

**Lara-Franco, Ana**

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**Subject:** FW: Open Forum question

**Attachments:** 1720 MacArthur DS190327 compliance report.pdf; 1720 MacArthur DS190327 decision letter.pdf

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**From:** Alexis or Ned Schroeder [REDACTED]

**Sent:** Thursday, October 1, 2020 3:30 PM

**To:** Lara-Franco, Ana <ALaraFranco@oaklandca.gov>

**Subject:** Re: Open Forum question

I am Alexis Schroeder. Attached are two sets of documents that will accompany my open forum speech on Monday, October 5<sup>th</sup> at the Public Ethics Commission.

On the Decision Letter document that was acquired via a public records request, the letter is signed by the Zoning Manager on page 2 but not signed or dated by the applicant on page 7.

On the Compliance Report document that was also acquired via a public record request, the report on page 9 clearly states there is "color coding." You will notice on the pages 9-13 that this color coding is not able to be clearly identified and analyzed when the report is only provided as a black/white/grey scaled copy.

I look forward to sharing my concerns with your commission. Thank you.

-Alexis Schroeder



**SITESAFE**  
RF COMPLIANCE EXPERTS

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**Crown Castle on behalf of T-Mobile  
Site ID – 815199  
Assessment Purpose – TMO app  
492023  
Site Name – LAKE MERRIT  
Site Compliance Report**

**1720 Macarthur Blvd  
Oakland, CA 94602**

Latitude: N37-48-02.73  
Longitude: W122-13-15.88  
Structure Type: Monopole

Report generated date: July 18, 2019  
Report by: Scott Broyles  
Customer Contact: Caroline Shaker

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**T-Mobile will be compliant upon completion of the  
remediation identified in Section 3.2.**

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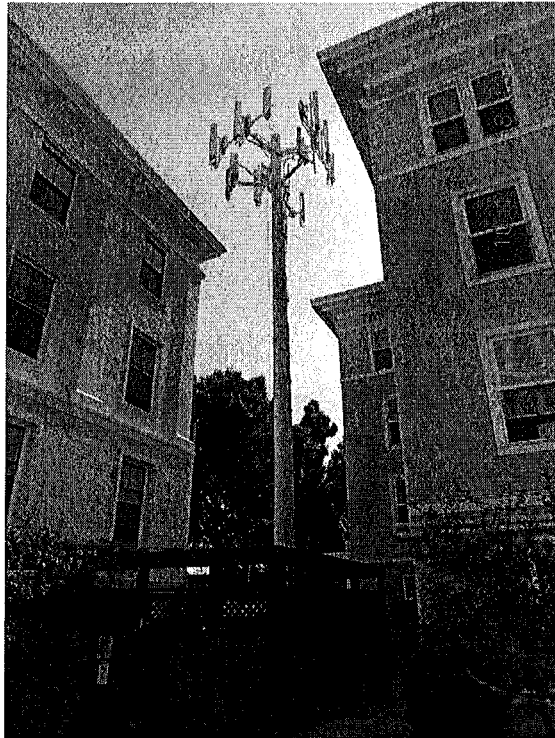


**Michael Fischer, P.E.**  
**Registered Professional Engineer (Electrical)**  
**California License Number 22921**  
**Expires September 30, 2019**

Signed 18 July 2019



**Crown Castle on behalf of T-Mobile  
LAKE MERRIT - 815199  
Radio Frequency (RF) Site Compliance Report**



**1720 Macarthur Blvd, Oakland, CA 94602**



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## 1 Executive Summary

T-Mobile has contracted with Site Safe, LLC (Sitesafe), an independent Radio Frequency (RF) regulatory and engineering consulting firm, to determine whether the proposed communications site, 815199 - LAKE MERRIT, located at 1720 Macarthur Blvd, Oakland, CA, is in compliance with Federal Communication Commission (FCC) Rules and Regulations for RF emissions.

This report contains a detailed summary of the RF environment at the site including:

- Diagram of the site
- Inventory of the make / model of all antennas
- Theoretical MPE based on modeling

This report addresses exposure to radio frequency electromagnetic fields in accordance with the FCC Rules and Regulations for all individuals, classified in two groups, "Occupational or Controlled" and "General Public or Uncontrolled."

**T-Mobile will be compliant** with the FCC rules and regulations, as described in OET Bulletin 65 **upon implementation of the proposed remediation**. The corrective actions needed to make this site compliant are located in Section 3.2.

T-Mobile proposes to make modifications to an existing site. The proposed antennas are noted as "proposed" in the antenna table under section 6.

This document and the conclusions herein are based on the information provided by T-Mobile.

If you have any questions regarding RF safety and regulatory compliance, please do not hesitate to contact Sitesafe's Customer Support Department at (703) 276-1100.



## 2 Regulatory Basis

### 2.1 FCC Rules and Regulations

In 1996, the Federal Communications Commission (FCC) adopted regulations for the evaluating of the effects of RF emissions in 47 CFR § 1.1307 and 1.1310. The guideline from the FCC Office of Engineering and Technology is Bulletin 65 ("OET Bulletin 65"), *Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields*, Edition 97-01, published August 1997. Since 1996 the FCC periodically reviews these rules and regulations as per their congressional mandate.

FCC regulations define two separate tiers of exposure limits: Occupational or "Controlled environment" and General Public or "Uncontrolled environment". The General Public limits are generally five times more conservative or restrictive than the Occupational limit. These limits apply to *accessible* areas where workers or the general public may be exposed to Radio Frequency (RF) electromagnetic fields.

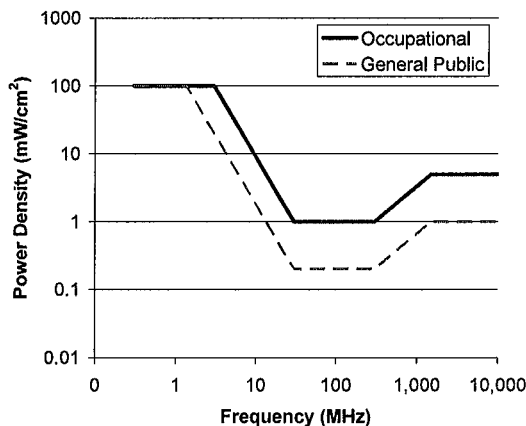
Occupational or Controlled limits apply in situations in which persons are exposed as a consequence of their employment and where those persons exposed have been made fully aware of the potential for exposure and can exercise control over their exposure.

An area is considered a Controlled environment when access is limited to these aware personnel. Typical criteria are restricted access (i.e. locked or alarmed doors, barriers, etc.) to the areas where antennas are located coupled with proper RF warning signage. A site with Controlled environments is evaluated with Occupational limits.

All other areas are considered Uncontrolled environments. If a site has no access controls or no RF warning signage it is evaluated with General Public limits.

The theoretical modeling of the RF electromagnetic fields has been performed in accordance with OET Bulletin 65. The Maximum Permissible Exposure (MPE) limits utilized in this analysis are outlined in the following diagram:

**FCC Limits for Maximum Permissible Exposure (MPE)**  
Plane-wave Equivalent Power Density





**Limits for Occupational/Controlled Exposure (MPE)**

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f <sup>2</sup> )*	6
30-300	61.4	0.163	1.0	6
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6

**Limits for General Population/Uncontrolled Exposure (MPE)**

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz      \*Plane-wave equivalent power density

**2.2 OSHA Statement**

The General Duty clause of the OSHA Act (Section 5) outlines the occupational safety and health responsibilities of the employer and employee. The General Duty clause in Section 5 states:

- (a) Each employer –
  - (1) shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees;
  - (2) shall comply with occupational safety and health standards promulgated under this Act.
- (b) Each employee shall comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to this Act which are applicable to his own actions and conduct.

OSHA has defined Radiofrequency and Microwave Radiation safety standards for workers who may enter hazardous RF areas. Regulation Standards 29 CFR § 1910.147 identify a generic lockout/tagout procedure aimed to control the unexpected energization or startup of machines when maintenance or service is being performed.



### 3 Site Compliance

#### 3.1 Site Compliance Statement

Upon evaluation of the cumulative RF emission levels from all operators at this site, Sitesafe has determined that:

**T-Mobile will be compliant** with the FCC rules and regulations, as described in OET Bulletin 65 **upon implementation of the proposed remediation**. The corrective actions needed to make this site compliant are located in Section 3.2.

The compliance determination is based on theoretical modeling, RF signage placement recommendations, proposed antenna inventory and the level of restricted access to the antennas at the site. Any deviation from the T-Mobile's proposed deployment plan could result in the site being rendered non-compliant.

