

**CITY OF EL PASO, TEXAS
AGENDA ITEM DEPARTMENT HEAD'S SUMMARY FORM**

DEPARTMENT: Planning and Inspections Department, Planning Division

AGENDA DATE: Introduction: July 12, 2016
Public Hearing: August 9, 2016

CONTACT PERSON/PHONE: Larry Nichols, (915) 212-1550, nicholslf@elpasotexas.gov
Jeff Howell, (915) 212-1607, howelljb@elpasotexas.gov

DISTRICT(S) AFFECTED: 1

SUBJECT:

An Ordinance granting Special Permit No. PZST16-00009, to allow for a ground-mounted 50' Personal Wireless Service Facility on the property described as a portion of Lot 1, Block 67A, Chaparral Park Unit 22, 1020 Belvidere Street, City of El Paso, El Paso County, Texas, pursuant to Section 20.10.455 of the El Paso City Code. The penalty being as provided in Chapter 20.24 of the El Paso City Code. Subject Property: 1020 Belvidere Street. Property Owner: Raimundo Portilla F. & Jose Manuel Portilla F. PZST16-00009 (District 1)

BACKGROUND / DISCUSSION:

On June 16, 2016, the CPC reviewed and recommended approval of the special permit request.

PRIOR COUNCIL ACTION:

There is no prior City Council action on this special permit application.

AMOUNT AND SOURCE OF FUNDING:

N/A

BOARD / COMMISSION ACTION:

City Plan Commission (CPC) – Approval Recommendation (6-0).

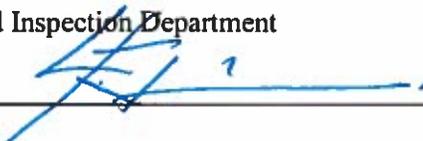
*****REQUIRED AUTHORIZATION*****

LEGAL: (if required) N/A

FINANCE: (if required) N/A

DEPARTMENT HEAD:

Larry F. Nichols
Director, Planning and Inspection Department



APPROVED FOR AGENDA:

CITY MANAGER: _____

DATE: _____

ORDINANCE NO. _____

AN ORDINANCE GRANTING SPECIAL PERMIT NO. PZST16-00009, TO ALLOW FOR A GROUND-MOUNTED 50' PERSONAL WIRELESS SERVICE FACILITY ON THE PROPERTY DESCRIBED AS A PORTION OF LOT 1, BLOCK 67A, CHAPARRAL PARK UNIT 22, 1020 BELVIDERE STREET, CITY OF EL PASO, EL PASO COUNTY, TEXAS, PURSUANT TO SECTION 20.10.455 OF THE EL PASO CITY CODE. THE PENALTY BEING AS PROVIDED IN CHAPTER 20.24 OF THE EL PASO CITY CODE.

WHEREAS, Raimundo Portilla F. & Jose Manuel Portilla F. property owners and Verizon Wireless c/o Black & Veatch Corp. have applied for a Special Permit under Section 20.04.320 of the El Paso City Code to allow for a ground-mounted Personal Wireless Service Facility (PWSF) that is 50-foot tall and camouflaged as a light pole; and,

WHEREAS, Section 20.10.455 allows for a ground-mounted personal wireless service facility by Special Permit; and,

WHEREAS, a report was made by the City Plan Commission and a public hearing was held regarding such application; and,

WHEREAS, the City Plan Commission has recommended approval of the subject Special Permit; and

WHEREAS, the subject Special Permit has been submitted to the City Council of the City of El Paso for review and approval; and

WHEREAS, the City Council of the City of El Paso finds that the application conforms to all requirements of Section 20.04.320 of the El Paso City Code.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF EL PASO:

1. That the property described as follows, is in a **C-1 (Commercial)** Zone District: *Portion of Lot 1, Block 67A, Chaparral Park Unit 22, 1020 Belvidere Street, City of El Paso, El Paso County, Texas*; and as more particularly described by metes and bounds on the attached Exhibit "A"; and,
2. That the City Council hereby grants a Special Permit under Section 20.04.320 of the El Paso City Code to allow for a ground-mounted 50-foot tall personal wireless service facility on the property described in Paragraph 1 of this Ordinance; and,
3. Furthermore, the City Council makes the following findings to reduce below one-half mile the minimum separation distance between ground-mounted PWSF antenna support structures:

ORDINANCE NO. _____

16-1007-1753 / 550536

1020 Belvidere Street

OAR

PZST16-00009

- i. The applicant is reasonably unable to use property that is more than one-half mile from another PWSF antenna support structure and be able to reasonably serve the area designated in a manner that is technically feasible and commercially reasonable;
 - ii. The property on which the PWSF antenna support structure is to be located is the only reasonably available property for use within one-half mile of another PWSF antenna support structure that will enable the applicant to reasonably serve the area designated in a manner that is technically feasible and commercially reasonable;
 - iii. The area designated by the applicant cannot be reasonably served in a manner that is technically feasible and commercially reasonable by locating additional antennas on the applicant's existing PWSF antenna support structures because such existing PWSF antenna support structures cannot safely support additional antennas;
 - iv. The applicant is unable to collocate its antennas on an existing PWSF antenna support structure that is owned or operated by a third person or entity and located such that the applicant is able to reasonably serve the area designated in a manner that is technically feasible and commercially reasonable; and
 - v. The applicant shall submit a list of addresses/locations showing all existing PWSF within a one-half mile radius of the proposed site and a map depicting such locations with the special permit application.
4. That this Special Permit is issued subject to the development standards in **C-1 (Commercial)** District regulations and is subject to the approved Detailed Site Development Plan signed by the Applicant, the City Manager and the Executive Secretary to the City Plan Commission. A copy of this plan is attached hereto as Exhibit "B" and is incorporated herein by reference for all purposes; and,
 5. That if at any time the Applicant fails to comply with any of the requirements of this Ordinance, **Special Permit No. PZST16-00009** shall be subject to termination; construction or occupancy shall be discontinued; and the Applicant shall be subject to the penalty provisions of Chapter 20.24 and any other legal or equitable remedy; and,
 6. That the Applicant shall sign an Agreement incorporating the requirements of this Ordinance. Such Agreement shall be signed and filed with the Zoning Administrator and the Executive Secretary to the City Plan Commission before building permits are issued.

ADOPTED this _____ of _____, 2016.

THE CITY OF EL PASO

Oscar Leeser, Mayor

ATTEST:

Richarda Duffy Momsen, City Clerk

APPROVED AS TO FORM:



Omar A. De La Rosa
Assistant City Attorney

APPROVED AS TO CONTENT:



Larry F. Nichols, Director
Planning and Inspections Department

AGREEMENT

Raimundo Portilla F. & Jose Manuel Portilla F. (Property Owners) and Verizon Wireless c/o Black & Veatch Corp. referred to in the above Ordinance, hereby agree to develop the above-described property in accordance with the approved Detailed Site Development Plan attached to same Ordinance, and in accordance with the standards identified in the C-1 (Commercial) District regulations, and subject to all other requirements set forth in this Ordinance.

EXECUTED 22ND day of June, 2016.


Kevin S. Provanice, Black & Veatch
on behalf of Verizon and the property
Raimundo Portilla F. (See Attached LOI) owner


Kevin S. Provanice, Black & Veatch
on behalf of Verizon and the property owner
Jose Manuel Portilla F. (See Attached LOI)


Signature
Kevin S. Provanice, Planning Manager
Name and Title
Verizon Wireless c/o Black & Veatch Corp.

(Acknowledgements appear on following pages)

ACKNOWLEDGMENT

THE STATE OF Oregon)
~~TEXAS~~)
COUNTY OF Clackamas)
~~EL PASO~~)

This instrument is acknowledged before me on this 22nd day of June, 2016,
by, Kevin Provanice, as Agent for Raimundo Portilla F. & Jose Manuel Portilla F. as
property owners.

RUTH S. LYONS
Notary Public, State of ~~Texas~~ Oregon
Signature

RUTH LYONS
Printed or Typed Name

My Commission Expires:

March 20, 2020



Kevin S. Provanice, Block & Ventel on behalf
of Ventel and Property Owners
(Signature) (See Attached LOA)

Kevin S. Provanice, Planning Manager
(Name/Title)

Kevin S. Provanice, Block & Ventel on behalf
of Ventel and Property Owners
(Signature) (See Attached LOA)

Kevin S. Provanice, Planning Manager
(Name/Title)

ORDINANCE NO. _____
16-1007-1753 / 550536
1020 Belvidere Street
OAR

PZST16-00009

ACKNOWLEDGMENT

THE STATE OF Oregon)
COUNTY OF Clackamas

This instrument is acknowledged before me on this 22nd day of June, 2016,
by Kevin Provance, as Agent for Verizon Wireless c/o Black & Veatch Corp. as
applicant.

Ruth S. Lyons
Notary Public, State of Oregon
Signature

RUTH LYONS
Printed or Typed Name

My Commission Expires:

March 20, 2020

LEASE AREA SURVEY

GENERAL LEGAL DESCRIPTION OF LESSOR'S PARCEL

A PORTION OF LOT 1, BLOCK 67A, CHAPARRAL PARK UNIT 22, CITY OF EL PASO, EL PASO COUNTY, TEXAS.

NO EASEMENT CERTIFICATION:

THIS IS TO CERTIFY THAT THE EASEMENTS LISTED IN THE "REPORT OF TITLE" FILE NO. 50271-TX1501-5030, REFERENCE NO. 20131016364, ISSUED MARCH 25, 2015 BY US TITLE SOLUTIONS HAVE BEEN REVIEWED AND DO NOT CROSS THROUGH THE VERIZON WIRELESS ELP AMPOSTA LEASE AREA.

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	931.78'	127.61'	127.51'	N 82°59'22" E	7°50'48"

TITLE REFERENCE:

This Survey was done with sufficient research and field gathered data to verify the Underlying Parcel of the subject property, however, this Surveyor has relied upon the title provider referenced herein for documents of record. This Surveyor makes no guarantee, either expressed or implied as to the quality of the title report/abstract and reference documents provided and the documents provided affecting the Lease and immediate area have been plotted.

REFERENCE DOCUMENTS:

- REPORT OF TITLE FILE NO. 50271-TX1501-5030, REFERENCE NO. 20131016364, BY US TITLE SOLUTIONS, ISSUED MARCH 24, 2015.
- PROTECTIVE COVENANTS FOR CHAPARRAL PARK UNIT 22, RECORDED OCTOBER 19, 1979, IN BOOK 1031, PAGE 595, RECORDS OF EL PASO COUNTY, TEXAS.
- CORRECTION TO PROTECTIVE COVENANTS FOR CHAPARRAL PARK UNIT 22, RECORDED FEBRUARY 27, 1980, IN BOOK 1060, PAGE 785, RECORDS OF EL PASO COUNTY, TEXAS.
- EASEMENT BY TIMES ENTERPRISES INC., RECORDED MARCH 25, 1977 IN BOOK 770, PAGE 636, INSTRUMENT NO. 39595, RECORDS OF EL PASO COUNTY, TEXAS.
- PLAT OF CHAPARRAL PARK UNIT 22, RECORDED IN BOOK 55, PAGE 4, RECORDS OF EL PASO COUNTY, TEXAS.

DEED CHAIN

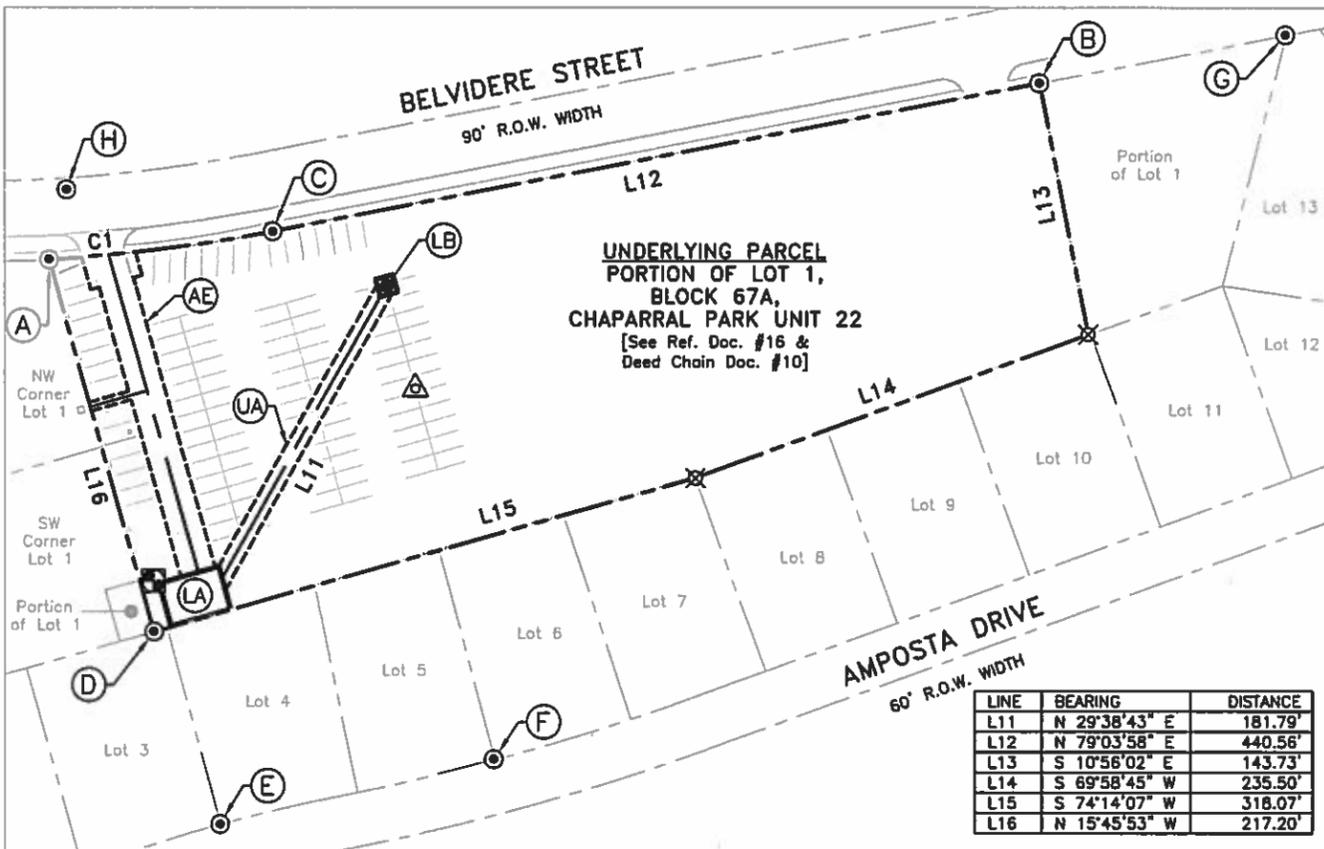
- WARRANTY DEED W/VENDOR'S LIEN BETWEEN INTER-VENTURE CO. (GRANTOR) AND RAIMUNDO F. PORTILLA AND JOSE MANUEL F. PORTILLA (GRANTEES) RECORDED ON MAY 28, 1986 IN BOOK 1677, PAGE 951, INSTRUMENT NO. 74713, RECORDS OF EL PASO COUNTY, TEXAS.

LEGEND

- △ "BASE" = SET GIN SPIKE W/TCT WASHER (Refer To Basis of Bearings & Datum Note)
- TEMPORARY BENCH MARK SET GIN SPIKE IN ASPHALT
LAT: 31°51'06.410" N
LONG: 106°32'27.138" W
ELEV.: 4,088.9' [NAVD88]
- FOUND SURVEY MONUMENT (AS NOTED)
- ⊗ CALCULATED CORNER (POINT NOT SET)
- SFNF SEARCHED FOR NOT FOUND
- SET REBAR WITH CAP OR (AS NOTED)
- () BEARING AND DISTANCE IN PARENTHESIS ARE FROM DOCUMENTS OF RECORD
- * SHOWN FOR REFERENCE, NOT DEFINED BY THIS SURVEY

KEYED NOTES

- (A) FOUND NAIL IN CONCRETE [HELD FOR ORIGIN OF SURVEY] NAD83(2011) COORDINATES
LAT: 31°51'08.162"N
LONG: 106°32'27.934"W
NAVD88 ELEV.: 4,083.2'
TX CENTRAL (4203)
N(Y): 10,691,200.90'
E(X): 370,013.76'
- (B) FOUND CROWS FOOT [HELD FOR ALIGNMENT]
- (C) FOUND MAG NAIL IN ASPHALT
- (D) FOUND NAIL ON WALL
- (E) FOUND CHISELED CROSS IN CONCRETE
- (F) FOUND 5/8" REBAR W/ CAP STAMPED "4297"
- (G) FOUND 1/2" REBAR W/NO I.D.
- (H) FOUND CITY MONUMENT
- (LA) CLIENT 25'X35' LEASE AREA "A" SEE SHEET SU2
- (LB) CLIENT 10'X10' LEASE AREA "B" SEE SHEET SU2
- (AE) CLIENT VARIABLE WIDTH ACCESS/UTILITY EASEMENT SEE SHEET SU2
- (UA) CLIENT 10' UTILITY EASEMENT "A" SEE SHEET SU2



LINE	BEARING	DISTANCE
L11	N 29°38'43" E	181.79'
L12	N 79°03'58" E	440.56'
L13	S 10°56'02" E	143.73'
L14	S 69°58'45" W	235.50'
L15	S 74°14'07" W	318.07'
L16	N 15°45'53" W	217.20'

UNDERLYING PARCEL SURVEY CONTROL OVERVIEW

SCALE: 1" = 100'

REGIONAL MAP:

VICINITY MAP:

FEMA PUBLIC FLOOD MAP INFO:
ZONE: C PANEL: 4802140022E DATE: 01/03/1997
FLOOD NOTE: AREAS OF MINIMAL FLOODING.

NEW LAMP POST COORDINATE REPORT:

NAD 83: 31°51'08.120"
106°32'25.715"

DECIMAL DEGREES: 31.85226N
106.54048W

NAVD88: 4,091.4'

BASIS OF BEARING AND DATUM NOTE:

- All distances are surface and all bearings are Grid based upon the Texas State Plane Coordinate System Central Zone.
- Project is tied to National CORS via the OPUS utility.

Geodetic Position of Control Monument is:
LATITUDE: 31° 51' 07.558"
LONGITUDE: 106° 32' 25.488"
ELLIPSOID HEIGHT: 4,014.4'

HORZ. DATUM NAD83 [CORS96] VERT. DATUM NAVD88 [GEOID03]

GRID POSITION (FT)
NORTHING: 10,691,128.22'
EASTING: 370,221.04'
ELEVATION: 4,092.6'

PROJECT NAME:
VERIZON WIRELESS
ELP
AMPOSTA

PROJECT ADDRESS:
1020 BELVIDERE ST.,
CITY OF EL PASO,
EL PASO COUNTY,
TEXAS 79912

DATE OF SURV.: 04/02/2015

DESIGNED FOR:
verizon wireless
4821 Eubank NE
Albuquerque, New Mexico 87111

DESIGNED BY:
TowerCom Technologies
AZ-CA-CO-ID-NM-NV-TX-UT
TEXAS LICENSED SURVEYING FIRM 10123001

UNDERLYING PARCEL OWNER:
RAIMUNDO F. PORTILLA
2150 TRAWOOD DR. STE A240
EL PASO, TX 79935

PUBLIC RECORD PARCEL I.D.:
C340999067A0400

COMMUNICATIONS FACILITY OWNER:
NEW BUILD NEW BUILD

DRIVING DIRECTIONS:
From the Verizon Wireless office in El Paso Texas, head North on Osborne Dr. to N. Mesa St., turn right heading Southeast for 0.9 miles to Belvidere St., turn left heading North for 2.0 miles just passed Westwind Dr. to the site located at a parking lot to the right (South) side of Belvidere St.

SURVEYOR'S NOTE & CERTIFICATION:

This "Lease Area Survey" is based on an actual field survey performed by me or under my direction. It correctly depicts existing, readily visible improvements and above ground utilities and the boundary of the underlying parcel was verified from field and record information. This "Lease Area Survey" is not a Boundary Survey of the Underlying Parcel and this Survey was developed to support the communications facility plan set named hereon.

L. DEAN VAN MATRE TX R.P.L.S. #5852 06/21/16



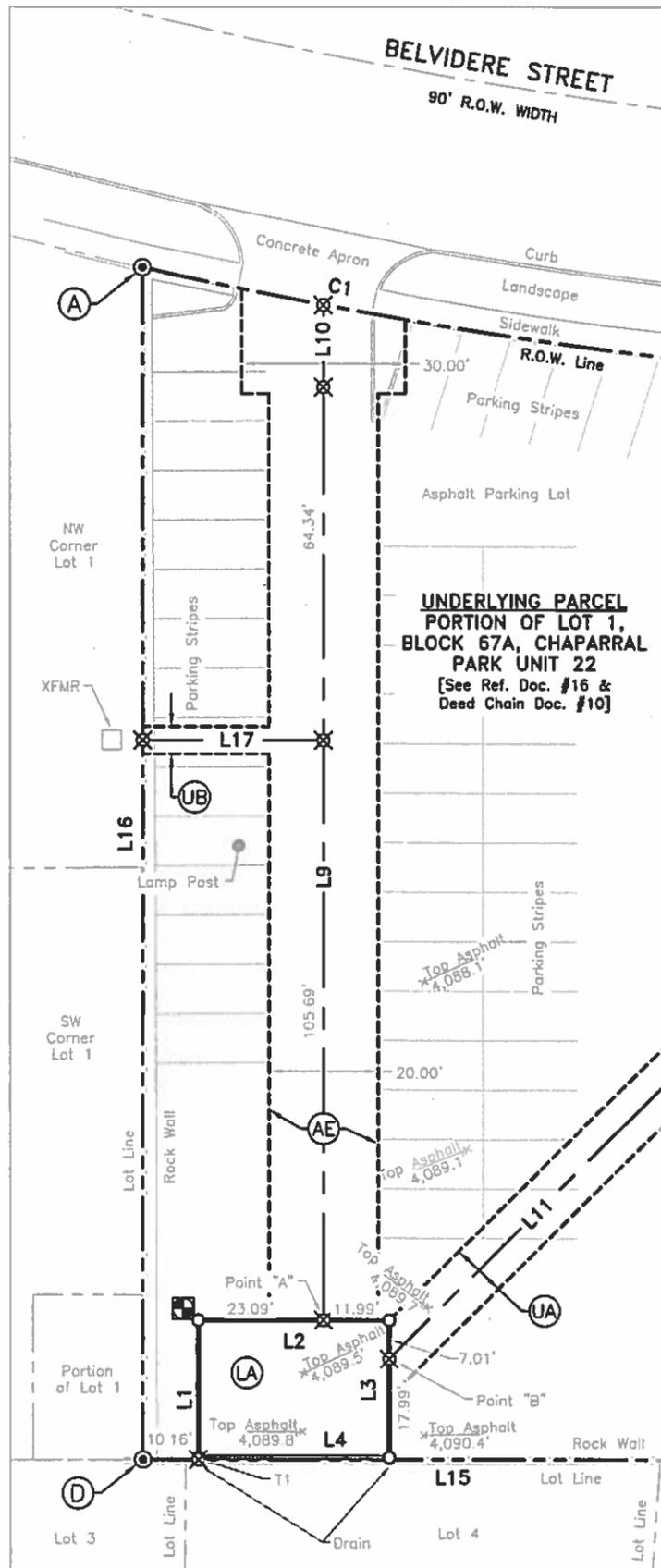
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REV.	DESCRIPTION	DATE	BY	CHK.
0	SPOT ELEVATION ADDITION/90% REISSUED	07/01/15	DH	DVM
1	UTILITY EASEMENTS ADDITION/FINAL REISSUED	10/23/15	DH	DVM
2	SITE ADDRESS UPDATE/FINAL REISSUED	03/14/16	DH	DVM
3	REVISED LEASE AREA LOCATION/FINAL REISSUED	06/21/16	SA	DVM

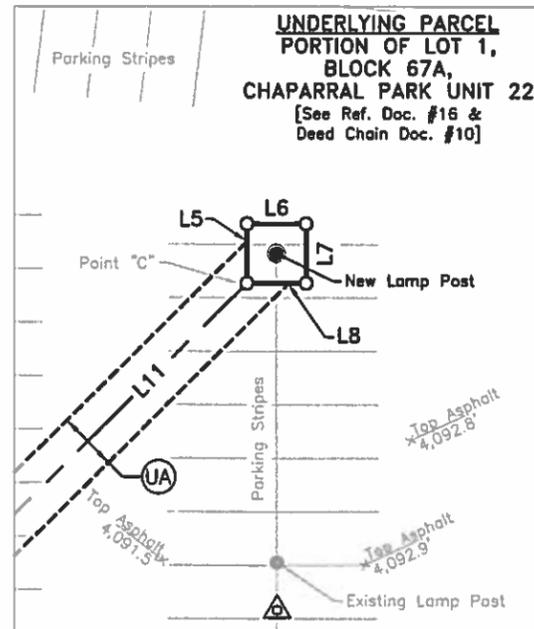
SHEET TITLE:
SURVEY NOTES & REFERENCE
SURVEY CONTROL OVERVIEW

TCT SITE I.D.: VZW ELP AMPOSTA

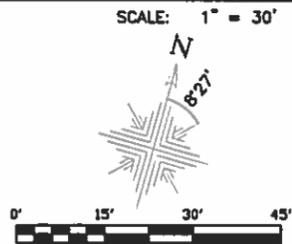
SHEET INFO.: Sheet 1 of 2 | SU1



LEASE AREA & ACCESS OVERVIEW
SCALE: 1" = 30'



