Development Review (Minor) Staff Approval

T- Mobile PH10925D - McDowell Mtn HOA

APPLICATION INFORMATION			
LOCATION:	16116 N McDowell Mountain Ranch Rd	APPLICANT:	Moriah Solomon
PARCEL:	217-17-002G	COMPANY:	Reliant Land Services
Q.S.:	35-53	ADDRESS:	8170 N. 86th Place, Suite 103 Scottsdale, AZ 85258
ZONING:	PCoC ESL	PHONE:	(602) 625-6628
Request: Modification to existing T-Mobile wireless communication facility (WCF) consisting of extending the width and height of an existing faux chimney and modifying antennas and associated equipment inside chimney.			

STIPULATIONS

1. Plans submitted with the construction drawing submittal shall be consistent with the plans submitted by Reliant Land Services and T-Mobile, with a date of 4/30/19.
2. New faux chimney color, texture materials shall match existing faux chimney.
3. Schedule a pre-construction meeting with Inspection Services by calling 480-312-5796. This note shall appear on the cover sheet.

CONSTRUCTION DOCUMENT PLAN REVIEW SUBMITTAL REQUIREMENTS

Submit construction drawings on-line at the below link. Construction drawings shall be reviewed by Building MPE, Building Structural, Fire and Planning.

https://eservices.scottsdaleaz.gov/bldgresources/Plans

ARCHITECTURAL: ☒ Submit CD's digitally to be reviewed by Building MPE & Structural, Fire & Planning
OTHER: ☒ Structural Report

Expiration of Development Review (Minor) Approval

This approval expires two (2) years from date of approval if a permit has not been issued, or if no permit is required, work for which approval has been granted has not been completed.

Staff Signature: _____ Date: 5/13/2019

Keith Niederer

1330 West Southern Ave, Ste A-102,
Tempe, Az 85282

City of Scottsdale
7447 E. Indian School, suite 105
Scottsdale, AZ 85251

May 2, 2019

Project Narrative

Subject: T- Mobile PH10925D – McDowell Mtn HOA

Dear City Planner,

T-Mobile proposes to complete a modification on a building located 16116 N. McDowell Mountain Ranch Road Scottsdale, AZ 85255

The scope of work includes the following:
EXTEND WIDTH AND HEIGHT OF (E) FAUX CHIMNEY
REMOVE (3) ANTENNAS
REMOVE (3) TOWER MOUNTED AMPLIFIERS
REMOVE (6) DIPLEXERS
INSTALL (3) ANTENNAS
INSTALL (1) COMBINED OVER VOLTAGE PROTECTION UNITS (COVPs)
INSTALL (6) REMOTE RADIO UNITS (RRUs)
INSTALL (1) HYBRID CABLES

Sincerely,
Moriah Solomon
Reliant Land Services, Inc.
8170 N. 86th Place, Suite 103
Scottsdale, AZ 85258
Email: moriah.solomon@rlsusa.com
Mobile: 602-625-6628
Authorized Representative for T-Mobile

T · ·Mobile·

1330 W. Southern, Tempe, AZ 85282

April 1, 2019

McDowell Mountain Ranch Community Association
16116 N. McDowell Mountain Ranch Road
Scottsdale, AZ 85255

Re: T-Mobile Site #: PH10925D McDowell Mountain
Site Address: 16116 N. McDowell Mountain Ranch Road. Scottsdale, AZ 85255
Acknowledgment and Consent Letter for Modification of Antenna Facilities.

Dear Sir or Madam:

T-Mobile West Corporation, a Delaware corporation ("T-Mobile"), and McDowell Mountain Ranch Community Association, entered into a site Lease with option dated September 7, 2005 for a site located at 16116 N. McDowell Mountain Ranch Road, Scottsdale, AZ 85255, upon which T-Mobile operates wireless antenna facilities.

Pursuant to the Lease, T-Mobile has the right to alter, replace, expand, enhance, modify or upgrade the antenna facilities at any time during the term of the Lease with landlord's approval, which cannot be unreasonably withheld, conditioned or delayed.

T-Mobile needs to modify the antenna facilities by installing the equipment described in attached file. All of the equipment will be installed within the existing premises. According to what was agreed upon, T-Mobile will increase the monthly rent amount by $450. The total new monthly rent will be $1,640.25.

To confirm your approval of the proposed modifications to the antenna facilities, please sign and date the acceptance and acknowledgment below, keep one copy for your records and return via email the other to copy to us. Prior to the start of any construction activities T-Mobile will contact you to coordinate the construction schedule. If you have any questions, please contact me below. We thank you for your courtesy and cooperation.

Sincerely,

Frank Cruz

Frank Cruz
Project Manager, Reliant Land Services, Inc.
Authorized Representative for T-Mobile.

Acknowledged, Accepted and Agreed:

Landlord: McDowell Mountain Ranch Community Association

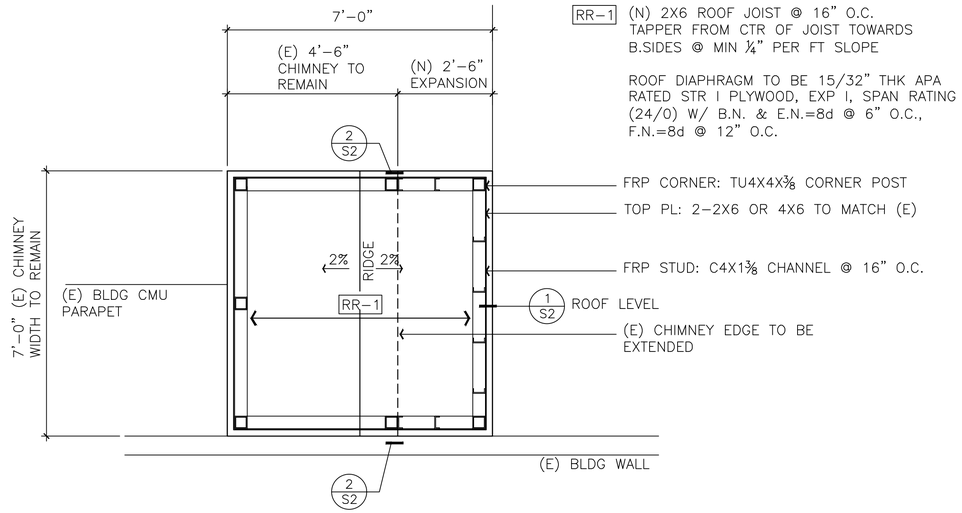
By: _____

Name: CHRIS RICHARDSON

Title: GENERAL MANAGER

Date: 4/2/19

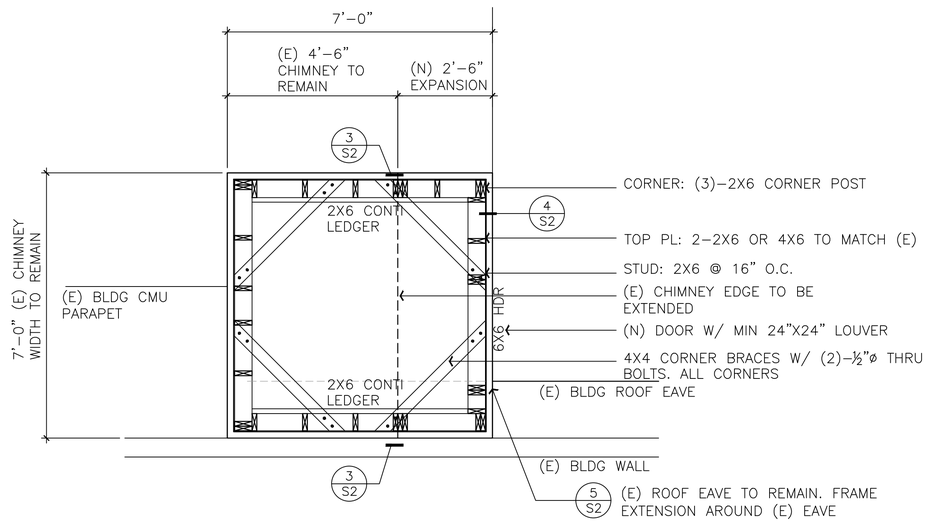
CHIMNEY TOWER ROOF PLAN



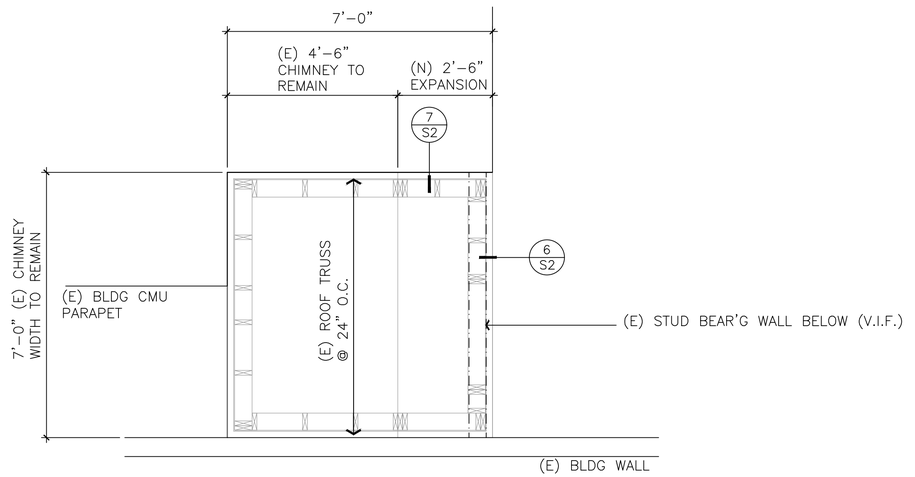
RR-1 (N) 2X6 ROOF JOIST @ 16" O.C. TAPPER FROM CTR OF JOIST TOWARDS B.SIDES @ MIN ¼" PER FT SLOPE

ROOF DIAPHRAGM TO BE 15/32" THK APA RATED STR I PLYWOOD, EXP I, SPAN RATING (24/0) W/ B.N. & E.N.=8d @ 6" O.C., F.N.=8d @ 12" O.C.

CHIMNEY TOWER MID LEVEL



CHIMNEY TOWER BASE LEVEL



FAUX CHIMNEY FRAMING PLANS

SCALE N.T.S. | 1

CARRIER:

T-Mobile

4830 PAN AMERICAN FREEWAY NE, SUITE A
ALBUQUERQUE, NM 87109

PLANS PREPARED BY:

RLS
RELIANT LAND SERVICES
8170 N. 86TH PLACE, STE 103
SCOTTSDALE, AZ 85258

SITE INFORMATION:

T-MOBILE
SITE NUMBER:
PH10925D
SITE NAME:
McDOWELL MTN HOA

16116 N. MCDOWELL MTN RANCH RD
SCOTTSDALE, AZ 85255
MARICOPA COUNTY

ISSUED FOR:

REV	DATE	DESCRIPTION	BY:
---	05/01/19	STRUCTURAL DRAWINGS	-

LICENSURE INFO:

Registered Professional Engineer (Structural) CERTIFICATION NO. 40506 SHIUH-GUANG LEE ARIZONA, U.S.A.

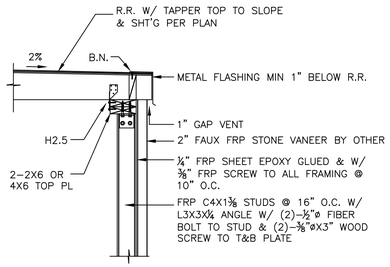
DATE STAMPED: 05/01/2019

SHEET TITLE:

FAUX CHIMNEY EXPANSION PLANS

SHEET NUMBER:

S-1



FAUX CHIMNEY ROOF FRAM'G

SCALE N.T.S. 1

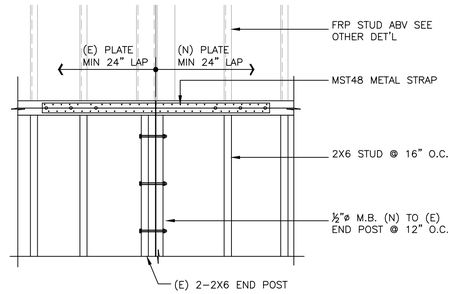
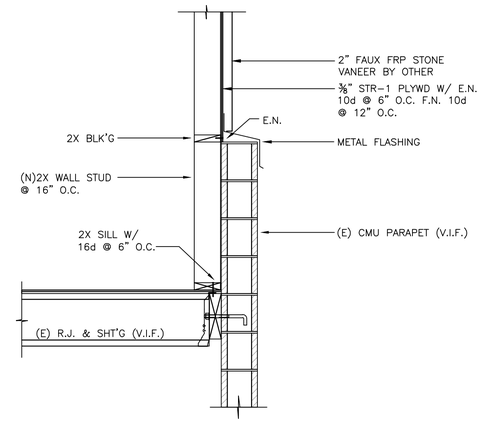


PLATE STRAP

SCALE N.T.S. 4



BASE CONN @ (E) PARAPET

SCALE N.T.S. 7

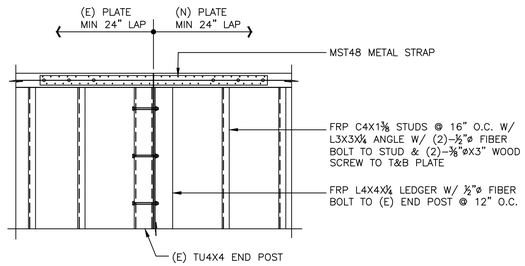
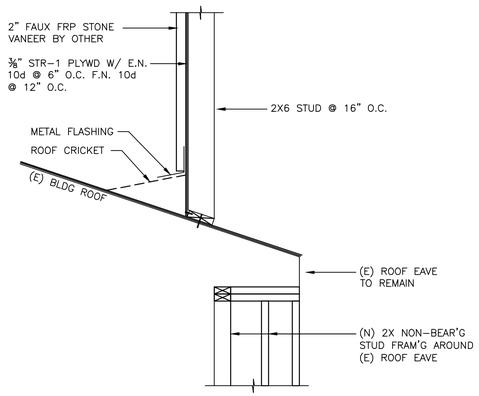


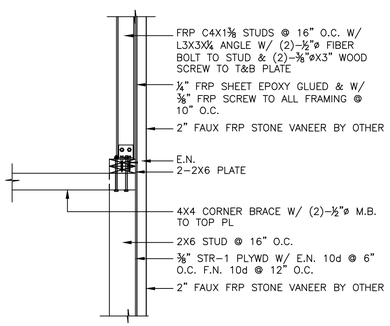
PLATE STRAP

SCALE N.T.S. 2



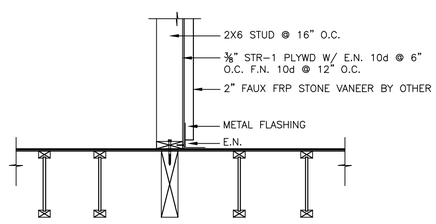
FRAMING @ (E) ROOF

SCALE N.T.S. 5



MID LEVEL WALL FRAMING

SCALE N.T.S. 3



BASE CONNECTION

SCALE N.T.S. 6

CARRIER:

T-Mobile

4830 PAN AMERICAN FREEWAY NE, SUITE A
ALBUQUERQUE, NM 87109

PLANS PREPARED BY:

RLS
RELIANT LAND SERVICES
8170 N. 86TH PLACE, STE 103
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16116 N. MCDOWELL MTN RANCH RD
SCOTTSDALE, AZ 85255
MARICOPA COUNTY

ISSUED FOR:

REV	DATE	DESCRIPTION	BY:
---	05/01/19	STRUCTURAL DRAWINGS	-

LICENSURE INFO:

Registered Professional Engineer (Structural)
CERTIFICATION NO.
40506
SHIUH-GUANG LEE
ARIZONA, U.S.A.

DATE STAMPED: 05/01/2019

SHEET TITLE:

DETAILS

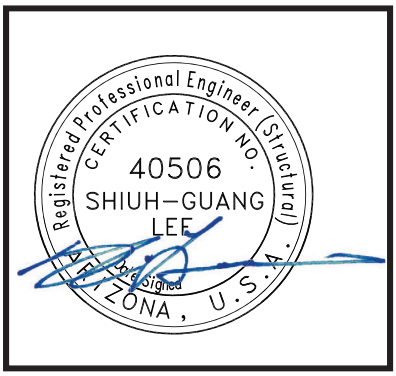
SHEET NUMBER:

S-2

RELIANT LAND SERVICES

Structural Calculations

Project:	T-Mobile
Site number:	PH10925D
Site name:	McDowell Mountain HOA
Address:	16116 N. McDowell Mountain Road Scottsdale, AZ85255 Maricopa County
Date:	04/29/19



1745 W. Orangewood Ave., Suite 103, Orange, CA 92868 Tel: (714) 685-0123 Fax: (714) 685-0125 web: www.rlsusa.com

Description of the project:

Design of faux chimney expansion over existing rooftop

Design Criteria:

Design code: 2018 IBC
Seismic: Risk Category II, Site D, Ss= 0.213 g, S1= 0.066 g
Wind: Exposure C, 115 mph.