#### 3.2 Actions for Site Compliance

Based on common industry practice and our understanding of FCC and OSHA requirements, this section provides a statement of recommendations for site compliance. RF alert signage recommendations have been proposed based on theoretical analysis of MPE levels. Where applicable, barriers can consist of locked doors, fencing, railing, rope, chain, paint striping or tape, combined with RF alert signage.

The site will be made compliant if the following changes are implemented:

##### **Adjacent Building 2 Access Location**

- Ensure that this access point is locked/restricted.
- Ensure that a Notice sign is installed.
- Ensure that an RF Guideline sign is installed.

##### OPTION 1:

Implement an RF safety plan to be reviewed and filed with property management for anyone required to access the areas exceeding the General Public MPE limit near the antennas at the Gamma sector.

##### OPTION 2:

Raise mounting height or lower power for the Gamma antennas.

##### **Monopole Access Location**

- Ensure that a Warning sign is installed.
- Ensure that an RF Guideline sign is installed.

**Note:** The construction drawing used to create this report may not have shown all or any of the roof access points. A Notice sign and an RF Guideline sign will be required at every access point in order for the site to be in compliance.

All roof access points must be locked or restricted for the site to be in compliance.





## 4 Safety Plan and Procedures

The following items are general safety recommendations that should be administered on a site by site basis as needed by the carrier.

**General Maintenance Work:** Any maintenance personnel required to work immediately in front of antennas and / or in areas indicated as above 100% of the Occupational MPE limits should coordinate with the wireless operators to disable transmitters during their work activities.

**Training and Qualification Verification:** All personnel accessing areas indicated as exceeding the General Population MPE limits should have a basic understanding of EME awareness and RF Safety procedures when working around transmitting antennas. Awareness training increases a worker's understanding to potential RF exposure scenarios. Awareness can be achieved in a number of ways (e.g. videos, formal classroom lecture or internet-based courses).

**Physical Access Control:** Access restrictions to transmitting antennas locations is the primary element in a site safety plan. Examples of access restrictions are as follows:

- Locked door or gate
- Alarmed door
- Locked ladder access
- Restrictive Barrier at antenna (e.g. Chain link with posted RF Sign)

**RF Signage:** Everyone should obey all posted signs at all times. RF signs play an important role in properly warning a worker prior to entering into a potential RF Exposure area.

**Assume all antennas are active:** Due to the nature of telecommunications transmissions, an antenna transmits intermittently. Always assume an antenna is transmitting. Never stop in front of an antenna. If you have to pass by an antenna, move through as quickly and safely as possible thereby reducing any exposure to a minimum.

**Maintain a 3 foot clearance from all antennas:** There is a direct correlation between the strength of an EME field and the distance from the transmitting antenna. The further away from an antenna, the lower the corresponding EME field is.

**Site RF Emissions Diagram:** Section 5 of this report contains an RF Diagram that outlines various theoretical Maximum Permissible Exposure (MPE) areas at the site. The modeling is a worst-case scenario assuming a duty cycle of 100% for each transmitting antenna at full power. This analysis is based on one of two access control criteria: General Public criteria means the access to the site is uncontrolled and anyone can gain access. Occupational criteria means the access is restricted and only properly trained individuals can gain access to the antenna locations.



## 5 Analysis

### 5.1 RF Emissions Diagram

The RF diagram(s) below display theoretical spatially averaged percentage of the Maximum Permissible Exposure for all systems at the site unless otherwise noted. These diagrams use modeling as prescribed in OET Bulletin 65 and assumptions detailed in Appendix B.

The key at the bottom of each diagram indicates if percentages displayed are referenced to FCC **General Public** Maximum Permissible Exposure (MPE) limits. Color coding on the diagram is as follows:

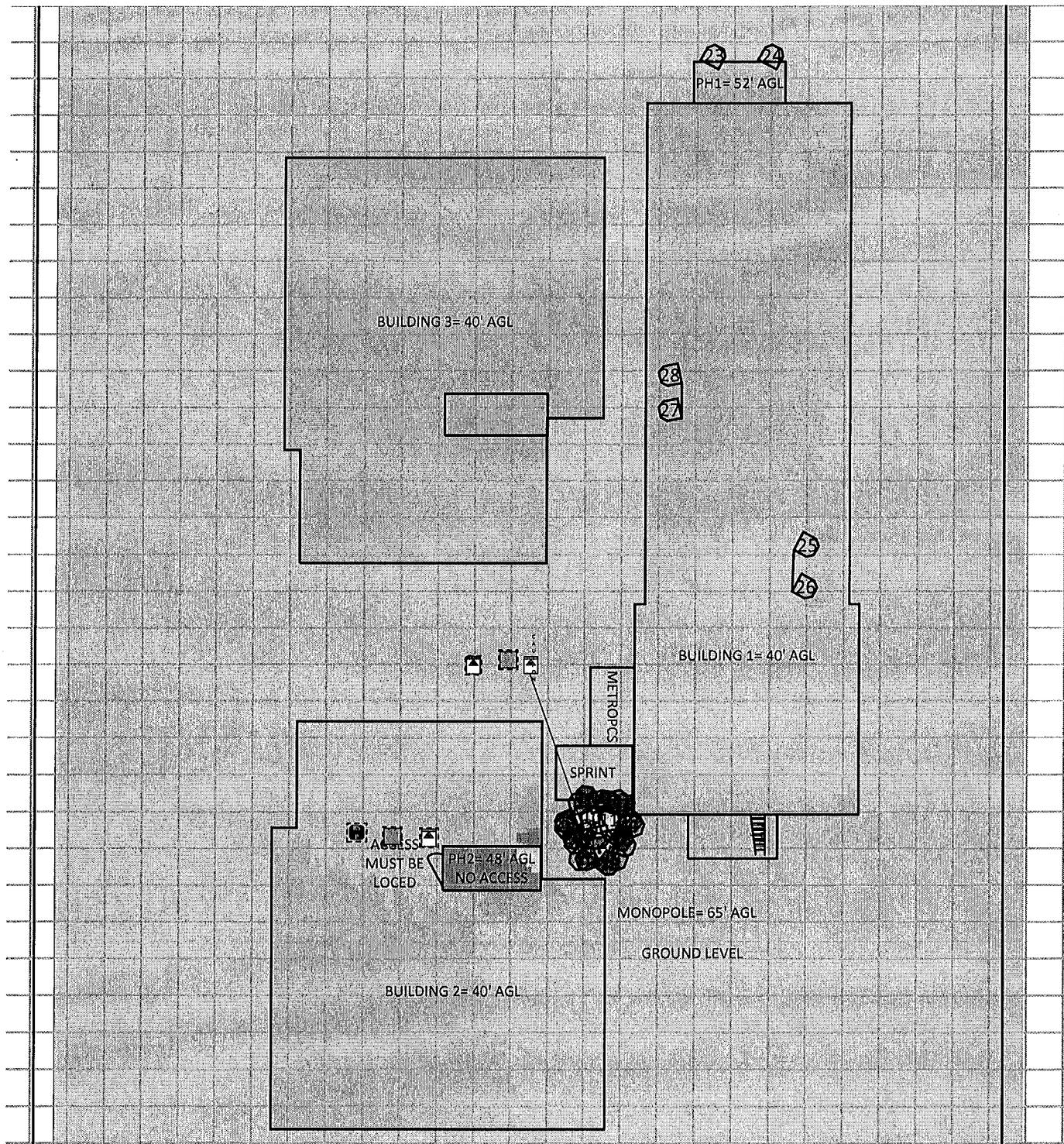
% of FCC Public Exposure Limit				
>= 5000	>= 500	>= 100	>= 5	< 5

This table displays the maximum theoretical percentage of the FCC's General Public MPE limits:

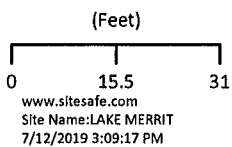
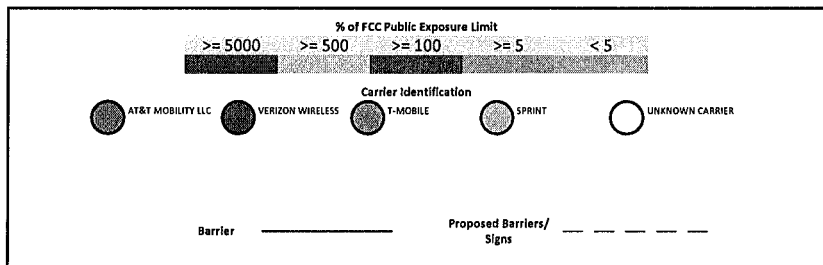
	General Public Levels:		
Exposure Type:	Maximum	Spatial Average	Spatial Average
Reference Level:	Antenna	Adjacent PH Rooftop	Ground
<b>T-Mobile:</b>	12,154.0%	1060.0 %	<1 %
<b>Composite:</b>	12,154.0%	1060.0 %	<1 %

Note: On the diagrams shown below, each level is marked with a height. For all diagrams that are marked as *Spatial average 0' - 6'*, the modeling program will spatially average the emissions within the area six feet above each set level. This provides an accurate spatial average of the percentage of the FCC's MPE limits within an accessible area.