NEW LIGHT POLE LEASE AREA OVERVIEW
SCALE: 1" = 30'



LEGEND

- △ "BASE" = SET GIN SPIKE W/TCT WASHER (Refer To Basis of Bearings & Datum Note)
- TEMPORARY BENCH MARK SET GIN SPIKE IN ASPHALT
LAT: 31°51'06.410" N
LONG: 106°32'27.138" W
ELEV.: 4,088.9' [NAVD88]
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- ⊗ CALCULATED CORNER (POINT NOT SET)
- SFNF SEARCHED FOR NOT FOUND
- SET REBAR WITH CAP OR (AS NOTED)
- () BEARING AND DISTANCE IN PARENTHESIS ARE FROM DOCUMENTS OF RECORD
- * SHOWN FOR REFERENCE, NOT DEFINED BY THIS SURVEY

LINE	BEARING	DISTANCE
L1	N 15°45'55" W	25.00'
L2	N 74°14'05" E	35.00'
L3	S 15°45'55" E	25.00'
L4	S 74°14'05" W	35.00'
L5	N 15°45'55" W	10.00'
L6	N 74°14'05" E	10.00'
L7	S 15°45'55" E	10.00'
L8	S 74°14'05" W	10.00'
L9	N 15°45'52" W	170.00'
L10	N 15°45'52" W	14.96'
L11	N 29°38'43" E	181.79'
L12	N 79°03'58" E	440.56'
L13	S 10°56'02" E	143.73'
L14	S 69°58'45" W	235.50'
L15	S 74°14'07" W	318.07'
L16	N 15°45'53" W	217.20'
L17	S 74°14'08" W	33.18'

TIE	BEARING	DISTANCE
T1	N 15°45'55" W	0.39'

The following land descriptions define Lease Areas and Easements within Lot 1, Block 67A of Chaparral Park, Unit 22 (Plat Book 55, Page 4) Some being within that parcel of land described in the Warranty Deed w/vendors lien on file in Book 1677, Page 951, Instrument 74713 and hereinafter referred to as the "Underlying Parcel". All situate within the City of El Paso, El Paso County, Texas and further described as follows:

Commencing at the southwest corner of the "Underlying Parcel" on the common lot line with Lot 3 (said subdivision), found marked by a nail with no ID on face of the rock wall: from which the following two monuments were tied for reference:

1. A nail without ID, found for the northwest corner of the Underlying Parcel at the southern right of way of Belvidere Street bears North 15°45'53" East, a distance of 217.20 feet: (referenced as Monument 1).
2. And from Monument 1, A Mag Nail in asphalt with no ID found at the point of curvature of the southern right of way of Belvidere Street bears (along a chord bearing) North 82°59'22" East, a distance of 127.51 feet (Curve Data: Radius:931.78'-Delta 07°50'48"-Arc Length:127.61'):

Thence, leaving the POINT OF COMMENCEMENT, North 74°14'07" East 10.16 feet to a point; Thence, North 15°45'55" West 0.38 feet to the southwest corner and POINT OF BEGINNING of the lease area herein described;

Thence, North 15°45'55" West, 25.00 feet;
Thence, North 74°14'05" East, 35.00 feet, passing at 23.09 feet Reference Point "A";
Thence, South 15°45'55" East, 25.00 feet, passing at 7.01 feet Reference Point "B";
Thence, South 74°14'05" West, 35.00 feet to the POINT OF BEGINNING of this description.
• Containing 875 square feet of land.

TOGETHER WITH:

A variable width Access and Utility Easement described as follows: Beginning at the aforementioned Reference Point "A" as a 20.00' (twenty foot) wide Access and Utility Easement being 10.00' (ten feet) on each side of the following described centerline; Thence, North 15°45'52" West 170.00 feet to a point; Thence, continuing as a 30.00' (thirty foot) wide Access and Utility Easement being 15.00' (fifteen feet) on each side of said centerline description North 15°45'52" West 14.96 feet to the southern right of way of Belvidere Street and the Termination Point of this centerline description.
• Containing 3863.0 square feet of land.

TOGETHER WITH:

A 10.00 (ten foot) wide Utility Easement being 5.00' (five feet) on each side of the centerline described as follows: Beginning at the aforementioned Reference Point "B", Thence, North 29°38'43" East 181.79 feet to the southwest corner of 10'x10' lease area served by this description and hereby referenced as Point "C" and being the Termination of this centerline description.
• Containing 1842.2 square feet of land.

TOGETHER WITH:

A 5.00 (five foot) wide Utility Easement being 2.50' (two and one half feet) on each side of the centerline described as follows: Commencing at the aforementioned Reference Point "A", Thence, North 15°45'52" West 105.69 feet to the POINT OF BEGINNING of this utility easement; Thence, South 74°14'08" West, 33.18 feet to a point along west lot line of said "Underlying Parcel" and the Termination of this easement centerline description.
• Containing 138.4 square feet of land.

TOGETHER WITH:

A 10.00 by 10.00 Lease area described as follows: Beginning at the aforementioned Reference Point "C",

Thence, North 15°45'55" West, 10.00 feet;
Thence, North 74°14'05" East, 10.00 feet;
Thence, South 15°45'55" East, 10.00 feet;
Thence, South 74°14'05" West, 10.00 feet to the POINT OF BEGINNING of this description.
• Containing 100 square feet of land.

END OF DESCRIPTIONS.

- Bearings are based upon the Texas State Plane Coordinate System Central Zone 4203-NAD83 and were developed from GPS static observations taken at the site and tied to the National "CORS" via the OPUS Utility.
- A 5/8" Rebar with Cap or Gin Spike with washer Stamped "TowerCom TX5852" will be placed at Lease Corners.
- A Lease Area Survey Plat accompanies these land descriptions.

LAND DESCRIPTIONS

KEYED NOTES

- (A) FOUND NAIL IN CONCRETE [HELD FOR ORIGIN OF SURVEY] NAD83(2011) COORDINATES
LAT: 31°51'08.162"N
LONG: 106°32'27.934"W
NAVD88 ELEV: 4,083.15'
TX CENTRAL (4203)
N(Y): 10,691,200.90'
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- (B) FOUND CROWS FOOT [HELD FOR ALIGNMENT]
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- (H) FOUND CITY MONUMENT
- (LA) CLIENT 25'X35' LEASE AREA "A" 875 SQ. FT.
- (LB) CLIENT 10'X10' LEASE AREA "B" 100 SQ. FT.
- (AE) CLIENT VARIABLE WIDTH ACCESS/UTILITY EASEMENT
- (UA) CLIENT 10' UTILITY EASEMENT "A"
- (UB) CLIENT 5' UTILITY EASEMENT "B"

DESIGNED FOR:
verizon wireless

4821 Eubank NE
Albuquerque, New Mexico 87111

DESIGNED BY:
TowerCom TECHNOLOGIES
AZ-CA-CO-ID-NM-NV-TX-UT
TEXAS LICENSED SURVEYING FIRM 10123001

SHEET TITLE:
**ACCESS & LEASE AREA OVERVIEW
LAND DESCRIPTIONS**

TCT SITE I.D.: ELP AMPOSTA
SHEET INFO.: Sheet 2 of 2 SU2



CITY DEVELOPMENT DEPARTMENT
PLANNING DIVISION
DETAILED SITE DEVELOPMENT PLAN
APPROVED BY THE CITY COUNCIL

06/22/16
DATE

Kevin S. Provan, Black & Veatch on behalf
of Verizon & Property Owners
APPLICANT

[Signature]
EXECUTIVE SECRETARY CITY PLAN COMMISSION

CITY MANAGER

Verizon wireless

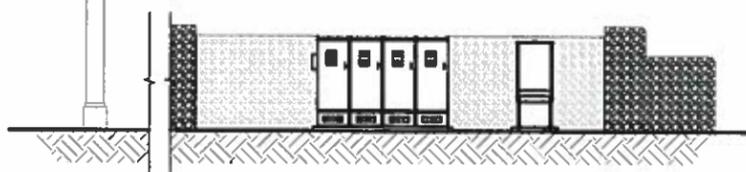
ELP AMPOSTA

PUBLIC RECORD PARCEL NO. C340999067A0400

1020 BELVIDERE ST.
EL PASO, TEXAS 79912
EL PASO COUNTY



VICINITY MAP
NORTH



NEW 48'-0" LIGHT POLE W/ CONCEALMENT CANISTER (OVERALL HEIGHT: 50'-0" A.G.L.) RAW LAND COMMUNICATION SITE



4821 EUBANK NE
ALBUQUERQUE, NEW MEXICO 87111

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DESIGNED BY:	TowerCom TECHNOLOGIES	AZ - CA - CO - ID - NM - NV - TX - UT	CHK	BY	DATE	DESCRIPTION
			0	APPROVED FOR CONSTRUCTION	10/30/15	EP
			1	REVISED PER REAL ESTATE COMMENTS	04/27/16	EP
			2	REVISED PER JURISDICTION COMMENTS	05/17/16	EP
3	REVISED PER NEW TOWER/COMPOUND LOCATION	06/21/16	EP			

SHEET INDEX:		
SHEET	TITLE	REV.
T1	TITLE SHEET	3
SP1	SPECIFICATION SHEET	3
PS1	PHOTO SHEET	3
SU1	SITE SURVEY	3
SU2	SITE SURVEY	3
C1	SETBACK PLAN AND SITE PLAN	3
C2	ENLARGED SITE PLAN	3
C2.1	DEMO SITE PLAN	3
C3	ELEVATIONS	3
C4	SECTIONS AND DETAILS	3
UC1	UTILITY COORDINATION SITE PLAN	1
E1	ELECTRICAL AND GROUNDING GENERAL NOTES	1
E2	SINGLE-LINE DIAGRAM	1
E3	ELECTRICAL SITE PLAN	1
G1	GROUNDING SITE PLAN	1
G2	GROUNDING DETAILS	1
G3	GROUNDING DETAILS	1
RF1	ANTENNA INFORMATION	3
RF2	ANTENNA CUT SHEET(S)	3

PROJECT INDEX:	
APPLICANT:	VERIZON WIRELESS 4821 EUBANK NE ALBUQUERQUE, NM 87111
CONTACT:	JEFF DEWALT PHONE: 505-250-0004
ENGINEERS/DESIGNERS:	TOWERCOM TECHNOLOGIES LLC 4520 MONTGOMERY BLVD. NE, SUITE 5 ALBUQUERQUE, NM 87109
CONTACT:	BRIAN WILEY PHONE: 505-232-4884 EXT. 130
SURVEYOR:	TOWERCOM TECHNOLOGIES 4520 MONTGOMERY BLVD. NE, SUITE 5 ALBUQUERQUE, NM 87109
CONTACT:	L. DEAN VAN MATRE, RPLS PHONE: 915-474-2803
ZONING/SITE AD:	BLACK & VEATCH CORP 5885 MEADOWS ROAD, SUITE 700 LAKE OSWEGO, OR 97035
CONTACT:	SEAN MURRAY PHONE: 503-443-4460 MOBILE: 503-686-3050 EMAIL: murraysj@BV.com
ABBREVIATED LEGAL DESCRIPTION:	
SITUATE WITHIN A PORTION OF LOT 1, BLOCK 67A, CHAPARRAL PARK UNIT 22, CITY OF EL PASO, EL PASO COUNTY, TEXAS.	

- GENERAL PROJECT NOTES:**
- PRIOR TO SUBMITTING A BID, THE CONTRACTOR SHALL FAMILIARIZE HIMSELF/HERSELF WITH THE SCOPE OF WORK AND ALL CONDITIONS AFFECTING THE NEW PROJECT.
 - CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS AND DIMENSIONS OF THE JOB SITE AND CONFIRM THAT WORK AS INDICATED ON THESE CONSTRUCTION DOCUMENTS CAN BE ACCOMPLISHED AS SHOWN PRIOR TO COMMENCEMENT OF ANY WORK.
 - ALL FIELD MODIFICATIONS BEFORE, DURING, OR AFTER CONSTRUCTION SHALL BE APPROVED IN WRITING BY A VERIZON WIRELESS REPRESENTATIVE.
 - INSTALL ALL EQUIPMENT AND MATERIALS PER THE MANUFACTURER'S RECOMMENDATIONS, U.N.O.
 - NOTIFY VERIZON WIRELESS, IN WRITING, OF ANY MAJOR DISCREPANCIES REGARDING THE CONTRACT DOCUMENTS, EXISTING CONDITIONS, AND DESIGN INTENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATIONS FROM A VERIZON WIRELESS REPRESENTATIVE AND ADJUSTING THE BID ACCORDINGLY.
 - CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF THE WORK UNDER THE CONTRACT.
 - CONTRACTOR SHALL PROTECT ALL EXISTING IMPROVEMENTS AND FINISHES THAT ARE TO REMAIN. CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY OCCUR DURING THE CONSTRUCTION TO THE SATISFACTION OF A VERIZON WIRELESS REPRESENTATIVE.
 - THE CONTRACTOR IS RESPONSIBLE FOR RED-LINING THE CONSTRUCTION PLANS TO ILLUSTRATE THE AS BUILT CONDITION OF THE SITE. FOLLOWING THE FINAL INSPECTION BY VERIZON WIRELESS, THE CONTRACTOR SHALL PROVIDE VERIZON WIRELESS WITH ONE COPY OF ALL RED-LINED DRAWINGS.
 - VERIFY ALL FINAL EQUIPMENT WITH A VERIZON WIRELESS REPRESENTATIVE. ALL EQUIPMENT LAYOUT, SPECS, PERFORMANCE INSTALLATION AND THEIR FINAL LOCATION ARE TO BE APPROVED BY VERIZON WIRELESS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS/HER WORK WITH THE WORK AND CLEARANCES REQUIRED BY OTHERS RELATED TO SAID INSTALLATIONS.

PROJECT INFORMATION:	
PROPERTY OWNER:	RAIMUNDO F. PORTILLA 725 S. MESA HILLS DR. 5 EL PASO, TX 79912
JURISDICTION:	CITY OF EL PASO
ZONING:	C-1 (COMMERCIAL)
PUBLIC RECORD PARCEL NO.:	C340999067A0400

DRIVING DIRECTIONS:	
LATITUDE:	31°51'08.120" N
LONGITUDE:	106°32'25.715" W
FROM THE VERIZON WIRELESS OFFICE LOCATED AT 4738 OSBORNE DR. EL PASO TEXAS: HEAD NORTH ON OSBORNE DR. TO N. MESA ST., TURN RIGHT HEADING SOUTHEAST FOR 0.9 MILES TO BELVIDERE ST., TURN LEFT HEADING NORTH FOR 2.0 MILES JUST PASSED WESTWIND DR. TO THE SITE LOCATED AT A PARKING LOT TO THE RIGHT (SOUTH) SIDE OF BELVIDERE ST.	

FCC COMPLIANCE:
RADIATION FROM THIS FACILITY WILL NOT INTERFERE WITH OPERATION OF OTHER COMMUNICATION DEVICES.

ADA COMPLIANCE:
THIS FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. LANDINGS AND EXITS SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES.

- PROJECT DESCRIPTION:**
THIS PROJECT CONSISTS OF THE FOLLOWING:
- REMOVAL**
- ONE (1) EXISTING LAMP POST
 - EXISTING PARKING STRIPES
- INSTALLATION**
- ONE (1) 48'-0" LIGHT POLE W/ CONCEALMENT CANISTER (DESIGNED BY OTHERS)
 - ONE (1) NEW OUTDOOR GENERATOR
 - FOUR (4) NEW SINGLE-BAY OUTDOOR EQUIPMENT CABINETS
 - SIX (6) NEW PANEL ANTENNAS
 - SIX (6) NEW RRH UNITS
 - TWO (2) NEW MAIN OVP UNITS



PROJECT NAME:	ELP AMPOSTA NEW 48'-0" LIGHT POLE W/ CONCEALMENT CANISTER (OVERALL HEIGHT: 50'-0" A.G.L.) RAW LAND COMMUNICATION SITE
PROJECT ADDRESS:	1020 BELVIDERE ST. EL PASO, TEXAS 79912 EL PASO COUNTY
SHEET TITLE:	TITLE SHEET
SAVE DATE:	6/21/2016 12:57 PM
SHEET NUMBER:	T1

GENERAL PROJECT NOTES:

- 1. CONTRACTOR IS RESPONSIBLE FOR ERECTING TEMPORARY BARRICADES AND/OR FENCING TO PROTECT THE SAFETY OF THE PUBLIC DURING CONSTRUCTION. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY BARRIERS AND REPAIR ALL DAMAGE TO PROPERTY ON THE SITE CAUSED BY THIS CONSTRUCTION. THE COST OF REPAIR IS THE CONTRACTOR'S RESPONSIBILITY.
- 2. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL MEASUREMENTS AT THE SITE PRIOR TO ORDERING ANY MATERIALS OR CONDUCTING ANY WORK.
- 4. EXCESS SOIL MATERIAL AND DEBRIS CAUSED BY THIS CONSTRUCTION SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER.
- 5. CONTRACTOR SHALL MAKE ADJUSTMENTS TO GRADING ELEVATIONS AS NECESSARY TO ENSURE A SITE FREE OF DRAINAGE PROBLEMS.
- 6. CONTRACTOR SHALL COORDINATE A CONSTRUCTION LAYDOWN AREA WITH THE PROPERTY OWNER. CONSTRUCTION LAYDOWN AREA SHALL BE FENCED-IN WITH TEMPORARY (45 DAY) CONSTRUCTION FENCE. THE TEMPORARY FENCE SHALL BE CONSTRUCTED OF 6' HIGH CHAIN LINK FABRIC AND IS TO BE REMOVED AT THE END OF CONSTRUCTION. LAYDOWN AREA IS TO BE RESTORED TO ITS ORIGINAL CONDITION AFTER FENCE REMOVAL.
- 7. SURVEY INFORMATION SHOWN WAS CREATED FROM RECORD INFORMATION AND DOES NOT CONSTITUTE A LEGAL BOUNDARY SURVEY.
- 8. THESE PLANS DO NOT ADDRESS THE SAFETY AND STABILITY OF THE STRUCTURE DURING ASSEMBLY AND ERECTION, WHICH ARE THE RESPONSIBILITY OF THE ERECTOR, BASED ON THE MEANS AND METHODS CHOSEN BY THE ERECTOR.
- 9. NEW EQUIPMENT COMPOUND SHALL BE COVERED W/ 4" CRUSHED ROCK INSTALLED OVER CLIENT-APPROVED WEED BARRIER MATERIAL (IF APPLICABLE).

GENERAL CONTRACTOR NOTES:

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE PROJECT SCOPE OF WORK DEFINED UNDER THE REQUEST FOR PROPOSAL (RFP) FOR THIS PROJECT AND ALL ASSOCIATED ATTACHMENTS AND DOCUMENTS PROVIDED. THE RFP AND ALL ASSOCIATED DOCUMENTS SHALL DEFINE THE COMPLETE PROJECT SCOPE OF WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL DOCUMENTS AND IS SOLELY RESPONSIBLE FOR ALL WORK. ALL DOCUMENTS INCLUDED WITHIN THE PROJECT REQUEST FOR PROPOSAL ARE REQUIRED FOR THE COMPLETE PROJECT SCOPE OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK (EQUIPMENT, MATERIAL, INSTALLATION, TESTING, ETC.) INDICATED IN ALL DOCUMENTS. THE RFP, VERIZON WIRELESS NETWORK STANDARDS AND PROJECT ADDENDUMS AND CLARIFICATIONS ARE COMPLEMENTARY TO EACH OTHER. THE FORMAT OF THE SPECIFICATIONS AND DRAWING NUMBERING PER DISCIPLINE IS NOT INTENDED TO IMPLY SEGREGATION OF SUB CONTRACTOR WORK. CONTRACTOR SHALL ASSIGN ALL SUB CONTRACTOR WORK AND VERIZON WIRELESS WILL NOT ACCEPT ANY CHANGE ORDERS FOR INTERNAL CONTRACTOR WORK ASSIGNMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTING ALL RFP DOCUMENTS TO THEIR SUB CONTRACTORS. ALL RFP DOCUMENTS ARE REQUIRED TO INDICATE THE PROJECT SCOPE OF WORK. PARTIAL SUB CONTRACTOR DOCUMENT PACKAGES ARE HIGHLY DISCOURAGED. IN THE EVENT OF A CONFLICT BETWEEN THE DRAWINGS, SPECIFICATIONS, REFERENCED STANDARDS, VERIZON WIRELESS STANDARDS, OR AGREEMENT TERMS AND CONDITIONS THE ARCHITECT/ ENGINEER SHALL BE CONTACTED FOR FORMAL INTERPRETATION OF THE REQUIREMENTS. THE CONTRACTOR SHALL BE DEEMED TO HAVE PROVIDED THE DETAILED AND EXTENSIVE INTERPRETATION. ANY WORK INSTALLED IN CONFLICT WITH THE ARCHITECT/ ENGINEER INTERPRETATIONS SHALL BE CORRECTED BY THE CONTRACTOR AT NO EXPENSE TO VERIZON WIRELESS.
- 2. ALL ANTENNAS MUST BE PIM TESTED WITHIN 48 HOURS OF THEM BEING RECEIVED BY THE INSTALLATION CONTRACTOR. THOSE RESULTS MUST BE SENT BACK TO THE VERIZON WIRELESS CONSTRUCTION ENGINEER AND EQUIPMENT ENGINEER WITHIN THE SAME 48 HOURS. IF YOU MISS THE 48HR TIMELINE AND THE ANTENNAS DO NOT PASS UPON INSTALLATION, YOUR COMPANY WILL BE CHARGED FOR THE COST OF THE ANTENNAS FOR REPLACEMENT.
- 3. ALL LOADS MUST BE SECURED PROPERLY TO THE VEHICLE OR TRAILER. VERIZON WIRELESS WILL PASS ALONG THE COST OF ANY REPLACEMENTS DUE TO DAMAGE OR LOSS WHETHER IT IS NEW OR USED.
- 4. ALL VENDORS ARE REQUIRED TO SHOW UP TO THE DC IN TEMPE, OR DELTA/KING COMMUNICATIONS, OR BROKEN ARROW IN NM WITH ENCLOSED TRANSPORTATION FOR ALL ELECTRONICS.

ANTENNA, MOUNTS & HARDWARE INSTALLATION NOTES:

- 1. CONTRACTOR TO INSTALL ANTENNAS, MOUNTS AND TOWER HARDWARE PER MANUFACTURER'S RECOMMENDATIONS (OR AS REQUIRED BY THE OWNER/PROVIDER).
- 2. ALL BOLTS SHALL BE TIGHTENED PER AISC REQUIREMENTS (SEE STEEL NOTES).
- 3. ANY GALVANIZED SURFACES THAT ARE DAMAGED BY ABRASIONS, CUTS, DRILLING OR FIELD WELDING DURING SHIPPING OR ERECTION SHALL BE TOUCHED-UP WITH TWO COATS OF COLD GALVANIZING COMPOUND MEETING THE REQUIREMENTS OF ASTM A780.
- 4. ANTENNA MOUNTS SHALL NOT BE USED AS A CLIMBING DEVICE. WORKERS SHALL ALWAYS TIE OFF TO AN APPROVED CLIMBING POINT.
- 5. SEE ALSO GENERAL ANTENNA NOTES ON SHEET RF1 (IF APPLICABLE).

STRUCTURAL DESIGN CRITERIA:

ALL LOADS DERIVED FROM REQUIREMENTS OF INTERNATIONAL BUILDING CODE 2009, ASCE 7-05, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" & ANSI TIA-222-G "STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS".

