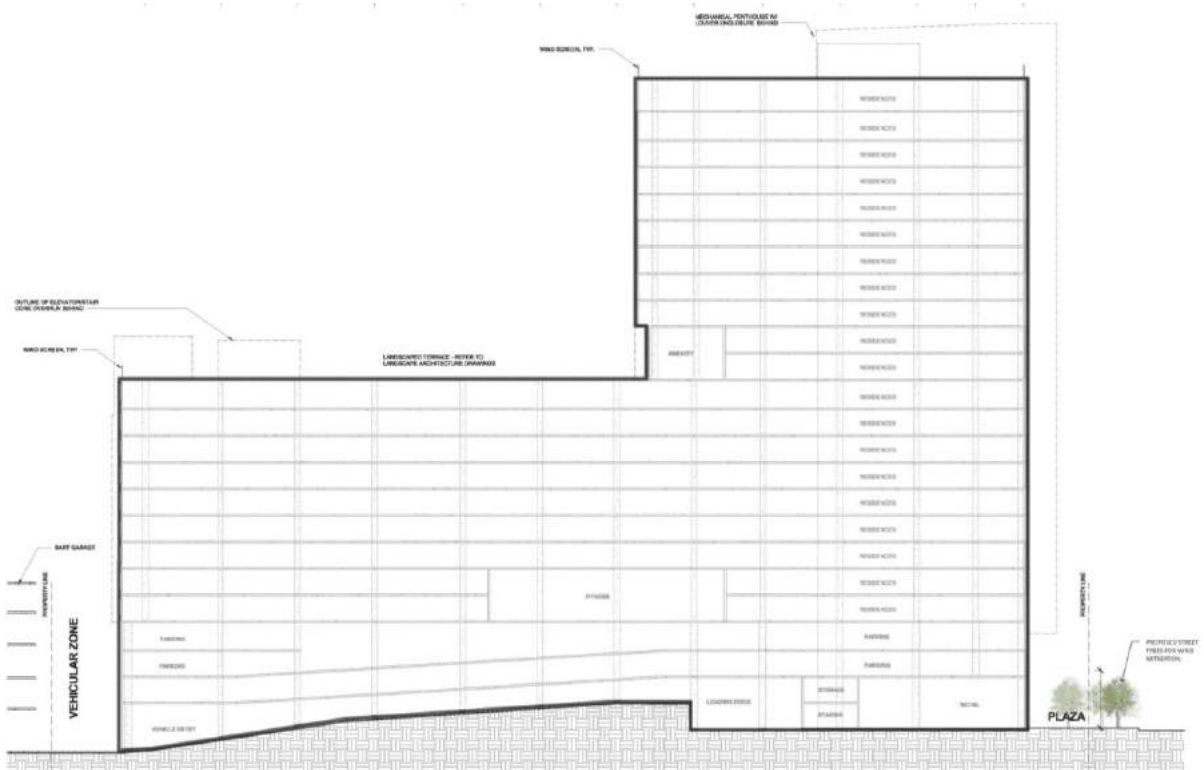
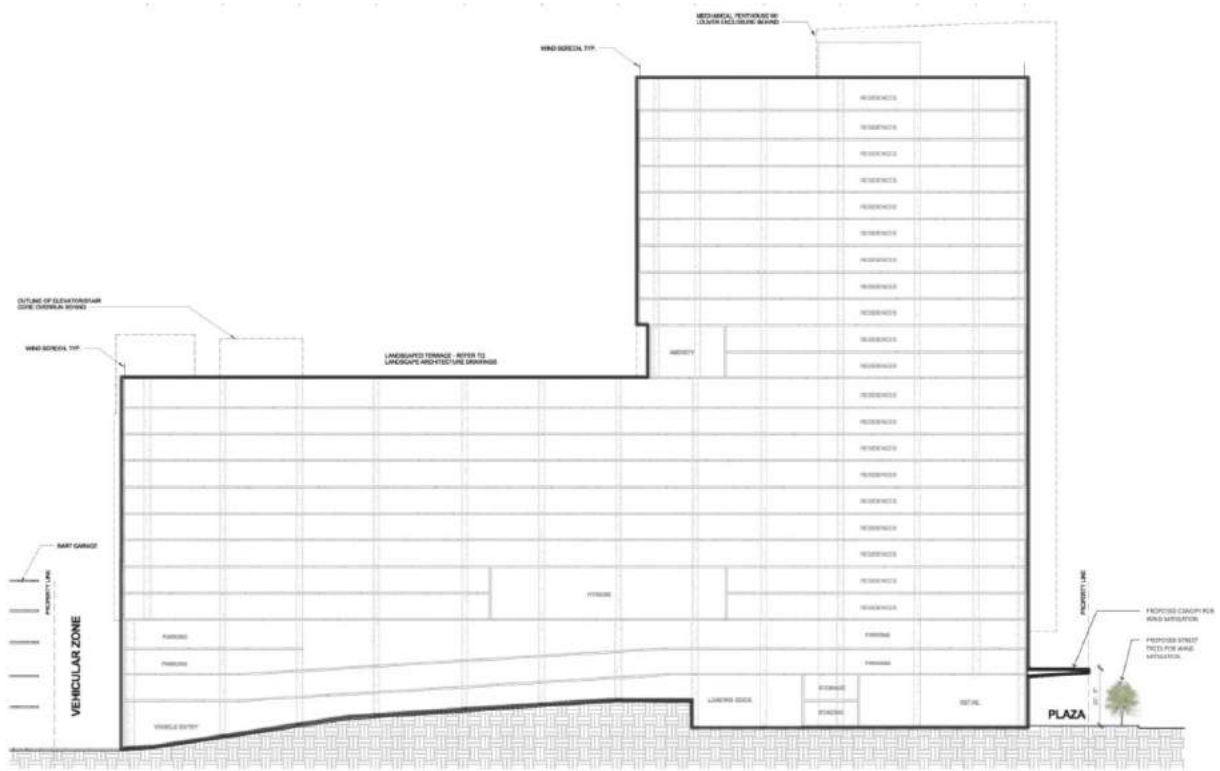