# RF Exposure Simulation For: LAKE MERRIT Composite View

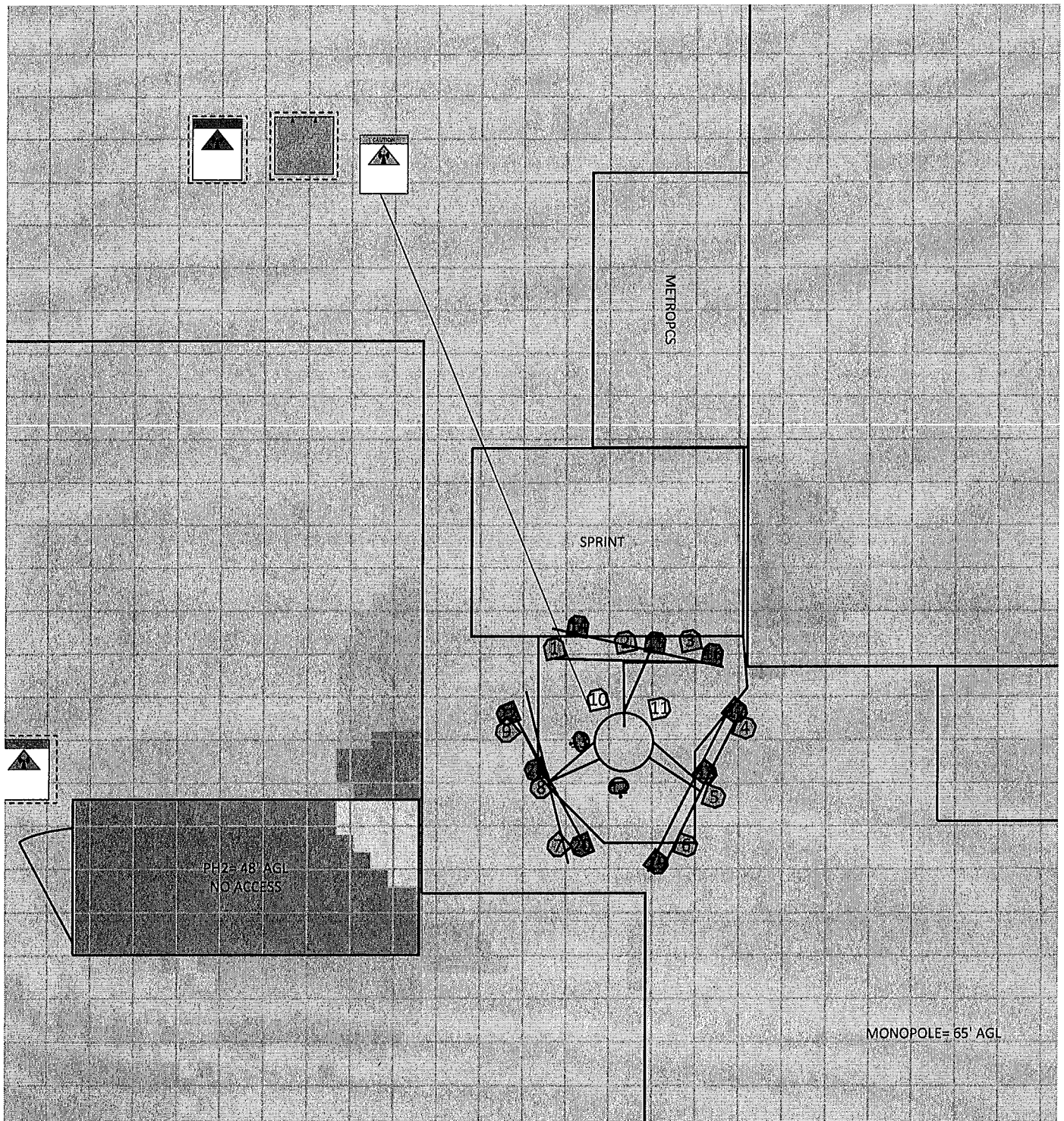


% of FCC Public Exposure Limit  
Spatial average 0' - 6'

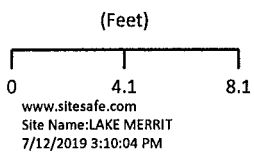
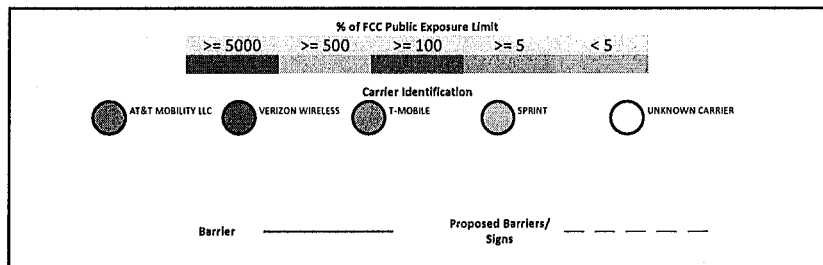


Sitesafe OET-65 Model  
Near Field Boundary:  
1.5 \* Aperture  
Reflection Factor: 1  
Spatially Averaged

# RF Exposure Simulation For: LAKE MERRIT Detailed View

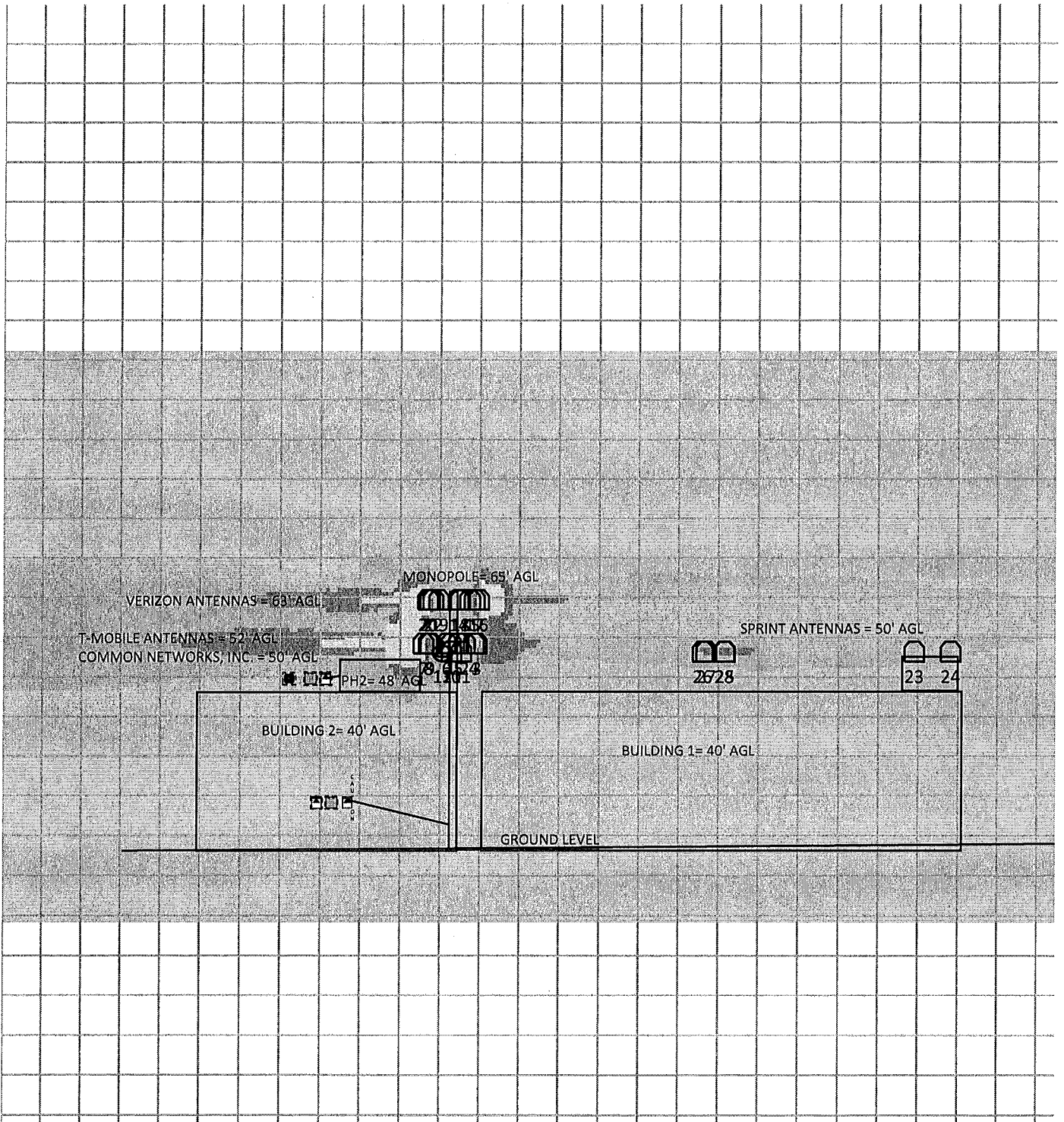


% of FCC Public Exposure Limit  
Spatial average 0' - 6'