BUILDING STRUCTURES:

- 1. WIND LOADS: IBC 2009 §1609 & ASCE 7-05 §6.4 (SIMPLIFIED METHOD) $V_{35} = 90$ MPH OCCUPANCY CAT. = II; EXPOSURE CAT. = C; IMPORTANCE FACTOR = 1.0
- 2. SEISMIC LOADS: IBC 2009 §1613 & ASCE 7-05 §12.14 (SIMPLIFIED METHOD) OCCUPANCY CAT. = II; SITE CLASS = D $V = \frac{F(S_{Ds})W}{R}$ $F = 1.0$ (SINGLE-STORY), 1.1 (TWO STORY), 1.2 (THREE STORY) $S_{Ds} = (2/3) S_{ms}$ $R = 1.5$ (ORDINARY PLAIN CONCRETE SHEARWALLS), 6.5 (LIGHT-FRAMED WALLS W/ WOOD STRUCTURAL PANELS), 4.0 (ORDINARY REINFORCED CONCRETE SHEARWALLS)

COMMUNICATIONS STRUCTURES:

- 1. WIND LOADS: IBC 2009 §1609, ASCE 7-05 §6.5.15 & ANSI TIA-222-G $V = 90$ MPH (3-SEC. GUST) $V = 30$ MPH (0" RADIAL ICE) STRUCTURE CLASS. = II; EXPOSURE CAT. = C; IMPORTANCE FACTOR = 1.0
- 2. SEISMIC LOADS*: IBC 2009 §1613, ASCE 7-05 §15.6.6 & ANSI TIA-222-G *MAY BE IGNORED FOR STRUCTURE CLASS I AND/OR EARTHQUAKE SPECTRAL RESPONSE FOR SHORT PERIOD (S_s) ≤ 1.0 STRUCT. CLASS. = II; OCC. CAT. = II; SITE CLASS = D; IMPORTANCE FACTOR = 1.0 $V = \frac{S_{Ds}(W)}{R}$ (EQUIVALENT LATERAL FORCE PROCEDURE (METHOD 1)) $V = \sum \frac{S_{Dz}(W_z)}{R}$ (EQUIVALENT MODAL ANALYSIS PROCEDURE (METHOD 2))

FOUNDATION NOTES:

- 1. THE CONTRACTOR SHALL READ THE GEOTECHNICAL REPORT (IF AVAILABLE) AND SHALL CONSULT THE GEOTECHNICAL ENGINEER AS NECESSARY PRIOR TO CONSTRUCTION.
- 2. THE GEOTECHNICAL ENGINEER (OR INSPECTOR) SHALL INSPECT THE EXCAVATION PRIOR TO THE PLACEMENT OF CONCRETE AND SHALL PROVIDE A NOTICE OF INSPECTION FOR THE BUILDING INSPECTOR FOR REVIEW AND RECORDS PURPOSES.
- 3. THE CONTRACTOR SHALL DETERMINE THE MEANS AND METHODS NECESSARY TO SUPPORT THE EXCAVATION DURING CONSTRUCTION.
- 4. REBAR AT BOTTOM OF FOUNDATIONS SHALL BE BONDED TO SITE GROUNDING SYSTEM (WHEN APPLICABLE). SEE ADDITIONAL DETAILS ON GROUNDING SITE PLAN.
- 5. ALL FOOTINGS TO BE PLACED ON FIRM, UNDISTURBED, INORGANIC MATERIAL. PROOF ROLL SUB-GRADE PRIOR TO PLACING CONCRETE WHERE THE MATERIAL HAS BEEN DISTURBED BY EQUIPMENT. UNACCEPTABLE/DISTURBED MATERIAL SHALL BE OVER-EXCAVATED AND REPLACED WITH "LEAN CONCRETE FILL".
- 6. STRUCTURAL BACKFILL SHALL BE GRANULAR FREE-DRAINING MATERIAL FREE OF DEBRIS, ORGANICS, REFUSE AND OTHERWISE DELETERIOUS MATERIALS. MATERIAL SHALL BE PLACED IN LIFTS NO GREATER THAN 6" IN DEPTH AND COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED PER ASTM D1557 (MODIFIED PROCTOR).

MAIN OVP, SECTOR BOX, RRH, TMA, & DIPLEXER INSTALLATION NOTES:

- 1. CONTRACTOR TO INSTALL MAIN OVP, SECTOR BOXES, REMOTE RADIO HEADS, TOWER MOUNTED AMPLIFIERS, AND/OR DIPLEXERS PER MANUFACTURER'S RECOMMENDATIONS.
- 2. ALL BOLTS SHALL BE TIGHTENED PER AISC REQUIREMENTS.
- 3. ANY GALVANIZED SURFACES THAT ARE DAMAGED BY ABRASIONS, CUTS, DRILLING OR FIELD WELDING DURING SHIPPING OR ERECTION SHALL BE TOUCHED-UP WITH TWO COATS OF COLD GALVANIZING COMPOUND MEETING THE REQUIREMENTS OF ASTM A780.

UTILITY NOTE:

- 1. ANY UTILITIES INSTALLED IN SUPPORT OF THIS PROJECT WILL BE ROUTED UNDER GROUND.

LANDSCAPE NOTE:

- 1. THIS PROJECT WILL NOT INCLUDE ANY PROVISIONS FOR LANDSCAPING. INSTEAD, VERIZON WIRELESS WILL UTILIZE THE LANDSCAPE BUYOUT OPTION OFFERED BY THE CITY OF EL PASO.

CONCRETE NOTES:

- 1. ALL CONCRETE SHALL BE IN ACCORDANCE WITH CHAPTER 19 OF THE IBC & ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", LATEST EDITION & HAVE THE FOLLOWING PROPERTIES: A. MINIMUM 28-DAY COMPRESSIVE STRENGTH (f'_c) OF 4,000 PSI. B. CEMENT SHALL BE "LOW-ALKALI" TYPE IIA (MODERATE SULFATE RESISTANCE, AIR ENTRAINING) CONFORMING TO ASTM C150. C. MAXIMUM WATER/CEMENT RATIO OF 0.45 AND AIR-ENTRAINED 4% TO 7%. D. CONCRETE PROPORTIONING SHALL BE DESIGNED BY AN APPROVED LABORATORY. TOLERANCES IN ACCORDANCE WITH ACI 117. COPIES OF CONCRETE MIX SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO PLACEMENT. E. ALL AGGREGATE USED IN CONCRETE SHALL CONFORM TO ASTM C33. USE ONLY AGGREGATES KNOWN NOT TO CAUSE EXCESSIVE SHRINKAGE. MAXIMUM AGGREGATE SIZE TO BE 1 1/2". F. MAXIMUM SLUMP: 3" (FOUNDATION, FOOTING, SLAB), 4" (WALL, COLUMN, BEAM)
- 2. FORMWORK FOR CONCRETE SHALL CONFORM TO ACI 347. TOLERANCES FOR FINISHED CONCRETE SURFACES SHALL MEET CLASS-C REQUIREMENTS. IN NO CASE SHALL FINISHED CONCRETE SURFACES EXCEED THE FOLLOWING VALUES AS MEASURED FROM NEAT PLAN LINES AND FINISHED GRADES: ± 1/4" VERTICAL, ± 1" HORIZONTAL.
- 3. CHAMFER ALL EXPOSED CORNERS AND FILLET ENTRANT ANGLES 1/4" U.N.O.
- 4. CONCRETE FINISHING: A. FLOORS: CONCRETE FLOOR SLABS SHALL BE FINISHED IN ACCORDANCE WITH ACI 302.1 CHAPTER 8. PROVIDE CLASS 4 FINISH U.N.O. PROVIDE NON-SLIP FINISH FOR EXTERIOR SURFACES. B. OTHER SURFACES: CONCRETE SURFACES SHALL BE FINISHED IN ACCORDANCE WITH ACI 301 SECTIONS 5.3, 6.3, AND 7.3. PROVIDE ROUGH FINISH FOR ALL SURFACES NOT EXPOSED TO VIEW AND SMOOTH FINISH FOR ALL OTHERS, U.N.O.
- 5. A MINIMUM OF ONE (1) SET OF CONCRETE CYLINDERS SHALL BE TAKEN (IF REQUIRED BY SPECIAL INSPECTIONS ON SHEET IN1). EACH SET SHALL CONSIST OF THREE (3) CYLINDERS. ONE (1) SHALL BE TESTED AT 7 DAYS, TWO (2) SHALL BE TESTED AT 28 DAYS. ALL CYLINDERS SHALL BE TAKEN, PREPARED AND TESTED BY A TESTING LAB IN ACCORDANCE WITH ASTM C172, C31 AND C39.

REINFORCING STEEL NOTES:

- 1. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615. VERTICAL/HORIZONTAL BARS SHALL BE GRADE 60; TIES OR STIRRUPS SHALL BE A MINIMUM OF GRADE 40. ALL REINFORCING STEEL SHALL HAVE 3" (± 3/8") OF CONCRETE COVER, U.N.O.
- 2. ALL BAR BENDS, HOOKS, SPLICES AND OTHER REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ACI 315.
- 3. ALL BARS SHALL BE SPLICED WITH A MINIMUM LAP OF 48 BAR DIAMETERS. LAP SPLICES OF DEFORMED BARS IN TENSION ZONES SHALL BE CLASS-B SPLICES. WELDING OF BARS IS NOT PERMITTED.
- 4. AT ALL CORNERS AND WALL INTERSECTIONS, PROVIDE BENT HORIZONTAL BARS TO MATCH THE HORIZONTAL REINFORCING STEEL.
- 5. PROVIDE VERTICAL DOWELS IN FOOTINGS AND AT CONSTRUCTION JOINTS TO MATCH VERTICAL REINFORCING BAR SIZE AND SPACING.
- 6. ACI-APPROVED PLASTIC-COATED BAR CHAIRS OR PRECAST CONCRETE BLOCKS SHALL BE PROVIDED FOR SUPPORT OF ALL GRADE-CAST REINFORCING STEEL & SHALL BE SUFFICIENT IN NUMBER TO PREVENT SAGGING. METAL CLIPS OR SUPPORTS SHALL NOT BE PLACED IN CONTACT WITH THE FORMS OR THE SUB-GRADE.
- 7. DOWELS AND ANCHOR BOLTS SHALL BE WIRED OR OTHERWISE HELD IN CORRECT POSITION PRIOR TO PLACING CONCRETE. IN NO CASE SHALL DOWELS OR ANCHOR BOLTS BE "STABBED" INTO FRESHLY-POURED CONCRETE.

CONCRETE MASONRY UNIT NOTES:

- 1. CONCRETE MASONRY UNITS (CMU) PER ASTM C90 A. MINIMUM COMPRESSIVE STRENGTH (f'_m) OF 1900 PSI. B. NOMINAL (ACTUAL) FACE DIMENSIONS, 8"Wx8"Hx16"L (7% x 7% x 15%). PROVIDE SPECIAL SHAPES AS REQUIRED AT CORNERS, JAMBS, & BOND BEAMS. C. TYPE I, MOISTURE CONTROLLED, NORMAL-WEIGHT UNITS.
- 2. MORTAR PER ASTM C270 A. EXTERIOR WALLS ABOVE GRADE: TYPE S, 3/4 TO 1/2 PART HYDRATED LIME TO 1 PART PORTLAND CEMENT BY VOLUME. B. EXTERIOR WALLS AT OR BELOW GRADE: TYPE M, 3/4 PART HYDRATED LIME TO 1 PART PORTLAND CEMENT BY VOLUME. C. PORTLAND CEMENT: ASTM C150, TYPE I OR II. D. HYDRATED LIME: ASTM C207, TYPE S.
- 3. GROUT PER ASTM C476 ALL REINFORCEMENT SHALL BE PLACED PRIOR TO GROUTING. VERTICAL BARS SHALL BE HELD IN POSITION AT THEIR TOP AND BOTTOM AND AT INTERVALS OF NOT MORE THAN 200 BAR DIAMETERS. NO "STABBING-IN" OF REINFORCEMENT PERMITTED.
- 4. GROUT SOLID ALL BOND BEAMS. RUN REINFORCING AROUND ALL CORNERS WITH APPROPRIATE SPLICES.
- 5. LAYING CMU WALLS: A. BOND PATTERN: ONE-HALF RUNNING BOND. B. LAY WALLS WITH 3/8" CONCAVE-TOOLED JOINTS.
- 6. VERTICAL REINFORCEMENT: (1) #5 @ 32" O.C. FULL HEIGHT AT ALL WALLS. (2) #5 @ EACH END OF WALL & EACH SIDE OF OPENING,
- 7. HORIZONTAL REINFORCEMENT: (1) #5 @ 48" O.C. MINIMUM. (1) #5 @ TOP AND BOTTOM OF EACH WALL & OPENING. PROVIDE (1) #5 HORIZONTAL CORNER/INTERSECTION BAR AT ALL BOND BEAM LEVELS W/ 48 BAR DIAMETER DEVELOPMENT ON EACH END.



DESIGNED FOR:



4821 EUBANK NE ALBUQUERQUE, NEW MEXICO 87111

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Table with columns: REV, DESCRIPTION, DATE, CHK, BY, DGD, EP, DGD, EP, DGD, EP. Includes TowerCom Technologies logo and project location: AZ - CA - CO - ID - NM - NV - TX - UT.

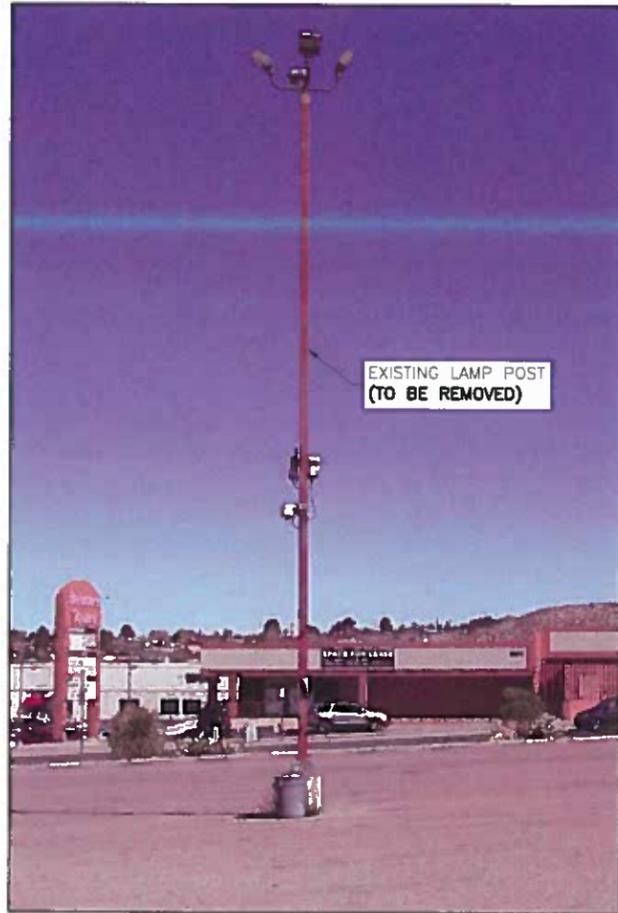


PROJECT NAME: ELP AMPOSTA NEW 48'-0" UGHT POLE W/ CONCEALMENT CANISTER (OVERALL HEIGHT: 50'-0" A.G.L.) RAW LAND COMMUNICATION SITE

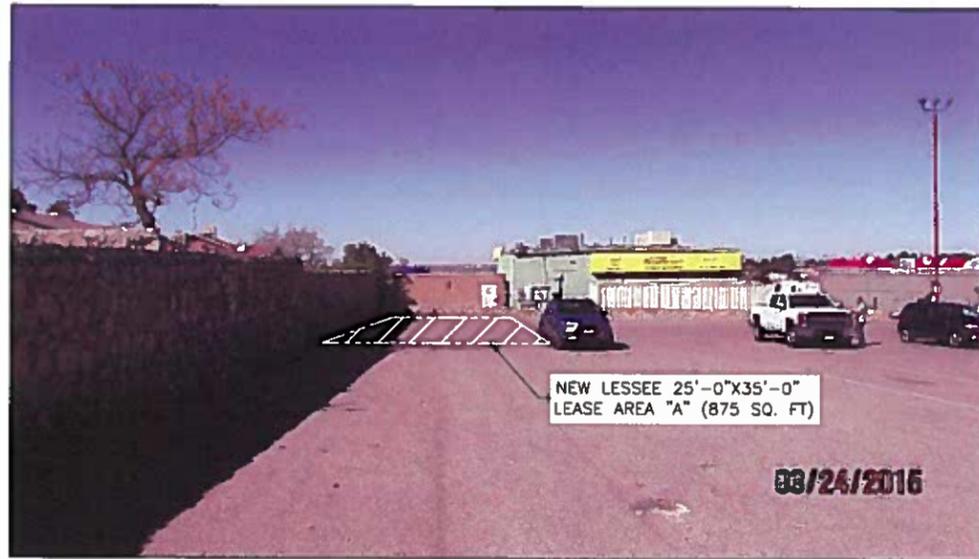
PROJECT ADDRESS: 1020 BELVIDERE ST. EL PASO, TEXAS 79912 EL PASO COUNTY

SHEET TITLE: SPECIFICATION SHEET

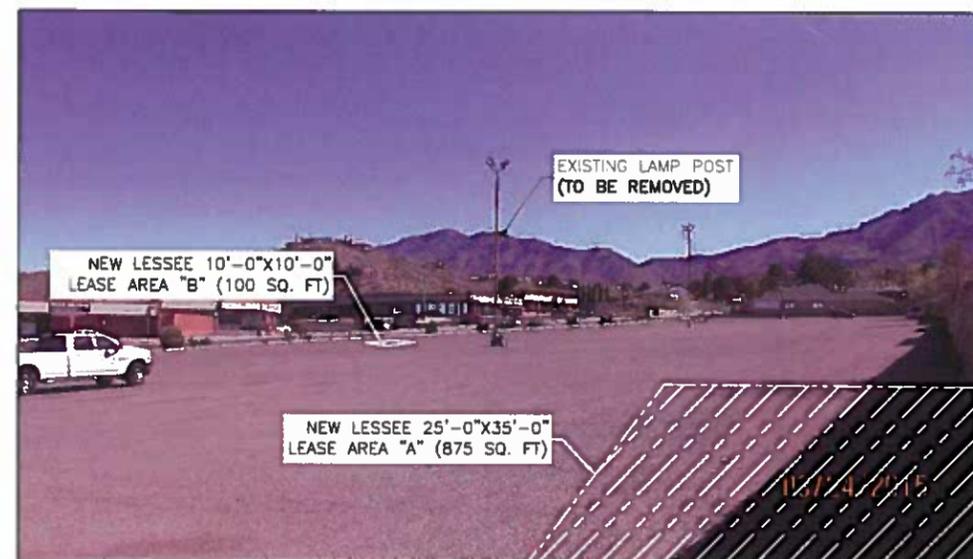
SAVE DATE: 6/21/2016 12:57 PM SHEET NUMBER: SP1



**VIEW OF EXISTING LAMP POST
(LOOKING WEST)**



**VIEW OF NEW LEASE AREA
(LOOKING WEST)**



**VIEW OF NEW LEASE AREA
(LOOKING EAST)**

LEGEND OF SYMBOLS:

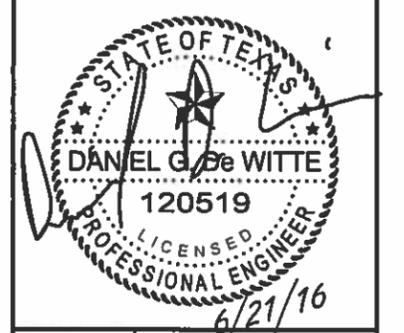
<p>REFERENCE LETTER OR NUMBER</p> <p>SECTION OR DETAIL</p> <p>SCALE:</p> <p>SHEET WHERE DRAWN</p> <p>SHEET WHERE TAKEN</p>	<p>EQUIPMENT OR FIXTURE NUMBER</p> <p>KEYED NOTE</p> <p>T.C. 1631.33 F.L. 1631.00 SPOT ELEVATION</p> <p>TOP OF WALL 1639.00 CONTROL OR DATUM POINT</p> <p>PROPERTY LINE</p> <p>EXISTING CONTOUR</p> <p>NEW CONTOUR</p> <p>ROUND/DIAMETER</p> <p>APPROXIMATELY</p>
<p>SECTION LETTER</p> <p>SHEET WHERE DRAWN</p> <p>SHEET WHERE TAKEN</p> <p>DETAIL NUMBER</p> <p>SHEET WHERE DRAWN</p> <p>SHEET WHERE TAKEN</p> <p>CENTERLINE</p> <p>PENNY</p>	<p>PROPERTY LINE</p> <p>EXISTING CONTOUR</p> <p>NEW CONTOUR</p> <p>ROUND/DIAMETER</p> <p>APPROXIMATELY</p>

**APPROVED
FOR CONSTRUCTION**

DESIGNED FOR:
verizonwireless
4821 EUBANK NE
ALBUQUERQUE, NEW MEXICO 87111

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TowerCom TECHNOLOGIES	AZ - CA - CO - ID - NM - NV - TX - UT	
	REV	DATE
	0	10/30/15
	1	04/27/16
DESCRIPTION	BY	CHK
APPROVED FOR CONSTRUCTION	EP	DGD
REVISED PER REAL ESTATE COMMENTS	EP	DGD
REVISED PER JURISDICTION COMMENTS	EP	DGD
REVISED PER NEW TOWER/COMPOUND LOCATION	EP	DGD



PROJECT NAME:
ELP AMPOSTA
NEW 48'-0" LIGHT POLE W/ CONCEALMENT CANSISTER
(OVERALL HEIGHT: 50'-0" A.G.L.)
RAW LAND COMMUNICATION SITE

PROJECT ADDRESS:
1020 BELVIDERE ST.
EL PASO, TEXAS 79912
EL PASO COUNTY

SHEET TITLE:
PHOTO SHEET

SAVE DATE:
6/21/2016 12:57 PM

SHEET NUMBER:
PS1

LEASE AREA SURVEY

GENERAL LEGAL DESCRIPTION OF LESSOR'S PARCEL

A PORTION OF LOT 1, BLOCK 67A, CHAPARRAL PARK UNIT 22, CITY OF EL PASO, EL PASO COUNTY, TEXAS.

NO EASEMENT CERTIFICATION:

THIS IS TO CERTIFY THAT THE EASEMENTS LISTED IN THE "REPORT OF TITLE" FILE NO. 50271-TX1501-5030, REFERENCE NO. 20131016364, ISSUED MARCH 25, 2015 BY US TITLE SOLUTIONS HAVE BEEN REVIEWED AND DO NOT CROSS THROUGH THE VERIZON WIRELESS ELP AMPOSTA LEASE AREA.

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	931.78'	127.61'	127.51'	N 82°59'22" E	7°50'48"

TITLE REFERENCE:

This Survey was done with sufficient research and field gathered data to verify the Underlying Parcel of the subject property, however, this Surveyor has relied upon the title provider referenced herein for documents of record. This Surveyor makes no guarantee, either expressed or implied as to the quality of the title report/abstract and reference documents provided and the documents provided affecting the Lease and immediate area have been plotted.

REFERENCE DOCUMENTS:

- REPORT OF TITLE FILE NO. 50271-TX1501-5030, REFERENCE NO. 20131016364, BY US TITLE SOLUTIONS, ISSUED MARCH 24, 2015.
- PROTECTIVE COVENANTS FOR CHAPARRAL PARK UNIT 22, RECORDED OCTOBER 19, 1979, IN BOOK 1031, PAGE 595, RECORDS OF EL PASO COUNTY, TEXAS.
- CORRECTION TO PROTECTIVE COVENANTS FOR CHAPARRAL PARK UNIT 22, RECORDED FEBRUARY 27, 1980, IN BOOK 1060, PAGE 785, RECORDS OF EL PASO COUNTY, TEXAS.
- EASEMENT BY TIMES ENTERPRISES INC., RECORDED MARCH 25, 1977 IN BOOK 770, PAGE 836, INSTRUMENT NO. 39595, RECORDS OF EL PASO COUNTY, TEXAS.
- PLAT OF CHAPARRAL PARK UNIT 22, RECORDED IN BOOK 55, PAGE 4, RECORDS OF EL PASO COUNTY, TEXAS.