Reference:

Existing building as-built drawing: n/a
Previous site as-built drawing: by "CSI, inc", no. 15-1761, dated 09/28/2006

Disclosure:

Please be advised that the evaluation and recommendations made were based on minimum design loads per current building codes without full as-built plans and without on-site intrusive investigation and verifications. With this inherent limitation, the design and evaluation were done in accordance with generally accepted engineering principles and practice. The engineer of record shall be notified immediately when discrepancy occurs between the actual on-site condition and this report and/or drawings for remedial solutions.

PH10925D

16116 E McDowell Mountain Ranch Rd, Scottsdale, AZ 85255, USA

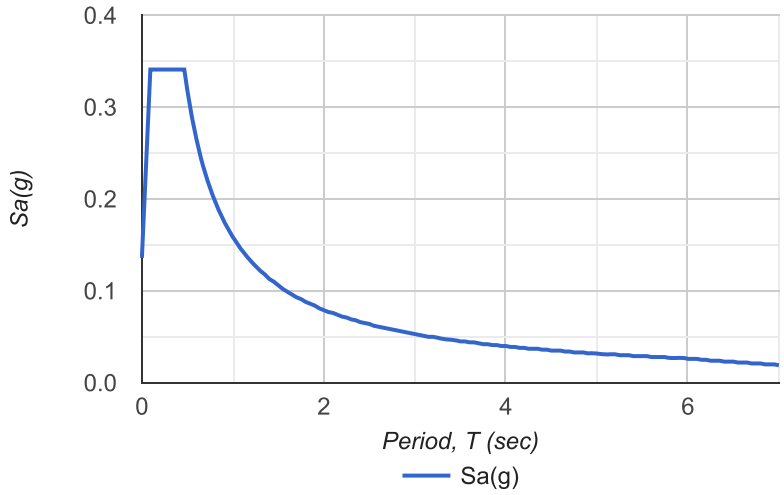
Latitude, Longitude: 33.631903, -111.84901500000001

Date	5/1/2019, 11:43:54 AM
Design Code Reference Document	ASCE7-10
Risk Category	II
Site Class	D - Stiff Soil

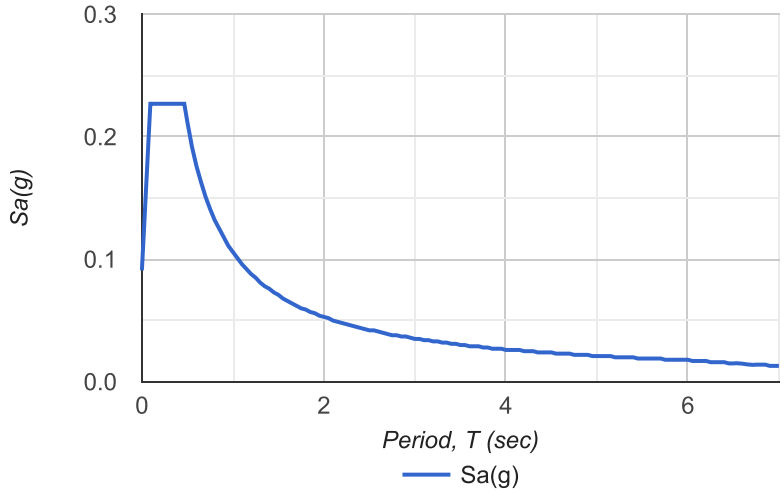
Type	Value	Description
S_S	0.213	MCE_R ground motion. (for 0.2 second period)
S_1	0.066	MCE_R ground motion. (for 1.0s period)
S_{MS}	0.341	Site-modified spectral acceleration value
S_{M1}	0.159	Site-modified spectral acceleration value
S_{DS}	0.227	Numeric seismic design value at 0.2 second SA
S_{D1}	0.106	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	B	Seismic design category
F_a	1.6	Site amplification factor at 0.2 second
F_v	2.4	Site amplification factor at 1.0 second
PGA	0.088	MCE_G peak ground acceleration
F_{PGA}	1.6	Site amplification factor at PGA
PGA_M	0.141	Site modified peak ground acceleration
T_L	6	Long-period transition period in seconds
SsRT	0.213	Probabilistic risk-targeted ground motion. (0.2 second)
SsUH	0.234	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
SsD	1.5	Factored deterministic acceleration value. (0.2 second)
S1RT	0.066	Probabilistic risk-targeted ground motion. (1.0 second)
S1UH	0.071	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S1D	0.6	Factored deterministic acceleration value. (1.0 second)
PGAd	0.5	Factored deterministic acceleration value. (Peak Ground Acceleration)
C_{RS}	0.909	Mapped value of the risk coefficient at short periods

MCER Response Spectrum



Design Response Spectrum



DISCLAIMER

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Seismic Calculation for faux chimney rooftop anchorage

Site Coordinates = **33.631903, -111.8490**
Soil Site Class = **D**
Risk Category = **II**

From Spectrum Data:

S_{MS} = **0.341** g $S_{DS} = 2/3\ S_{MS}$ = **0.227** g
S_{M1} = **0.159** g $S_{D1} = 2/3\ S_{M1}$ = **0.106** g
Seismic Design Category = **B**
ρ = **1.0**

Seismic Design Force :

R_p = **2.5** a_p = **1.0**
I_p = **1.0** z/h = **1.0**

W_p = **10** lbs ***Faux chimney unit weight***

$F_p = [0.4\ a_p\ S_{DS}\ W_p / (R_p/I_p)] \times (1+2(z/h))$
= **1.09** lbs
$F_{p,MAX} = 1.6\ S_{DS}\ I_p\ W_p$ = **3.64** lbs $F_{p,MIN} = 0.3\ S_{DS}\ I_p\ W_p$ = **0.68** lbs

Therefore F_p = **1.09** lbs

Seismic Load Effects E :

$E = \rho F_p \pm 0.2\ S_{DS}\ D$
= **1.09** lbs (Lateral) ± **0.45** lbs (Vertical)

Seismic Lateral Coefficient = **0.11**
ASD design coefficient = **0.08**

Antenna Wind Loads for anchroage design

Basic Wind Speed = **115** mph

Exposure = **C**
Category = **II**

Mean Roof Height (h) = **30** ft

Non-building Structure : Antenna

W = **1.0** ft
H = **1.0** ft

Apply "Design Wind Loads on Other Structures"

$F_{Wind} = q_h \ (G\ C_f)\ A_f$

q_z = velocity pressure evaluated at height z of the centroid og area of A_f
= $0.00256\ K_z\ K_{zt}\ K_d\ V^2$ (lb/ft^2)

K_z = **0.98**

$K_{zt} = (1 + K_1\ K_2\ K_3)^2$
= **1.0**

K_d = **0.85**

V = **115** mph

qz = **28.2** psf

G = **0.85**
C_f = **1.3**

G C_f = **1.105**

f_{wind} = **31.2** psf
ASD factor = **0.6**
for screen ONLY

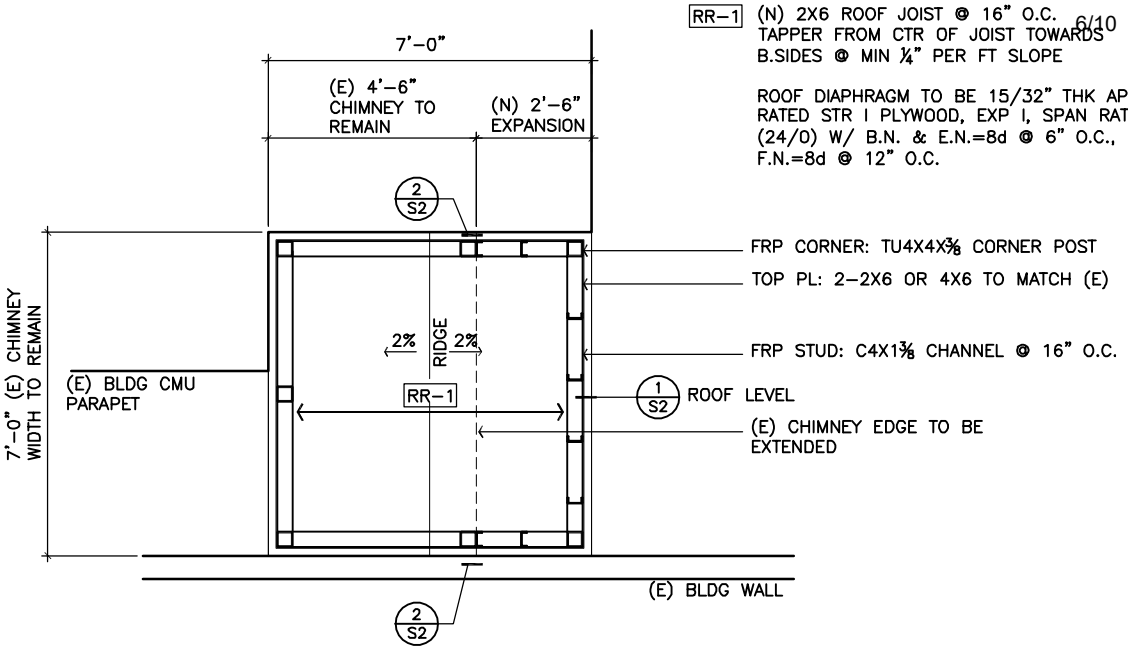
Base increase factor = 1.9
With reduction factor = 1.9 - [(1.9-1.0) x 0.0 = **1.9**

Final Fw (LRFD) = **59.2** psf = **59.2** lbs
Final Fw (ASD) = **35.5** psf = **35.5** lbs

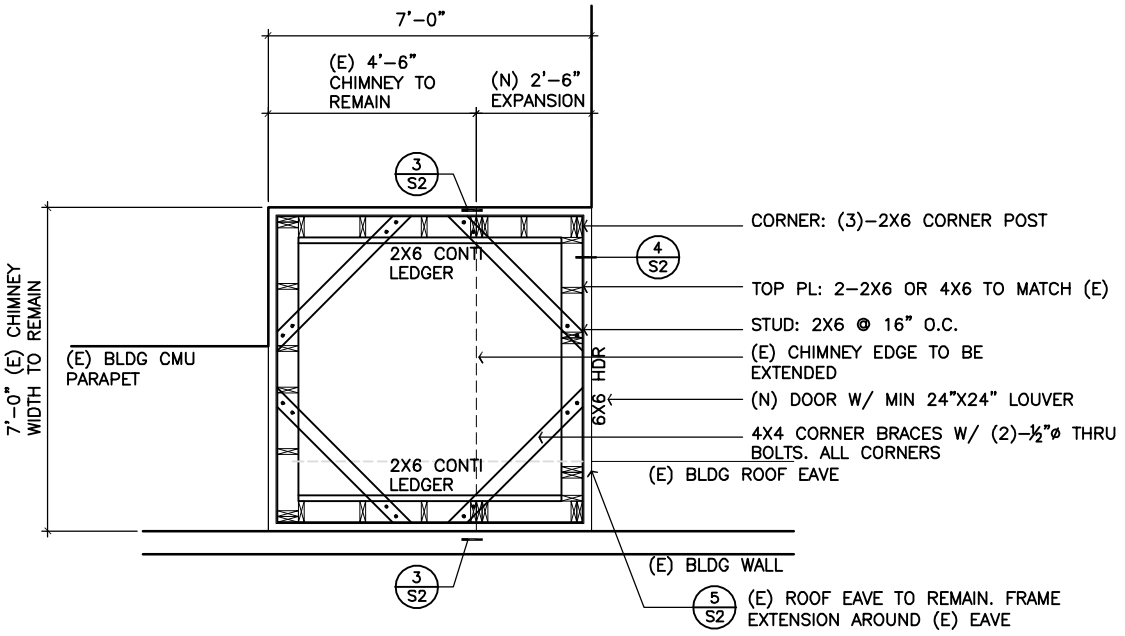
RR-1 (N) 2X6 ROOF JOIST @ 16" O.C. TAPPER FROM CTR OF JOIST TOWARDS B.SIDES @ MIN ¼" PER FT SLOPE

ROOF DIAPHRAGM TO BE 15/32" THK APA RATED STR I PLYWOOD, EXP I, SPAN RATING (24/0) W/ B.N. & E.N.=8d @ 6" O.C., F.N.=8d @ 12" O.C.

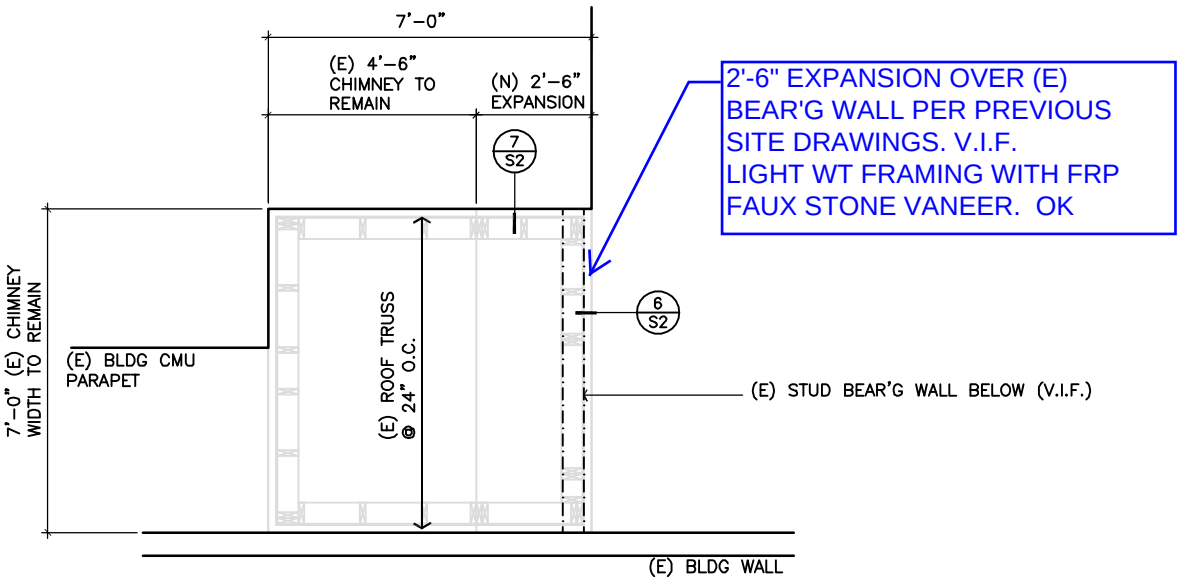
CHIMNEY TOWER ROOF PLAN



CHIMNEY TOWER MID LEVEL



CHIMNEY TOWER BASE LEVEL



2X6 ROOF RAFTER

PAGE:
DATE:
JOB No:

MAXIMUM ROOF RAFTER SPANS:

Roofing Material: built-up roofing **Pitch:** 0.0 :12

	psf		psf		in		L / factor=
DL=	10.00	LL=	20.00	SPACING:	16		360

SIZE	d(in)	A(in^2)	S(in^3)	I(in^4)	CF	Cr	CD
2 X 6	5.50	8.25	7.56	20.80	1.30	1.15	1.25
2 X 8	7.25	10.88	13.14	47.64	1.20	1.15	1.25
2 X 10	9.25	13.88	21.39	98.93	1.10	1.15	1.25
2 X 12	11.25	16.88	31.64	177.98	1.00	1.15	1.25

GRADE: DOUGLAS FIR # 2

Fb= 875 Fv= 95 E= 1600000

SIZE	F'b	F'v	L(bending)	L(shear)	L(deflect)	**L(max)**
2 X 6	1635.16	118.75	14.36	32.66	10.72	**10.72**
2 X 8	1509.38	118.75	18.18	43.05	14.13	**14.13**
2 X 10	1383.59	118.75	22.21	54.92	18.03	**18.03**
2 X 12	1257.81	118.75	25.75	66.80	21.93	**21.93**

notching end to form 1/4" slope.
net edge depth = 5.5-0.25"x3.5' = 4.625" End shear bearing OK