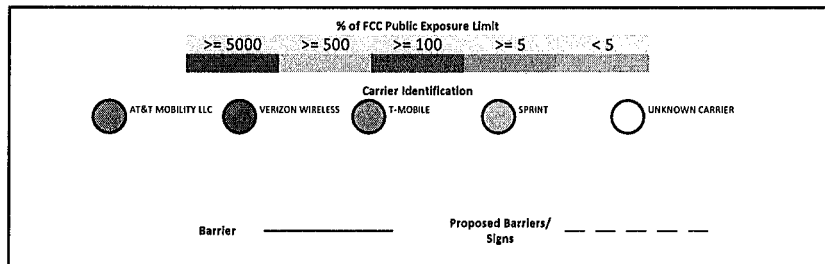
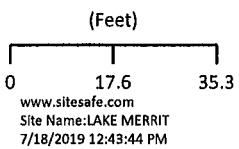


Sitesafe OET-65 Model  
Near Field Boundary:  
1.5 \* Aperture  
Reflection Factor: 1  
Spatially Averaged

# RF Exposure Simulation For: LAKE MERRIT Elevation View

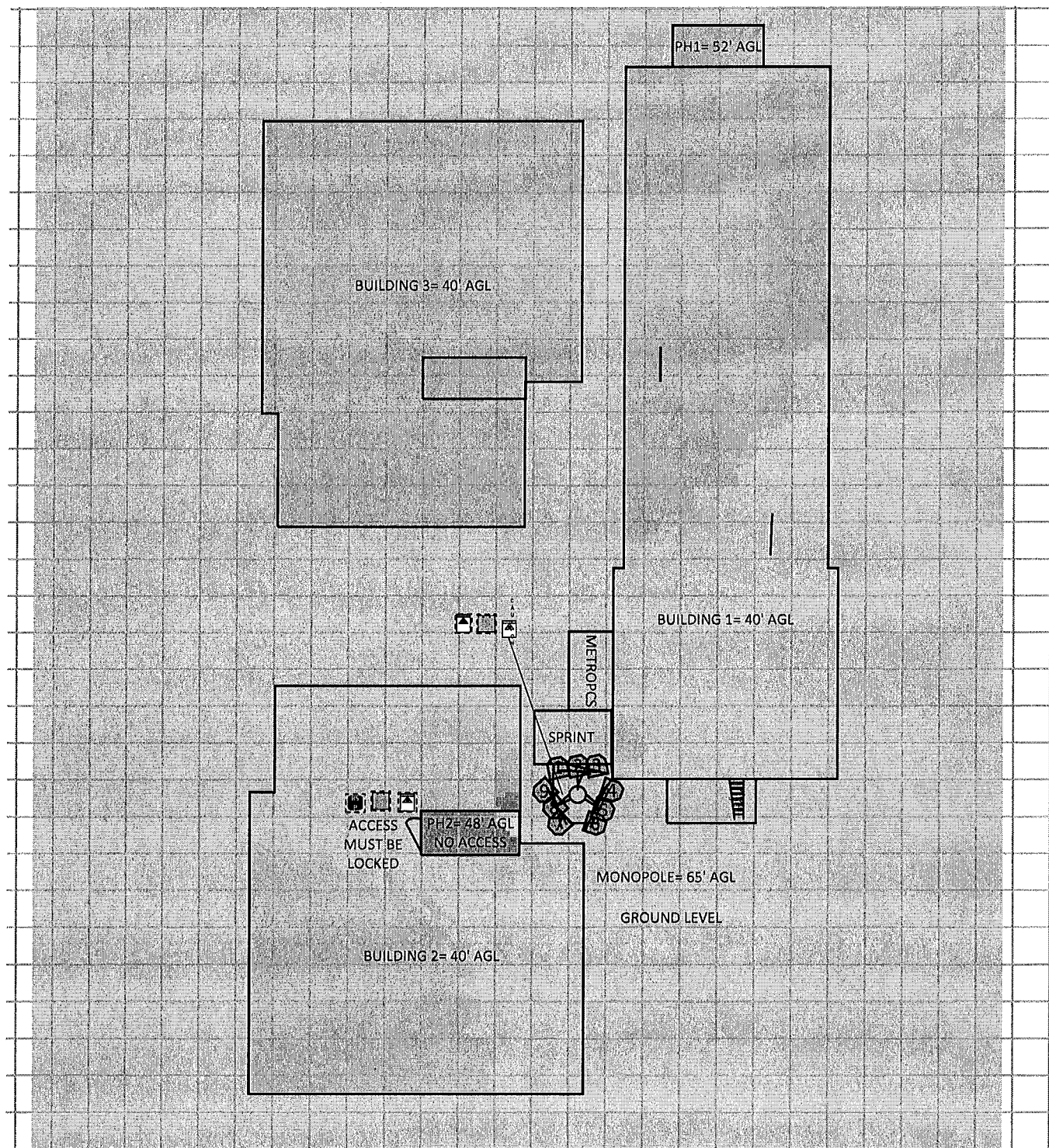


% of FCC Public Exposure Limit

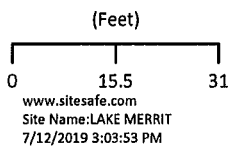
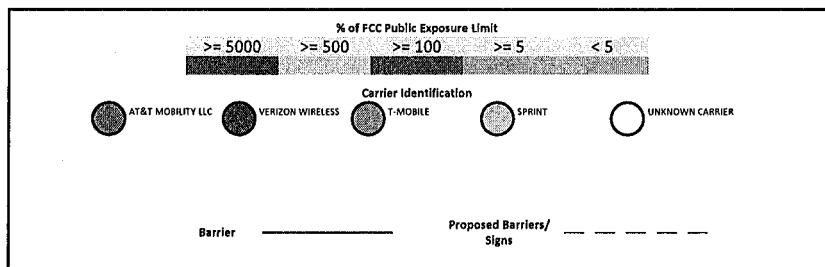


Sitesafe OET-65 Model  
Near Field Boundary:  
1.5 \* Aperture  
Reflection Factor: 1  
Single Level (0)

# RF Exposure Simulation For: LAKE MERRIT T-Mobile Contributions



% of FCC Public Exposure Limit  
Spatial average 0' - 6'



Sitesafe OET-65 Model  
Near Field Boundary:  
1.5 \* Aperture  
Reflection Factor: 1  
Spatially Averaged



## 6 Antenna Inventory

The Antenna Inventory shows all transmitting antennas at the site. This inventory was provided by the customer and was utilized by Sitesafe to perform theoretical modeling of RF emissions. The inventory coincides with the site diagrams in this report, identifying each antenna's location at 815199 - LAKE MERRIT. The antenna information collected includes the following information:

- Licensee or wireless operator name
- Frequency or frequency band
- Transmitter power – Transmitter Power Output ("TPO"), Effective Radiated Power ("ERP"), or Equivalent Isotropic Radiated Power ("EIRP")
- Antenna manufacturer make, model, and gain

For other carriers at this site, the use of "Generic" as an antenna model, or "Unknown" for an operator means the information with regard to carrier, their FCC license and/or antenna information was not available nor could it be secured while on site. Equipment, antenna models and nominal transmit power were used for modeling, based on past experience with radio service providers.