DEED CHAIN

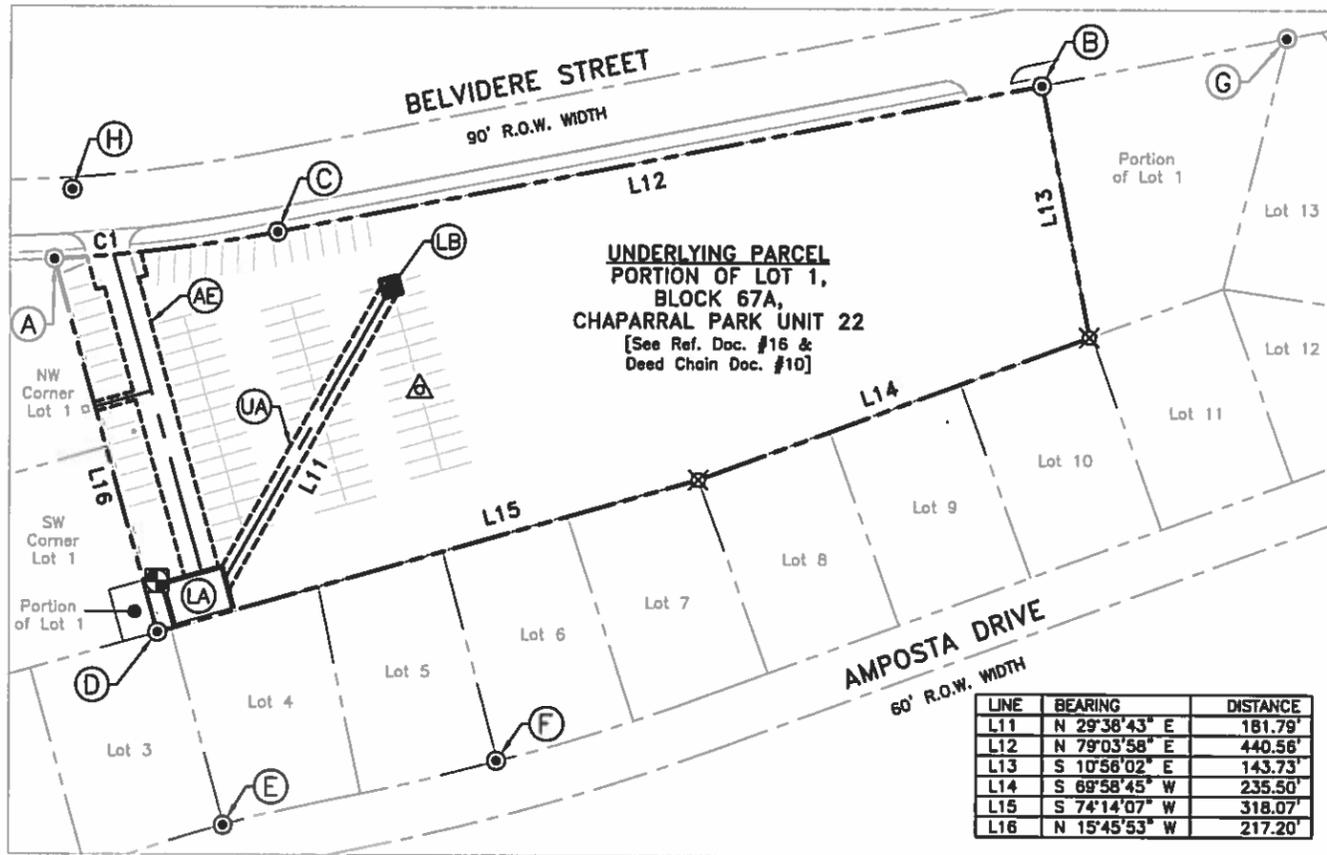
- WARRANTY DEED W/VENDOR'S LIEN BETWEEN INTER-VENTURE CO. (GRANTOR) AND RAMUNDO F. PORTILLA AND JOSE MANUEL F. PORTILLA (GRANTEES) RECORDED ON MAY 28, 1986 IN BOOK 1677, PAGE 951, INSTRUMENT NO. 74713, RECORDS OF EL PASO COUNTY, TEXAS.

LEGEND

- △ "BASE" = SET GIN SPIKE W/TCT WASHER (Refer To Basis of Bearings & Datum Note)
- TEMPORARY BENCH MARK SET GIN SPIKE IN ASPHALT
LAT: 31°51'08.410" N
LONG: 106°32'27.138" W
ELEV.: 4,088.9' [NAVD88]
- ⊙ FOUND SURVEY MONUMENT (AS NOTED)
- ⊗ CALCULATED CORNER (POINT NOT SET)
- SET REBAR WITH CAP OR (AS NOTED)
- () BEARING AND DISTANCE IN PARENTHESIS ARE FROM DOCUMENTS OF RECORD
- * SHOWN FOR REFERENCE, NOT DEFINED BY THIS SURVEY

KEYED NOTES

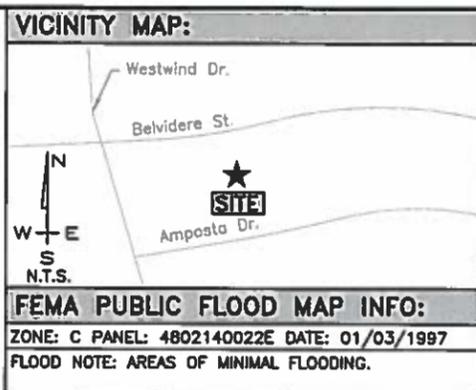
- (A) FOUND NAIL IN CONCRETE [HELD FOR ORIGIN OF SURVEY]
NAD83(2011) COORDINATES
LAT: 31°51'08.162"N
LONG: 106°32'27.934"W
NAVD88 ELEV: 4,083.2'
TX CENTRAL (4203)
N(Y): 10,691,200.90'
E(X): 370,013.76'
- (B) FOUND CROWS FOOT [HELD FOR ALIGNMENT]
- (C) FOUND MAG NAIL IN ASPHALT
- (D) FOUND NAIL ON WALL
- (E) FOUND CHISELED CROSS IN CONCRETE
- (F) FOUND 5/8" REBAR W/ CAP STAMPED "4297"
- (G) FOUND 1/2" REBAR W/NO I.D.
- (H) FOUND CITY MONUMENT
- (LA) CLIENT 25'X35' LEASE AREA "A" SEE SHEET SU2
- (LB) CLIENT 10'X10' LEASE AREA "B" SEE SHEET SU2
- (AE) CLIENT VARIABLE WIDTH ACCESS/UTILITY EASEMENT SEE SHEET SU2
- (UA) CLIENT 10' UTILITY EASEMENT "A" SEE SHEET SU2



LINE	BEARING	DISTANCE
L11	N 29°38'43" E	181.79'
L12	N 79°03'58" E	440.56'
L13	S 10°56'02" E	143.73'
L14	S 69°58'45" W	235.50'
L15	S 74°14'07" W	318.07'
L16	N 15°45'53" W	217.20'

UNDERLYING PARCEL SURVEY CONTROL OVERVIEW

SCALE: 1" = 100'



NEW LAMP POST COORDINATE REPORT:

NAD 83: 31°51'08.120"
106°32'25.715"

DECIMAL DEGREES: 31.85226N
106.54048W

NAVD88: 4,091.4'

BASIS OF BEARING AND DATUM NOTE:

- All distances are surface and all bearings are Grid based upon the Texas State Plane Coordinate System Central Zone.
- Project is tied to National CORS via the OPUS utility.

Geodetic Position of Control Monument is:
LATITUDE: 31° 51' 07.558"
LONGITUDE: 106° 32' 25.488"
ELLIPSOID HEIGHT: 4,014.4'

HORZ. DATUM NAD83 [CORS98] VERT. DATUM NAVD88 [GEOID03]

GRID POSITION (FT)
NORTHING: 10,691,128.22'
EASTING: 370,221.04'
ELEVATION: 4,092.6'

PROJECT NAME:
VERIZON WIRELESS
ELP
AMPOSTA

PROJECT ADDRESS:
1020 BELVIDERE ST.,
CITY OF EL PASO,
EL PASO COUNTY,
TEXAS 79912

DATE OF SURV.: 04/02/2015

DESIGNED FOR:
verizon wireless
4821 Eubank NE
Albuquerque, New Mexico 87111

DESIGNED BY:
TowerCom TECHNOLOGIES
AZ-CA-CO-ID-NM-NV-TX-UT
TEXAS LICENSED SURVEYING FIRM 10123001

UNDERLYING PARCEL OWNER:
RAMUNDO F. PORTILLA
2150 TRAWOOD DR. STE A240
EL PASO, TX 79935

PUBLIC RECORD PARCEL I.D.:
C340999067A0400

COMMUNICATIONS FACILITY OWNER:
NEW BUILD

DRIVING DIRECTIONS:
From the Verizon Wireless office in El Paso Texas, head North on Osborne Dr. to N. Mesa St., turn right heading Southeast for 0.9 miles to Belvidere St., turn left heading North for 2.0 miles just passed Westwind Dr. to the site located at a parking lot to the right (South) side of Belvidere St.

SURVEYOR'S NOTE & CERTIFICATION:

This "Lease Area Survey" is based on an actual field survey performed by me or under my direction. It correctly depicts existing, readily visible improvements and above ground utilities and the Boundary of the underlying parcel was verified from field and record information. This "Lease Area Survey" is not a Boundary Survey of the Underlying Parcel and this Survey was developed to support the communications facility plan set named herein.



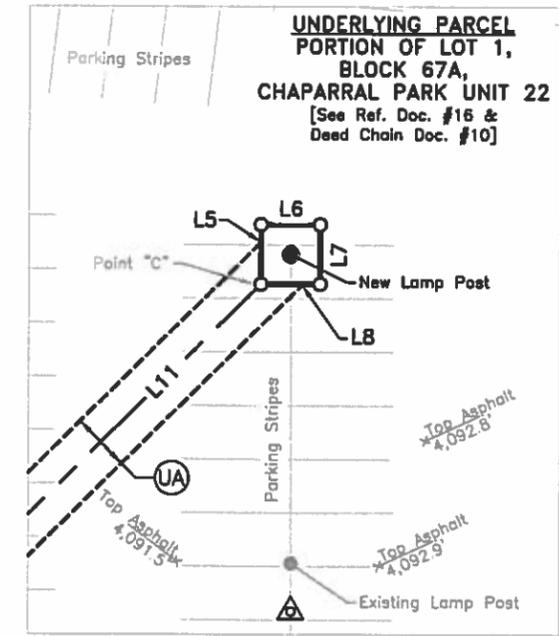
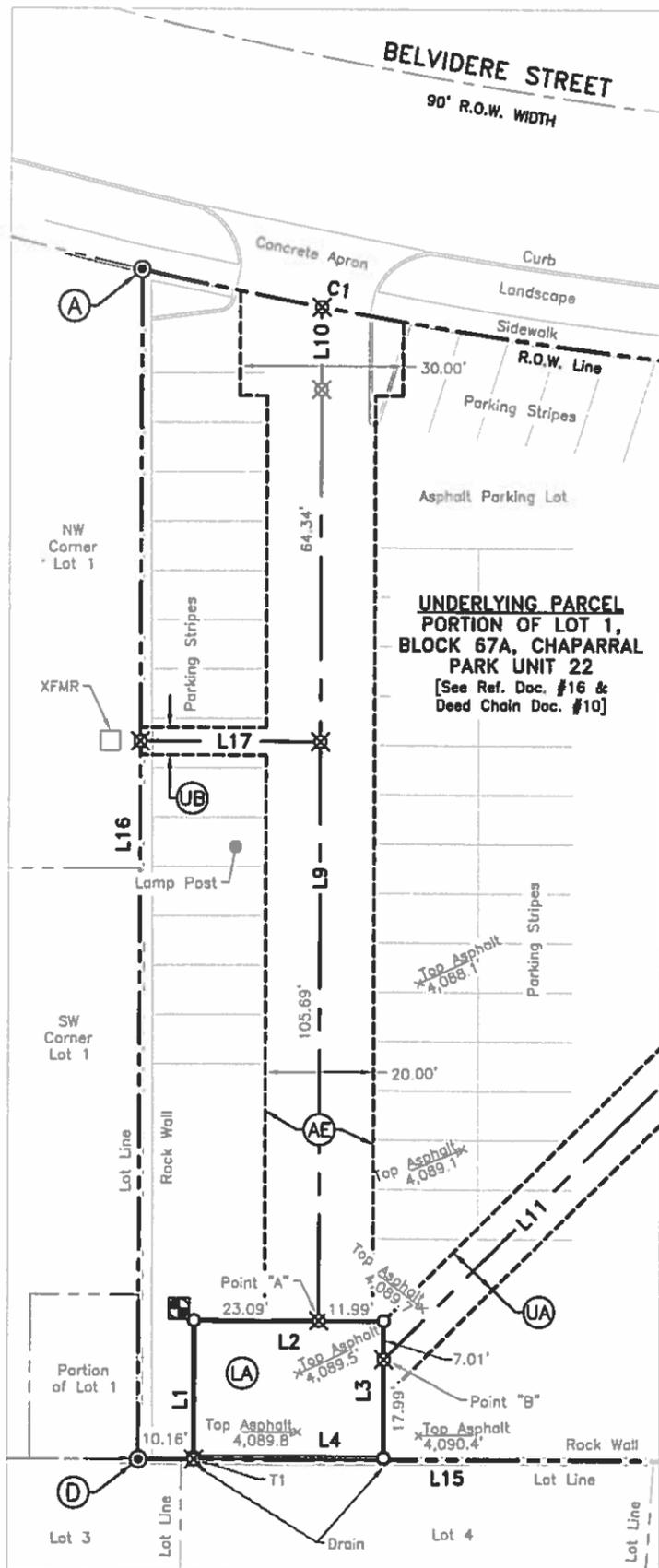
THESE DRAWINGS AND SURVEYS ARE COPYRIGHT PROTECTED AND THE SOLE PROPERTY OF TOWERCOM TECHNOLOGIES, LLC AND PRODUCED FOR THE USE OF OUR CLIENT. ANY REPRODUCTION OR USE OF THE INFORMATION CONTAINED WITHIN SAID DOCUMENTS IS PROHIBITED WITHOUT THE WRITTEN CONSENT BY TOWERCOM TECHNOLOGIES, LLC.

REV.	DESCRIPTION	DATE	BY	CHK
0	SPOT ELEVATION ADDITION/90% REISSUED	07/01/15	DH	DVM
1	UTILITY EASEMENTS ADDITION/FINAL REISSUED	10/23/15	DH	DVM
2	SITE ADDRESS UPDATE/FINAL REISSUED	03/14/16	DH	DVM
3	REVISED LEASE AREA LOCATION/FINAL REISSUED	06/21/16	SA	DVM

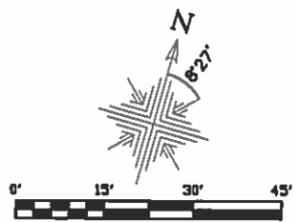
SHEET TITLE:
SURVEY NOTES & REFERENCE
SURVEY CONTROL OVERVIEW

TCT SITE I.D.: VZW ELP AMPOSTA

SHEET INFO.: Sheet 1 of 2 | SU1



NEW LIGHT POLE LEASE AREA OVERVIEW
SCALE: 1" = 30'



- LEGEND**
- △ "BASE" = SET GIN SPIKE W/TCT WASHER (Refer To Basis of Bearings & Datum Note)
 - TEMPORARY BENCH MARK SET GIN SPIKE IN ASPHALT
LAT: 31°51'06.410" N
LONG: 106°32'27.138" W
ELEV.: 4,088.9' [NAVD88]
 - FOUND SURVEY MONUMENT (AS NOTED)
 - ⊗ CALCULATED CORNER (POINT NOT SET)
 - SFNF SEARCHED FOR NOT FOUND
 - SET REBAR WITH CAP OR (AS NOTED)
 - () BEARING AND DISTANCE IN PARENTHESIS ARE FROM DOCUMENTS OF RECORD
 - * SHOWN FOR REFERENCE, NOT DEFINED BY THIS SURVEY

LINE	BEARING	DISTANCE
L1	N 15°45'55" W	25.00'
L2	N 74°14'05" E	35.00'
L3	S 15°45'55" E	25.00'
L4	S 74°14'05" W	35.00'
L5	N 15°45'55" W	10.00'
L6	N 74°14'05" E	10.00'
L7	S 15°45'55" E	10.00'
L8	S 74°14'05" W	10.00'
L9	N 15°45'52" W	170.00'
L10	N 15°45'52" W	14.98'
L11	N 29°38'43" E	181.79'
L12	N 79°03'58" E	440.56'
L13	S 10°56'02" E	143.73'
L14	S 89°58'45" W	235.50'
L15	S 74°14'07" W	318.07'
L16	N 15°45'53" W	217.20'
L17	S 74°14'08" W	33.18'

TIE	BEARING	DISTANCE
T1	N 15°45'55" W	0.39'

The following land descriptions define Lease Areas and Easements within Lot 1, Block 67A of Chaparral Park, Unit 22 (Plat Book 55, Page 4) Same being within that parcel of land described in the Warranty Deed w/vendors lien on file in Book 1677, Page 951, Instrument 74713 and hereinafter referred to as the "Underlying Parcel", All situate within the City of El Paso, El Paso County, Texas and further described as follows:

Commencing at the southwest corner of the "Underlying Parcel" on the common lot line with Lot 3 (said subdivision), found marked by a nail with no ID on face of the rock wall: from which the following two monuments were tied for reference:

1. A nail without ID, found for the northwest corner of the Underlying Parcel at the southern right of way of Belvidere Street bears North 15°45'53" East, a distance of 217.20 feet: (referenced as Monument 1).
2. And from Monument 1, A Mag Nail in asphalt with no ID found at the point of curvature of the southern right of way of Belvidere Street bears (along a chord bearing) North 82°59'22" East, a distance of 127.51 feet (Curve Data: Radius:931.78'-Delta 07°50'48"-Arc Length:127.61'):

Thence, leaving the POINT OF COMMENCEMENT, North 74°14'07" East 10.16 feet to a point; Thence, North 15°45'55" West 0.38 feet to the southwest corner and POINT OF BEGINNING of the lease area herein described;

Thence, North 15°45'55" West, 25.00 feet;
Thence, North 74°14'05" East, 35.00 feet, passing at 23.09 feet Reference Point "A";
Thence, South 15°45'55" East, 25.00 feet, passing at 7.01 feet Reference Point "B";
Thence, South 74°14'05" West, 35.00 feet to the POINT OF BEGINNING of this description.
• Containing 875 square feet of land.

TOGETHER WITH:
A variable width Access and Utility Easement described as follows: Beginning at the aforementioned Reference Point "A" as a 20.00' (twenty foot) wide Access and Utility Easement being 10.00' (ten feet) on each side of the following described centerline; Thence, North 15°45'52" West 170.00 feet to a point; Thence, continuing as a 30.00' (thirty foot) wide Access and Utility Easement being 15.00' (fifteen feet) on each side of said centerline description North 15°45'52" West 14.96 feet to the southern right of way of Belvidere Street and the Termination Point of this centerline description.
• Containing 3863.0 square feet of land.

TOGETHER WITH:
A 10.00 (ten foot) wide Utility Easement being 5.00' (five feet) on each side of the centerline described as follows:
Beginning at the aforementioned Reference Point "B", Thence, North 29°38'43" East 181.79 feet to the southwest corner of 10'x10' lease area served by this description and hereby referenced as Point "C" and being the Termination of this easement centerline description.
• Containing 1842.2 square feet of land.

TOGETHER WITH:
A 5.00 (five foot) wide Utility Easement being 2.50' (two and one half feet) on each side of the centerline described as follows:
Commencing at the aforementioned Reference Point "A", Thence, North 15°45'52" West 105.69 feet to the POINT OF BEGINNING of this utility easement;
Thence, South 74°14'08" West, 33.18 feet to a point along west lot line of said "Underlying Parcel" and the Termination of this easement description.
• Containing 138.4 square feet of land.

TOGETHER WITH:
A 10.00 by 10.00 Lease area described as follows:
Beginning at the aforementioned Reference Point "C",

Thence, North 15°45'55" West, 10.00 feet;
Thence, North 74°14'05" East, 10.00 feet;
Thence, South 15°45'55" East, 10.00 feet;
Thence, South 74°14'05" West, 10.00 feet to the POINT OF BEGINNING of this description.
• Containing 100 square feet of land.

END OF DESCRIPTIONS.

- Bearings are based upon the Texas State Plane Coordinate System Central Zone 4203-NAD83 and were developed from GPS static observations taken at the site and tied to the National "CORS" via the OPUS Utility.
- A 5/8" Rebar with Cap or Gin Spike with washer Stamped "TowerCom TX5852" will be placed at Lease Corners.
- A Lease Area Survey Plat accompanies these land descriptions.

LAND DESCRIPTIONS

KEYED NOTES

- (A) FOUND NAIL IN CONCRETE [HELD FOR ORIGIN OF SURVEY] NAD83(2011) COORDINATES
LAT: 31°51'08.162"N
LONG: 106°32'27.934"W
NAVD88 ELEV: 4,083.15'
TX CENTRAL (4203)
N(Y): 10,691,200.90'
E(X): 370,013.76'
- (B) FOUND CROWS FOOT [HELD FOR ALIGNMENT]
- (C) FOUND MAG NAIL IN ASPHALT
- (D) FOUND NAIL ON WALL
- (E) FOUND CHISELED CROSS IN CONCRETE
- (F) FOUND 5/8" REBAR W/ CAP STAMPED "4297"
- (G) FOUND 1/2" REBAR W/NO I.D.
- (H) FOUND CITY MONUMENT
- (LA) CLIENT 25'X35' LEASE AREA "A" 875 SQ. FT.
- (LB) CLIENT 10'X10' LEASE AREA "B" 100 SQ. FT.
- (AE) CLIENT VARIABLE WIDTH ACCESS/UTILITY EASEMENT
- (UA) CLIENT 10' UTILITY EASEMENT "A"
- (UB) CLIENT 5' UTILITY EASEMENT "B"

DESIGNED FOR:
verizon wireless

4821 Eubank NE
Albuquerque, New Mexico 87111

DESIGNED BY:

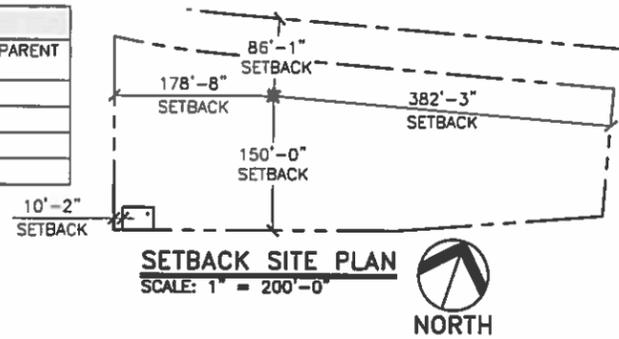
TowerCom
TECHNOLOGIES
AZ-CA-CO-ID-NM-NV-TX-UT
TEXAS LICENSED SURVEYING FIRM 10123001

SHEET TITLE:
**ACCESS & LEASE AREA OVERVIEW
LAND DESCRIPTIONS**

TCT SITE I.D.: ELP AMPOSTA
SHEET INFO.: Sheet 2 of 2 SU2

SETBACK TABLE:

	TOWER BASE TO PARENT PROPERTY LINE	LEASE BOUNDARY TO PARENT PROPERTY LINE
NORTH	86'-1"	82'-2"
SOUTH	150'-0"	146'-0"
WEST	178'-8"	174'-8"
EAST	382'-3"	378'-3"



LANDSCAPE NOTE:

1. THIS PROJECT WILL NOT INCLUDE ANY PROVISIONS FOR LANDSCAPING. INSTEAD, VERIZON WIRELESS WILL UTILIZE THE LANDSCAPE BUYOUT OPTION OFFERED BY THE CITY OF EL PASO.