GRADE: DOUGLAS FIR #1

Fb= 1000 Fv= 95 E= 1700000

SIZE	F'b	F'v	L(bending)	L(shear)	L(deflect)	**L(max)**
2 X 6	1868.75	118.75	15.35	32.66	10.94	**10.94**
2 X 8	1725.00	118.75	19.44	43.05	14.42	**14.42**
2 X 10	1581.25	118.75	23.74	54.92	18.40	**18.40**
2 X 12	1437.50	118.75	27.53	66.80	22.38	**22.38**

GRADE: DOUGLAS FIR #1& BETTER

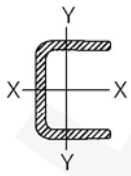
Fb= 1150 Fv= 95 E= 1800000

SIZE	F'b	F'v	L(bending)	L(shear)	L(deflect)	**L(max)**
2 X 6	2149.06	118.75	16.46	32.66	11.15	**11.15**
2 X 8	1983.75	118.75	20.84	43.05	14.70	**14.70**
2 X 10	1818.44	118.75	25.46	54.92	18.75	**18.75**
2 X 12	1653.13	118.75	29.53	66.80	22.81	**22.81**

TYP FRP WALL STUD @ UPPER LEVEL AGAINST WIND LOAD

BEAMS

CHANNELS — EXTREN® 500 & 525
E = 2.6 x 10^6 psi



Allowable Uniform Loads in Pounds Per Foot

	SPAN IN FEET	LATERALLY SUPPORTED - GOVERNED BY: Stress *F_b or F_v	Deflection l/100	l/150	l/180	l/240	l/360
** **4 x 1-1/16 x 1/8**	3	*291	—	—	—	234	156
Wt/ft. = 0.58 lbs.	4	*164	—	—	151	113	76
b_f/t_f = 8.50	5	*105	—	100	83	62	42
F_b = 5043 psi	6	*73	—	60	50	38	25
A_w = 0.47 in^2	7	*54	—	39	32	24	16
I_x = 1.55 in^4	8	*41	40	26	22	17	11
S_x = 0.78 in^3	9	*32	28	19	16	12	8
I_y = 0.01 in^4	10	*26	21	14	12	9	6
J = 0.004 in^4							
4 x 1-1/8 x 1/4	3	880	—	696	580	435	290
Wt/ft. = 1.11 lbs.	4	*550	505	337	281	210	140
b_f/t_f = 4.50	5	*352	277	185	154	116	77
F_b = 9228 psi	6	*244	167	111	93	70	46
A_w = 0.88 in^2	7	*180	108	72	60	45	30
I_x = 2.87 in^4	8	*137	74	49	41	31	20
S_x =1.43 in^3	9	*109	52	35	29	22	15
I_y = 0.13 in^4	10	*88	38	26	21	16	11
J = 0.030 in^4							
4 x 1-3/8 x 3/16	3	*563	—	—	503	377	251
Wt/ft. = 0.94 lbs.	4	*317	—	297	248	186	124
b_f/t_f = 7.33	5	*203	—	165	137	103	69
F_b = 5803 psi	6	*141	—	100	83	63	42
A_w = 0.68 in^2	7	*103	97	65	54	41	27
I_x = 2.62 in^4	8	*79	66	44	37	28	18
S_x =1.31 in^3	9	*63	47	32	26	20	13
I_y = 0.19 in^4	10	*51	35	23	19	15	10
J = 0.014 in^4							

** Non-stock size subject to mill run requirements.

Deflection not critical. Actual wind load = 35.5 psf x 21.33' = 47.2 #/ft OK

LOWER LEVEL 2X6 STUD @ 16" O.C.

PAGE:
DATE:
JOB No:

STUD OR COLUMN DESIGN:

DESCRIPTION: **10'-0" stud height**

LOADING:	DL(psf)	LL(psf)	W OR H/2	DL(plf)	LL(plf)		AXIAL LOAD:
ROOF:	10.00	20.00	3.50	35	70	DEAD:	0.00
WALL:	10.00		10.00	100		LIVE:	0.00
FLOOR:	0.00	0.00	0.00	0	0		
			TL(plf):	135	70		

WIND LOAD: P= 16.00 psf Fp= 3 psf

Hx= 10.00 ft

Hy= 0.00 ft

SPACING: 16.00 in

SELECT A TRIAL SIZE : 2 X 6 NUMBER: 1

SIZE	dy(in)	dx(in)	A(in^2)	S(in^3)	I(in^4)
2 X 6	1.5	5.5	8.25	7.5625	20.8

CM= 1.00 Ct= 1.00 CL= 1.00 Kf= 1

Cr = 1.15 CT= 1.00 K= 1 PIN:PIN

DOUGLAS FIR GRADE # 1

Fb	Fv	E	Fc	Fcn
875.00	95.00	1600000	1300	625

(le/d)y= 0 in Cb=(Lb+0.375)/Lb= 1.25

(le/d)x= 21.82 in

FOR VISUALLY GRADED SAWN LUMBER:

Kce= 0.3

c= 0.8

CHECK STUD FOR VERTICAL LOADS ONLY: CD= 1.25 CF= 1.1

F' b	E'	F'c	F'cn	Fce=	1008.33 psi	Fce/F*c=	0.564
1383.59	1600000	852.74651	781.25	F*c=	1787.5 psi	Cp=	0.477

PDL= 180 PLL= 93.333333 Ptotal= 273.33333

fc=P/A= 33.13 OKAY

CHECK STUDS FOR VERTICAL AND LATERAL LOADS:

CD= 1.33 CF= 1.3

F' b	E'	F'c	F'cn	Fce=	1008.33 psi	Fce/F*c=	0.530
1739.81	1600000	864.33018	781.25	F*c=	1901.9 psi	Cp=	0.454
w=	21.33	plf	M=wh^2/8	3200.00	in-lb		psi

fc=P/A= 33.13 OKAY

fb=M/S= 423.14 OKAY

CHECK COMBINED STRESSES:

check (fc/F'c)^2+(1/(1-fc/Fce))*fb/F'b <=1.0

(fc/F'c)^2+(1/(1-fc/Fce))*fb/F'b = 0.25 OKAY

CHECK DEFLECTION:

DEFLECTION CRITERIA: 240

MAXIMUM ALLOWED DEFLECTION: 0.50 in

ACTUAL DEFLECTION DUE TO LATERAL LOADS: 0.14 in

ADDITIONAL DEFLECTION DUE TO P-DELTA: 0.00 in

TOTAL ACTUAL DEFLECTION: 0.15 in

OKAY

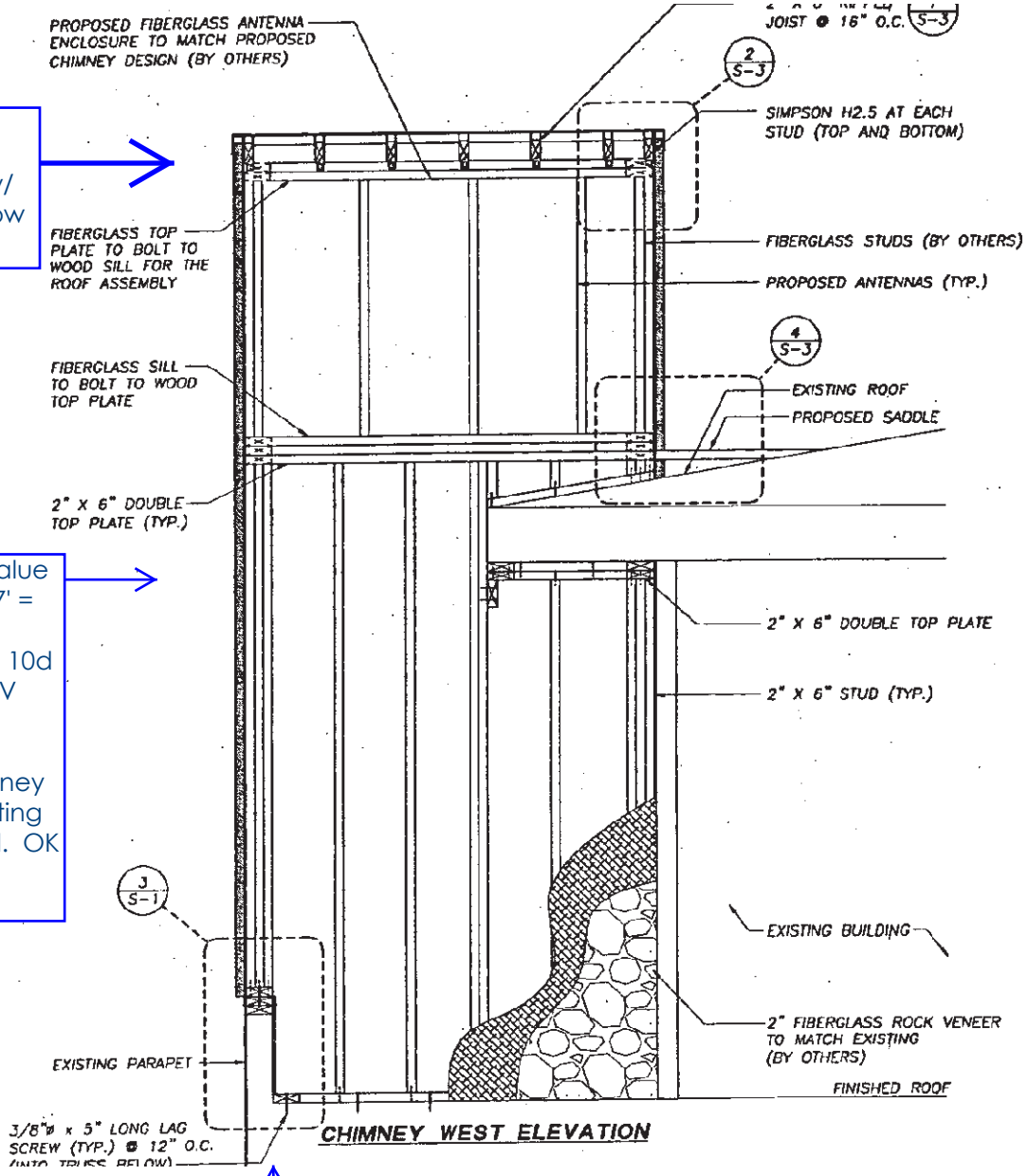
USE 1 2 X 6 DF# 2 AT 16 INCHES o/c

DL of entire 16'h faux chimney tower = 10 psf x 16'x 7'x4 = 4,480#
Seismic load = 0.11 x 4,480# = 493 lbs
Wind load = 35.5 psf x 16' x 7' = 3,976 lbs

Roof diaphragm = 3976 lbs / 4 / 7' = 142 #/ft
typ 1/2" STR-I plywood w/ 8d E.N. no block'g V allow = 200 #/ft OK

Wall plywood shear value
Force = 3976 lbs / 2 / 7' = 284 #/ft
provide 3/8" Plywd w/ 10d @ 6" blocked edges. V allow = 280#/ft OK

In addition, faux chimney is braced against existing building 2nd floor wall. OK by inspection.



All sides of faux chimney is supported by bearing wall wood or CMU. OK by inspection

T-MOBILE SITE NUMBER: PH10925D
T-MOBILE SITE NAME: McDOWELL MTN HOA

SITE ADDRESS: 16116 N. McDOWELL MTN RANCH RD
SCOTTSDALE, AZ 85255

COUNTY: MARICOPA
JURISDICTION: CITY OF SCOTTSDALE

PROJECT ID: L600

STRUCTURE TYPE: BUILDING STRUCTURE HEIGHT: 30'-6"

SITE INFORMATION

SITE NAME:	McDOWELL MTN HOA
SITE ADDRESS:	16116 N. McDOWELL MTN RANCH RD SCOTTSDALE, AZ 85255
COUNTY:	MARICOPA
APN #:	217-17-002G
AREA OF CONSTRUCTION:	EXISTING
LATITUDE:	33° 37' 57.3" N
LONGITUDE:	111° 50' 54.4" W
LAT/LONG TYPE:	NAD83
GROUND ELEVATION:	1713.6'
CURRENT ZONING:	P.CO.C
JURISDICTION:	CITY OF SCOTTSDALE
OCCUPANCY CLASSIFICATION:	U
TYPE OF CONSTRUCTION:	VB
LEASE AREA SQ FTG:	300 SQ. FT.
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
PROPERTY OWNER:	MCDOWELL MTN RANCH COMM. ASSOC. 2400 E ARIZONA BILTMORE CIR, STE 1300 PHOENIX, AZ 85016
CARRIER/APPLICANT:	T-MOBILE 1330 W. SOUTHERN AVE, STE A-102 TEMPE, AZ 85282

ISSUED FOR: FINAL CONSTRUCTION

DRAWING INDEX

SHEET #	SHEET DESCRIPTION
T1	TITLE SHEET
C0	GENERAL NOTES
C1	OVERALL SITE PLAN & EXISTING CONDITIONS
C2	EXISTING & NEW ENLARGED SITE PLANS
C3	EXISTING & NEW ELEVATIONS
C4	ANTENNA PLANS & SCHEMATIC
C5	DETAILS
G1	GROUNDING NOTES, PLAN & SCHEMATIC
G2	GROUNDING DETAILS
S-1	FAUX CHIMNEY EXPANSION PLANS
S-2	DETAILS

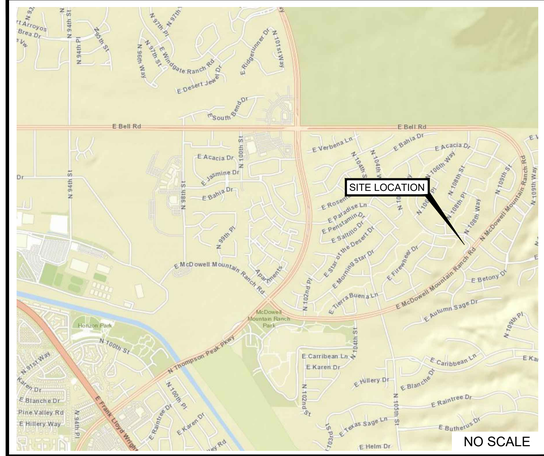
PROJECT TEAM

APPLICANT/CLIENT
T-MOBILE
1330 W. SOUTHERN AVE, STE A-102
TEMPE, AZ 85282

CONSULTING A&E FIRM:
RELIANT LAND SERVICES
8170 N. 86TH PLACE, SUITE 103
SCOTTSDALE, AZ 85258
CONTACT: FRANK CRUZ
- PROJECT MANAGER
OFFICE: (602) 540-0001

ENGINEER OF RECORD:
CHRIS LEE, P.E.
RELIANT LAND SERVICES
1745 W. ORANGEWOOD AVE., SUITE 103
ORANGE, CA 92868
OFFICE: (714) 685-0123

LOCATION MAP



NO SCALE

DRIVING DIRECTIONS FROM T-MOBILE LOCAL OFFICE AT 1330 W. SOUTHERN AVE, STE A-102, TEMPE, AZ 85282: TURN RIGHT (WEST) ONTO W SOUTHERN AVE. TURN LEFT ONTO S PRIEST DR. TURN LEFT TO MERGE ONTO US-60 E TOWARD MESA. CONTINUE ON US-60 E. TAKE EXIT 176B TO MERGE ONTO AZ-101 LOOP N. CONTINUE ON AZ-101 N UNTIL EXIT 39 FOR RAINTREE DR. TURN RIGHT ONTO E RAINTREE DR. TURN LEFT ONTO N THOMPSON PEAK PKWY. TURN RIGHT ONTO E MCDOWELL MOUNTAIN RANCH RD. TURN LEFT ONTO E PARADISE LN. MAKE THE 1ST LEFT TURN. SITE WILL BE ON THE RIGHT.

PROJECT DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO ENHANCE BROADBAND CONNECTIVITY AND CAPACITY TO THE EXISTING ELIGIBLE WIRELESS FACILITY.