The following antenna inventory was provided by the customer and was utilized to create the site model diagrams:

Antenna Inventory																	
Ant #	Operated By	Antenna Model	Ant Type	Len (ft)	TX Freq (Mhz)	TECH	Az (Deg)	Antenna Gain (dBd)	Horizontal Half Power Beamwidth (Deg)	POWER	POWER TYPE	POWER UNITS	# of Trains	ERP (Watts)	Z (ft)	MDT	EDT
1	T-MOBILE	Kathrein-Scala 742-215	Panel	4.3	1900	UMTS	0	15.57	65.3	40	TPO	Watt	1	1442.3	52	0	0
2	T-MOBILE (Proposed)	Ericsson AIR 32 B2A B66AA	Panel	4.9	1900	LTE	0	15.86	63	160	TPO	Watt	1	6167.7	52	0	0
2	T-MOBILE (Proposed)	Ericsson AIR 32 B2A B66AA	Panel	4.9	2100	LTE	0	15.86	61	160	TPO	Watt	1	6167.7	52	0	0
3	T-MOBILE (Proposed)	RFS APXVAARR24_43-U-NA20	Panel	8	600	LTE	0	13.2	62.76	120	TPO	Watt	1	2507.2	52	0	0
3	T-MOBILE (Proposed)	RFS APXVAARR24_43-U-NA20	Panel	8	700	LTE	0	13.39	62	160	TPO	Watt	1	3492.4	52	0	0
4	T-MOBILE	Kathrein-Scala 742-215	Panel	4.3	1900	UMTS	120	15.57	65.3	40	TPO	Watt	1	1442.3	52	0	0
5	T-MOBILE (Proposed)	Ericsson AIR 32 B2A B66AA	Panel	4.9	1900	LTE	120	15.86	63	160	TPO	Watt	1	6167.7	52	0	0
5	T-MOBILE (Proposed)	Ericsson AIR 32 B2A B66AA	Panel	4.9	2100	LTE	120	15.86	61	160	TPO	Watt	1	6167.7	52	0	0
6	T-MOBILE (Proposed)	RFS APXVAARR24_43-U-NA20	Panel	8	600	LTE	120	13.2	62.76	120	TPO	Watt	1	2507.2	52	0	0
6	T-MOBILE (Proposed)	RFS APXVAARR24_43-U-NA20	Panel	8	700	LTE	120	13.39	62	160	TPO	Watt	1	3492.4	52	0	0
7	T-MOBILE	Kathrein-Scala 742-215	Panel	4.3	1900	UMTS	240	15.57	65.3	40	TPO	Watt	1	1442.3	52	0	0
8	T-MOBILE (Proposed)	Ericsson AIR 32 B2A B66AA	Panel	4.9	1900	LTE	240	15.86	63	160	TPO	Watt	1	6167.7	52	0	0





Antenna Inventory																	
Ant #	Operated By	Antenna Model	Ant Type	Len (ft)	TX Freq (MHz)	TECH	Az (Deg)	Antenna Gain (dBS)	Horizontal Half Power Beamwidth (Deg)	POWER	POWER TYPE	POWER UNITS	# of Trains	ERP (Watts)	Z (ft)	MDT	EDT
8	T-MOBILE (Proposed)	Ericsson AIR 32 B2A B66AA	Panel	4.9	2100	LTE	240	15.86	61	160	TPO	Watt	1	6167.7	52	0	0
9	T-MOBILE (Proposed)	RFS APXVAARR24_43-U-NA20	Panel	8	600	LTE	240	13.2	62.76	120	TPO	Watt	1	2507.2	52	0	0
9	T-MOBILE (Proposed)	RFS APXVAARR24_43-U-NA20	Panel	8	700	LTE	240	13.39	62	160	TPO	Watt	1	3492.4	52	0	0
10	Common Networks, Inc.	Generic	Panel	1	5000		0	21.36	9.5	12.6	EIRP	Watt	1	7.7	50	0	0
11	Common Networks, Inc.	Generic	Panel	1	5000		90	21.36	9.5	12.6	EIRP	Watt	1	7.7	50	0	0
12	Common Networks, Inc.	Generic	Aperture	0	60000		180	46.36	2	400	EIRP	Watt	1	243.9	50	0	0
13	Common Networks, Inc.	Generic	Aperture	0	80000		270	48.86	2	6000	EIRP	Watt	1	3658.5	50	0	0
14	VERIZON WIRELESS	Andrew LNX-6513DS-VTM	Panel	4.6	850		20	12.86	65	160	TPO	Watt	1	3091.1	63	0	0
15	VERIZON WIRELESS	Andrew SBNHH-1D65B	Panel	6	1900		20	15.82	66	120	TPO	Watt	1	4583.3	63	0	0
16	VERIZON WIRELESS	Andrew SBNHH-1D65B	Panel	6	751		20	12.31	68	60	TPO	Watt	1	1021.3	63	0	0
16	VERIZON WIRELESS	Andrew SBNHH-1D65B	Panel	6	2100		20	16.33	63	120	TPO	Watt	1	5154.4	63	0	0
17	VERIZON WIRELESS	Andrew LNX-6513DS-VTM	Panel	4.6	850		140	12.86	65	160	TPO	Watt	1	3091.1	63	0	0



Antenna Inventory																	
Ant #	Operated By	Antenna Model	Ant Type	Len (ft)	TX Freq (MHz)	TECH	Az (Deg)	Antenna Gain (dBC)	Horizontal Half Power Beamwidth (Deg)	POWER	POWER TYPE	POWER UNITS	# of Trns	ERP (Watts)	Z (ft)	MDT	EDT
18	VERIZON WIRELESS	Andrew SBNHH-1D65B	Panel	6	1900		140	15.82	66	120	TPO	Watt	1	4583.3	63	0	0
19	VERIZON WIRELESS	Andrew SBNHH-1D65B	Panel	6	751		140	12.31	68	60	TPO	Watt	1	1021.3	63	0	0
19	VERIZON WIRELESS	Andrew SBNHH-1D65B	Panel	6	2100		140	16.33	63	120	TPO	Watt	1	5154.4	63	0	0
20	VERIZON WIRELESS	Andrew LNX-6513DS-VTM	Panel	4.6	850		260	12.86	65	160	TPO	Watt	1	3091.1	63	0	0
21	VERIZON WIRELESS	Andrew SBNHH-1D65B	Panel	6	1900		260	15.82	66	120	TPO	Watt	1	4583.3	63	0	0
22	VERIZON WIRELESS	Andrew SBNHH-1D65B	Panel	6	751		260	12.31	68	60	TPO	Watt	1	1021.3	63	0	0
22	VERIZON WIRELESS	Andrew SBNHH-1D65B	Panel	6	2100		260	16.33	63	120	TPO	Watt	1	5154.4	63	0	0
23	SPRINT	Generic	Panel	4.6	1900		40	15.43	65	45	TPO	Watt	1	1571.1	50	0	0
24	SPRINT	Generic	Panel	4.6	1900		40	15.43	65	45	TPO	Watt	1	1571.1	50	0	0
25	SPRINT	Generic	Panel	4.6	1900		130	15.43	65	45	TPO	Watt	1	1571.1	50	0	0
26	SPRINT	Generic	Panel	4.6	1900		130	15.43	65	45	TPO	Watt	1	1571.1	50	0	0
27	SPRINT	Generic	Panel	4.6	1900		270	15.43	65	45	TPO	Watt	1	1571.1	50	0	0
28	SPRINT	Generic	Panel	4.6	1900		270	15.43	65	45	TPO	Watt	1	1571.1	50	0	0

Note: Z indicates relative position of the antenna to the origin location on the site displayed in the model results diagram. The Z reference indicates antenna height above the main site level unless otherwise indicated. ERP values provided by the client and used in the modeling may be greater than are currently deployed. For additional modeling information, refer to Appendix B. Proposed equipment is tagged as (Proposed) under Antenna Make and Model.



## 7 Engineer Certification

The professional engineer whose seal appears on the cover of this document hereby certifies and affirms:

That I am registered as a Professional Engineer in the jurisdiction indicated in the professional engineering stamp on the cover of this document; and

That I am an employee of Site Safe, LLC, in Vienna, Virginia, at which place the staff and I provide RF compliance services to clients in the wireless communications industry; and

That I am thoroughly familiar with the Rules and Regulations of the Federal Communications Commission (FCC) as well as the regulations of the Occupational Safety and Health Administration (OSHA), both in general and specifically as they apply to the FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields; and

That I have thoroughly reviewed this Site Compliance Report and believe it to be true and accurate to the best of my knowledge as assembled by and attested to by Scott Broyles.

July 18, 2019



## **Appendix A – Statement of Limiting Conditions**

Sitesafe will not be responsible for matters of a legal nature that affect the site or property.