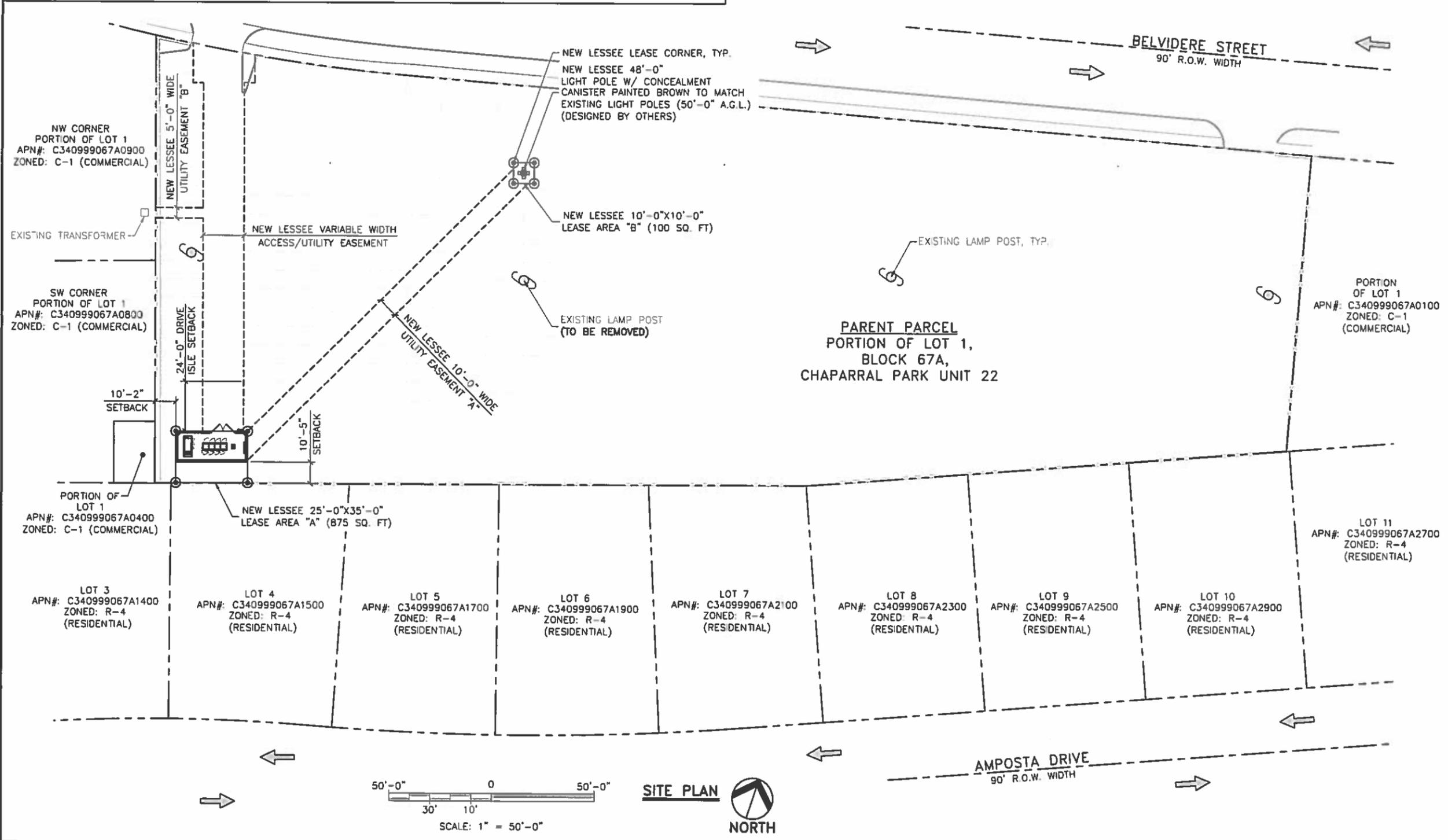
APPROVED FOR CONSTRUCTION

DESIGNED FOR:
verizonwireless
4821 EUBANK NE
ALBUQUERQUE, NEW MEXICO 87111

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TowerCom TECHNOLOGIES
AZ - CA - CO - ID - NM - NV - TX - UT

REV	DESCRIPTION	DATE	CHK	BY	DGD
0	APPROVED FOR CONSTRUCTION	10/30/15	EP	EP	DGD
1	REVISED PER REAL ESTATE COMMENTS	04/27/16	EP	EP	DGD
2	REVISED PER JURISDICTION COMMENTS	05/17/16	EP	EP	DGD
3	REVISED PER NEW TOWER/COMPOUND LOCATION	06/21/16	EP	EP	DGD



STATE OF TEXAS
DANIEL G. DE WITTE
120519
LICENSED PROFESSIONAL ENGINEER
6/21/16

PROJECT NAME:
ELP AMPOSTA
NEW 48'-0" LIGHT POLE W/ CONCEALMENT CANISTER
(OVERALL HEIGHT: 50'-0" A.G.L.)
RAW LAND COMMUNICATION SITE

PROJECT ADDRESS:
1020 BELVIDERE ST.
EL PASO, TEXAS 79912
EL PASO COUNTY

SHEET TITLE:
SETBACK PLAN AND SITE PLAN

SAVE DATE:
6/21/2016 12:57 PM

SHEET NUMBER:
C1

- SITE NOTES:**
1. PRIOR TO EXCAVATION, CONTRACTOR SHALL CHECK THE AREA FOR UNDERGROUND FACILITIES.
 2. CONTRACTOR TO PLACE MONOPOLE FOUNDATION BASED ON FINISHED COMPOUND GRADE.

- LANDSCAPE NOTE:**
1. THIS PROJECT WILL NOT INCLUDE ANY PROVISIONS FOR LANDSCAPING. INSTEAD, VERIZON WIRELESS WILL UTILIZE THE LANDSCAPE BUYOUT OPTION OFFERED BY THE CITY OF EL PASO.

- GENERAL NOTES:**
1. NEW LESSEE 8' CMU ROCK WALL IS TO MATCH SAME STYLE MATERIAL AND TEXTURE OF EXISTING ROCK WALL.
 2. NEW LESSEE FLOOD LIGHTS TO BE DARK-SKY COMPLIANT PER SECTION 18.18.

DESIGNED FOR:
verizonwireless
 4821 EUBANK NE
 ALBUQUERQUE, NEW MEXICO 87111

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 AZ - CA - CO - ID - NM - NV - TX - UT	CHK	BY	DATE	DESCRIPTION
	0	EP	10/30/15	APPROVED FOR CONSTRUCTION
	1	EP	04/27/16	REVISED PER REAL ESTATE COMMENTS
	2	EP	05/17/16	REVISED PER JURISDICTION COMMENTS
3	EP	06/21/16	REVISED PER NEW TOWER/COMPOUND LOCATION	

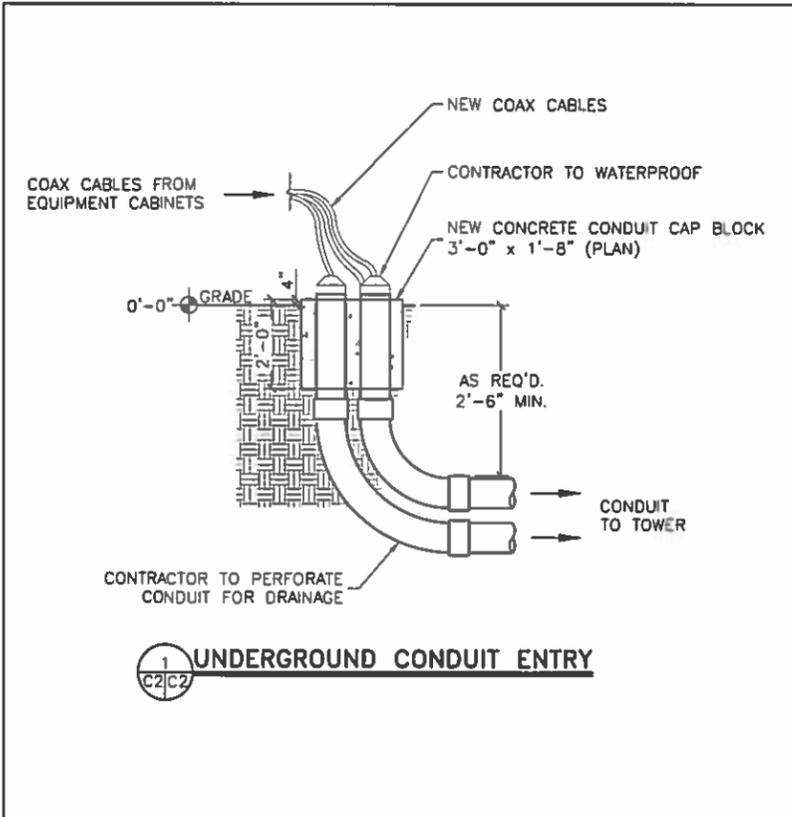
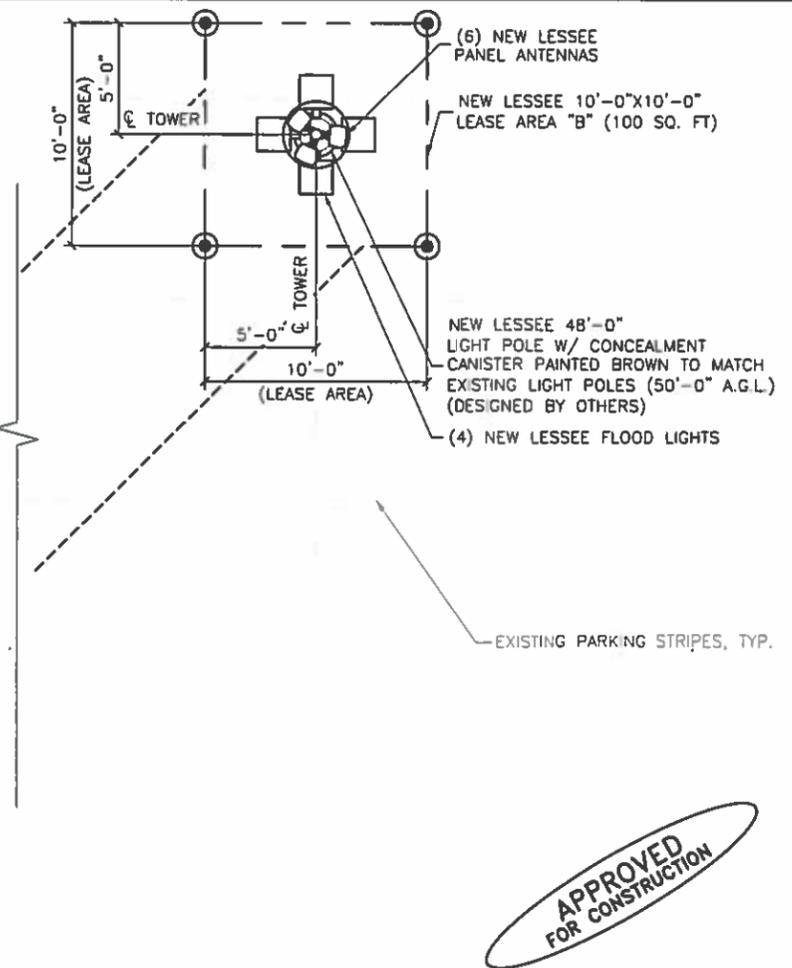
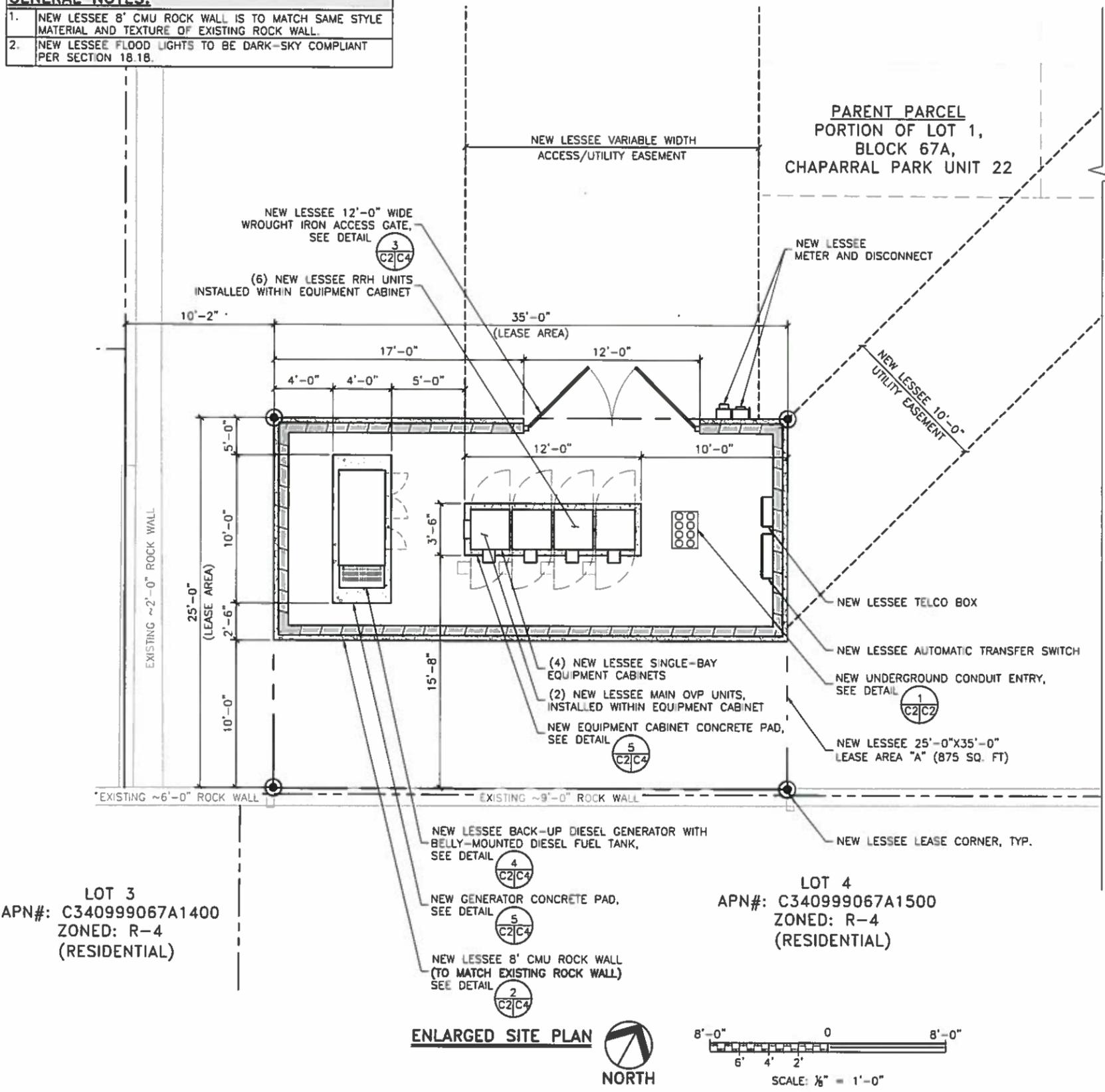


PROJECT NAME:
ELP AMPOSTA
 NEW 48'-0" LIGHT POLE W/ CONCEALMENT CANISTER
 (OVERALL HEIGHT: 50'-0" A.G.L.)
 RAW LAND COMMUNICATION SITE

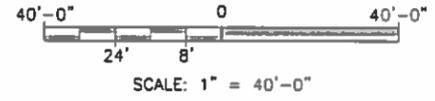
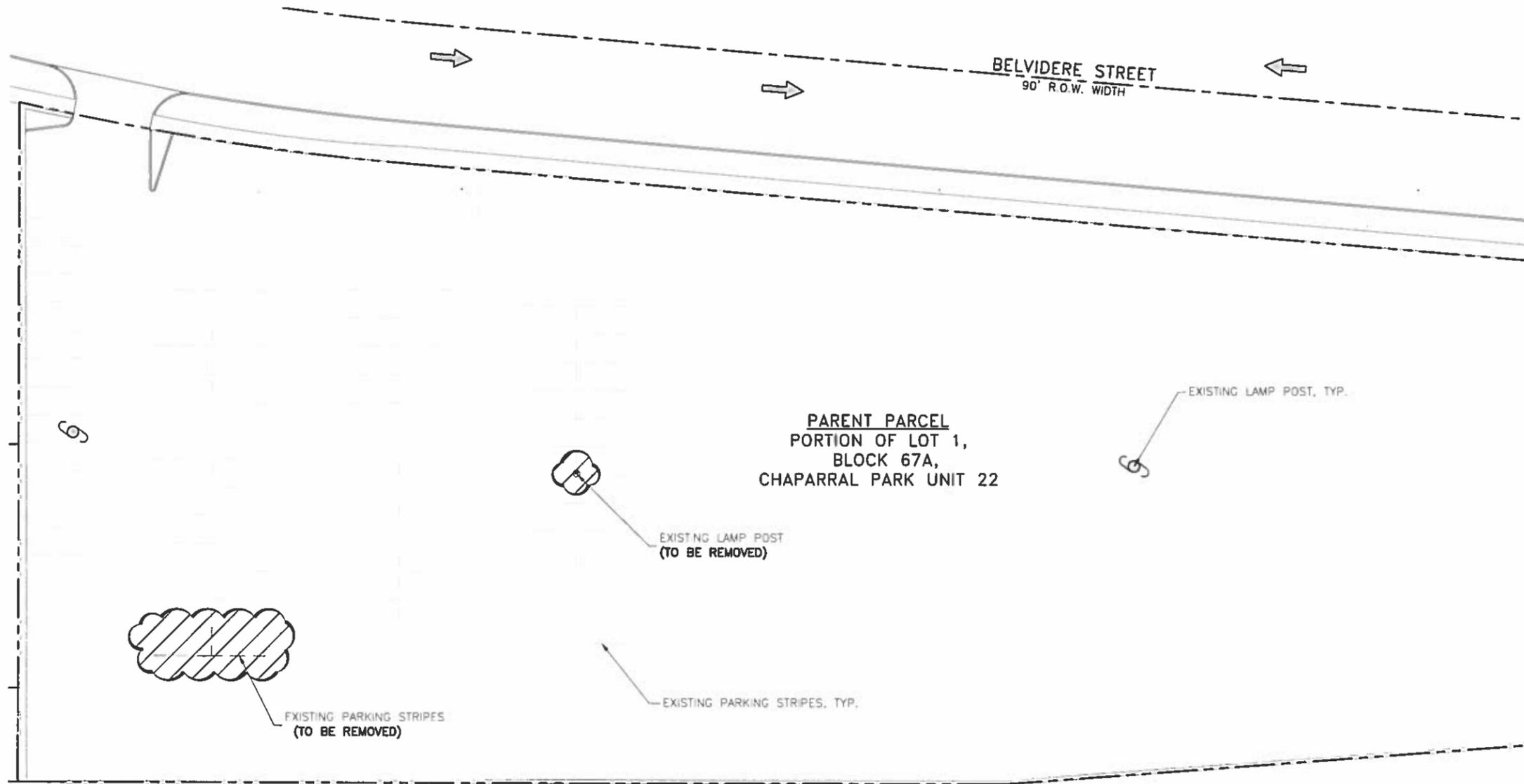
PROJECT ADDRESS:
 1020 BELVIDERE ST.
 EL PASO, TEXAS 79912
 EL PASO COUNTY

SHEET TITLE:
ENLARGED SITE PLAN

SAVE DATE:
 6/21/2016 12:57 PM
 SHEET NUMBER:
C2



NOTE:
 TO BE REMOVED AND DISPOSED OF IN A LEGAL MANNER.



DEMO SITE PLAN
 SCALE: 1" = 40'-0"



APPROVED FOR CONSTRUCTION

DESIGNED FOR:
verizonwireless
 4821 EUBANK NE
 ALBUQUERQUE, NEW MEXICO 87111

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DESIGNED BY:		AZ - CA - CO - ID - NM - NV - TX - UT	CHK	BY	DATE
			REV	DESCRIPTION	DATE
			0	APPROVED FOR CONSTRUCTION	10/30/15
			1	REVISED PER REAL ESTATE COMMENTS	04/27/16
			2	REVISED PER JURISDICTION COMMENTS	05/17/16
3	REVISED PER NEW TOWER/COMPOUND LOCATION	06/21/16			



PROJECT NAME:
ELP AMPOSTA
 NEW 48'-0" LIGHT POLE W/ CONCEALMENT CANISTER
 (OVERALL HEIGHT: 50'-0" A.G.L.)
 RAW LAND COMMUNICATION SITE

PROJECT ADDRESS:
 1020 BELVIDERE ST.
 EL PASO, TEXAS 79912
 EL PASO COUNTY

SHEET TITLE:
DEMO SITE PLAN

SAVE DATE:
 6/21/2016 12:57 PM

SHEET NUMBER:
C2.1

GENERAL NOTES:

1. NEW LESSEE 8' CMU ROCK WALL IS TO MATCH SAME STYLE MATERIAL AND TEXTURE OF EXISTING ROCK WALL.
2. NEW LESSEE FLOOD LIGHTS IS TO BE DARK-SKY COMPLIANT PER SECTION 18.18

KEY:

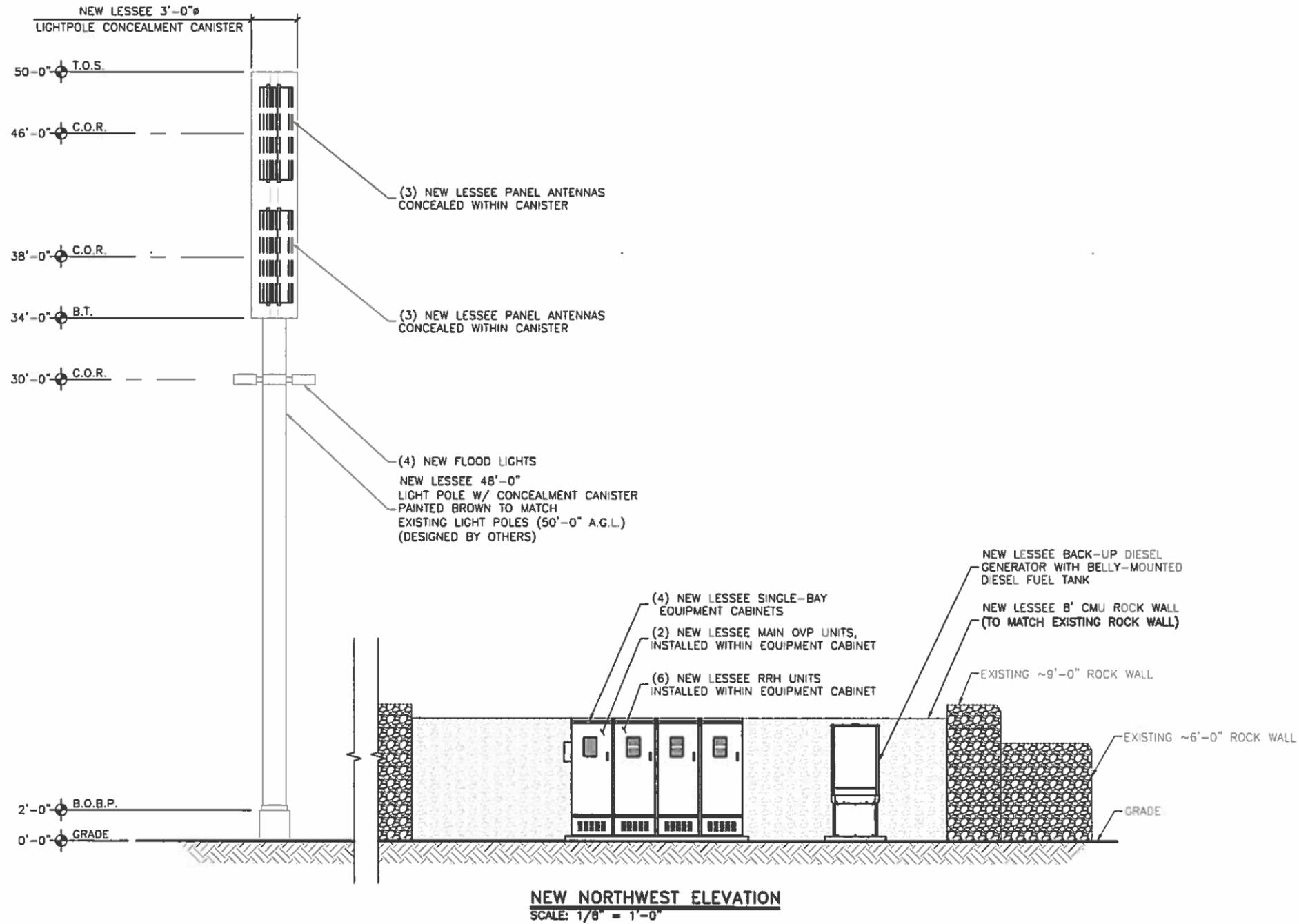
C.O.R. =	CENTER OF RADIATION
A.L. =	ATTACHMENT LEVEL
B.T. =	BOTTOM TIP LEVEL
T.T. =	TOP TIP LEVEL
A.G.L. =	ABOVE GRADE LEVEL
B.O.B.P. =	BOTTOM OF BASE PLATE
T.O.S. =	TOP OF STRUCTURE

DESIGNED FOR:

verizonwireless

4821 EUBANK NE
ALBUQUERQUE, NEW MEXICO 87111

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REV	DESCRIPTION	DATE	CHK	BY
0	APPROVED FOR CONSTRUCTION	10/30/15	DGD	EP
1	REVISED PER REAL ESTATE COMMENTS	04/27/16	EP	DGD
2	REVISED PER JURISDICTION COMMENTS	05/17/16	EP	DGD
3	REVISED PER NEW TOWER/COMPOUND LOCATION	06/21/16	EP	DGD

DESIGNED BY: **TOWERCOM TECHNOLOGIES**
AZ - CA - CO - ID - NM - NV - TX - UT



PROJECT NAME:
ELP AMPOSTA
NEW 48'-0" LIGHT POLE W/ CONCEALMENT CANISTER
(OVERALL HEIGHT: 50'-0" A.G.L.)
RAW LAND COMMUNICATION SITE