Figure 10. Section view from west of building showing Landscape Option 1 + Canopy (top) and Landscape Option 2 (bottom).

**Table 1a. One hour winds speeds and hours of exceedance of the CEQA criterion for the Existing and Existing-plus-Proposed configurations.**

Test Location	Hazard Criterion (mph)	Existing Structures			Existing-plus-Proposed Project			Change in Hazard Hours with Proposed Project in Place
		Equivalent Wind Speed Occuring 1hr/yr (mph)	Hours/year Wind Hazard Criterion Exceeded	Exceeds Criterion?	Equivalent Wind Speed Occuring 1hr/yr	Hours/year Wind Hazard Criterion Exceeded	Exceeds Criterion?	
1	36	19	0.0		34	0.4		+0.4
2	36	19	0.0		32	0.1		+0.1
3	36	19	0.0		38	2.9	*	+2.9
4	36	20	0.0		32	0.1		+0.1
5	36	17	0.0		25	0.0		0.0
6	36	16	0.0		35	0.5		+0.5
7	36	23	0.0		44	23.2	*	+23.2
8	36	22	0.0		28	0.0		0.0
9	36	23	0.0		19	0.0		0.0
10	36	21	0.0		22	0.0		0.0
11	36	26	0.0		24	0.0		0.0
12	36	21	0.0		25	0.0		0.0
13	36	22	0.0		30	0.2		+0.2
14	36	18	0.0		34	0.6		+0.6
15	36	20	0.0		38	2.3	*	+2.3
16	36	19	0.0		36	0.8		+0.8
17	36	18	0.0		35	0.7		+0.7
18	36	19	0.0		21	0.0		0.0
<b>Averages</b>		<b>20</b>	<b>0.00</b>		<b>31</b>	<b>1.76</b>		<b>+1.8</b>
<b>No. of Exceedances</b>		<b>0</b>			<b>3</b>			

**Table 1b. One hour winds speeds and hours of exceedance of the CEQA criterion for the Existing-plus-Proposed and Cumulative-plus-Proposed configurations.**