PROJECT SCOPE OF WORK:
- EXTEND WIDTH AND HEIGHT OF (E) FAUX CHIMNEY
- REMOVE (3) ANTENNAS
- REMOVE (9) TOWER MOUNTED AMPLIFIERS
- REMOVE (6) DIPLEXERS
- INSTALL (3) ANTENNAS
- INSTALL (1) COMBINED OVER VOLTAGE PROTECTION UNITS (COVPs)
- INSTALL (6) REMOTE RADIO UNITS (RRUs)
- INSTALL (1) HYBRID CABLES

REFERENCE DOCUMENTS

DESIGN PACKAGE BASED ON THE RFDS, REVISION: (2.1) DATED 01/02/2019
STRUCTURAL ANALYSIS: (BY RELIANT LAND SERVICES) DATED 05/01/2019

APPLICABLE CODES

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

CODE TYPE	CODE
BUILDING	2015 IBC
MECHANICAL	2015 IMC
ELECTRICAL	2014 NEC

ALL APPLICABLE LOCAL AMENDMENTS

811 Know what's below. Call before you dig.

APPROVALS

APPROVAL	SIGNATURE	DATE
T-MOBILE MANAGER		
CONSULTING PROJ. MGR		
PROPERTY OWNER		
REAL ESTATE		

CARRIER:
T-Mobile
4830 PAN AMERICAN FREEWAY NE, SUITE A
ALBUQUERQUE, NM 87109

PLANS PREPARED BY:
RLS
RELIANT LAND SERVICES
8170 N. 86TH PLACE, STE 103
SCOTTSDALE, AZ 85258

SITE INFORMATION:

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MARICOPA COUNTY

ISSUED FOR:

REV	DATE	DESCRIPTION	BY:
---	04/08/19	DESIGN REVIEW	JMC
A	04/08/19	PRELIMINARY CONSTRUCTION	JMC
B	04/30/19	FINAL CONSTRUCTION	JMC

LICENSURE INFO:

Registered Professional Engineer (Structural) CERTIFICATION NO. 40506 SHIUH-GUANG LEE ARIZONA U.S.A.

DATE STAMPED: 05/01/2019

SHEET TITLE:
TITLE SHEET

SHEET NUMBER:
T1

GENERAL CONSTRUCTION NOTES:

1. THE FACILITY IS AN UNOCCUPIED TELECOMMUNICATION FACILITY.
2. PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
3. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE IMPLEMENTATION ENGINEER AND ARCHITECT AND/OR ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
4. THE CONTRACTOR SHALL RECEIVE, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
5. CONTRACTOR SHALL CONTACT ARIZONA 811 BEFORE PROCEEDING WITH ANY EXCAVATION, SITE WORK OR CONSTRUCTION.
6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
7. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
8. THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, USING THE BEST SKILLS AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT INCLUDING CONTACT AND COORDINATION WITH THE IMPLEMENTATION ENGINEER AND WITH THE LANDLORD'S AUTHORIZED REPRESENTATIVE.
9. SEAL PENETRATIONS THROUGH FIRE RATED AREAS WITH U.L. LISTED AND FIRE CODE APPROVED MATERIALS PER SECTION 709.6.
10. PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF THE PROJECT AREA DURING CONSTRUCTION.
11. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CHAPTER 16 OF THE UBC REGARDING EARTHQUAKE PIPING, LIGHT FIXTURES, CEILING GRID, INTERIOR PARTITIONS AND MECHANICAL EQUIPMENT. ALL WORK MUST BE IN ACCORDANCE WITH LOCAL EARTHQUAKE CODES AND REGULATIONS.
12. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATION MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.
13. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT (E) IMPROVEMENTS, PAVING, CURBS, VEGETATION, GALVANIZED SURFACES, ETC., AND UPON COMPLETION OF WORK REPAIR ANY DAMAGE THAT OCCURRED DURING CONSTRUCTION TO THE SATISFACTION OF T-MOBILE.
14. KEEP GENERAL AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. LEAVE PREMISES IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST OR SMUDGES OF ANY NATURE.
15. REPRESENTATIONS OF TRUE NORTH, OTHER THAN THOSE FOUND ON THE PLOT OF SURVEY DRAWING (SHEET LS1), SHALL NOT BE USED TO IDENTIFY OR ESTABLISH THE BEARING OF TRUE NORTH AT THE SITE. THE CONTRACTOR SHALL RELY SOLELY ON THE PLOT OF SURVEY DRAWING AND ANY SURVEYOR'S MARKINGS AT THE SITE FOR THE ESTABLISHMENT OF TRUE NORTH, AND SHALL NOTIFY THE ARCHITECT AND/OR ENGINEER PRIOR TO PROCEEDING WITH THE WORK IF ANY DISCREPANCY IS FOUND BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND THE TRUE NORTH ORIENTATION AS DEPICTED ON THE CIVIL SURVEY. THE CONTRACTOR SHALL ASSUME SOLE LIABILITY FOR ANY FAILURE TO NOTIFY THE ARCHITECT AND/OR ENGINEER.
16. PENETRATIONS OF ROOF MEMBRANES SHALL BE PATCHED AND/OR FLASHED AND MADE WATERTIGHT USING LIKE MATERIALS IN ACCORDANCE WITH NRCA ROOFING STANDARDS AND DETAILS. CONTRACTOR SHALL OBTAIN DETAILING CLARIFICATION FOR SITE-SPECIFIC CONDITIONS FROM ARCHITECT/ENGINEER, IF NECESSARY, BEFORE PROCEEDING.

A.B.	ANCHOR BOLT	DIA.	DIAMETER	GRND.	GROUND	REF.	REFERENCE
ABV.	ABOVE	DIAG.	DIAGONAL	HDR.	HEADER	REINF.	REINFORCEMENT(ING)
ACCA	ANTENNA CABLE COVER ASSEMBLY	DIM.	DIMENSION	HGR.	HANGER	REQ'D.	REQUIRED
ADD'L	ADDITIONAL	DWG.	DRAWING(S)	HT.	HEIGHT	RGS.	RIGID GALVANIZED STEEL
A.F.F.	ABOVE FINISHED FLOOR	DWL.	DOWEL(S)	ICGB.	ISOLATED COPPER GROUND BUS	SCH.	SCHEDULE
A.F.G.	ABOVE FINISHED GRADE	EA.	EACH	IN.(")	INCH(ES)	SHT.	SHEET
ALUM.	ALUMINUM	EL.	ELEVATION	INT.	INTERIOR	SIM.	SIMILAR
ALT.	ALTERNATE	ELEC.	ELECTRICAL	LB.(#)	POUND(S)	SPEC.	SPECIFICATION(S)
ANT.	ANTENNA	ELEV.	ELEVATOR	L.B.	LAG BOLTS	SQ.	SQUARE
APPRX.	APPROXIMATE(LY)	EMT.	ELECTRICAL METALLIC TUBING	L.F.	LINEAR FEET (FOOT)	S.S.	STAINLESS STEEL
ARCH.	ARCHITECT(URAL)	E.N.	EDGE NAIL	L.	LONG(ITUDINAL)	STD.	STANDARD
AWG.	AMERICAN WIRE GAUGE	ENG.	ENGINEER	MAS.	MASONRY	STL.	STEEL
BLDG.	BUILDING	EQ.	EQUAL	MAX.	MAXIMUM	STRUC.	STRUCTURAL
BLK.	BLOCK	EXP.	EXPANSION	M.B.	MACHINE BOLT	TEMP.	TEMPORARY
BLKG.	BLOCKING	EXST.(E)	(E)	MECH.	MECHANICAL	THK.	THICK(NESS)
BM.	BEAM	EXT.	EXTERIOR	MFR.	MANUFACTURER	T.N.	TOE NAIL
B.N.	BOUNDARY NAILING	FAB.	FABRICATION(OR)	MIN.	MINIMUM	T.O.A.	TOP OF ANTENNA
BTCW.	BARE TINNED COPPER WIRE	F.F.	FINISH FLOOR	MISC.	MISCELLANEOUS	T.O.C.	TOP OF CURB
B.O.F.	BOTTOM OF FOOTING	F.G.	FINISH GRADE	MTL.	METAL	T.O.F.	TOP OF FOUNDATION
B/U	BACK-UP CABINET	FIN.	FINISH(ED)	(P)	NEW	T.O.P.	TOP OF PLATE (PARAPET)
CAB.	CABINET	FLR.	FLOOR	NO.(#)	NUMBER	T.O.S.	TOP OF STEEL
CANT.	CANTILEVER(ED)	FDN.	FOUNDATION	N.T.S.	NOT TO SCALE	T.O.W.	TOP OF WALL
C.I.P.	CAST IN PLACE	F.O.C.	FACE OF CONCRETE	O.C.	ON CENTER	TYP.	TYPICAL
CLG.	CEILING	F.O.M.	FACE OF MASONRY	OPNG.	OPENING	U.G.	UNDER GROUND
CLR.	CLEAR	F.O.S.	FACE OF STUD	P/C	PRECAST CONCRETE	U.L.	UNDERWRITERS LABORATORY
COL.	COLUMN	F.O.W.	FACE OF WALL	PCS	PERSONAL COMMUNICATION SERVICES	U.N.O.	UNLESS NOTED OTHERWISE
CONC.	CONCRETE	F.S.	FINISH SURFACE	PLY.	PLYWOOD	V.I.F.	VERIFY IN FIELD
CONN.	CONNECTION(OR)	FT.(')	FOOT(FEET)	PPC	POWER PROTECTION CABINET	W	WIDE(WIDTH)
CONST.	CONSTRUCTION	FTG.	FOOTING	PRC	PRIMARY RADIO CABINET	W/	WITH
CONT.	CONTINUOUS	G.	GROWTH (CABINET)	P.S.F.	POUNDS PER SQUARE FOOT	WD.	WOOD
d	PENNY (NAILS)	GA.	GAUGE	P.S.I.	POUNDS PER SQUARE INCH	W.P.	WEATHERPROOF
DBL.	DOUBLE	GI.	GALVANIZE(D)	P.T.	PRESSURE TREATED	WT.	WEIGHT
DEPT.	DEPARTMENT	G.F.I.	GROUND FAULT CIRCUIT INTERRUPTER	PWR.	POWER (CABINET)	℄	CENTERLINE
D.F.	DOUGLAS FIR	GLB.(GLU-LAM)	GLUE LAMINATED BEAM	QTY.	QUANTITY	℘	PLATE
				RAD.(R)			

ABBREVIATIONS

2

NEW ANTENNA
(E) ANTENNA
GROUND ROD
GROUND BUS BAR
MECHANICAL GRND. CONN.
CADWELD
GROUND ACCESS WELL
ELECTRIC BOX
TELEPHONE BOX
LIGHT POLE
FND. MONUMENT
SPOT ELEVATION
SET POINT
REVISION
GRID REFERENCE
DETAIL REFERENCE
ELEVATION REFERENCE
SECTION REFERENCE
GROUT OR PLASTER
(E) BRICK
(E) MASONRY
CONCRETE
EARTH
GRAVEL
PLYWOOD
SAND
WOOD CONTINUOUS
WOOD BLOCKING
STEEL
CENTERLINE
PROPERTY/LEASE LINE
MATCH LINE
WORK POINT
GROUND CONDUCTOR
TELEPHONE CONDUIT
ELECTRICAL CONDUIT (POWER LINE)
COAXIAL CABLE
OVERHEAD SERVICE CONDUCTORS
CHAIN LINK FENCING
WROUGHT IRON FENCING

LEGEND

3

CARRIER:

T-Mobile

4830 PAN AMERICAN FREEWAY NE, SUITE A
ALBUQUERQUE, NM 87109

PLANS PREPARED BY:

RLS
RELIANT LAND SERVICES
8170 N. 86TH PLACE, STE 103
SCOTTSDALE, AZ 85258

SITE INFORMATION:

T-MOBILE
SITE NUMBER:
PH10925D
SITE NAME:
McDOWELL MTN HOA

16116 N. MCDOWELL MTN RANCH RD
SCOTTSDALE, AZ 85255
MARICOPA COUNTY

ISSUED FOR:

REV	DATE	DESCRIPTION	BY:
---	04/08/19	DESIGN REVIEW	JMC
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B	04/30/19	FINAL CONSTRUCTION	JMC

LICENSURE INFO:

Registered Professional Engineer (Structural) CERTIFICATION NO. 40506 SHIUH-GUANG LEE ARIZONA U.S.A.

DATE STAMPED: 05/01/2019

SHEET TITLE:

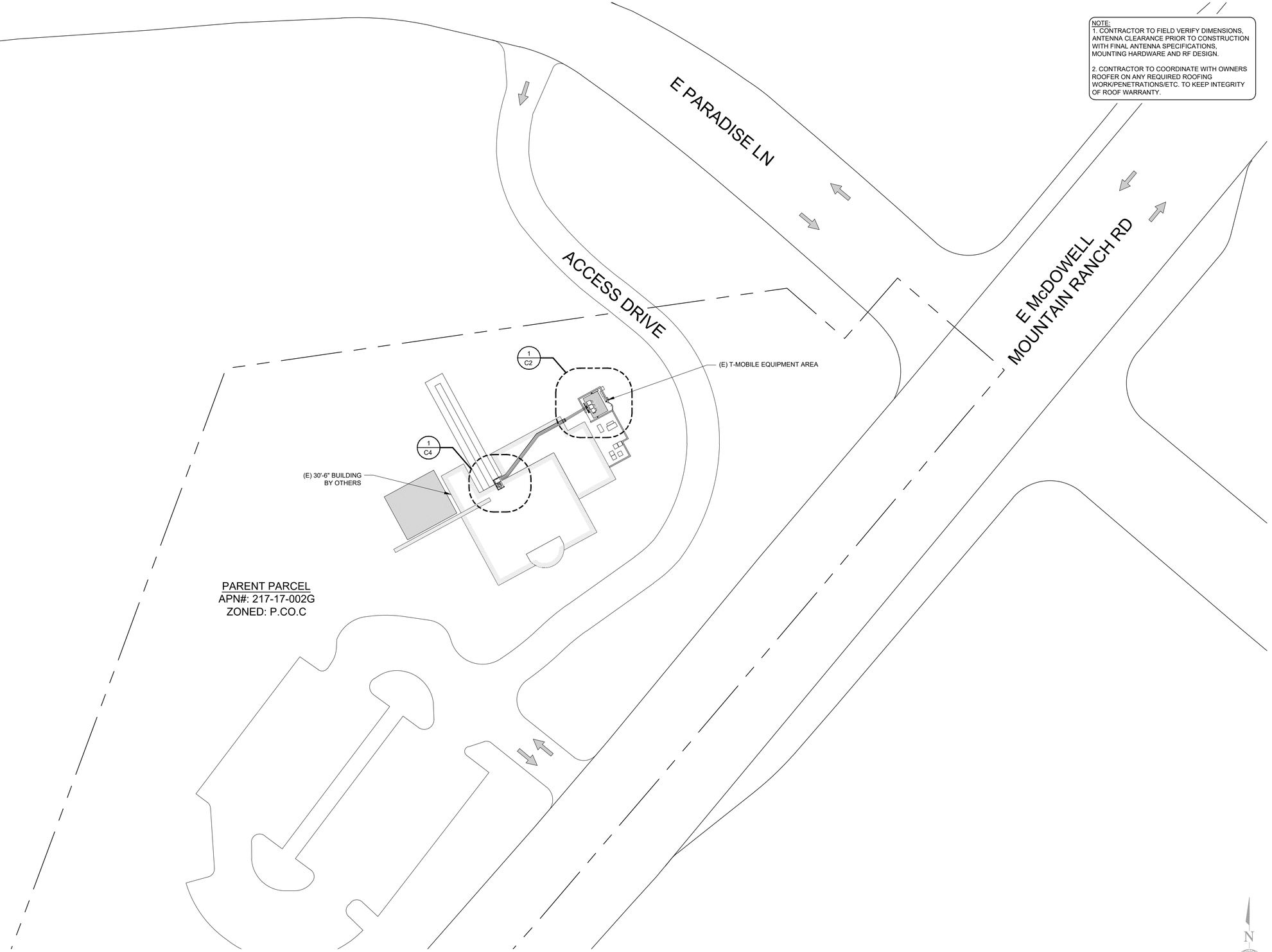
GENERAL NOTES

SHEET NUMBER:

C0

NOTE:
1. CONTRACTOR TO FIELD VERIFY DIMENSIONS, ANTENNA CLEARANCE PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE AND RF DESIGN.

2. CONTRACTOR TO COORDINATE WITH OWNERS ROOFER ON ANY REQUIRED ROOFING WORK/PENETRATIONS/ETC. TO KEEP INTEGRITY OF ROOF WARRANTY.



1 OVERALL SITE PLAN & EXISTING CONDITIONS

SCALE: 1" = 30'

30' 15' 0 30'

1"=30'-0" (FULL SIZE)
1"=60'-0" (11x17)

CARRIER:

T-Mobile

4830 PAN AMERICAN FREEWAY NE, SUITE A
ALBUQUERQUE, NM 87109

PLANS PREPARED BY:

RLS
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8170 N. 86TH PLACE, STE 103
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40506
SHIUH-GUANG LEE
ARIZONA, U.S.A.