Due to the complexity of some wireless sites, Sitesafe performed this analysis and created this report utilizing best industry practices and due diligence. Sitesafe cannot be held accountable or responsible for anomalies or discrepancies due to actual site conditions (i.e., mislabeling of antennas or equipment, inaccessible cable runs, inaccessible antennas or equipment, etc.) or information or data supplied by T-Mobile, the site manager, or their affiliates, subcontractors or assigns.

Sitesafe has provided computer generated model(s) in this Site Compliance Report to show approximate dimensions of the site, and the model is included to assist the reader of the compliance report to visualize the site area, and to provide supporting documentation for Sitesafe's recommendations.

Sitesafe may note in the Site Compliance Report any adverse physical conditions, such as needed repairs, observed during the survey of the subject property or that Sitesafe became aware of during the normal research involved in performing this survey. Sitesafe will not be responsible for any such conditions that do exist or for any engineering or testing that might be required to discover whether such conditions exist. Because Sitesafe is not an expert in the field of mechanical engineering or building maintenance, the Site Compliance Report must not be considered a structural or physical engineering report.

Sitesafe obtained information used in this Site Compliance Report from sources that Sitesafe considers reliable and believes them to be true and correct. Sitesafe does not assume any responsibility for the accuracy of such items that were furnished by other parties. When conflicts in information occur between data provided by a second party and physical data collected by Sitesafe, the physical data will be used.



## Appendix B – Assumptions and Definitions

### General Model Assumptions

In this site compliance report, it is assumed that all antennas are operating at **full power at all times**. Software modeling was performed for all transmitting antennas located on the site. Sitesafe has further assumed a 100% duty cycle and maximum radiated power.

The site has been modeled with these assumptions to show the maximum RF energy density. Sitesafe believes this to be a *worst-case* analysis, based on best available data. Areas modeled to predict emissions greater than 100% of the applicable MPE level may not actually occur but are shown as a *worst-case* prediction that could be realized real time. Sitesafe believes these areas to be safe for entry by occupationally trained personnel utilizing appropriate personal protective equipment (in most cases, a personal monitor).

Thus, at any time, if power density measurements were made, we believe the real-time measurements would indicate levels below those depicted in the RF emission diagram(s) in this report. By modeling in this way, Sitesafe has conservatively shown exclusion areas – areas that should not be entered without the use of a personal monitor, carriers reducing power, or performing real-time measurements to indicate real-time exposure levels.

### Use of Generic Antennas

For the purposes of this report, the use of "Generic" as an antenna model, or "Unknown" for an operator means the information about a carrier, their FCC license and/or antenna information was not provided and could not be obtained while on site. In the event of unknown information, Sitesafe will use our industry specific knowledge of equipment, antenna models, and transmit power to model the site. If more specific information can be obtained for the unknown measurement criteria, Sitesafe recommends remodeling of the site utilizing the more complete and accurate data. Information about similar facilities is used when the service is identified and associated with a particular antenna. If no information is available regarding the transmitting service associated with an unidentified antenna, using the antenna manufacturer's published data regarding the antenna's physical characteristics makes more conservative assumptions.

Where the frequency is unknown, Sitesafe uses the closest frequency in the antenna's range that corresponds to the highest MPE, resulting in a conservative analysis.



## Definitions

**5% Rule** – The rules adopted by the FCC specify that, in general, at multiple transmitter sites actions necessary to bring the area into compliance with the guidelines are the shared responsibility of all licensees whose transmitters produce field strengths or power density levels at the area in question in excess of 5% of the exposure limits. In other words, any wireless operator that contributes 5% or greater of the MPE limit in an area that is identified to be greater than 100% of the MPE limit is responsible taking corrective actions to bring the site into compliance.

**Compliance** – The determination of whether a site is safe or not with regards to Human Exposure to Radio Frequency Radiation from transmitting antennas.

**Decibel (dB)** – A unit for measuring power or strength of a signal.

**Duty Cycle** – The percent of pulse duration to the pulse period of a periodic pulse train. Also, may be a measure of the temporal transmission characteristic of an intermittently transmitting RF source such as a paging antenna by dividing average transmission duration by the average period for transmission. A duty cycle of 100% corresponds to continuous operation.

**Effective (or Equivalent) Isotropic Radiated Power (EIRP)** – The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna.

**Effective Radiated Power (ERP)** – The product of the power supplied to the antenna and the antenna gain in a given direction relative to a half-wave dipole antenna.

**Gain (of an antenna)** – The ratio of the maximum intensity in a given direction to the maximum radiation in the same direction from an isotropic radiator. Gain is a measure of the relative efficiency of a directional antenna as compared to an omni directional antenna.

**General Population/Uncontrolled Environment** – Defined by the FCC, as an area where RFR exposure may occur to persons who are **unaware** of the potential for exposure and who have no control of their exposure. General Population is also referenced as General Public.

**Generic Antenna** – For the purposes of this report, the use of "Generic" as an antenna model means the antenna information was not provided and could not be obtained while on site. In the event of unknown information, Sitesafe will use our industry specific knowledge of antenna models to select a worst-case scenario antenna to model the site.

**Isotropic Antenna** – An antenna that is completely non-directional. In other words, an antenna that radiates energy equally in all directions.

**Maximum Measurement** – This measurement represents the single largest measurement recorded when performing a spatial average measurement.

**Maximum Permissible Exposure (MPE)** – The rms and peak electric and magnetic field strength, their squares, or the plane-wave equivalent power densities



associated with these fields to which a person may be exposed without harmful effect and with acceptable safety factor.

**Occupational/Controlled Environment** – Defined by the FCC, as an area where Radio Frequency Radiation (RFR) exposure may occur to persons who are **aware** of the potential for exposure as a condition of employment or specific activity and can exercise control over their exposure.

**OET Bulletin 65** – Technical guideline developed by the FCC's Office of Engineering and Technology to determine the impact of Radio Frequency radiation on Humans. The guideline was published in August 1997.

**OSHA (Occupational Safety and Health Administration)** – Under the Occupational Safety and Health Act of 1970, employers are responsible for providing a safe and healthy workplace for their employees. OSHA's role is to promote the safety and health of America's working men and women by setting and enforcing standards; providing training, outreach and education; establishing partnerships; and encouraging continual process improvement in workplace safety and health. For more information, visit [www.osha.gov](http://www.osha.gov).

**Radio Frequency Electromagnetic Fields** – Electromagnetic waves that are propagated from antennas through space.

**Spatial Average Measurement** – A technique used to average a minimum of ten (10) measurements taken in a ten (10) second interval from zero (0) to six (6) feet. This measurement is intended to model the average energy an average sized human body will absorb while present in an electromagnetic field of energy.

**Transmitter Power Output (TPO)** – The radio frequency output power of a transmitter's final radio frequency stage as measured at the output terminal while connected to a load.



## Appendix C – Rules & Regulations

### Explanation of Applicable Rules and Regulations

The FCC has set forth guidelines in OET Bulletin 65 for human exposure to radio frequency electromagnetic fields. Specific regulations regarding this topic are listed in Part 1, Subpart I, of Title 47 in the Code of Federal Regulations. Currently, there are two different levels of MPE - General Public MPE and Occupational MPE. An individual classified as Occupational can be defined as an individual who has received appropriate RF training and meets the conditions outlined below. General Public is defined as anyone who does not meet the conditions of being Occupational. FCC and OSHA Rules and Regulations define compliance in terms of total exposure to total RF energy, regardless of location of or proximity to the sources of energy.

It is the responsibility of all licensees to ensure these guidelines are maintained at all times. It is the ongoing responsibility of all licensees composing the site to maintain ongoing compliance with FCC rules and regulations. Individual licensees that contribute less than 5% MPE to any total area out of compliance are not responsible for corrective actions.

OSHA has adopted and enforces the FCC's exposure guidelines. A building owner or site manager can use this report as part of an overall RF Health and Safety Policy. It is important for building owners/site managers to identify areas in excess of the General Population MPE and ensure that only persons qualified as Occupational are granted access to those areas.

### Occupational Environment Explained

The FCC definition of Occupational exposure limits apply to persons who:

- are exposed to RF energy as a consequence of their employment;
- have been made aware of the possibility of exposure; and
- can exercise control over their exposure.

OSHA guidelines go further to state that persons must complete RF Safety Awareness training and must be trained in the use of appropriate personal protective equipment.

In order to consider this site an Occupational Environment, the site must be controlled to prevent access by any individuals classified as the General Public. Compliance is also maintained when any non-occupational individuals (the General Public) are prevented from accessing areas indicated as Red or Yellow in the attached RF Emissions diagram. In addition, a person must be aware of the RF environment into which they are entering. This can be accomplished by an RF Safety Awareness class, and by appropriate written documentation such as this Site Compliance Report.