Test Location	Hazard Criterion (mph)	Existing-plus-Proposed Project			Cumulative-plus-Proposed			Change in Hazard Hours with Cumulative Structures in Place
		Equivalent Wind Speed Occuring 1hr/yr	Hours/year Wind Hazard Criterion Exceeded	Exceeds Criterion?	Equivalent Wind Speed Occuring 1hr/yr	Hours/year Wind Hazard Criterion Exceeded	Exceeds Criterion?	
1	36	34	0.4		33	0.2		-0.2
2	36	32	0.1		37	1.8	*	+1.8
3	36	38	2.9	*	37	1.3	*	-1.6
4	36	32	0.1		28	0.0		-0.1
5	36	25	0.0		21	0.0		0
6	36	35	0.5		34	0.4		-0.1
7	36	44	23.2	*	44	21.8	*	-1.4
8	36	28	0.0		28	0.0		0
9	36	19	0.0		16	0.0		0
10	36	22	0.0		21	0.0		0
11	36	24	0.0		21	0.0		0
12	36	25	0.0		32	0.3		+0.3
13	36	30	0.2		27	0.0		-0.2
14	36	34	0.6		33	0.2		-0.4
15	36	38	2.3	*	29	0.0		-2.3
16	36	36	0.8		34	0.3		-0.5
17	36	35	0.7		28	0.0		-0.7
18	36	21	0.0		27	0.0		0
<b>Averages</b>		<b>31</b>	<b>1.76</b>		<b>29</b>	<b>1.46</b>		<b>-0.3</b>
<b>No. of Exceedances</b>		<b>3</b>			<b>3</b>			

**Table 2a. One hour winds speeds and hours of exceedance for the Existing-plus-Proposed configuration and the same configuration with Landscape Option 1 + Canopy in place.**

Test Location	Hazard Criterion (mph)	Existing-plus-Proposed Project			Landscape Option 1 + Canopy			Change in Hazard Hours with Wind Intervention 1 in Place
		Equivalent Wind Speed Occuring 1hr/yr (mph)	Hours/year Wind Hazard Criterion Exceeded	Exceeds Criterion?	Equivalent Wind Speed Occuring 1hr/yr	Hours/year Wind Hazard Criterion Exceeded	Exceeds Criterion?	
1	36	34	0.4		25	0.0		-0.4
2	36	32	0.1		26	0.0		-0.1
3	36	38	2.9	*	39	4.0	*	+1.1
4	36	32	0.1		33	0.2		+0.1
5	36	25	0.0		22	0.0		0.0
6	36	35	0.5		34	0.4		-0.1
7	36	44	23.2	*	44	21.4	*	-1.8
8	36	28	0.0		26	0.0		0.0
9	36	19	0.0		16	0.0		0.0
10	36	22	0.0		22	0.0		0.0
11	36	24	0.0		25	0.0		0.0
12	36	25	0.0		26	0.0		0.0
13	36	30	0.2		29	0.1		-0.1
14	36	34	0.6		31	0.1		-0.5
15	36	38	2.3	*	36	1.1	*	-1.2
16	36	36	0.8		34	0.4		-0.4
17	36	35	0.7		34	0.3		-0.4
18	36	21	0.0		21	0.0		0.0
<b>Averages</b>		<b>31</b>	<b>1.76</b>		<b>29</b>	<b>1.55</b>		<b>-0.2</b>
<b>No. of Exceedances</b>		<b>3</b>			<b>3</b>			

**Table 2b. One hour winds speeds and hours of exceedance for the Existing-plus-Proposed Configuration and the same configuration with Landscape Option 2 in place.**

Test Location	Hazard Criterion (mph)	Existing-plus-Proposed Project			Landscape Option 2			Change in Hazard Hours with Wind Intervention 2 in place
		Equivalent Wind Speed Occuring 1hr/yr	Hours/year Wind Hazard Criterion Exceeded	Exceeds Criterion?	Equivalent Wind Speed Occuring 1hr/yr	Hours/year Wind Hazard Criterion Exceeded	Exceeds Criterion?	
1	36	34	0.4		26	0.0		-0.4
2	36	32	0.1		23	0.0		-0.1
3	36	38	2.9	*	27	0.0		-2.9
4	36	32	0.1		31	0.0		-0.1
5	36	25	0.0		21	0.0		0
6	36	35	0.5		34	0.4		-0.1
7	36	44	23.2	*	42	13.1	*	-10.2
8	36	28	0.0		26	0.0		0
9	36	19	0.0		15	0.0		0
10	36	22	0.0		23	0.0		0
11	36	24	0.0		25	0.0		0
12	36	25	0.0		25	0.0		0
13	36	30	0.2		29	0.1		-0.1
14	36	34	0.6		30	0.1		-0.5
15	36	38	2.3	*	34	0.3		-2.0
16	36	36	0.8		36	0.8		0
17	36	35	0.7		35	0.6		-0.1
18	36	21	0.0		21	0.0		0
<b>Averages</b>		<b>31</b>	<b>1.76</b>		<b>28</b>	<b>0.85</b>		<b>-0.9</b>
<b>No. of Exceedances</b>		<b>3</b>			<b>1</b>			