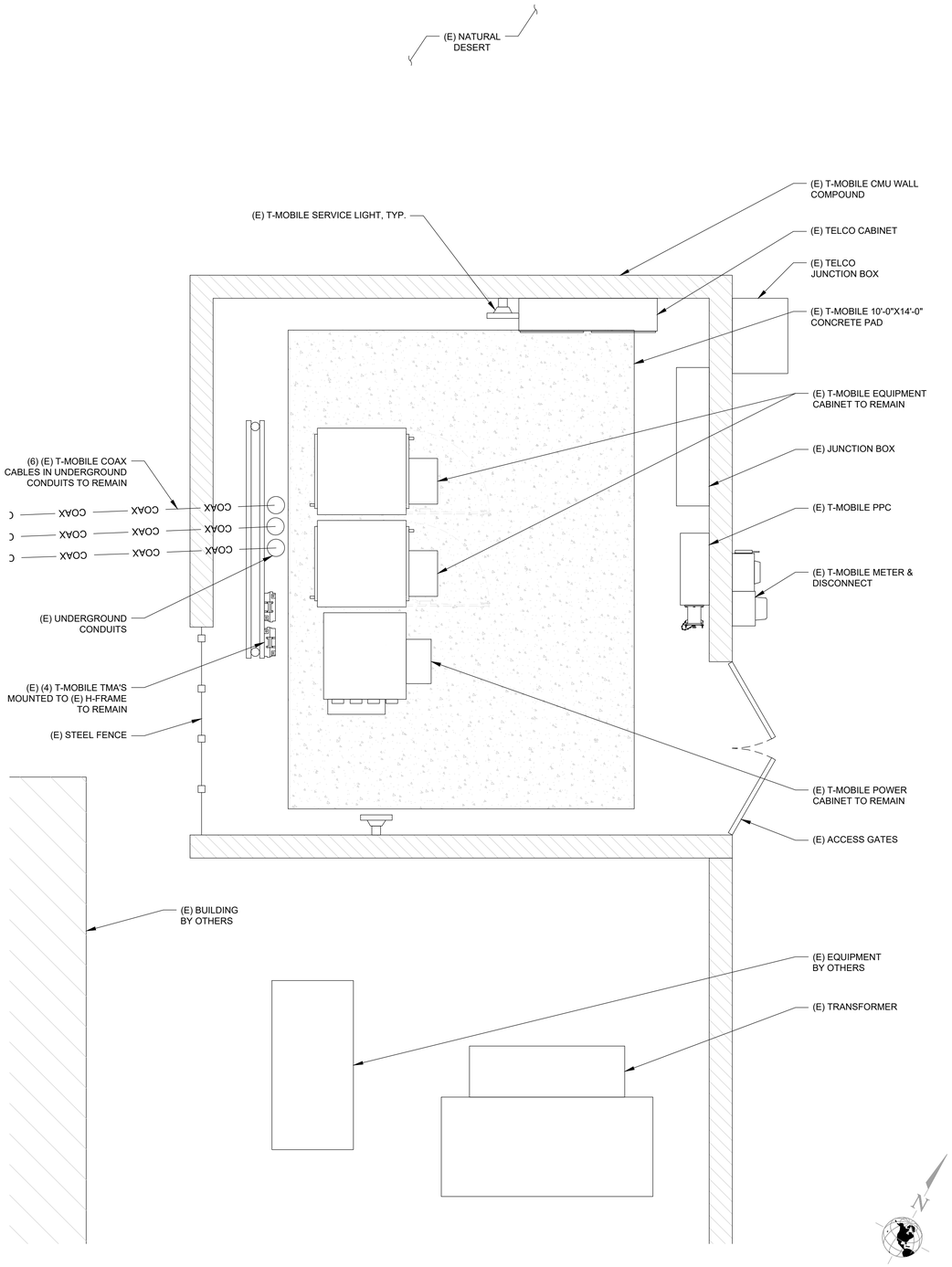
DATE STAMPED: 05/01/2019

SHEET TITLE:

OVERALL SITE PLAN & EXISTING CONDITIONS

SHEET NUMBER:

C1

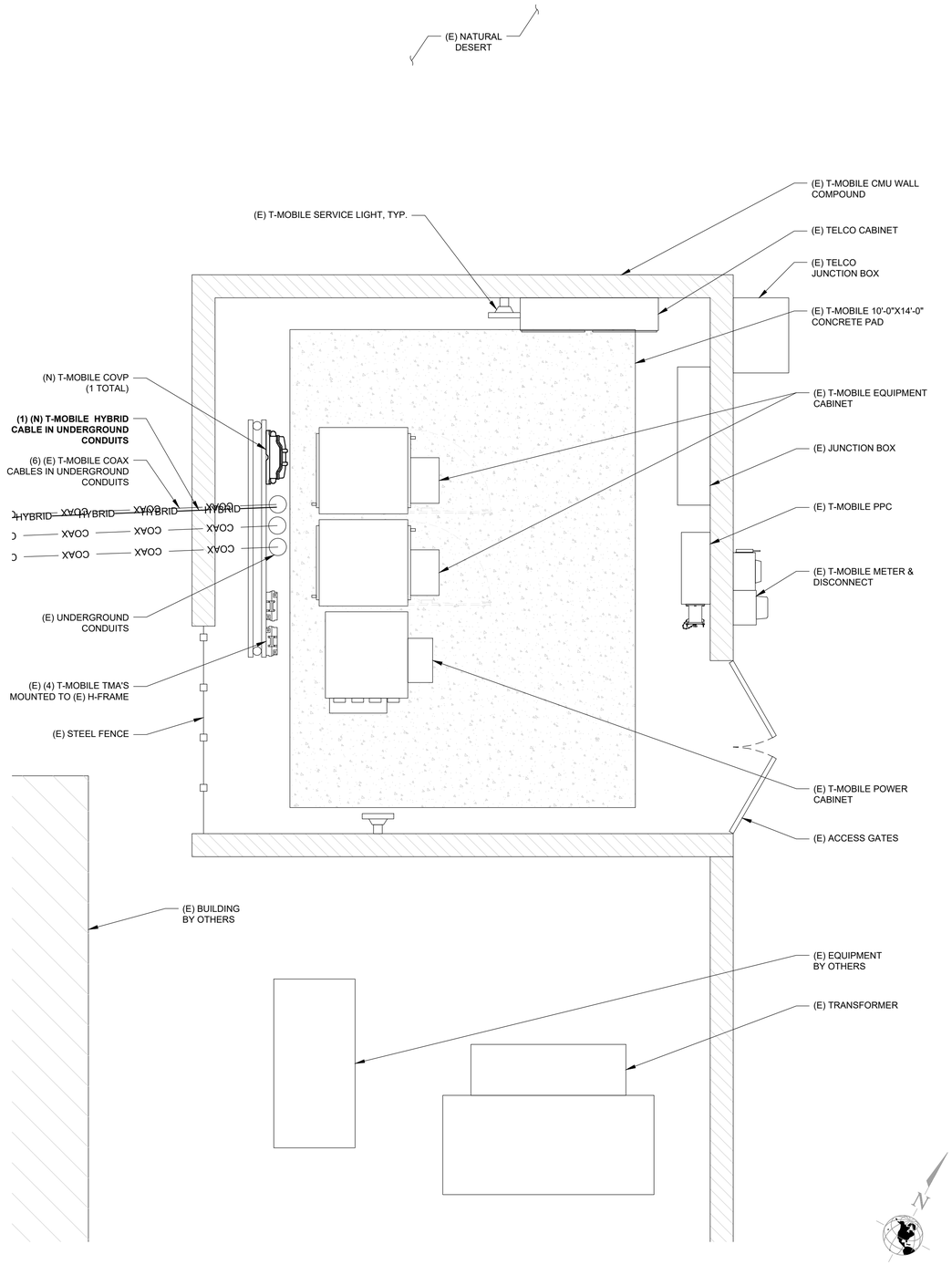


1 ENLARGED SITE PLAN - EXISTING

SCALE: 1/2" = 1'-0"

2' 1' 0 2'

1/2"=1'-0" (FULL SIZE)
1/4"=1'-0" (11x17)



2 ENLARGED SITE PLAN - NEW

SCALE: 1/2" = 1'-0"

2' 1' 0 2'

1/2"=1'-0" (FULL SIZE)
1/4"=1'-0" (11x17)

CARRIER:

T-Mobile

4830 PAN AMERICAN FREEWAY NE, SUITE A
ALBUQUERQUE, NM 87109

PLANS PREPARED BY:

RLS
RELIANT LAND SERVICES
8170 N. 86TH PLACE, STE 103
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SHIUH-GUANG LEE
ARIZONA, U.S.A.

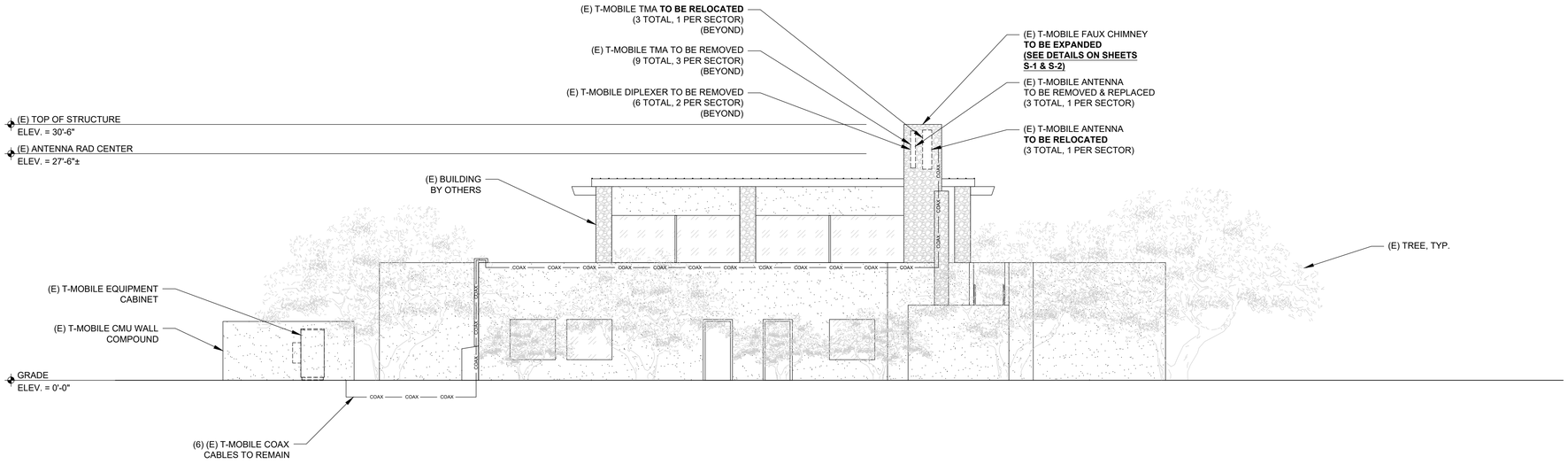
DATE STAMPED: 05/01/2019

SHEET TITLE:

EXISTING & NEW ENLARGED SITE PLANS

SHEET NUMBER:

C2



1 NORTHWEST ELEVATION - EXISTING

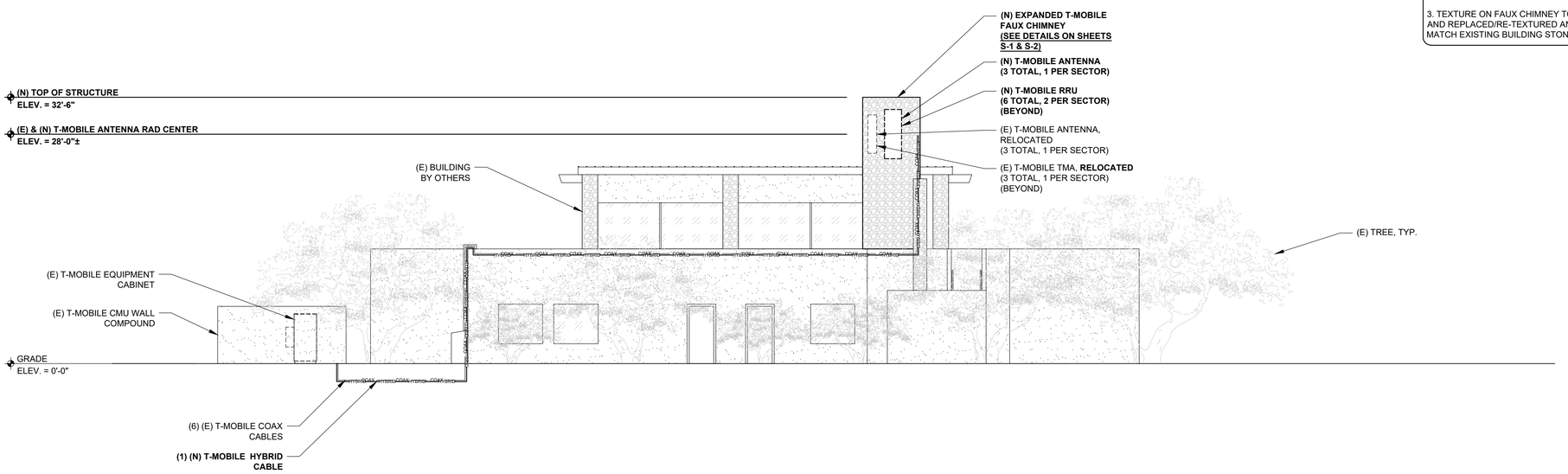
SCALE: 1/8" = 1'-0"

1/4"=1'-0" (FULL SIZE)
1/8"=1'-0" (11x17)

NOTE:
1. CONTRACTOR TO FIELD VERIFY DIMENSIONS, ANTENNA CLEARANCE PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE AND RF DESIGN.

2. CONTRACTOR TO COORDINATE WITH OWNERS ROOFER ON ANY REQUIRED ROOFING WORK/PENETRATIONS/ETC. TO KEEP INTEGRITY OF ROOF WARRANTY.

3. TEXTURE ON FAUX CHIMNEY TO BE REMOVED AND REPLACED/RE-TEXTURED AND PAINTED TO MATCH EXISTING BUILDING STONE VENEER



2 NORTHWEST ELEVATION - NEW

SCALE: 1/8" = 1'-0"

1/4"=1'-0" (FULL SIZE)
1/8"=1'-0" (11x17)

CARRIER:

T-Mobile

4830 PAN AMERICAN FREEWAY NE, SUITE A
ALBUQUERQUE, NM 87109

PLANS PREPARED BY:

RLS
RELIANT LAND SERVICES
8170 N. 86TH PLACE, STE 103
SCOTTSDALE, AZ 85258

SITE INFORMATION:

T-MOBILE
SITE NUMBER:
PH10925D
SITE NAME:
McDOWELL MTN HOA

16116 N. MCDOWELL MTN RANCH RD
SCOTTSDALE, AZ 85255
MARICOPA COUNTY

ISSUED FOR:

REV	DATE	DESCRIPTION	BY:
---	04/08/19	DESIGN REVIEW	JMC
A	04/08/19	PRELIMINARY CONSTRUCTION	JMC
B	04/30/19	FINAL CONSTRUCTION	JMC

LICENSURE INFO:

Registered Professional Engineer (Structural)
CERTIFICATION NO.
40506
SHIUH-GUANG LEE
ARIZONA, U.S.A.