All T-Mobile employees who require access to this site must complete RF Safety Awareness training and must be trained in the use of appropriate personal protective equipment.



## Appendix D – General Safety Recommendations

The following are *general recommendations* appropriate for any site with accessible areas in excess of 100% General Public MPE. These recommendations are not specific to this site. These are safety recommendations appropriate for typical site management, building management, and other tenant operations.

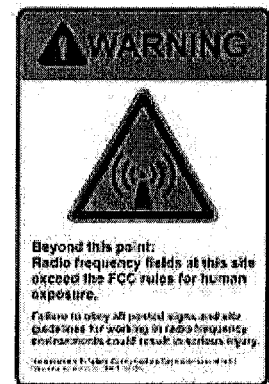
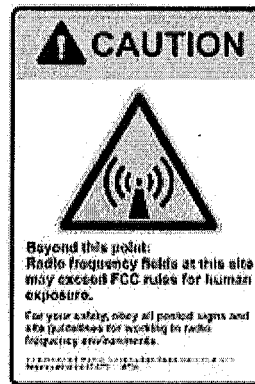
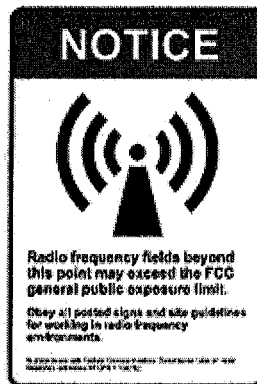
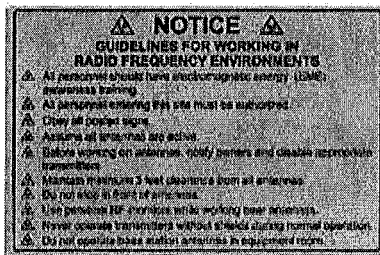
1. All individuals needing access to the main site (or the area indicated to be in excess of General Public MPE) should wear a personal RF Exposure monitor, successfully complete proper RF Safety Awareness training, and have and be trained in the use of appropriate personal protective equipment.

2. All individuals needing access to the main site should be instructed to read and obey all posted placards and signs.

3. The site should be routinely inspected and this or similar report updated with the addition of any antennas or upon any changes to the RF environment including:

- adding new antennas that may have been located on the site
- removing of any existing antennas
- changes in the radiating power or number of RF emitters

4. Post the appropriate **NOTICE**, **CAUTION**, or **WARNING** sign at the main site access point(s) and other locations as required. Note: Please refer to RF Exposure Diagrams in Section 5.1 to inform everyone who has access to this site that beyond posted signs there may be levels in excess of the limits prescribed by the FCC. In addition to RF Advisory Signage, a RF Guideline Signage is recommended to be posted at the main site access point(s). The signs below are examples of signs meeting FCC guidelines.



5. Ensure that the site door remains locked (or appropriately controlled) to deny access to the general public if deemed as policy by the building/site owner.

6. For a General Public environment the five color levels identified in this analysis can be interpreted in the following manner:

- Gray represents areas at 5% of the General Public MPE limits or below. *The General Public can access these areas with no restrictions.*



- Green represents areas predicted to be between 5% and 100% of the General Public MPE limits. *The General Public can access these areas with no restrictions.*
- Blue represents areas predicted to be between 100% and 500% of the General Public MPE limits. *The General Public should be restricted from accessing these areas.*
- Yellow represents areas predicted to be between 500% and 5000% of the General Public MPE limits. *The General Public should be restricted from accessing these areas.*
- Red areas indicated predicted levels greater than 5000% of the General Public MPE limits. *The General Public should be restricted from accessing these areas.*

7. For an Occupational environment the five color levels identified in this analysis can be interpreted in the following manner:

- Gray represents areas at 1% of the Occupational MPE limits or below. *Workers can access these areas with no restrictions.*
- Green represents areas predicted to be between 1% and 20% of the Occupational MPE limits. *Workers can access these areas with no restrictions.*
- Blue represents areas predicted to be between 20% and 100% of the Occupational MPE limits. *Workers can access these areas assuming they have basic understanding of EME awareness and RF safety procedures and understand how to limit their exposure.*
- Yellow represents areas predicted to be between 100% and 1000% of the Occupational MPE limits. *Workers can access these areas assuming they have basic understanding of EME awareness and RF safety procedures and understand how to limit their exposure. Transmitter power reduction and/or time-averaging may be required.*
- Red areas indicated predicted levels greater than 1000% of the Occupational MPE limits *These areas are not safe for workers to be in for prolonged periods of time. Special procedures must be adhered to, such as lockout/tagout or transmitter power reduction, to minimize worker exposure to EME.*

8. Use of a Personal Protective Monitor: When working around antennas, Sitesafe strongly recommends the use of a Personal Protective Monitor (PPM). Wearing a PPM will properly forewarn the individual prior to entering an RF exposure area.

Keep a copy of this report available for all persons who must access the site. They should read this report and be aware of the potential hazards with regards to RF and MPE limits.

### **Additional Information**

Additional RF information is available at the following sites:

<https://www.fcc.gov/general/radio-frequency-safety-0>

<https://www.fcc.gov/engineering-technology/electromagnetic-compatibility-division/radio-frequency-safety/faq/rf-safety>

OSHA has additional information available at:

<https://www.osha.gov/SLTC/radiofrequencyradiation/index.html>



# CITY OF OAKLAND

## SMALL PROJECT DESIGN REVIEW

**DATE:** July 29, 2019

**PROJECT ADDRESS:** 1720 MacArthur Blvd. **APN:** 023-0517-002-00

**APPLICANT NAME:** Ms. Caroline Shaker/ Crown Castle for T-Mobile Wireless

**MAILING ADDRESS:** 1 Park Place, Suite #300 **ZONING:** RM-4  
Dublin, CA 94568 **GENERAL PLAN:** Mixed Housing Type  
Residential

**CASE FILE NO.:** DS19-0327 **EXEMPT PER CEQA SECTION(S)** 15301 and 15303  
(existing telecom site)

Dear Applicant:

- Your application to \_\_\_\_\_ (*describe project*) does not conform to the attached Small Project Design Review Criteria Checklist, and is therefore **DENIED**. (The attached Checklist identifies the Design Guidelines to which the proposal does not conform).
- Your Application for a Small Project Design Review to modify an existing T-Mobile Wireless Telecommunication Facility as follow:  
**At the Tower: remove existing antenna mounts; install (1) T-Arm antenna mounting kit; install 93) new antennas; install (3) RRU; install (1) 6 x 12 HCS. At Ground: remove (1) cabinet; install (1) RBS 6102 MU AC; install (1) BB 6630 for N600 for T-Mobile Wireless on an existing Telecommunication Tower located on historic site per 6409 (a) per 6409 (a) FCC. conforms to the attached Small Project Design Review Criteria Checklist and to all applicable zoning regulations, and is therefore APPROVED. This approval is subject to the Conditions of Approval stated in the following section of this letter**

This design review approval becomes effective immediately and shall expire two calendar years from the date of this letter, unless all necessary permits for construction or alteration have been issued within such period. Upon written request and payment of appropriate fees submitted no later than the expiration date of this permit, such period of time may be extended by the Director of City Planning or designee, 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.

**NOTICE TO ALL PARTIES:** The time within which judicial review must be sought of disposition of the Director of City Planning is governed by Section 1094.6 of the Code of Civil Procedure of the State of California. With certain exceptions, the time is ninety (90) days from date of the decision.

**Please note that any desired modifications to the approved plans must be submitted for review by the Planning Department prior to the changes taking place.**

**To apply for a building permit you must complete an application form and submit two additional sets of plans to the Building Services Division. For more information about building permit requirements, please contact the Building Services Division at (510) 238-3443.**

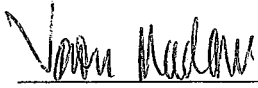
Small Project Design Review Case No. DS19-327 (Crown Castle for T-Mobile Wireless upgrade)

1720 MacArthur Blvd.

Page 2

If you have any questions regarding this approval, please contact the Planning Dept. at (510) 238-4790.

Signed,



*-for-*

Robert Merkamp  
Zoning Manager  
Bureau of Planning

**SMALL PROJECT DESIGN REVIEW**  
**CONDITIONS OF APPROVAL**  
**ATTACHED AND INCORPORATED INTO CASE: DS19-0327**  
**PROJECT ADDRESS: 1720 MACARTHUR BLVD, OAKLAND CA**

**1. Approved Use**

***Ongoing***

- a) The project shall be constructed and operated in accordance with the authorized use as described in the application materials and the plans dated **07/08/2019** and submitted on **07/26/2019**, 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 required prior written approval from the Director of City Planning or designee.
  