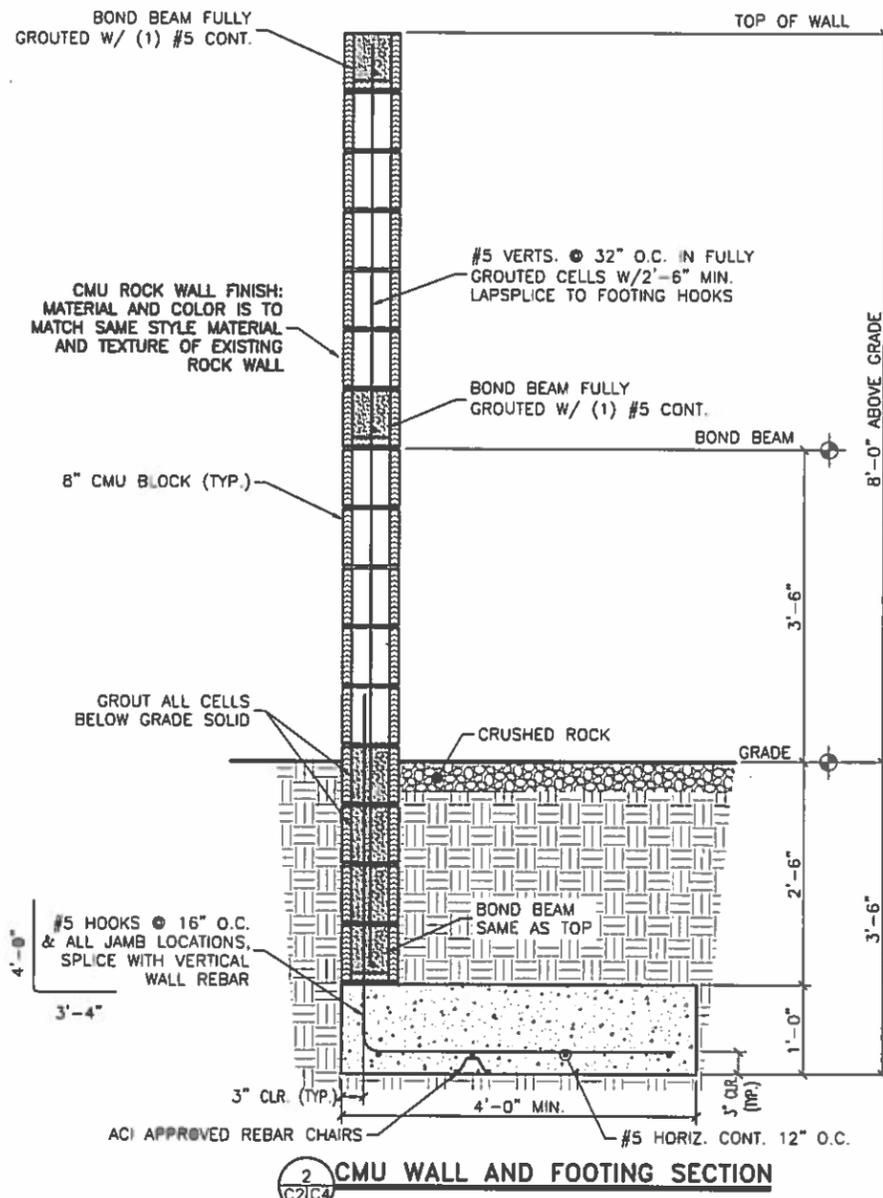
PROJECT ADDRESS:
1020 BELVIDERE ST.
EL PASO, TEXAS 79912
EL PASO COUNTY

SHEET TITLE:
ELEVATIONS

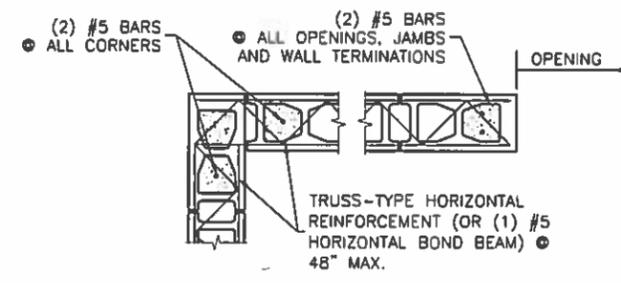
SAVE DATE:
6/21/2016 12:57 PM

SHEET NUMBER:
C3

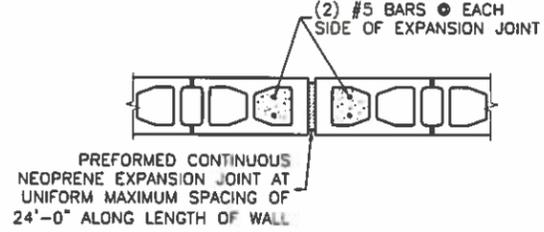
APPROVED FOR CONSTRUCTION



2 CMU WALL AND FOOTING SECTION
C2/C4



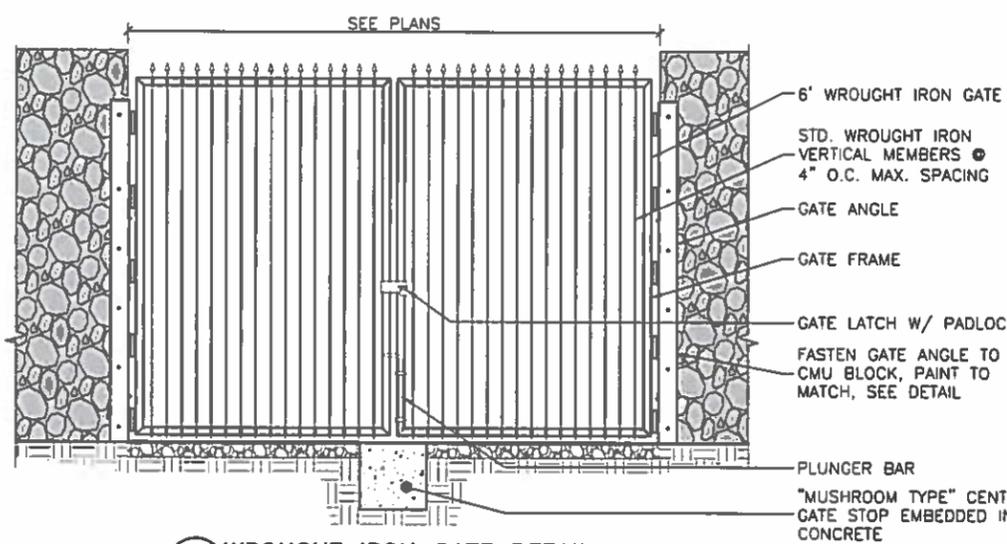
CMU CORNER & JAMB DETAIL
SCALE: N.T.S.



CMU EXPANSION JOINT DETAIL

STUCCO NOTES:

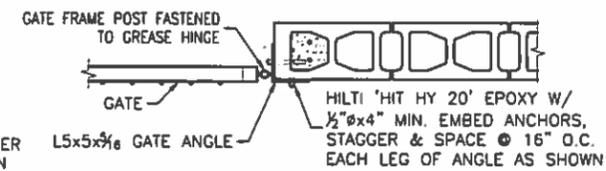
- METAL LATHING & ACCESSORIES SHALL CONFORM TO ASTM 1063, MLSFA "TECHNICAL BULLETIN 101" AND ASTM C841 FOR SELECTION OF METAL LATH FOR EACH APPLICATION INDICATED, AND FS QO-L-101. MANUFACTURER'S STANDARD STEEL GALVANIZED FINISH (ASTM A525 G90) ON STEEL PRODUCTS
- STUCCO MESH SHALL BE GALVANIZED HEXAGONAL WOVEN SIDE MESH 1 1/2", 17 GA., SELF FURRED.
- EXTERIOR GALVANIZED DIAMOND MESH LATH OF 3.4 LBS. PER SQ. YD. MAY BE USED INSTEAD OF STUCCO NETTING
- THREE COAT STUCCO SYSTEM TO BE USED CONSISTING OF MANUFACTURER'S STANDARD PRODUCTS CONSISTING OF SEPARATE BASE COAT, SCRATCH COAT AND FINISH COAT MATERIALS. FIBER-REINFORCED PORTLAND CEMENT PLASTER BASECOAT TO BE USED.
- INSTALLATION OF METAL SUPPORT SYSTEMS SHALL COMPLY WITH ASTM C754.
- CONTRACTOR TO APPLY DIAMOND MESH AT ALL CORNERS AND OPENINGS.
- CONTRACTOR TO PROVIDE EXPANSION AND CONTROL JOINTS WHERE NOTED ON PLANS AND AT ALL DISSIMILAR MATERIALS JUNCTIONS.
- CONTRACTOR TO MOIST CURE EACH BASECOAT WITH CLEAN POTABLE WATER FOR 48-72 HOURS FOLLOWING INITIAL BASECOAT APPLICATION. ALLOW BROWN COAT TO AIR CURE FOR AN ADDITIONAL 7-10 DAYS BEFORE THE APPLICATION OF THE CEMENT BASED FINISH COATS.



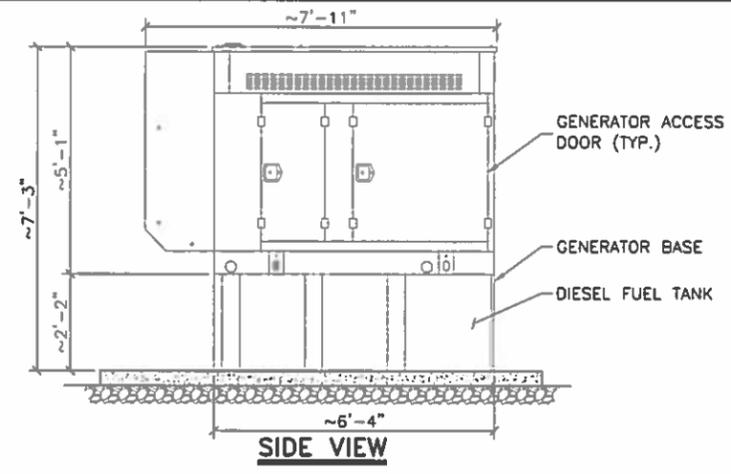
3 WROUGHT IRON GATE DETAIL
C2/C4

WROUGHT IRON SPECIFICATIONS:

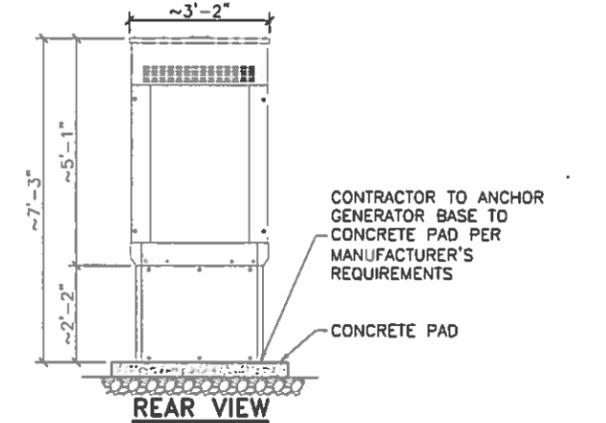
GATE POST	4"x4" TUBE STEEL 12 GAUGE FOR GATE WIDTHS UP TO 6 FEET
LINE POST	3"x3" TUBE STEEL 14 GAUGE WITH 8'-0" MAX. SPACING BETWEEN POSTS
CORNER POST	3"x3" TUBE STEEL 14 GAUGE
TOP/BOTTOM RAIL	1.50"x1.38"x1.50" STEEL U CHANNEL 11 GAUGE
GATE FRAME	2"x2" TUBE STEEL 14 GAUGE
GATE LATCH	1.375" O.D. PLUNGER ROD W/ MUSHROOM TYPE CATCH AND LOCK. CONTRACTOR TO INSTALL (2) GATE HOLDBACKS TO HOLD GATE OPEN DURING USE.
VERTICAL MEMBERS	3/4"x3/4" TUBE STEEL 18 GAUGE MINIMUM



CMU HINGE DETAIL



SIDE VIEW

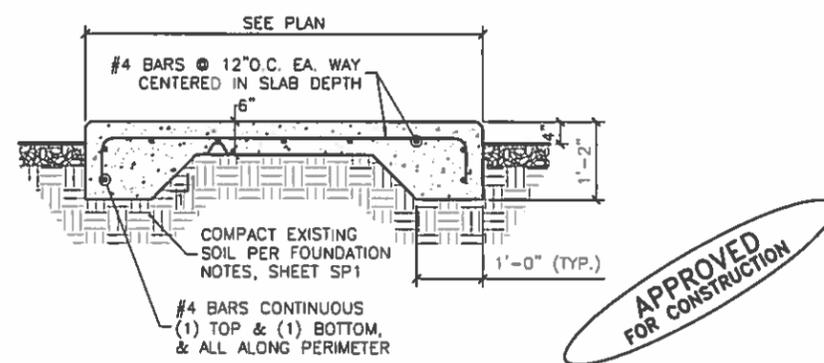


REAR VIEW

OUTDOOR GENERATOR INFORMATION:

- GENSET TO BE GENERAC MODEL 6671 30KW 60HZ STANDBY GENERATOR.
- THE INTENDED USE OF THIS GENERATOR IS FOR BACK-UP POWER PURPOSES ONLY. THE GENERATOR WILL BE PERIODICALLY CYCLED AND EXERCISED TO ENSURE CONTINUED RELIABILITY.
- THIS GENERATOR OPERATES AT AN AVERAGE SOUND LEVEL OF 87 DECIBELS AT A DISTANCE OF 23 FEET (7 METERS) WHICH IS COMPARABLE TO THE SOUND LEVEL OF A DIAL TONE OR HANDSAW (85 DECIBELS).
- THE DIESEL FUEL TANK FOR THE GENERATOR SHALL BE DUAL WALL SUB-BASE TYPE DESIGNED FOR SECONDARY CONTAINMENT. MUST ALSO BE EQUIPPED WITH EMERGENCY PRESSURE RELIEF AND ATMOSPHERIC VENT CAPS. A FUEL GAUGE SHALL BE PROVIDED AND PLACED IN A FULLY VISIBLE LOCATION TO KEEP FUELING PERSONNEL FROM OVERFILLING THE TANK. FUEL GAUGE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- ANY AND ALL DIESEL FUEL SPILLS, NO MATTER THE SIZE, MUST BE REPORTED.
- PROPOSED DIESEL GENERATOR W/ BELLY MOUNTED 132 GALLON DIESEL FUEL TANK.

4 GENERATOR DETAIL
C2/C4



5 GENERATOR AND CABINET CONCRETE PAD SECTION
C2/C4

APPROVED FOR CONSTRUCTION

DESIGNED FOR:
verizon wireless
4821 EUBANK NE
ALBUQUERQUE, NEW MEXICO 87111

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REV	DESCRIPTION	DATE	CHK	BY
0	APPROVED FOR CONSTRUCTION	10/30/15	DGD	EP
1	REVISED PER REAL ESTATE COMMENTS	04/27/16	DGD	EP
2	REVISED PER JURISDICTION COMMENTS	05/17/16	DGD	EP
3	REVISED PER NEW TOWER/COMPOUND LOCATION	06/21/16	DGD	EP

STATE OF TEXAS
DANIEL G. DE WITTE
120519
LICENSED PROFESSIONAL ENGINEER
6/21/16

PROJECT NAME:
ELP AMPOSTA
NEW 48'-0" LIGHT POLE W/ CONCEALMENT CANISTER (OVERALL HEIGHT: 50'-0" A.G.L.)
RAW LAND COMMUNICATION SITE

PROJECT ADDRESS:
1020 BELVIDERE ST.
EL PASO, TEXAS 79912
EL PASO COUNTY

SHEET TITLE:
SECTIONS & DETAILS

SAVE DATE:
6/21/2016 12:57 PM
SHEET NUMBER:
C4

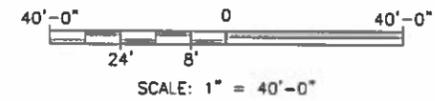
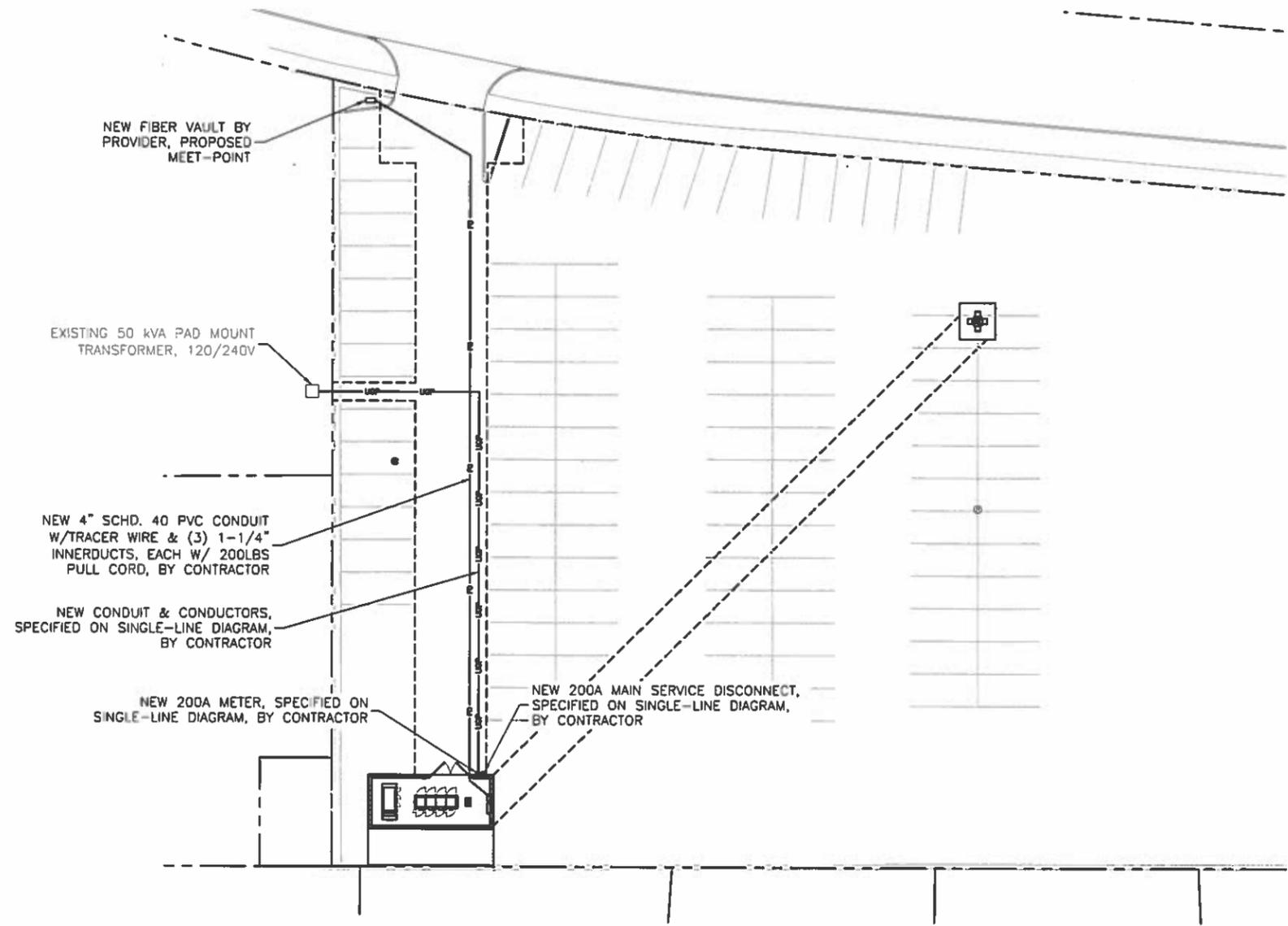
- NOTES:**
1. POWER COORDINATION INFORMATION DEPICTED ON THESE DRAWINGS IS ACCURATE AND COMPLETE AS OF 10-07-15. HOWEVER, PRIOR TO SUBMITTING BIDS CONTRACTOR SHALL CONTACT UTILITY REPRESENTATIVE AND VERIFY THAT CONDITIONS HAVE NOT CHANGED.
 2. FIBER COORDINATION IS NOT YET COMPLETE AS OF 10-26-15. FIBER SERVICE INFORMATION DEPICTED IN THESE DRAWINGS IS PRELIMINARY AND WILL BE UPDATED UPON COMPLETION OF FIBER COORDINATION, AT WHICH TIME REVISED DRAWINGS WILL BE ISSUED. PRIOR TO SUBMITTING BIDS CONTRACTORS SHALL CONTACT VERIZON WIRELESS CONSTRUCTION MANAGER FOR REVISED DRAWINGS.
 3. ALL CONDUIT NOT SPECIFIED OTHERWISE SHALL BE SCHED. 40 PVC BELOW GRADE, IMC ABOVE. EMT ACCEPTABLE INDOORS IN AREAS THAT ARE ACCESSIBLE ONLY TO VERIZON WIRELESS AUTHORIZED PERSONNEL.

POWER CONTACT:
 EL PASO ELECTRIC
 ADOLFO DEL REAL
 915-238-1591
 adolfo.delreal@epelectric.com
 CONTACT SHALL BE NOTIFIED PRIOR TO START OF CONSTRUCTION.

FIBER CONTACT:
 TO BE DETERMINED, SEE NOTE #2
 CONTACT SHALL BE NOTIFIED PRIOR TO START OF CONSTRUCTION.

DESIGNED FOR:
verizonwireless
 4821 EUBANK NE
 ALBUQUERQUE, NEW MEXICO 87111

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UTILITY COORDINATION SITE PLAN



APPROVED FOR CONSTRUCTION

DESIGNED BY: **TowerCom TECHNOLOGIES**
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REV	DESCRIPTION	DATE	CHK	BY
0	APPROVED FOR CONSTRUCTION	10/27/15	SB	LRP
1	REVISED PER NEW TOWER/COMPOUND LOCATION	06/20/16	SB	LRP



PROJECT NAME:
ELP AMPOSTA
 NEW 48'-0" LIGHTPOLE W/ CONCEALMENT CANISTER
 (OVERALL HEIGHT: 50'-0" A.G.L.)
 RAW LAND COMMUNICATION SITE

PROJECT ADDRESS:
 BELVIDERE ST. & WESTWIND DR.
 EL PASO, TEXAS 79912
 EL PASO COUNTY

SHEET TITLE:
UTILITY COORDINATION SITE PLAN

SAVE DATE:
 6/20/2016 10:23 AM

SHEET NUMBER:
UC1

GENERAL ELECTRICAL NOTES

1. CONTRACTOR SHALL COMPLY WITH UTILITY'S ELECTRICAL SERVICE SPECIFICATIONS, OBTAIN A COPY AS NEEDED.
2. THE ELECTRICAL INSTALLATION WORK SHALL COMPLY WITH ALL LOCAL, STATE AND NATIONAL CODES, LAWS AND ORDINANCES APPLICABLE TO ELECTRICAL WORK.
3. **ARC FLASH HAZARD WARNING SIGNS:**
PER NEC ARTICLE 110.16 EACH OF THE FOLLOWING DEVICES SHALL HAVE A PERMANENT LABEL OR SIGN AFFIXED WARNING QUALIFIED PERSONS OF POTENTIAL ARC FLASH HAZARDS: SERVICE GUTTER-BOXES, METER ENCLOSURES, DISCONNECTS, TRANSFORMERS DOWN-STREAM OR SERVICE EQUIPMENT, TRANSFER SWITCHES, DISTRIBUTION PANEL BOARDS, ANY OTHER DEVICES THAT ARE INSTALLED AND ARE SPECIFIED IN NEC ARTICLE 110.16. THIS LABEL OR SIGN SHALL MEET THE GUIDELINES FOR SAFETY SIGNS SPECIFIED IN THE CURRENT REVISION OF ANSI Z535.4.
4. CONTRACTOR SHALL VISIT SITE AND VERIFY EXISTING CONDITIONS BEFORE BEGINNING WORK.
5. ALL MATERIAL AND EQUIPMENT FURNISHED AND INSTALLED UNDER THIS CONTRACT SHALL BE NEW, FREE FROM DEFECTS, AND SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE BY OWNER OR HIS REPRESENTATIVE. SHOULD ANY TROUBLE DEVELOP DURING THIS PERIOD DUE TO FAULTY WORKMANSHIP, MATERIAL OR EQUIPMENT, THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS AND LABOR TO CORRECT THE TROUBLE WITHOUT COST TO THE OWNER.
6. ALL WORK TO BE EXECUTED IN A WORKMANLIKE MANNER AND SHALL PRESENT A NEAT MECHANICAL APPEARANCE WHEN COMPLETED.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING RELATED TO ELECTRICAL WORK.
8. ALL BRANCH CIRCUIT CONDUCTORS SHALL BE COPPER TYPE "TH," #12, AND #10 SOLID, #8 AND LARGER STRANDED.
9. CONTRACTOR SHALL FURNISH AS-BUILT DRAWINGS TO THE VERIZON WIRELESS PROJECT MANAGER UPON COMPLETION OF THE JOB.
10. ELECTRICAL WORK SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED, INCLUDING BUT NOT LIMITED TO COMPLETE ELECTRICAL SYSTEMS POWER AND LIGHTING, TELEPHONE CONDUIT SYSTEM, SIGNAL SYSTEMS, PANELBOARD(S), CONTROL WIRING, GROUNDING, CONDUIT ONLY SYSTEMS, ETC., AS INDICATED ON ELECTRICAL DRAWINGS AND/OR REQUIRED BY GOVERNING CODES.
11. PRIOR TO INSTALLING ANY ELECTRICAL WORK, THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS AND REQUIREMENTS ON THE JOB, AND BY REFERENCE TO ARCHITECTURE, AND EQUIPMENT SUPPLIER'S DRAWINGS. SHOULD THERE BE ANY QUESTIONS OR PROBLEMS CONCERNING THE NECESSARY PROVISIONS TO BE MADE, PROPER DIRECTIONS FROM THE VERIZON WIRELESS PROJECT MANAGER SHALL BE OBTAINED BEFORE PROCEEDING WITH ANY WORK.
12. THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS, ELECTRICAL SERVICE REQUIREMENTS AND COORDINATE ALL INTERCONNECTION REQUIREMENTS WITH LOCAL UTILITY AS NECESSARY.
13. THE NOTE, SPECIFICATION OR CODE WHICH PRESCRIBES AND ESTABLISHES THE HIGHEST STANDARD OF PERFORMANCE SHALL PREVAIL IN THE EVENT OF ANY CONFLICT OR INCONSISTENCY BETWEEN ITEMS SHOWN ON THE PLANS AND/OR SPECIFICATIONS.
14. THE CONTRACTOR SHALL FURNISH AND PAY FOR ALL PERMITS AND RELATED FEES.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE, STATE OF TEXAS ELECTRICAL SAFETY ORDERS, ALL CODES AND ORDINANCES AND ALL OTHER ADMINISTRATIVE AUTHORITIES HAVING JURISDICTION OVER THIS WORK.
16. NETWORK-POWERED BROADBAND COMMUNICATIONS EQUIPMENT AND CABLES SHALL BE LISTED AND MARKED IN ACCORDANCE WITH NEC 830.179 (A) OR (B).
17. PREMISES - POWERED BROADBAND COMMUNICATIONS SYSTEMS EQUIPMENT & CABLES SHALL BE LISTED AND MARKED IN ACCORDANCE WITH NEC 840.179.