DATE STAMPED: 05/01/2019

SHEET TITLE:

EXISTING & NEW ELEVATIONS

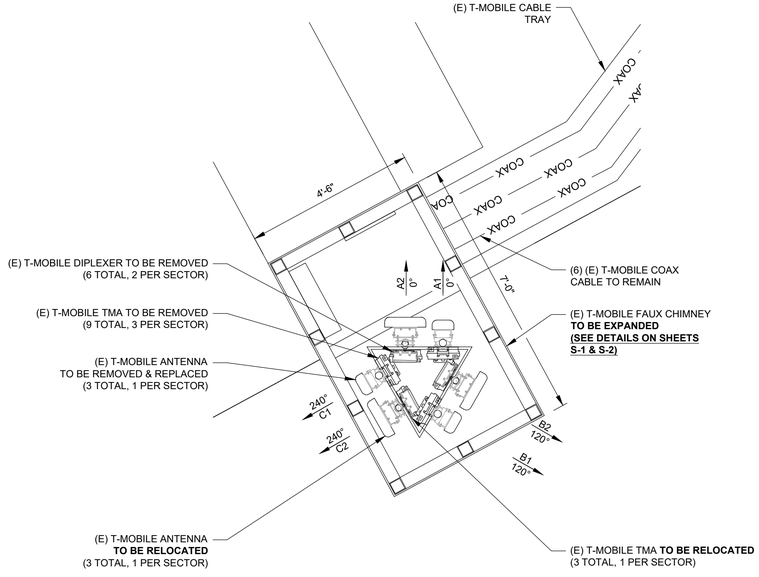
SHEET NUMBER:

C3

ANTENNA LEVEL EQUIPMENT SCHEDULE

CONDITION	POS.	AZIMUTH	RAD CENTER	ANTENNA INFO	CONDITION	RRU INFO	QTY	FEEDLINES
EXISTING	A1	0°	27'-6"	QUAD PORT PANEL ANTENNA	EXISTING	TMA	1	(E) (6) COAX **(N) (1) HYBRID**
NEW	A2	0°	27'-6"	OCTO PORT PANEL ANTENNA	NEW	RRU	2	
EXISTING	B1	120°	27'-6"	QUAD PORT PANEL ANTENNA	EXISTING	TMA	1	
NEW	B2	120°	27'-6"	OCTO PORT PANEL ANTENNA	NEW	RRU	2	
EXISTING	C1	240°	27'-6"	QUAD PORT PANEL ANTENNA	EXISTING	TMA	1	
NEW	C2	240°	27'-6"	OCTO PORT PANEL ANTENNA	NEW	RRU	2	

1 ANTENNA LEVEL EQUIPMENT SCHEDULE



2 EXISTING ANTENNA LAYOUT

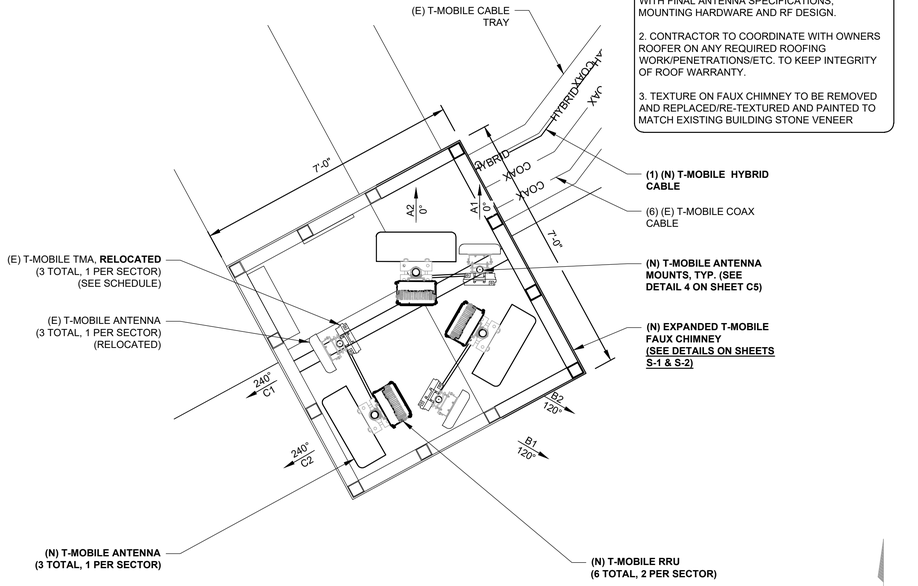
SCALE: 1/2" = 1'-0"

3/8"=1'-0" (FULL SIZE)
3/16"=1'-0" (11x17)

NOTE:
1. CONTRACTOR TO FIELD VERIFY DIMENSIONS, ANTENNA CLEARANCE PRIOR TO CONSTRUCTION WITH FINAL ANTENNA SPECIFICATIONS, MOUNTING HARDWARE AND RF DESIGN.

2. CONTRACTOR TO COORDINATE WITH OWNERS ROOFER ON ANY REQUIRED ROOFING WORK/PENETRATIONS/ETC. TO KEEP INTEGRITY OF ROOF WARRANTY.

3. TEXTURE ON FAUX CHIMNEY TO BE REMOVED AND REPLACED/RE-TEXTURED AND PAINTED TO MATCH EXISTING BUILDING STONE VENEER



3 NEW ANTENNA LAYOUT

SCALE: 1/2" = 1'-0"

3/8"=1'-0" (FULL SIZE)
3/16"=1'-0" (11x17)

CARRIER:

T-Mobile

4830 PAN AMERICAN FREEWAY NE, SUITE A
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PLANS PREPARED BY:

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Registered Professional Engineer (Structural) CERTIFICATION NO. 40506 SHIUH-GUANG LEE ARIZONA, U.S.A.

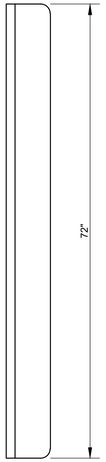
DATE STAMPED: 05/01/2019

SHEET TITLE:

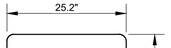
ANTENNA PLANS & SCHEMATIC

SHEET NUMBER:

C4



SIDE



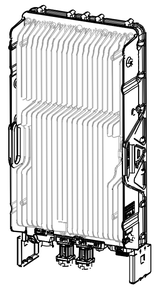
TOP

CONNECTIONS

PROPERTY	VALUE
LENGTH	72"
WIDTH	25.2"
DEPTH	9.3"
WEIGHT	101.4 LBS

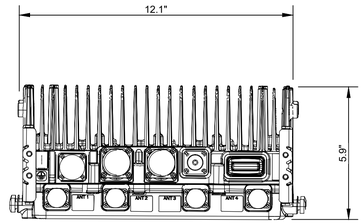
1 PANEL ANTENNA DETAIL

SCALE: NOT TO SCALE



ISO

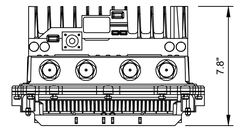
PROPERTY	VALUE
HEIGHT	CORE RRU: 22.0" WITH UPPER AND LOWER MOUNTING BRACKETS: 26.6"
DEPTH	CORE RRU: 5.9" WITH UPPER AND LOWER MOUNTING BRACKETS: 6.5"
WIDTH	CORE RRU: 12.1" WITH UPPER AND LOWER MOUNTING BRACKETS: 12.9"
WEIGHT	66.1 LBS

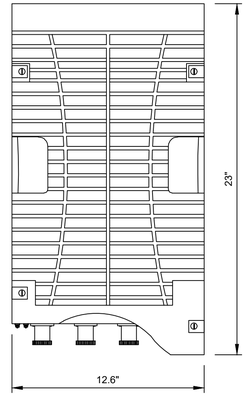


2 REMOTE RADIO UNIT (RRU) DETAIL

SCALE: NOT TO SCALE

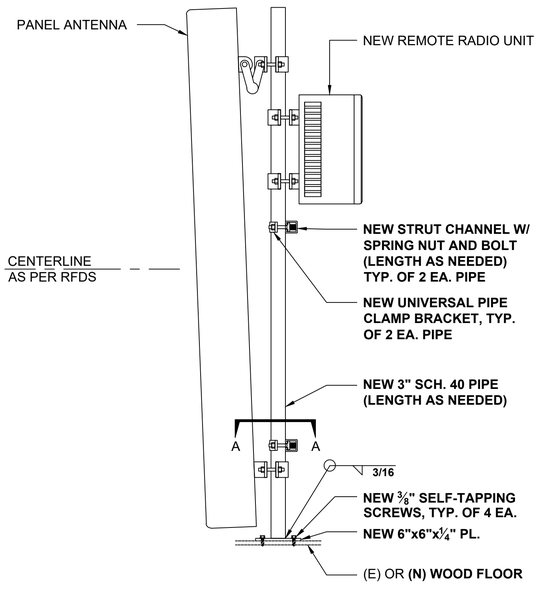
PROPERTY	VALUE
HEIGHT	CORE RRU: 23.0" WITH UPPER AND LOWER MOUNTING BRACKETS: 34.3"
DEPTH	7.8"
WIDTH	12.6"
WEIGHT	48.5 LBS (W/ BRACKET 51 LBS)



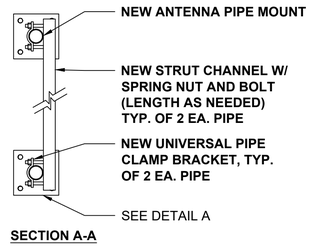


3 REMOTE RADIO UNIT (RRU) DETAIL

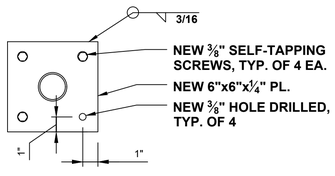
SCALE: NOT TO SCALE



ANTENNA PIPE MOUNT



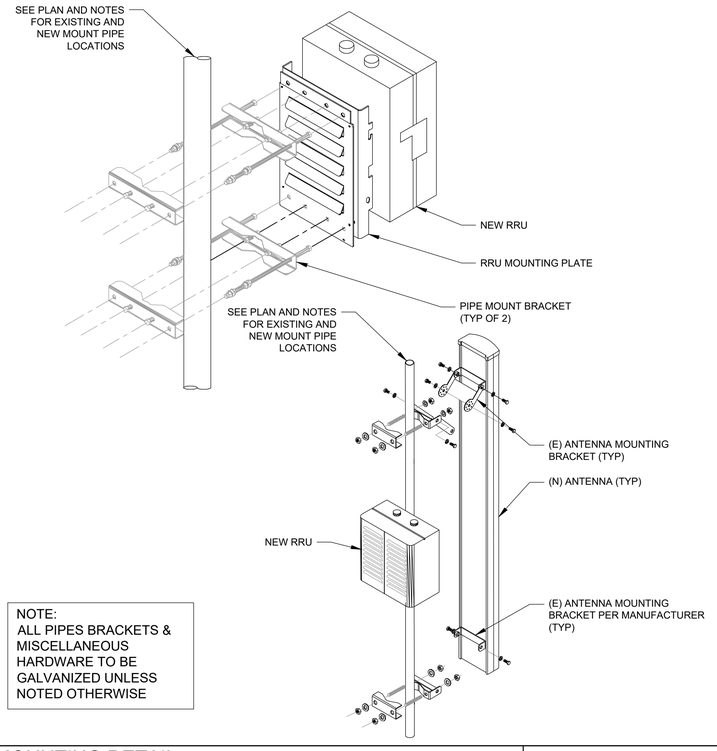
SECTION A-A



DETAIL A

4 ANTENNA MOUNT DETAIL

SCALE: NOT TO SCALE



NOTE:
ALL PIPES BRACKETS & MISCELLANEOUS HARDWARE TO BE GALVANIZED UNLESS NOTED OTHERWISE

5 ANTENNA & RRU MOUNTING DETAIL

SCALE: NOT TO SCALE

CARRIER:

T-Mobile

4830 PAN AMERICAN FREEWAY NE, SUITE A
ALBUQUERQUE, NM 87109

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LICENSURE INFO:

DATE STAMPED: 05/01/2019

SHEET TITLE:

DETAILS

SHEET NUMBER:

C5

GENERAL GROUNDING NOTES - ANTENNA MODIFICATION

1. ALL GROUNDING LEADS INSTALLED TO ENSURE A SMOOTH PATH TO COUNTERPOISE WITHOUT KINKS OR SHARP BENDS OR RETURN UPWARDS.
2. ANY EXCEPTIONS TO THIS BASIC GROUNDING DESIGN GUIDELINE, ROUTING DESIGN, OR MODIFICATIONS, WILL BE DOCUMENTED AND DIMENSIONED BY WAY OF RED LINE DRAWINGS. IT IS THE RESPONSIBILITY OF THE SELECTED CONTRACTOR TO ENSURE THE NEWLY INSTALLED GROUNDING SYSTEM MEETS THE T-MOBILE STANDARD OF 5 OHMS OR LESS.
3. PROVIDE ALL WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY AND LOCAL CODES, O.S.H.A. AND THE PROJECT SPECIFICATIONS.
4. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED AND APPROVED OF THE DIVISION OF INDUSTRIAL SAFETY AND ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, AND NBFU.
5. THESE PLANS ARE DIAGRAMMATIC ONLY, FOLLOW AS CLOSELY AS POSSIBLE.
6. SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDERE THIS CONTRACT.
7. COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. ANY WORK, MATERIAL OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
8. HEIGHTS SHALL BE VERIFIED WITH T-MOBILE AND/OR LANDLORD PRIOR TO INSTALLATION.
9. CONTRACTOR SHALL PERFORM ALL VERIFICATION OBSERVATION TESTS, AND EXAMINATION WORK PRIOR TO ORDERING OF THE ELECTRICAL EQUIPMENT AND THE ACTUAL CONSTRUCTION. CONTRACT SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES.
10. PROVIDE CONSTRUCTION MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND CIRCUITS.
11. ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURN OVER TO OWNER AT JOB COMPLETION.
12. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES AND DRAWINGS.
13. PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
14. IN DRILLING HOLES INTO CONCRETE WHETHER FOR FASTENING OR ANCHORING PURPOSES, OR DAMAGED UNDER ANY CIRCUMSTANCES.
15. LOCATION OF TENDONS AND/OR REINFORCING STEEL ARE NOT DEFINITELY KNOWN AND THEREFORE MUST BE SEARCHED FOR BY APPROPRIATE METHODS AND EQUIPMENT VIA X-RAY OR OTHER DEVICES THAT CAN ACCURATELY LOCATE THE REINFORCING AND / OR STEEL TENDONS.
16. PENETRATIONS IN FIRE RATED WALL SHALL BE FIRE STOPPED IN ACCORDANCE WITH SECTION NO. 4305 AND NO. 4304 OF THE U.B.C.
17. ALL MATERIALS SHALL BE U.L. LISTED
18. CONDUIT:

a. RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN CONCRETE SLABS, OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE ½ LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.

b. ELECTRICAL METALLIC CONDUIT SHALL HAVE U.L. LABEL, FITTINGS SHALL BE GLAND RING COMPRESSION TYPE. EMT SHALL BE USED ONLY FOR INTERIOR RUNS.

c. LIQUID TIGHT FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE, SEAL TIGHT FLEXIBLE CONDUIT. ALL CONDUIT SHALL HAVE FULL SIZE GROUND WIRE.

d. ALL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40 (UNLESS NOTED OTHERWISE) AT A MINIMUM DEPTH OF 36" BELOW GRADE.

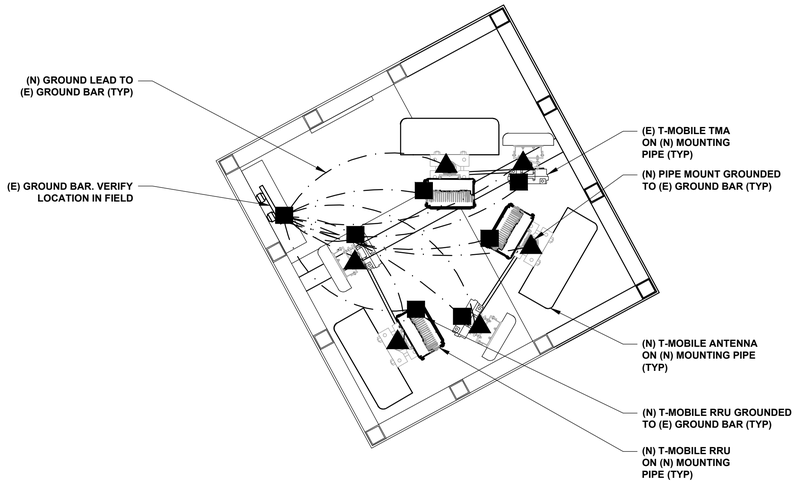
19. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS.*
20. ALL DETAILS ARE SHOWN DIAGRAMMATICALLY. ACTUAL GROUNDING INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS.
22. UPON COMPLETION OF WORK, CONDUCT A CONTINUITY TEST, SHORT CIRCUIT TEST, AND FALL POTENTIAL GROUNDING TEST (5 OHMS OR LESS). SUBMIT TEST REPORTS TO CONSTRUCTION MANAGER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION.
23. CHEMICAL GROUNDS SHALL BE XIT, CHEM-ROD OR APPROVED EQUAL, WHEN REQUIRED AND APPROVED BY T-MOBILE.
24. ALL UNDERGROUND GROUNDING CONNECTORS ARE TO BE CADWELDED. ABOVE GRADE GROUNDING SHALL BE EITHER CADWELD OR MECHANICAL. AS SPECIFIED ON DRAWINGS.