- b) This action by the Zoning Administrator (“this Approval”) includes the approvals set forth below. This Approval includes permission to **upgrade T-Mobile Wireless telecommunication facility as follow:**  
**At the Tower: remove existing antenna mounts; install (1) T-Arm antenna mounting kit; install 93) new antennas; install (3) RRU; install (1) 6 x 12 HCS. At Ground: remove (1) cabinet; install (1) RBS 6102 MU AC; install (1) BB 6630 for N600 for T-Mobile Wireless on an existing Telecommunication Tower located on historic site per 6409 (a) per 6409 (a) FCC.**

**Effective Date, Expiration, Extensions and Extinguishment**

***Ongoing***

Unless a different termination date is prescribed, this Approval shall expire **two calendar years** from the date of this letter, the effective date of its granting, unless, within such period, all necessary permits for construction or alteration have been issued, or the authorized activities have commenced in the case of a permit not involving construction or alteration. Upon written request and payment of appropriate fees submitted no later than the expiration date of this permit, such period of time may be extended by the Director of City Planning or designee, 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.

**2. Scope of This Approval; Major and Minor Changes**

***Ongoing***

- a) The project is approved pursuant to the Planning Code only and shall comply with all other applicable codes, requirements, regulations, and guide lines, including but not limited to those imposed by the City’s Building Services Division, the City’s Fire Marshal, and the Public Works Agency.
  
- b) 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.

**3. Conformance to Approved Plans; Modification of Conditions or Revocation**

***Ongoing***

The City of Oakland reserves the right at any time during construction 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 construct the project in accordance with approved plans may result in remedial reconstruction, permit revocation, permit modification or other corrective action.

**4. Signed Copy of the Conditions**

***With submittal of a demolition, grading, and building permit***

A copy of the approval letter and Conditions shall be signed by the property owner and submitted with each set of permit plans submitted for this project.

**5. Job Site Plans**

***Ongoing throughout demolition, grading, and/or construction***

At least one (1) copy of the approved plans, along with the Approval Letter and Conditions of Approval, shall be available for review at the job site at all times.

**6. Compliance with Conditions of Approval**

***Ongoing***

The project applicant shall be responsible for compliance with the recommendations in any submitted and approved technical report and all the Conditions of Approval set forth below at its sole cost and expense, and subject to review and approval of the City of Oakland.

**7. Severability**

***Ongoing***

Approval of the project would not have been granted but for the applicability and validity of each and every one of the specified conditions. If any one or more of such conditions is found to be invalid by a court of competent jurisdiction, other valid conditions consistent with achieving the same purpose and intent of such Approval shall still apply to the project.

**8. Indemnification**

***Ongoing***

- a) To the maximum extent permitted by law, the applicant shall defend (with counsel acceptable to the City), indemnify, and hold harmless the City of Oakland, the Oakland City Council, the City of Oakland Redevelopment Agency, the Oakland City Planning Commission and its respective agents, officers, and employees (hereafter collectively called City) from any liability, damages, claim, judgment, loss (direct or indirect) action, causes of action, or proceeding (including legal costs, attorneys' fees, expert witness or consultant fees, City Attorney or staff time, expenses or costs) (collectively called "Action") against the City to attack, set aside, void or annul, (1) an approval by the City relating to a development-related application or subdivision or (2) implementation of an approved development-related project. The City may elect, in its sole discretion, to participate in the defense of said Action and the applicant shall reimburse the City for its reasonable legal costs and attorneys' fees.
- b) Within ten (10) calendar days of the filing of any Action as specified in subsection A above, the applicant shall execute a Letter Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations. These obligations and the Letter of Agreement shall survive termination, extinguishment or invalidation of the approval. Failure to timely execute the Letter Agreement does not relieve the applicant of any of the obligations contained in this condition or other requirements or conditions of approval that may be imposed by the City.

**9. 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:

- a) Demonstrate compliance with Bay Area Air Quality Management District (BAAQMD) Regulation 2, Rule 1 (General Requirements) for all portable construction equipment subject to that rule.

BAAQMD Regulation 2, Rule 1, requires an authority to construct and permit 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.

- 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) should be performed for such equipment used continuously during the construction period.

#### 10. 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 required by the City Building Department.

- a) Such activities are limited to between 7:00 AM and 7:00 PM Monday through Friday. Pile driving 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. Monday through Friday.
- b) Any construction activity proposed to occur outside of the standard hours of 7:00 am to 7:00 pm 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.
- c) Construction activity shall not occur on Saturdays, with the following possible exceptions:
  - i) 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.
  - ii) 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.
- d) No extreme noise generating activities (greater than 90 dBA) shall be allowed on Saturdays, with no exceptions.
- e) No construction activity shall take place on Sundays or Federal holidays.
- f) For clarification, 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.

#### 11. Noise Control

##### *Ongoing throughout demolition, grading, and/or construction*

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:

- 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).
- b) 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 where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible.

- 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 other measures to the extent feasible.
- d) If feasible, the noisiest phases of construction (such as pile driving) shall be limited to less than 10 days at a time.

## 12. Waste Reduction and Recycling

### *Prior to issuance of demolition, grading, or building permit*

The project applicant shall submit a Construction & Demolition Waste Reduction and Recycling Plan (WRRP) and an Operational Diversion Plan (ODP) for review and approval by the Public Works Agency.

- a) OMC 15.34 outlines requirements for reducing waste and optimizing construction and demolition (C&D) recycling. Affected projects include all new construction, renovations, alterations, and/or modifications with construction values of \$50,000 or more (except R-3), and all demolition (including soft demo). The WRRP must specify the methods by which the development will divert C&D debris waste generated by the proposed project from landfill disposal in accordance with current City requirements. Current standards, FAQs, and forms are available at [www.oaklandpw.com/Page39.aspx](http://www.oaklandpw.com/Page39.aspx) or in the Green Building Resource Center. After approval of the plan, the project applicant will implement the plan.

### *Ongoing*

- b) The ODP will identify how the project complies with the Recycling Space Allocation Ordinance, OMC 17.118, including capacity calculations, and specify the methods by which the development will meet the current diversion of solid waste generated by operation of the proposed project from landfill disposal in accordance with current City requirements. The proposed program shall be implemented and maintained for the duration of the proposed activity or facility. Changes to the plan may be re-submitted to the Environmental Services Division of Public Works for review and approval. Any incentive programs shall remain fully operational as long as residents and businesses exist at the project site.

## 13. Landscape Plan, Installation, and Maintenance

### *Prior to issuance of a demolition, grading, or building permit*

- a) For projects involving the establishment of a new residential unit, excluding a secondary unit of 500 square feet or less, and for additions to Residential Facilities of over 500 square feet, a landscape plan for the entire site shall be submitted to the Planning Department for review and approval.
- b) Projects requiring a landscape plan shall include at least one (1) fifteen-gallon tree, or substantially equivalent landscaping consistent with city policy and as approved by the Director of City Planning, for every twenty-five (25) feet of street frontage. On streets with sidewalks where the distance from the face of the curb to the outer edge of the sidewalk is at least six and one-half (6 ½) feet, the trees to be provided shall include street trees to the satisfaction of the Director of Parks and Recreation. The street tree species, size at time of planting, and placement in the right-of-way shall be indicated on the building permit plan set, and be reviewed and approved by the Public Works Agency.

### *Prior to final zoning inspection*

- c) All landscaping shall be installed prior to final inspection of the building unless bonded pursuant to the provisions of Section 17.124.50 of the Oakland Planning Code.

### *Ongoing*



- c) All proposed landscaping shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with all applicable landscaping requirements.

**14. Radio Frequency Emissions**

*Prior to the final building permit sign off.*

The applicant shall submit a certified RF emissions report stating the facility is operating within the acceptable standards established by the regulatory Federal Communications Commission.

**15. Operational**

*Ongoing.*

Noise levels from the activity, property, or any mechanical equipment on site shall comply with the performance standards of Section 17.120 of the Oakland Planning Code and Section 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 Planning and Zoning Division and Building Services.

**APPLICANT AND CONTRACTOR STATEMENT:**

I have read and understand and accept responsibility for the conditions of approval for Small Project Design Review Application Number: **DS19-0327**, as listed in the Zoning Administrator's Action dated **July 29, 2019**. I agree to abide by and conform to these conditions, as well as to all provisions of the Oakland Zoning Code and Municipal Code pertaining to the project located at **1720 Macarthur Blvd.**

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature      Owner

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature      Contractor