GENERAL GROUNDING NOTES:

1. CONTRACTOR TO COMPLY WITH VERIZON WIRELESS CELL SITE GROUNDING & BONDING SPECIFICATIONS. IN THE EVENT THAT DRAWINGS CONFLICT WITH VERIZON WIRELESS SPECIFICATIONS, VERIZON WIRELESS SPECIFICATIONS SHALL GOVERN.
2. ALL DETAILS ARE SHOWN IN GENERAL TERMS, ACTUAL GROUNDING INSTALLATION AND MOUNTING MAY VARY DUE TO SITE SPECIFIC CONDITIONS, XIT GROUND MAY BE REQUIRED.
3. GROUND RODS SHALL BE COPPER CLAD STEEL, 5/8"Ø x 8' LONG.
4. INSTALL GROUND AND BONDING CONDUCTORS WITH SUFFICIENT SLACK TO AVOID BREAKING DUE TO SETTLEMENT AND MOVEMENT OF CONDUCTORS AT ATTACHED POINTS.
5. RESISTANCE TO GROUND SHALL NOT EXCEED 5 OHMS MEASUREMENT. ADDITIONAL GROUND RODS OR XIT GROUND SHALL BE PROVIDED TO ATTAIN THIS VALUE OR LESS. WHERE MULTIPLE RODS ARE INSTALLED THEY SHALL BE SPACED BETWEEN 8 AND 16 FEET APART.
6. ALL GROUNDING CONDUCTORS SHALL BE U.L. LISTED FOR THEIR PURPOSE.
7. ALL GROUND CONNECTIONS TO GROUND BARS SHALL BE U.I. 467 LISTED, IRREVERSIBLE COMPRESSION TYPE.
8. ALL CONNECTIONS TO GROUND BARS SHALL BE COATED WITH ANTIOXIDANT COMPOUND.
9. PROVIDE ONE TIME HIT 1 lb. HAMMER TEST ON ALL CADWELDS.
10. ALL EXTERIOR GROUND BARS SHALL BE GALVANIZED STEEL.

NOTICE:

1. CONTRACTOR SHALL NOT SUBMIT BIDS OR PERFORM CONSTRUCTION WORK ON THIS PROJECT WITHOUT ACCESS TO THE CURRENT COMPLETE SET OF DRAWINGS LISTED IN THE TITLE-SHEET INDEX.

DESIGNED FOR:

verizonwireless

4821 EUBANK NE
ALBUQUERQUE, NEW MEXICO 87111

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REV	DESCRIPTION	DATE	CHK	BY
0	APPROVED FOR CONSTRUCTION	10/27/15	SB	LRP
1	REVISED PER NEW TOWER/COMPOUND LOCATION	06/20/16	SB	LRP

DESIGNED BY:



PROJECT NAME:

ELP AMPOSTA
NEW 48'-0" LIGHTPOLE W/ CONCEALMENT CANISTER
(OVERALL HEIGHT: 50'-0" A.G.L.)
RAW LAND COMMUNICATION SITE

PROJECT ADDRESS:

BELVIDERE ST. & WESTWIND DR.
EL PASO, TEXAS 79912
EL PASO COUNTY

SHEET TITLE:

**ELECTRICAL & GROUNDING
GENERAL NOTES**

SAVE DATE:

6/20/2016 10:23 AM

SHEET NUMBER:

E1



KEYED COMPONENT NOTES:

①	EXISTING 50kVA TRANSFORMER BY UTILITY COMPANY.
②	200A METER SOCKET ACCEPTABLE TO UTILITY COMPANY.
③	200A FUSED DISCONNECT 120/240V, 1Ø, 3W, NEMA 3R, SQUARE D D224NRB OR EQUIVALENT.
④	GENERAC 200AMP, 2-POLE, SOLID-NEUTRAL AUTOMATIC TRANSFER SWITCH PROVIDED BY VERIZON WIRELESS. SCCR = 25,000A. SERIES RATED SCCR = 200,000A WITH UPSTREAM CLASS-J FUSE.
⑤	PROPOSED GENERAC 30KW STANDBY GENERATOR. GENERATOR NEUTRAL SHALL NOT BE BONDED TO FRAME. IT SHALL BE SOLIDLY CONNECTED THROUGH TRANSFER SWITCH TO SERVICE NEUTRAL.
⑥	200A DISTRIBUTION PANEL, 120/240V, 1Ø, 3W

KEYED CONDUIT NOTES:

①	2" C MINIMUM, (3) #3/0 THWN COPPER CONDUCTORS BY CONTRACTOR
②	2" C MINIMUM, (3) #3/0 THWN COPPER CONDUCTORS, (1) #2 THWN COPPER GROUND BY CONTRACTOR.
③	#2 B.C. TO (2) 3/8"x8' LONG GROUND RODS. (BY CONTRACTOR)

NOTES:

1. ALL CONDUIT NOT SPECIFIED OTHERWISE SHALL BE SCHD. 40 PVC BELOW GRADE, IMC ABOVE. EMT ACCEPTABLE INDOORS.

SHORT CIRCUIT CALCULATIONS:

POINT TO POINT METHOD FOR SHORT CIRCUIT CALCULATIONS ILLUSTRATED IN BUSSMAN MANUFACTURING PUBLICATION FORM SPD90.

$$I_{F.L.} = \frac{50,000}{240} = 208.3$$

$$\text{MULTIPLIER} = \frac{100}{1.6} = 62.5$$

AVAILABLE SHORT CIRCUIT CURRENT FROM UTILITY = 13,021 A.

$$\text{FIND FACTOR } f = \frac{2.0 \times (\text{length in feet}) \times (\text{short circuit current})}{(\text{constant from Table C}) \times (\text{line-to-line voltage})}$$

$$f = \frac{2.0 \times 130 \times 13,021}{13,923 \times 240} = 1.01$$

$$\text{FIND FACTOR } M = \frac{1}{1.7} \quad M = 0.5$$

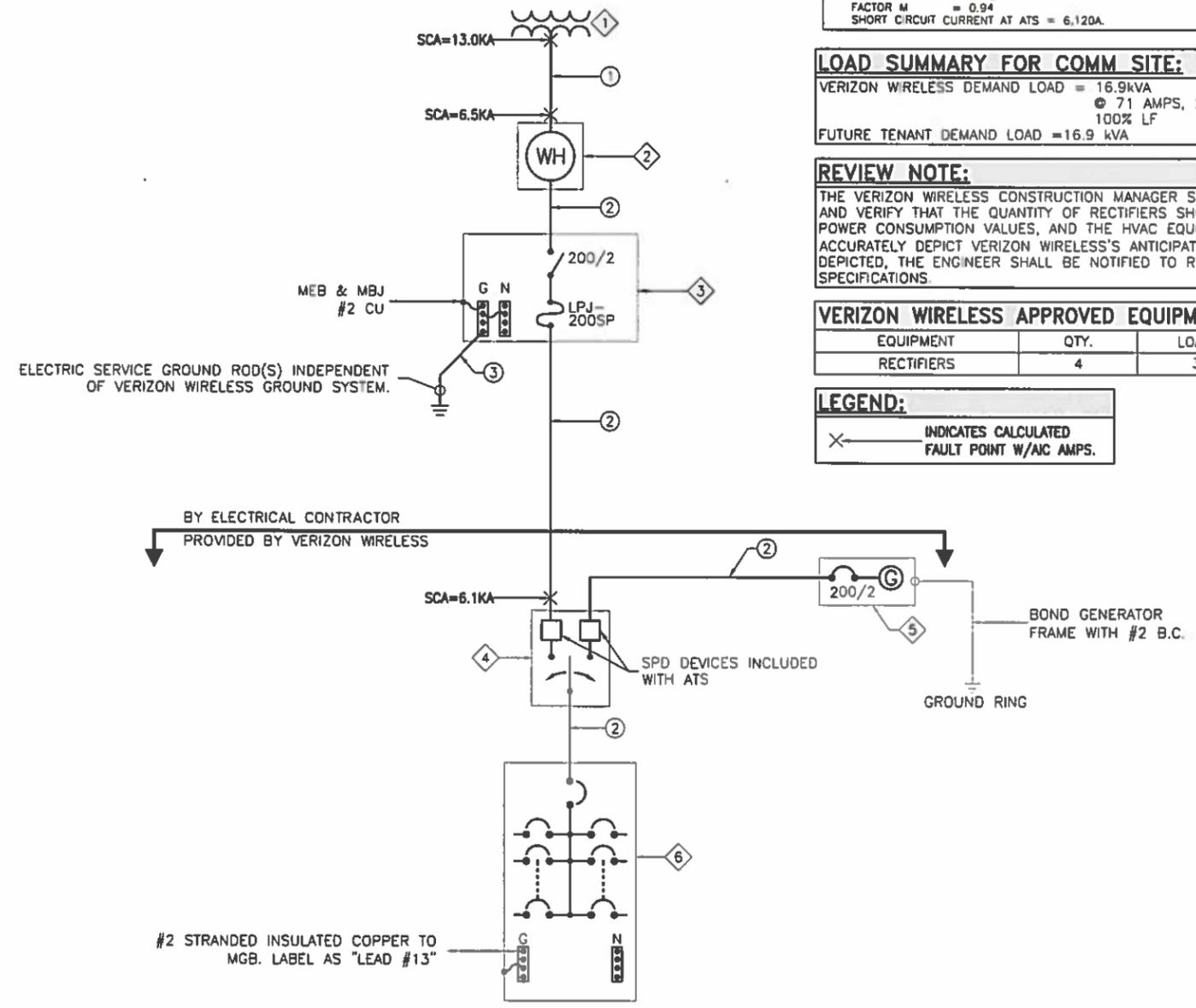
SHORT CIRCUIT CURRENT AT METER = M x AVAILABLE S.C. CURRENT

$$I = 6,511 \text{ A.}$$

LENGTH IN FEET = 15
 FACTOR f = 0.063
 FACTOR M = 0.94
 SHORT CIRCUIT CURRENT AT ATS = 6,120A.

$$f = \frac{2.0 \times 15 \times 6,511}{12,844 \times 240} = 0.063$$

REFER TO CABINET DRAWINGS FOR PANEL SCHEDULE



SINGLE LINE DIAGRAM

LOAD SUMMARY FOR COMM SITE:

VERIZON WIRELESS DEMAND LOAD = 16.9kVA
 @ 71 AMPS, 240V
 100% LF

FUTURE TENANT DEMAND LOAD = 16.9 kVA

REVIEW NOTE:

THE VERIZON WIRELESS CONSTRUCTION MANAGER SHALL REVIEW THE CHART BELOW AND VERIFY THAT THE QUANTITY OF RECTIFIERS SHOWN, WITH THEIR RESPECTIVE POWER CONSUMPTION VALUES, AND THE HVAC EQUIPMENT QUANTITY AND SIZE, ACCURATELY DEPICT VERIZON WIRELESS'S ANTICIPATED EQUIPMENT. IF NOT ACCURATELY DEPICTED, THE ENGINEER SHALL BE NOTIFIED TO REVISE THE EQUIPMENT LOAD SPECIFICATIONS.

VERIZON WIRELESS APPROVED EQUIPMENT AND HVAC LOADS

EQUIPMENT	QTY.	LOAD EACH	TOTAL LOAD
RECTIFIERS	4	3,600W	14,400W

LEGEND:

X INDICATES CALCULATED FAULT POINT W/A/C AMPS.

NOTICE:

1. CONTRACTOR SHALL NOT SUBMIT BIDS OR PERFORM CONSTRUCTION WORK ON THIS PROJECT WITHOUT ACCESS TO THE CURRENT COMPLETE SET OF DRAWINGS LISTED IN THE TITLE-SHEET INDEX.

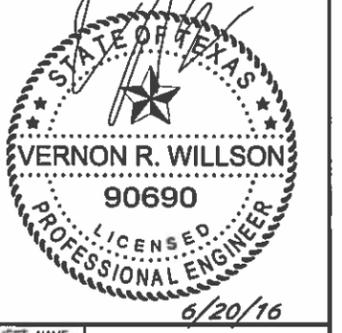
APPROVED FOR CONSTRUCTION

DESIGNED FOR:
verizonwireless
 4821 EUBANK NE
 ALBUQUERQUE, NEW MEXICO 87111

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REV	DESCRIPTION	DATE	CHK	BY
0	APPROVED FOR CONSTRUCTION	10/27/15	SB	LRP
1	REVISED PER NEW TOWER/COMPOUND LOCATION	06/20/16	SB	LRP



PROJECT NAME:
ELP AMPOSTA
 NEW 48'-0" LIGHTPOLE W/ CONCEALMENT CANISTER
 (OVERALL HEIGHT: 50'-0" A.G.L.)
 RAW LAND COMMUNICATION SITE

PROJECT ADDRESS:
 BELVIDERE ST. & WESTWIND DR.
 EL PASO, TEXAS 79912
 EL PASO COUNTY

SHEET TITLE:
SINGLE-LINE DIAGRAM

SAVE DATE:
 6/20/2016 10:23 AM

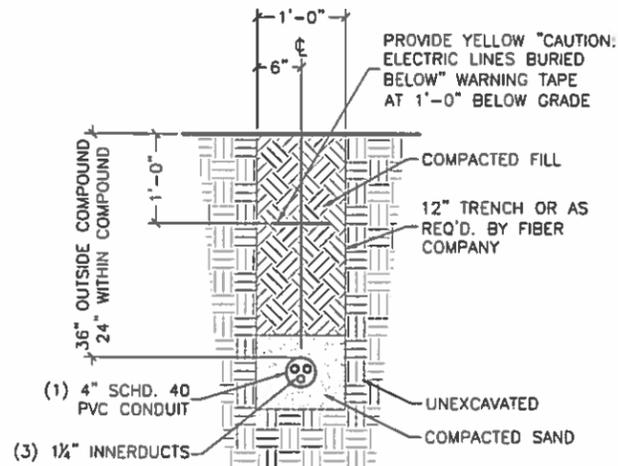
SHEET NUMBER:
E2

KEYED COMPONENT NOTES:

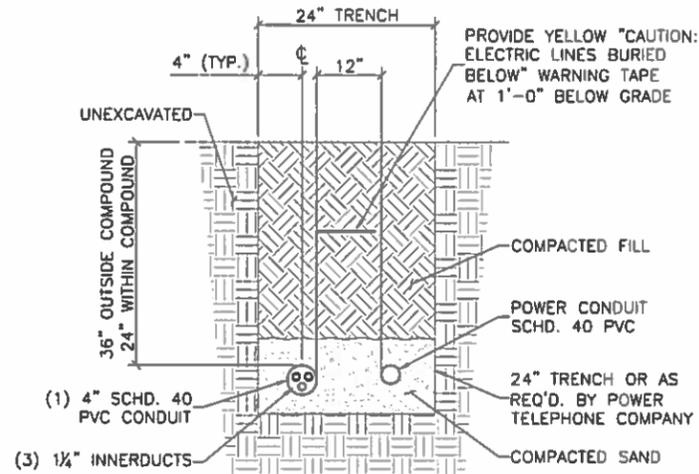
1	NEW 15KVA POLE MOUNT TRANSFORMER
2	NEW 200A METER, SPECIFIED ON SINGLE-LINE DIAGRAM, BY CONTRACTOR
3	NEW 200A FUSED MAIN SERVICE DISCONNECT, SPECIFIED ON SINGLE-LINE DIAGRAM, BY CONTRACTOR
4	NEW AUTOMATIC TRANSFER SWITCH, SPECIFIED ON SINGLE-LINE DIAGRAM, BY CONTRACTOR
5	NEW 200A DISTRIBUTION PANEL, SPECIFIED ON SINGLE-LINE DIAGRAM, BY CONTRACTOR
6	NEW GENERAC 30KW STANDBY GENERATOR, SPECIFIED ON SINGLE-LINE DIAGRAM, BY CONTRACTOR
7	3'x3' TELCO BOX

KEYED CONDUIT NOTES:

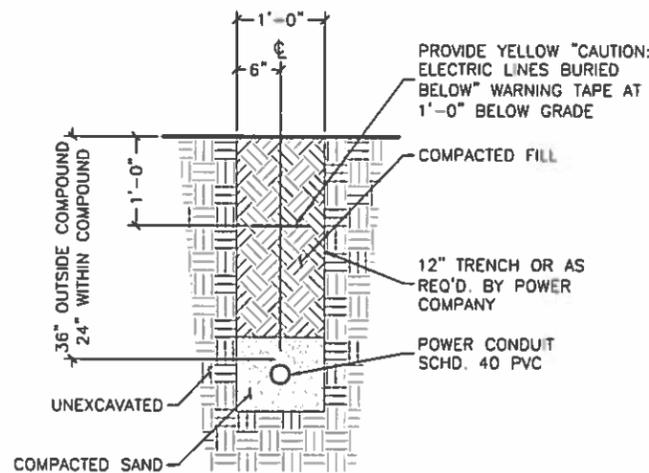
1	NEW CONDUIT & CONDUCTORS, SPECIFIED ON SINGLE-LINE DIAGRAM, BY UTILITY.
2	NEW CONDUIT & CONDUCTORS FROM DISCONNECT TO A.T.S., SPECIFIED ON SINGLE-LINE DIAGRAM.
3	NEW CONDUIT & CONDUCTORS FROM A.T.S. TO DISTRIBUTION PANEL, SPECIFIED ON SINGLE-LINE DIAGRAM.
4	NEW CONDUIT & CONDUCTORS FROM A.T.S. TO GENERATOR, SPECIFIED ON SINGLE-LINE DIAGRAM.
5	3/4" CONDUIT & ALARM CONTROL CONDUCTORS FROM GENERATOR TO A.T.S.
6	3/4" CONDUIT & BLOCK HEATER/BATTERY CHARGER CONDUCTORS FROM DISTRIBUTION PANEL TO GENERATOR.
7	3/4" CONDUIT & ALARM CONDUCTORS TO VERIZON WIRELESS ALARM PANEL
8	NEW 4" SCHD 40 PVC CONDUIT W/TRACER WIRE & (3) 1 1/4" INNERDUCTS, EACH W/200LBS PULL CORD BY CONTRACTOR.



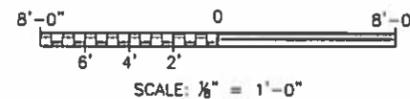
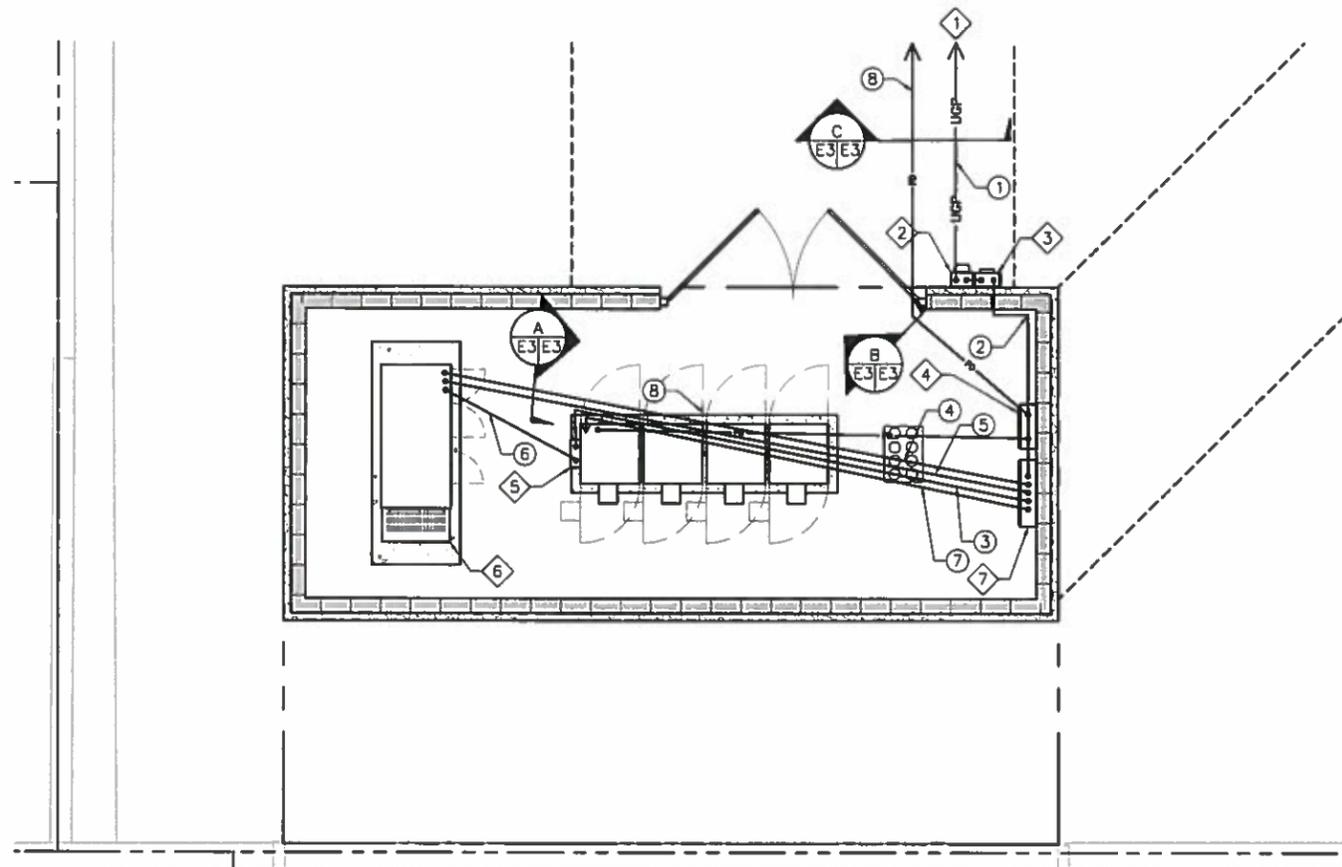
B FIBER CONDUIT DETAIL
E3/E3 SCALE: 1/2" = 1'-0"



C POWER/FIBER TRENCH
E3/E3 N.T.S.



A POWER CONDUIT DETAIL
E3/E3 SCALE: 1/2" = 1'-0"



ELECTRICAL SITE PLAN



APPROVED FOR CONSTRUCTION

NOTICE:

1. CONTRACTOR SHALL NOT SUBMIT BIDS OR PERFORM CONSTRUCTION WORK ON THIS PROJECT WITHOUT ACCESS TO THE CURRENT COMPLETE SET OF DRAWINGS LISTED IN THE TITLE-SHEET INDEX.