1 GENERAL GROUNDING NOTES

SCALE: NOT TO SCALE

GROUNDING LEGEND:

SYMBOL	DESCRIPTION
— · —	#2 SOLID, TINNED, BARE COPPER
▲	CADWELD CONNECTION (EXOTHERMIC WELD)
■	MECHANICAL CONNECTION

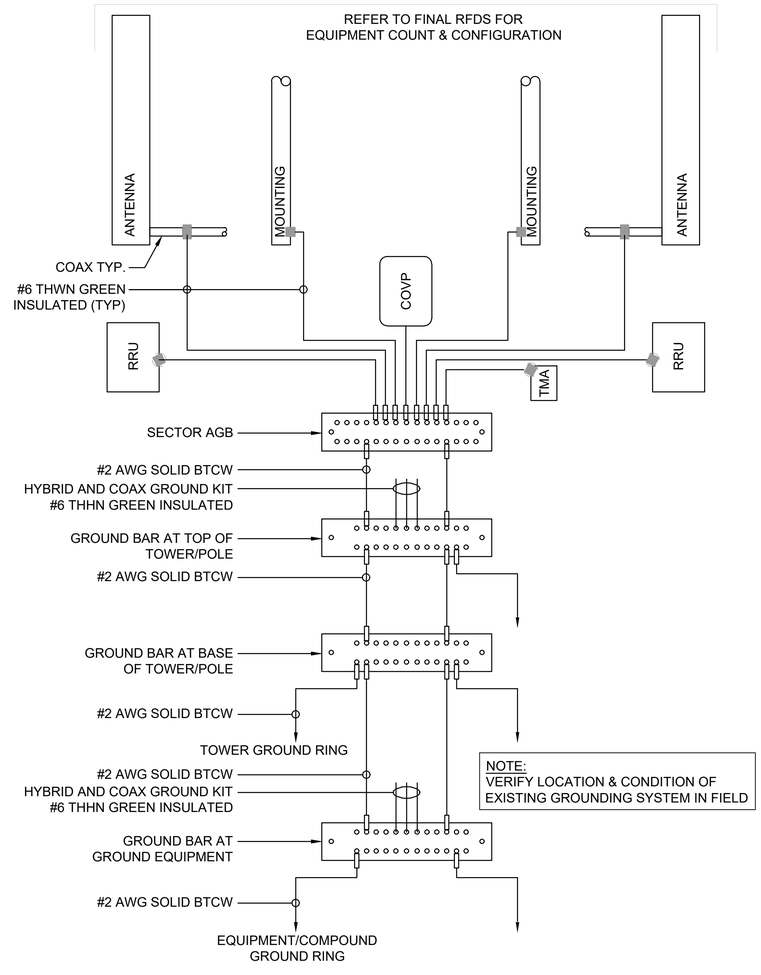


2 ANTENNA GROUNDING PLAN

SCALE: NOT TO SCALE

EACH ANTENNA SECTOR (TYP)

REFER TO FINAL RFDS FOR EQUIPMENT COUNT & CONFIGURATION



3 GROUNDING SCHEMATIC

SCALE: NOT TO SCALE

CARRIER:

T-Mobile

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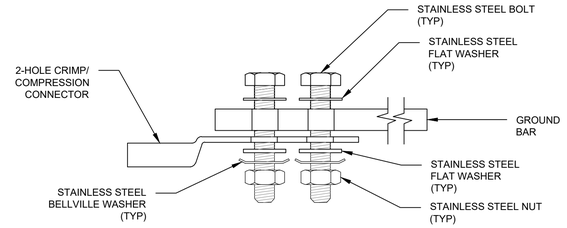
DATE STAMPED: 05/01/2019

SHEET TITLE:

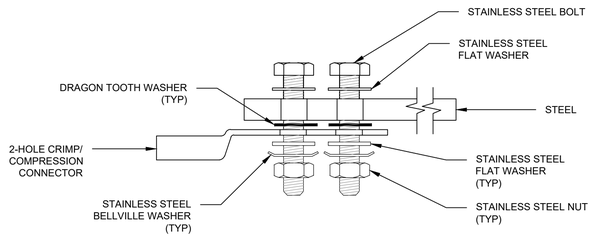
GROUNDING NOTES, PLAN & SCHEMATIC

SHEET NUMBER:

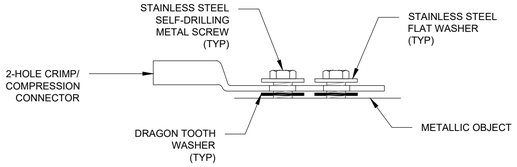
G1



SINGLE CONNECTOR AT GROUND BARS



SINGLE CONNECTOR AT STEEL OBJECTS

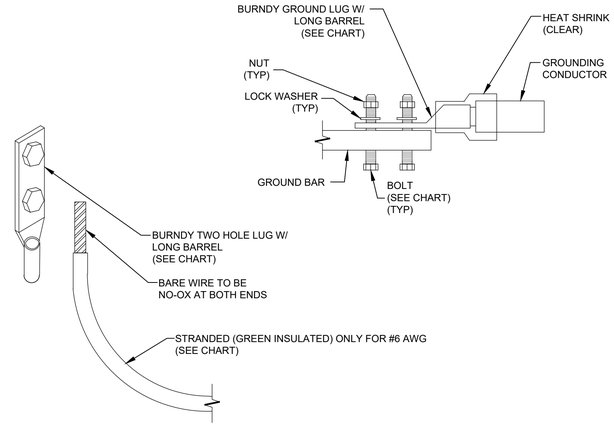


SINGLE CONNECTOR AT METALLIC/STEEL OBJECTS

1 HARDWARE DETAILS FOR EXTERIOR CONNECTIONS

SCALE: NOT TO SCALE

WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 AWG GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG SOLID TINNED	YA3C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG STRANDED	YA2C-2TC38	3/8" - 16 NC S 2 BOLT
#2/0 AWG STRANDED	YA26-2TC38	3/8" - 16 NC S 2 BOLT
#4/0 AWG STRANDED	YA28-2N	1/2" - 16 NC S 2 BOLT

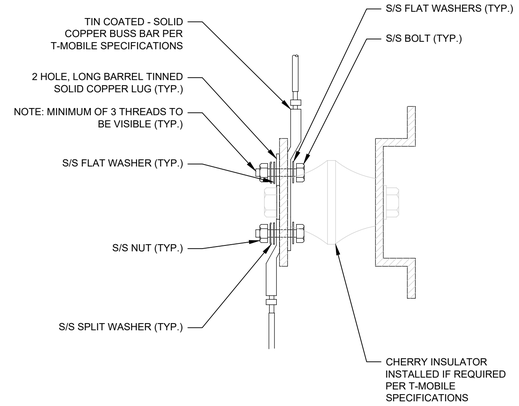


NOTES:

1. ALL GROUNDING LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
2. ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER,GROUND BAR, GROUND LUG, FLAT WASHER AND NUT.
3. COPPER SHIELD, ANTIOX, CR NO-OX OR EQUIVALENT SHALL BE PLACED WHERE ALL DISSIMILAR METALS CONNECT.

2 MECHANICAL LUG CONNECTIONS

SCALE: NOT TO SCALE

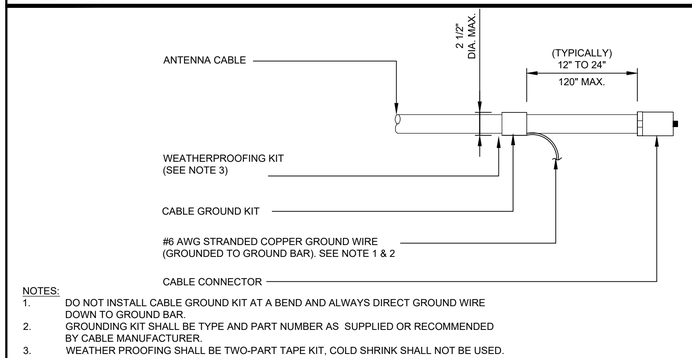


NOTES:

1) ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING SPLIT WASHERS.
2) COAT WIRE END WITH ANTI-OXIDATION COMPOUND PRIOR TO INSERTION INTO LUG BARREL AND CRIMPING.
3) APPLY ANTI-OXIDATION COMPOUND BETWEEN ALL LUGS AND BUSS BARS PRIOR TO MATING AND BOLTING.

3 GROUNDING LUG DETAIL

SCALE: NOT TO SCALE



NOTES:

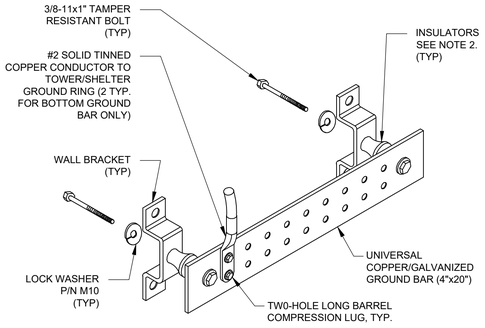
1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

4 CABLE GROUND KIT CONNECTION

SCALE: NOT TO SCALE

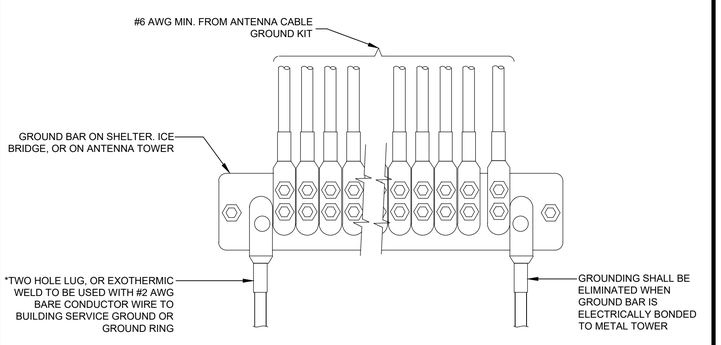
NOTES:

1. DOWN LEAD (HOME RUN) CONDUCTORS ARE NOT TO BE INSTALLED ON CROWN CASTLE TOWER, PER THE GROUNDING DOWN CONDUCTOR POLICY QAS-STD-10091. NO MODIFICATION OR DRILLING TO TOWER STEEL IS ALLOWED IN ANY FORM OR FASHION, CAD-WELDING ON THE TOWER AND/OR IN THE AIR ARE NOT PERMITTED.
2. OMIT INSULATOR WHEN MOUNTING TO TOWER STEEL OR PLATFORM STEEL. USE INSULATORS WHEN ATTACHING TO BUILDING OR SHELTERS.
3. EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
4. GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO TOWER STEEL (TOWER ONLY).
5. GROUND BAR SHALL BE ISOLATED FROM BUILDING OR SHELTER.



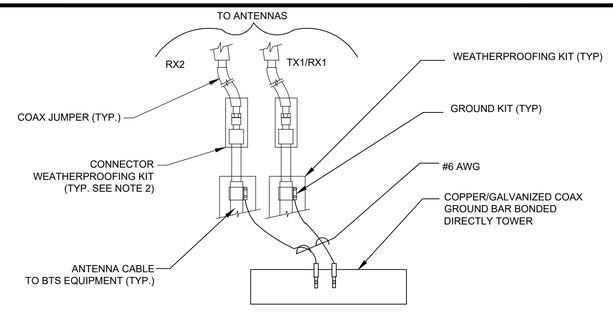
5 ANTENNA GROUND BAR DETAIL

SCALE: NOT TO SCALE



6 GROUND WIRE INSTALLATION

SCALE: NOT SCALE

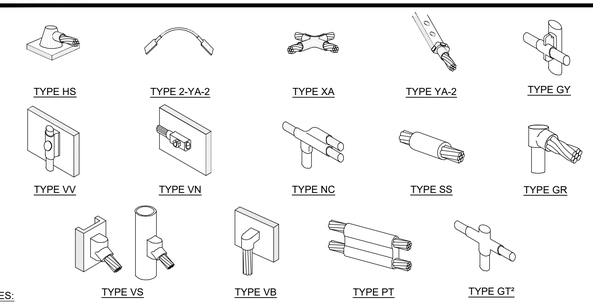


NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.
2. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.

7 ANTENNA GROUND KIT

SCALE: NOT TO SCALE



NOTES:

1. ERICO EXOTHERMIC "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH CONSTRUCTION MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.
2. MOLD TYPE ONLY TO BE USED BELOW GRADE WHEN CONNECTING GROUND RING TO GROUND ROD.

8 EXOTHERMIC WELD

SCALE: NOT TO SCALE

9 NOT USED

SCALE: NOT TO SCALE

CARRIER:

T-Mobile

4830 PAN AMERICAN FREEWAY NE, SUITE A
ALBUQUERQUE, NM 87109

PLANS PREPARED BY:

RLS
RELIANT LAND SERVICES
8170 N. 86TH PLACE, STE 103
SCOTTSDALE, AZ 85258

SITE INFORMATION:

T-MOBILE
SITE NUMBER:
PH10925D
SITE NAME:
McDOWELL MTN HOA

16116 N. MCDOWELL MTN RANCH RD
SCOTTSDALE, AZ 85255
MARICOPA COUNTY

ISSUED FOR:

REV	DATE	DESCRIPTION	BY:
---	04/08/19	DESIGN REVIEW	JMC
A	04/08/19	PRELIMINARY CONSTRUCTION	JMC
B	04/30/19	FINAL CONSTRUCTION	JMC

LICENSURE INFO:

Registered Professional Engineer (Structural) CERTIFICATION NO. 40506 SHIUH-GUANG LEE ARIZONA U.S.A.

DATE STAMPED: 05/01/2019

SHEET TITLE:

GROUNDING DETAILS

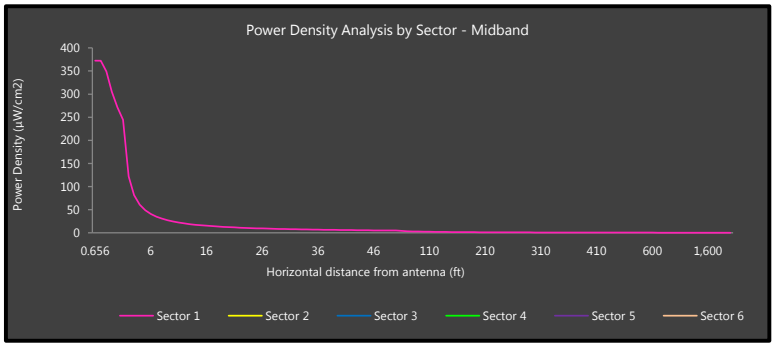
SHEET NUMBER:

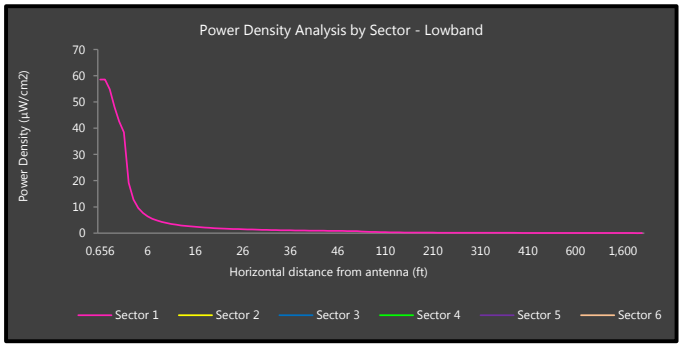
G2

MAXIMUM PERMISSIBLE EMISSION (MPE) ANALYSIS REPORT

Report Date: 6-May-19

REGION :	West	MARKET :	Phoenix	SITE ID :	PH10925D	SITE TYPE :	Non-pole	COLOCATED :	No