**Table 3a. One hour winds speeds and hours of exceedance for the Cumulative-plus-Proposed Configuration and the same configuration with Landscape Option 1 + Canopy in place.**

Test Location	Hazard Criterion (mph)	Cumulative-plus-Proposed			Landscape Option 1+ Canopy			Change in Hazard Hours with Wind Intervention 1 in Place
		Equivalent Wind Speed Occuring 1hr/yr (mph)	Hours/year Wind Hazard Criterion Exceeded	Exceeds Criterion?	Equivalent Wind Speed Occuring 1hr/yr	Hours/year Wind Hazard Criterion Exceeded	Exceeds Criterion?	
1	36	33	0.2		25	0.0		-0.2
2	36	37	1.8	*	27	0.0		-1.8
3	36	37	1.3	*	36	1.0		-0.4
4	36	28	0.0		26	0.0		0.0
5	36	21	0.0		23	0.0		0.0
6	36	34	0.4		34	0.4		-0.1
7	36	44	21.8	*	43	16.3	*	-5.5
8	36	28	0.0		24	0.0		0.0
9	36	16	0.0		17	0.0		0.0
10	36	21	0.0		22	0.0		0.0
11	36	21	0.0		21	0.0		0.0
12	36	32	0.3		29	0.1		-0.2
13	36	27	0.0		24	0.0		0.0
14	36	33	0.2		27	0.0		-0.2
15	36	29	0.0		28	0.0		0.0
16	36	34	0.3		33	0.2		-0.1
17	36	28	0.0		28	0.0		0.0
18	36	27	0.0		27	0.0		0.0
<b>Averages</b>		<b>29</b>	<b>1.46</b>		<b>27</b>	<b>0.99</b>		<b>-0.5</b>
<b>No. of Exceedances</b>		<b>3</b>			<b>1</b>			

**Table 3b. One hour winds speeds and hours of exceedance for the Cumulative-plus-Proposed Configuration and the same configuration with Landscape Option 2 in place.**

Test Location	Hazard Criterion (mph)	Cumulative-plus-Proposed			Landscape Option 2			Change in Hazard Hours with Wind Intervention 2 in place
		Equivalent Wind Speed Occuring 1hr/yr	Hours/year Wind Hazard Criterion Exceeded	Exceeds Criterion?	Equivalent Wind Speed Occuring 1hr/yr	Hours/year Wind Hazard Criterion Exceeded	Exceeds Criterion?	
1	36	33	0.2		27	0.0		-0.2
2	36	37	1.8	*	27	0.0		-1.8
3	36	37	1.3	*	26	0.0		-1.3
4	36	28	0.0		27	0.0		0
5	36	21	0.0		23	0.0		0
6	36	34	0.4		34	0.4		0
7	36	44	21.8	*	44	23.0	*	+1.1
8	36	28	0.0		27	0.0		0
9	36	16	0.0		16	0.0		0
10	36	21	0.0		22	0.0		0
11	36	21	0.0		21	0.0		0
12	36	32	0.3		29	0.1		-0.2
13	36	27	0.0		26	0.0		0
14	36	33	0.2		28	0.0		-0.2
15	36	29	0.0		28	0.0		0
16	36	34	0.3		33	0.2		-0.1
17	36	28	0.0		29	0.0		0
18	36	27	0.0		27	0.0		0
<b>Averages</b>		<b>29</b>	<b>1.46</b>		<b>27</b>	<b>1.31</b>		<b>-0.1</b>
<b>No. of Exceedances</b>		<b>3</b>			<b>1</b>			





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