Distance (ft)	Midband Frequencies - Calculated Power Density (µW/cm^2)						Lowband Frequencies - Calculated Power Density (µW/cm^2)						Midband	Lowband
	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5	Sector 6	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5	Sector 6	Limit	Limit
0.656	372.3587	372.3587	372.3587				58.5386	58.5386	58.5386				1000	400
0.6561	372.3020	372.3020	372.3020				58.5297	58.5297	58.5297				1000	400
0.7	348.9533	348.9533	348.9533				54.8590	54.8590	54.8590				1000	400
0.8	305.3342	305.3342	305.3342				48.0017	48.0017	48.0017				1000	400
0.9	271.4081	271.4081	271.4081				42.6681	42.6681	42.6681				1000	400
1	244.2673	244.2673	244.2673				38.4013	38.4013	38.4013				1000	400
2	122.1337	122.1337	122.1337				19.2007	19.2007	19.2007				1000	400
3	81.4224	81.4224	81.4224				12.8004	12.8004	12.8004				1000	400
4	61.0668	61.0668	61.0668				9.6003	9.6003	9.6003				1000	400
5	48.8535	48.8535	48.8535				7.6803	7.6803	7.6803				1000	400
6	40.7112	40.7112	40.7112				6.4002	6.4002	6.4002				1000	400
7	34.8953	34.8953	34.8953				5.4859	5.4859	5.4859				1000	400
8	30.5334	30.5334	30.5334				4.8002	4.8002	4.8002				1000	400
9	27.1408	27.1408	27.1408				4.2668	4.2668	4.2668				1000	400
10	24.4267	24.4267	24.4267				3.8401	3.8401	3.8401				1000	400
11	22.2061	22.2061	22.2061				3.4910	3.4910	3.4910				1000	400
12	20.3556	20.3556	20.3556				3.2001	3.2001	3.2001				1000	400
13	18.7898	18.7898	18.7898				2.9539	2.9539	2.9539				1000	400
14	17.4477	17.4477	17.4477				2.7430	2.7430	2.7430				1000	400
15	16.2845	16.2845	16.2845				2.5601	2.5601	2.5601				1000	400
16	15.2667	15.2667	15.2667				2.4001	2.4001	2.4001				1000	400
17	14.3687	14.3687	14.3687				2.2589	2.2589	2.2589				1000	400
18	13.5704	13.5704	13.5704				2.1334	2.1334	2.1334				1000	400
19	12.8562	12.8562	12.8562				2.0211	2.0211	2.0211				1000	400
20	12.2134	12.2134	12.2134				1.9201	1.9201	1.9201				1000	400
21	11.6318	11.6318	11.6318				1.8286	1.8286	1.8286				1000	400
22	11.1031	11.1031	11.1031				1.7455	1.7455	1.7455				1000	400
23	10.6203	10.6203	10.6203				1.6696	1.6696	1.6696				1000	400
24	10.1778	10.1778	10.1778				1.6001	1.6001	1.6001				1000	400
25	9.7707	9.7707	9.7707				1.5361	1.5361	1.5361				1000	400
26	9.3949	9.3949	9.3949				1.4770	1.4770	1.4770				1000	400
27	9.0469	9.0469	9.0469				1.4223	1.4223	1.4223				1000	400
28	8.7238	8.7238	8.7238				1.3715	1.3715	1.3715				1000	400
29	8.4230	8.4230	8.4230				1.3242	1.3242	1.3242				1000	400
30	8.1422	8.1422	8.1422				1.2800	1.2800	1.2800				1000	400
31	7.8796	7.8796	7.8796				1.2388	1.2388	1.2388				1000	400
32	7.6334	7.6334	7.6334				1.2000	1.2000	1.2000				1000	400
33	7.4020	7.4020	7.4020				1.1637	1.1637	1.1637				1000	400
34	7.1843	7.1843	7.1843				1.1295	1.1295	1.1295				1000	400
35	6.9791	6.9791	6.9791				1.0972	1.0972	1.0972				1000	400
36	6.7852	6.7852	6.7852				1.0667	1.0667	1.0667				1000	400
37	6.6018	6.6018	6.6018				1.0379	1.0379	1.0379				1000	400
38	6.4281	6.4281	6.4281				1.0106	1.0106	1.0106				1000	400
39	6.2633	6.2633	6.2633				0.9846	0.9846	0.9846				1000	400
40	6.1067	6.1067	6.1067				0.9600	0.9600	0.9600				1000	400
41	5.9577	5.9577	5.9577				0.9366	0.9366	0.9366				1000	400
42	5.8159	5.8159	5.8159				0.9143	0.9143	0.9143				1000	400
43	5.6806	5.6806	5.6806				0.8931	0.8931	0.8931				1000	400
44	5.5515	5.5515	5.5515				0.8728	0.8728	0.8728				1000	400
45	5.4282	5.4282	5.4282				0.8534	0.8534	0.8534				1000	400
46	5.3102	5.3102	5.3102				0.8348	0.8348	0.8348				1000	400
47	5.1972	5.1972	5.1972				0.8170	0.8170	0.8170				1000	400
48	5.0889	5.0889	5.0889				0.8000	0.8000	0.8000				1000	400
49	4.9850	4.9850	4.9850				0.7837	0.7837	0.7837				1000	400
50	4.8853	4.8853	4.8853				0.7680	0.7680	0.7680				1000	400
60	4.0711	4.0711	4.0711				0.6400	0.6400	0.6400				1000	400
70	3.4895	3.4895	3.4895				0.5486	0.5486	0.5486				1000	400
80	3.0533	3.0533	3.0533				0.4800	0.4800	0.4800				1000	400
90	2.7141	2.7141	2.7141				0.4267	0.4267	0.4267				1000	400
100	2.4427	2.4427	2.4427				0.3840	0.3840	0.3840				1000	400
110	2.2206	2.2206	2.2206				0.3491	0.3491	0.3491				1000	400
120	2.0356	2.0356	2.0356				0.3200	0.3200	0.3200				1000	400
130	1.8790	1.8790	1.8790				0.2954	0.2954	0.2954				1000	400
140	1.7448	1.7448	1.7448				0.2743	0.2743	0.2743				1000	400
150	1.6284	1.6284	1.6284				0.2560	0.2560	0.2560				1000	400
160	1.5267	1.5267	1.5267				0.2400	0.2400	0.2400				1000	400
170	1.4369	1.4369	1.4369				0.2259	0.2259	0.2259				1000	400
180	1.3570	1.3570	1.3570				0.2133	0.2133	0.2133				1000	400
190	1.2856	1.2856	1.2856				0.2021	0.2021	0.2021				1000	400
200	1.2213	1.2213	1.2213				0.1920	0.1920	0.1920				1000	400
210	1.1632	1.1632	1.1632				0.1829	0.1829	0.1829				1000	400

Distance (ft)	Midband Frequencies - Calculated Power Density (µW/cm²)						Lowband Frequencies - Calculated Power Density (µW/cm²)						Midband	Lowband
	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5	Sector 6	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5	Sector 6	Limit	Limit
220	1.1103	1.1103	1.1103				0.1746	0.1746	0.1746				1000	400
230	1.0620	1.0620	1.0620				0.1670	0.1670	0.1670				1000	400
240	1.0178	1.0178	1.0178				0.1600	0.1600	0.1600				1000	400
250	0.9771	0.9771	0.9771				0.1536	0.1536	0.1536				1000	400
260	0.9395	0.9395	0.9395				0.1477	0.1477	0.1477				1000	400
270	0.9047	0.9047	0.9047				0.1422	0.1422	0.1422				1000	400
280	0.8724	0.8724	0.8724				0.1371	0.1371	0.1371				1000	400
290	0.8423	0.8423	0.8423				0.1324	0.1324	0.1324				1000	400
300	0.8142	0.8142	0.8142				0.1280	0.1280	0.1280				1000	400
310	0.7880	0.7880	0.7880				0.1239	0.1239	0.1239				1000	400
320	0.7633	0.7633	0.7633				0.1200	0.1200	0.1200				1000	400
330	0.7402	0.7402	0.7402				0.1164	0.1164	0.1164				1000	400
340	0.7184	0.7184	0.7184				0.1129	0.1129	0.1129				1000	400
350	0.6979	0.6979	0.6979				0.1097	0.1097	0.1097				1000	400
360	0.6785	0.6785	0.6785				0.1067	0.1067	0.1067				1000	400
370	0.6602	0.6602	0.6602				0.1038	0.1038	0.1038				1000	400
380	0.6428	0.6428	0.6428				0.1011	0.1011	0.1011				1000	400
390	0.6263	0.6263	0.6263				0.0985	0.0985	0.0985				1000	400
400	0.6107	0.6107	0.6107				0.0960	0.0960	0.0960				1000	400
410	0.5958	0.5958	0.5958				0.0937	0.0937	0.0937				1000	400
420	0.5816	0.5816	0.5816				0.0914	0.0914	0.0914				1000	400
430	0.5681	0.5681	0.5681				0.0893	0.0893	0.0893				1000	400
440	0.5552	0.5552	0.5552				0.0873	0.0873	0.0873				1000	400
450	0.5428	0.5428	0.5428				0.0853	0.0853	0.0853				1000	400
460	0.5310	0.5310	0.5310				0.0835	0.0835	0.0835				1000	400
470	0.5197	0.5197	0.5197				0.0817	0.0817	0.0817				1000	400
480	0.5089	0.5089	0.5089				0.0800	0.0800	0.0800				1000	400
490	0.4985	0.4985	0.4985				0.0784	0.0784	0.0784				1000	400
500	0.4885	0.4885	0.4885				0.0768	0.0768	0.0768				1000	400
600	0.4071	0.4071	0.4071				0.0640	0.0640	0.0640				1000	400
700	0.3490	0.3490	0.3490				0.0549	0.0549	0.0549				1000	400
800	0.3053	0.3053	0.3053				0.0480	0.0480	0.0480				1000	400
900	0.2714	0.2714	0.2714				0.0427	0.0427	0.0427				1000	400
1,000	0.2443	0.2443	0.2443				0.0384	0.0384	0.0384				1000	400
1,100	0.2221	0.2221	0.2221				0.0349	0.0349	0.0349				1000	400
1,200	0.2036	0.2036	0.2036				0.0320	0.0320	0.0320				1000	400
1,300	0.1879	0.1879	0.1879				0.0295	0.0295	0.0295				1000	400
1,400	0.1745	0.1745	0.1745				0.0274	0.0274	0.0274				1000	400
1,500	0.1628	0.1628	0.1628				0.0256	0.0256	0.0256				1000	400
1,600	0.1527	0.1527	0.1527				0.0240	0.0240	0.0240				1000	400
1,700	0.1437	0.1437	0.1437				0.0226	0.0226	0.0226				1000	400
1,800	0.1357	0.1357	0.1357				0.0213	0.0213	0.0213				1000	400
1,900	0.1286	0.1286	0.1286				0.0202	0.0202	0.0202				1000	400
2,000	0.1221	0.1221	0.1221				0.0192	0.0192	0.0192				1000	400

MPE ANALYSIS RESULTS		Midband Frequencies						Lowband Frequencies				Max. power density dist. (ft)		Pass or Fail
SECTOR	TECH	RAD CENTER (ft)	TOTAL PCS EIRP (W)	TOTAL AWS EIRP (W)	CATEGORICAL EXCLUSION RESULT	MAX POWER DENSITY (µW/cm²)	NEXT STEPS	TOTAL 600 MHz EIRP (W)	TOTAL 700 MHz EIRP (W)	MAX POWER DENSITY (µW/cm²)	NEXT STEPS	Midband	Lowband	
1	GSM,U19,L21,L19,L6,L7	26	6,754	6,748	Not Categorically Excluded	372.3587	No further action needed	577	590	58.5386	No further action needed	0.656	0.656	PASS
2	GSM,U19,L21,L19,L6,L7	26	6,754	6,748	Not Categorically Excluded	372.3587	No further action needed	577	590	58.5386	No further action needed	0.656	0.656	PASS
3	GSM,U19,L21,L19,L6,L7	26	6,754	6,748	Not Categorically Excluded	372.3587	No further action needed	577	590	58.5386	No further action needed	0.656	0.656	PASS

MPE RESULT : The site PASSED on the power density modelling.

NEXT STEP : Generate and save the MPE site report (PDF format) and no further action needed.

SIGN REQUIREMENTS (Note: The sign requirements below are from the result of the MPE analysis. Ability of an individual to come near the antenna can result in requiring signs also)

BLUE NOTICE AND YELLOW GUIDELINE

Required on sector 1, 2, 3

YELLOW CAUTION

None Required

RED WARNING

None Required

Affidavit of Authorization to Act for Property Owner

CITY OF SCOTTSDALE

1. This affidavit concerns the following parcel of land:

   a. Street Address: 16116 N. McDowell Mtn. Ranch Rd.
   b. County Tax Assessor's Parcel Number: 217-17-002G
   c. General Location: E. Paradise &
   d. Parcel Size: 197,440 sq ft. E. McDowell Mtn. Ranch
   e. Legal Description: _____
   (If the land is a platted lot, then write the lot number, subdivision name, and the plat's recording number and date. Otherwise, write "see attached legal description" and attach a legal description.)

2. I am the owner of the land or I am the duly and lawfully appointed agent of the owner of the land and have authority from the owner to sign this affidavit on the owner's behalf. If the land has more than one owner, then I am the agent for all of the owners, and the word "owner" in this affidavit refers to all of them.
3. I have authority from the owner to act for the owner before the City of Scottsdale with regard to any and all reviews, zoning map amendments, general plan amendments, development variances, abandonments, plats, lot splits, lot ties, use permits, building permits and other land use regulatory or related matters of every description involving the land, or involving adjacent or nearby lands in which the owner has (or may acquire) an interest, and all applications, dedications, payments, assurances, decisions, agreements, legal documents, commitments, waivers and other matters relating to any of them.
4. The City of Scottsdale is authorized to rely on my authority as described in this affidavit until three work days after the day the owner delivers to the Director of the Scottsdale Planning & Development Services Department a written statement revoking my authority.
5. I will immediately deliver to the Director of the City of Scottsdale Planning & Development Services Department written notice of any change in the ownership of the land or in my authority to act for the owner.
6. If more than one person signs this affidavit, each of them, acting alone, shall have the authority described in this affidavit, and each of them warrant to the City of Scottsdale the authority of the others.
7. Under penalty of perjury, I warrant and represent to the City of Scottsdale that this affidavit is true and complete. I understand that any error or incomplete information in this affidavit or any applications may invalidate approvals or other actions taken by the City of Scottsdale, may otherwise delay or prevent development of the land, and may expose me and the owner to other liability. I understand that people who have not signed this form may be prohibited from speaking for the owner at public meetings or in other city processes.

Name (printed)	Date	Signature
Moriah Solomon on behalf of T-Mobile	05/07, 2019	Moriah Solomon
	_____, 20___	
	_____, 20___	
	_____, 20___	

PH10925D - McDowell Mtn HOA

16116 N. MCDOWELL MTN RANCH ROAD
SCOTTSDALE, AZ 85255
MARICOPA COUNTY

Prepared By:
RLS RELIANT LAND SERVICES
8170 N 86th Place, Suite 103
Scottsdale, Arizona 85258
(602) 453-0050

AERIAL MAP

EXISTING

PROPOSED

VIEW FROM SOUTH OF (E) BUILDING (CHIMNEY)

Accuracy of photo simulation based upon information provided by project applicant. The proposed installation is an artistic representation, and not intended to be an exact reproduction. The final installation will have cables, cable ports, and various attachments, such as antennas, nuts, and bolts. Every effort will be made to disguise these components and they will not be readily apparent to the casual observer or passerby. However, upon close scrutiny, the true nature of the installation will be apparent.

T · ·Mobile·

1330 W. Southern, Tempe, AZ 85282

April 1, 2019

McDowell Mountain Ranch Community Association
16116 N. McDowell Mountain Ranch Road
Scottsdale, AZ 85255

Re: T-Mobile Site #: PH10925D McDowell Mountain
Site Address: 16116 N. McDowell Mountain Ranch Road. Scottsdale, AZ 85255
Acknowledgment and Consent Letter for Modification of Antenna Facilities.

Dear Sir or Madam:

T-Mobile West Corporation, a Delaware corporation ("T-Mobile"), and McDowell Mountain Ranch Community Association, entered into a site Lease with option dated September 7, 2005 for a site located at 16116 N. McDowell Mountain Ranch Road, Scottsdale, AZ 85255, upon which T-Mobile operates wireless antenna facilities.

Pursuant to the Lease, T-Mobile has the right to alter, replace, expand, enhance, modify or upgrade the antenna facilities at any time during the term of the Lease with landlord's approval, which cannot be unreasonably withheld, conditioned or delayed.

T-Mobile needs to modify the antenna facilities by installing the equipment described in attached file. All of the equipment will be installed within the existing premises. According to what was agreed upon, T-Mobile will increase the monthly rent amount by $450. The total new monthly rent will be $1,640.25.

To confirm your approval of the proposed modifications to the antenna facilities, please sign and date the acceptance and acknowledgment below, keep one copy for your records and return via email the other to copy to us. Prior to the start of any construction activities T-Mobile will contact you to coordinate the construction schedule. If you have any questions, please contact me below. We thank you for your courtesy and cooperation.

Sincerely,

Frank Cruz

Frank Cruz
Project Manager, Reliant Land Services, Inc.
Authorized Representative for T-Mobile.

Acknowledged, Accepted and Agreed:

Landlord: McDowell Mountain Ranch Community Association

By: _____

Name: CHRIS RICHARDSON

Title: GENERAL MANAGER

Date: 4/2/19

PH10925D - McDowell Mtn HOA

16116 N. MCDOWELL MTN RANCH ROAD
SCOTTSDALE, AZ 85255
MARICOPA COUNTY

Prepared By:
RLS RELIANT LAND SERVICES
8170 N 86th Place, Suite 103
Scottsdale, Arizona 85258
(602) 453-0050

AERIAL MAP

EXISTING

PROPOSED

VIEW FROM SOUTH OF (E) BUILDING (CHIMNEY)

Accuracy of photo simulation based upon information provided by project applicant. The proposed installation is an artistic representation, and not intended to be an exact reproduction. The final installation will have cables, cable ports, and various attachments, such as antennas, nuts, and bolts. Every effort will be made to disguise these components and they will not be readily apparent to the casual observer or passerby. However, upon close scrutiny, the true nature of the installation will be apparent.