DESIGNED FOR:

verizonwireless

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ALBUQUERQUE, NEW MEXICO 87111

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REV	DATE	DESCRIPTION	CHK	BY
0	10/27/15	APPROVED FOR CONSTRUCTION	SB	LRP
1	06/20/16	REVISED PER NEW TOWER/COMPOUND LOCATION	SB	LRP

DESIGNED BY:



PROJECT NAME:

ELP AMPOSTA
NEW 48'-0" LIGHTPOLE W/ CONCEALMENT CANISTER
(OVERALL HEIGHT: 50'-0" A.G.L.)
RAW LAND COMMUNICATION SITE

PROJECT ADDRESS:

BELVIDERE ST. & WESTWIND DR.
EL PASO, TEXAS 79912
EL PASO COUNTY

SHEET TITLE:

ELECTRICAL SITE PLAN

SAVE DATE:

6/20/2016 10:23 AM

SHEET NUMBER:

E3

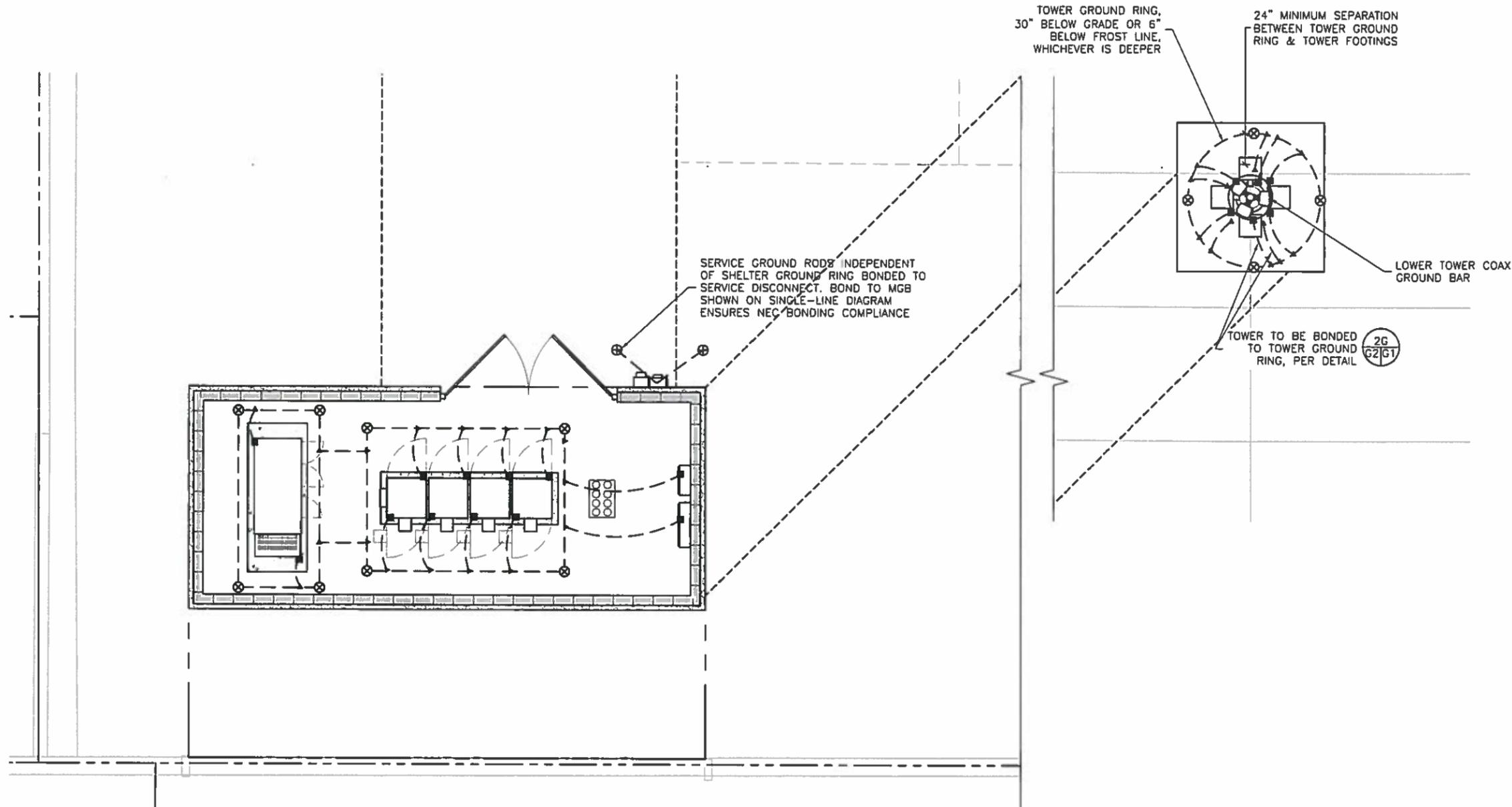
- NOTES:**
1. ALL EXTERIOR GROUND BARS SHALL BE GALVANIZED STEEL AND SHALL HAVE ALARM CONNECTIONS FOR THEFT PREVENTION PER LESSEE GROUNDING STANDARD NSTD46 REV 2-1-11, SECTION 5.3.
 2. CONTRACTOR TO BOND ANY METALLIC ITEMS WITHIN 6' OF VERIZON WIRELESS EQUIPMENT, SHELTER OR GROUND RING TO VERIZON WIRELESS GROUND RING.
 3. THE GROUNDING DIAGRAM SHOWN HERE IS SOMEWHAT SCHEMATIC IN NATURE AND MANY OF THE GROUNDING CONDUCTORS ARE SHOWN WITH A CURVE TO THEM. THIS IS SIMPLY TO INSURE THAT THEY STAND OUT FROM LEASE LINES, FENCE LINES AND SHELTER LINES ETC. ALL GROUNDING AND BONDING CONDUCTORS SHOULD BE INSTALLED IN AS STRAIGHT A LINE AS POSSIBLE. ANY BENDS THAT ARE REQUIRED IN GROUNDING OR BONDING CONDUCTORS SHOULD HAVE A RADIUS NO LESS THAN 12".
 4. BONDING JUMPERS FROM REBAR CAGE AND ANCHOR BOLT TO GROUND RING SHOULD ATTACH AT LOCATIONS ALLOWING JUMPERS TO BE CLOSE TO HORIZONTAL AS POSSIBLE.

GROUNDING LEGEND:

▲	CADWELDED CONNECTION
■	MECHANICAL CONNECTION
⊗	5/8"X8" CU CLAD STEEL GROUND ROD
---	#2 SOLID, TINNED, BARE COPPER
---	#2 STRANDED, INSULATED, COPPER
---	INTERIOR GROUND

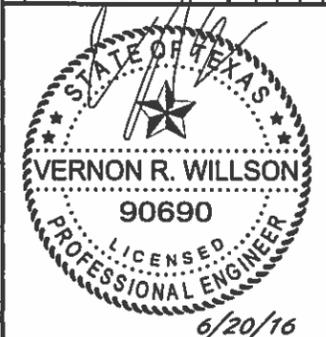
DESIGNED FOR:
verizonwireless
 4821 EUBANK NE
 ALBUQUERQUE, NEW MEXICO 87111

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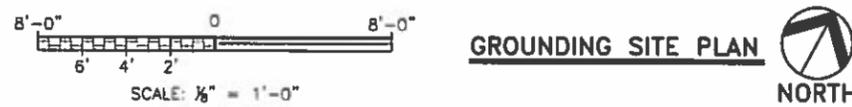
REV	DESCRIPTION	DATE	CHK	BY
0	APPROVED FOR CONSTRUCTION	10/27/15	SB	LRP
1	REVISED PER NEW TOWER/COMPOUND LOCATION	06/20/16	SB	LRP



PROJECT NAME:
ELP AMPOSTA
 NEW 48'-0" LIGHTPOLE W/ CONCEALMENT CANISTER
 (OVERALL HEIGHT: 50'-0" A.G.L.)
 RAW LAND COMMUNICATION SITE

PROJECT ADDRESS:
 BELVIDERE ST. & WESTWIND DR.
 EL PASO, TEXAS 79912
 EL PASO COUNTY

- NOTICE:**
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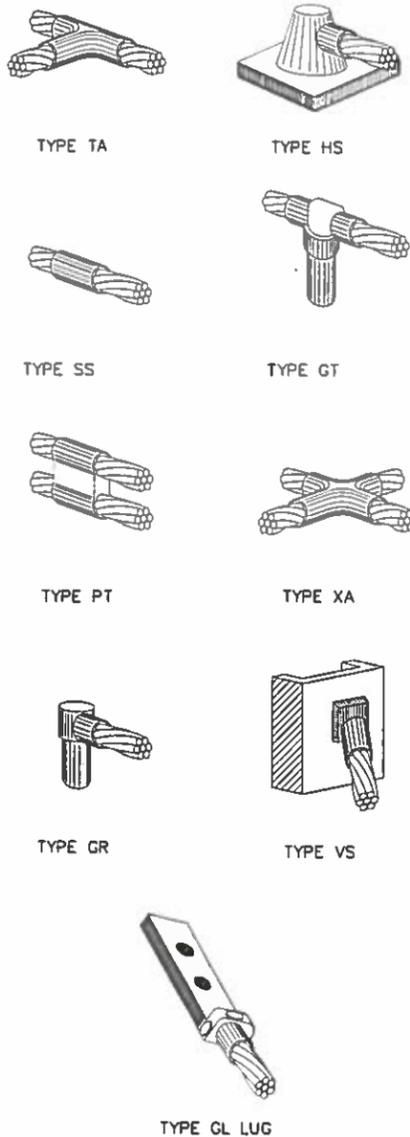
APPROVED FOR CONSTRUCTION

SHEET TITLE:
GROUNDING SITE PLAN

SAVE DATE:
 6/20/2016 10:23 AM

SHEET NUMBER:
G1

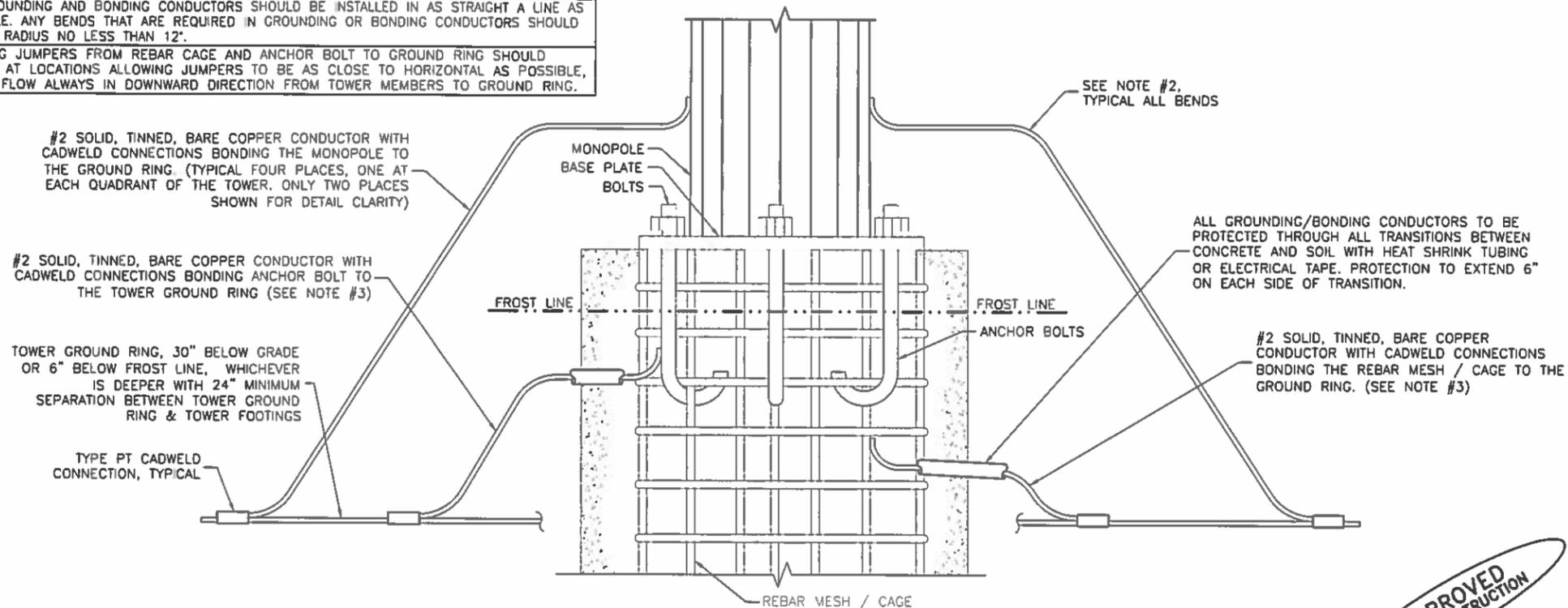
GROUNDING LEGEND:	
▲	CADWELD CONNECTION
●	COAX GROUND KIT
■	MECHANICAL CONNECTION
⊗	5/8"X8' CU CLAD STEEL GROUND ROD
---	#2 SOLID, TINNED, BARE COPPER
---	#2 STRANDED, INSULATED, COPPER INTERIOR GROUND



NOTE:
CADWELD "TYPES" SHOWN ABOVE ARE EXAMPLES - CONSULT WITH PROJECT MANAGER FOR SPECIFIC TYPES OF CADWELDS TO BE USED FOR THIS PROJECT.

TYPICAL CADWELD & COMPRESSION CONNECTION DETAILS

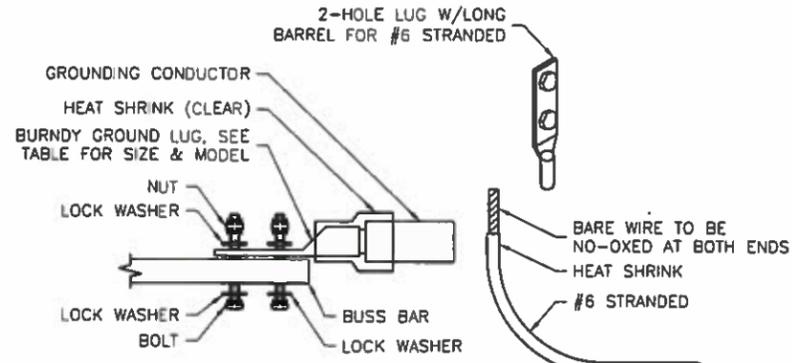
- NOTES:**
1. TOWER & TOWER FOOTING GROUNDING DETAILS AS SPECIFIED BY VERIZON WIRELESS STANDARD NSTD46 - 2011, 4.6 & 4.14.3.
 2. ALL GROUNDING AND BONDING CONDUCTORS SHOULD BE INSTALLED IN AS STRAIGHT A LINE AS POSSIBLE. ANY BENDS THAT ARE REQUIRED IN GROUNDING OR BONDING CONDUCTORS SHOULD HAVE A RADIUS NO LESS THAN 12".
 3. BONDING JUMPERS FROM REBAR CAGE AND ANCHOR BOLT TO GROUND RING SHOULD ATTACH AT LOCATIONS ALLOWING JUMPERS TO BE AS CLOSE TO HORIZONTAL AS POSSIBLE, OR TO FLOW ALWAYS IN DOWNWARD DIRECTION FROM TOWER MEMBERS TO GROUND RING.



2 TOWER & FOUNDATION GROUNDING/BONDING DETAIL
SCALE: N.T.S.

- NOTES:**
- 1 ALL HARDWARE BOLTS, NUTS & LOCK WASHERS SHALL BE STAINLESS STEEL. CONNECTIONS SHALL BE BOLT, LOCK WASHER, BUS BAR, LUG & LOCK WASHER, IN THAT ORDER.
 - 2 CONNECTIONS TO STEEL SHALL HAVE A THOMAS & BETTS IDTW DRAGON TOOTH TRANSITION WASHER BETWEEN THE LUG, & STEEL. THE ORDER OF STEEL CONNECTIONS SHALL BE BOLT, LOCK WASHER, STEEL, DRAGON TOOTH WASHER, LUG, LOCK WASHER, NUT.
 - 3 KOPER SHIELD, ANTIOX, CR NO-OX, OR EQUIVALENT IS TO BE PLACED WHERE ALL DISSIMILAR METALS CONNECT.

WIRE SIZE	BURNDY LUG	BOLT SIZE
#6	YA6C-2TC3B	3/8"-16 NC S 2-BOLT
#2 AWG SOLID	YA3C-2TC3B	3/8"-16 NC S 2-BOLT
#2 AWG STRANDED	YA2C-2TC3B	3/8"-16 NC S 2-BOLT
#2/0 AWG	YA26-2TC3B	3/8"-16 NC S 2-BOLT
#4/0 AWG	YA28-2N	1/2"-16 NC S 2-BOLT



GROUND LUG TO BUS BAR DETAIL
SCALE: N.T.S.

DESIGNED FOR:
verizonwireless
4821 EUBANK NE
ALBUQUERQUE, NEW MEXICO 87111

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DESIGNED BY:	DATE:	CHK	BY	DATE	SB	LRP		
		REV	DESCRIPTION	DATE	SB	LRP		
		0	APPROVED FOR CONSTRUCTION	10/27/15	SB	LRP		
		1	REVISED PER NEW TOWER/COMPOUND LOCATION	06/20/16	SB	LRP		

TowerCom TECHNOLOGIES
AZ - CA - CO - ID - NM - NV - TX - UT



PROJECT NAME:
ELP AMPOSTA
NEW 48'-0" LIGHTPOLE W/ CONCEALMENT CANISTER (OVERALL HEIGHT: 50'-0" A.G.L.)
RAW LAND COMMUNICATION SITE

PROJECT ADDRESS:
BELVIDERE ST. & WESTWIND DR.
EL PASO, TEXAS 79912
EL PASO COUNTY

SHEET TITLE:
GROUNDING DETAILS

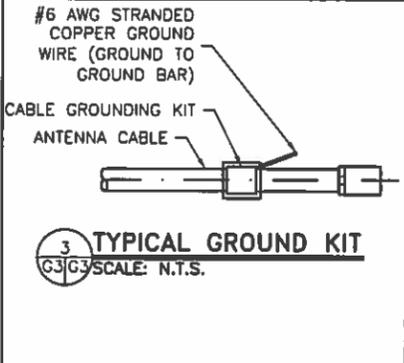
SAVE DATE:
6/20/2016 10:23 AM

SHEET NUMBER:
G2

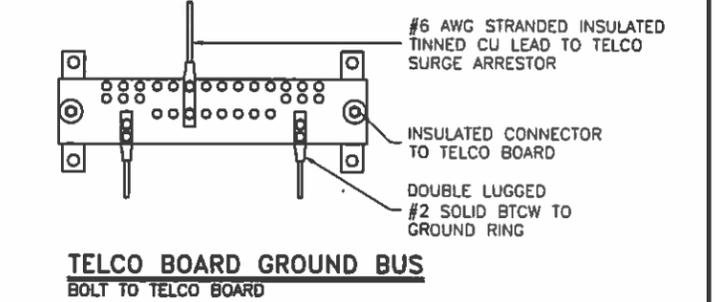
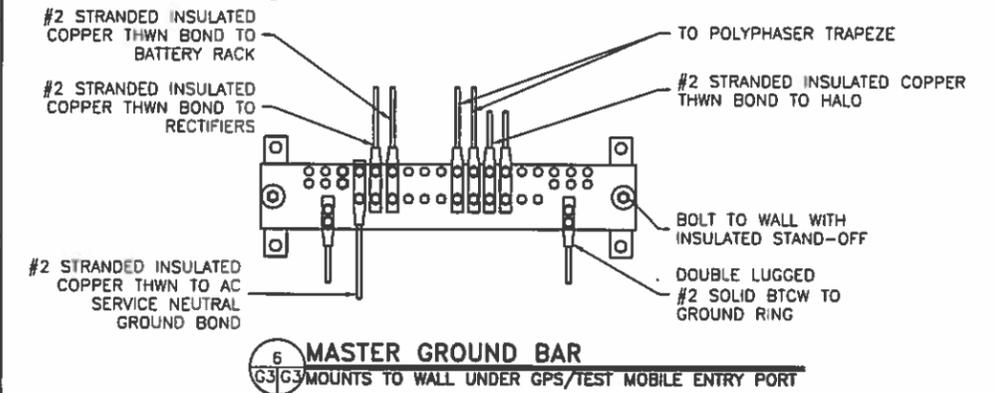
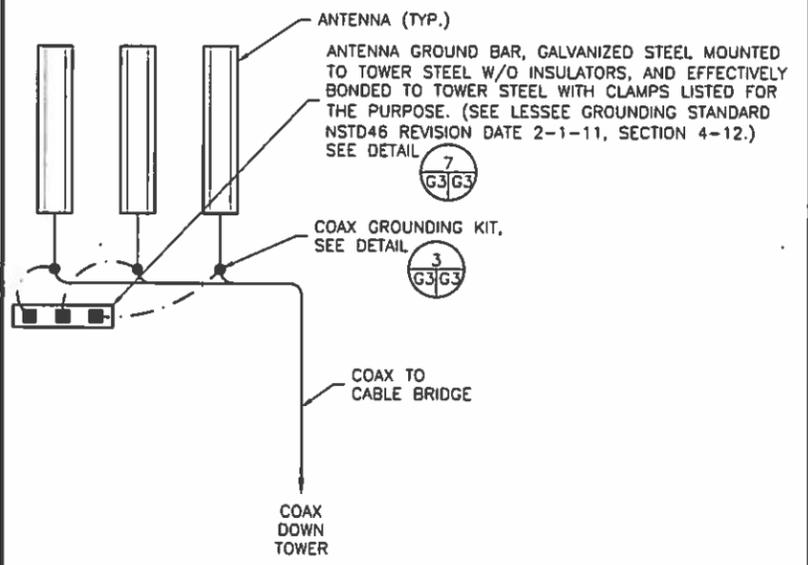
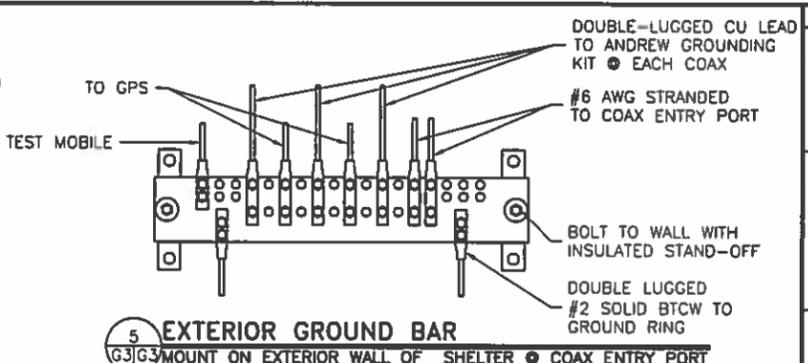
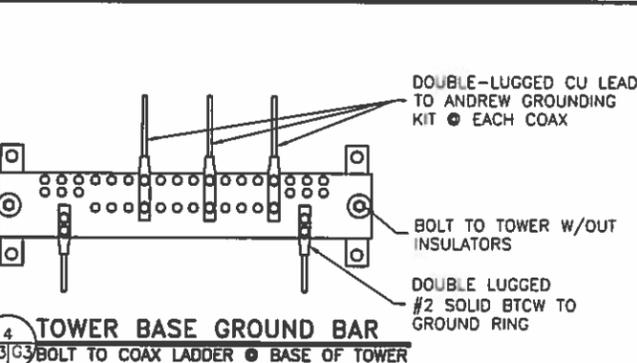


GROUNDING LEGEND:

▲	CADWELD CONNECTION
●	COAX GROUND KIT
■	MECHANICAL CONNECTION
⊗	5/8"X8' CU CLAD STEEL GROUND ROD
---	#2 SOLID, TINNED, BARE COPPER
---	#2 STRANDED, INSULATED, COPPER INTERIOR GROUND
---	COAX & JUMPERS
---	#6 STRANDED, INSULATED COPPER THWN

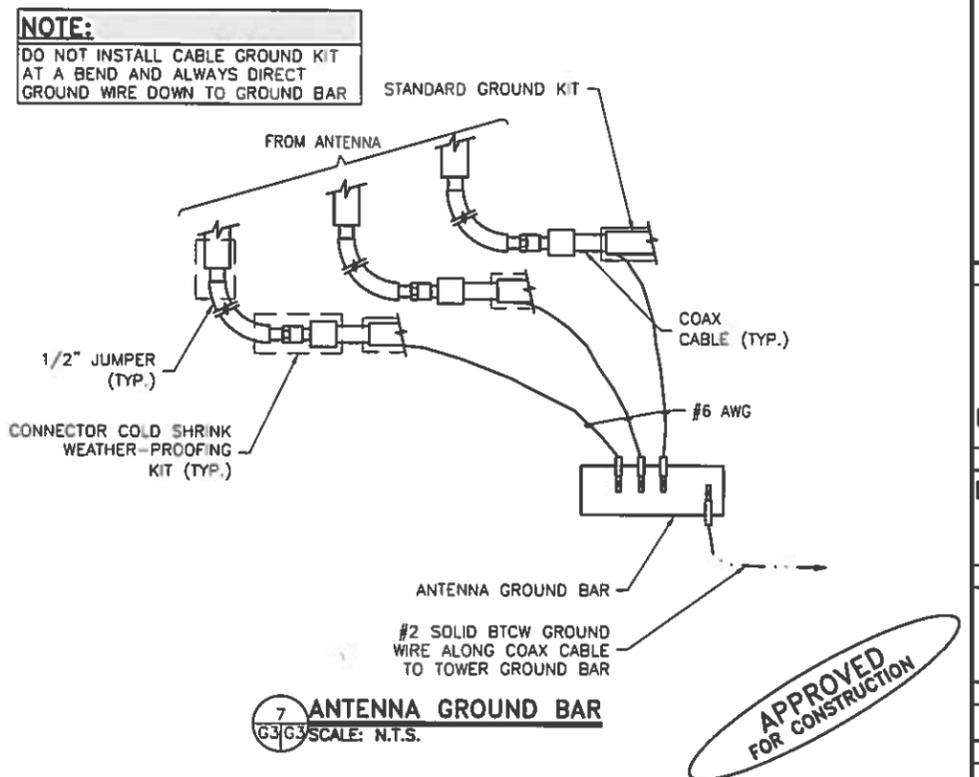
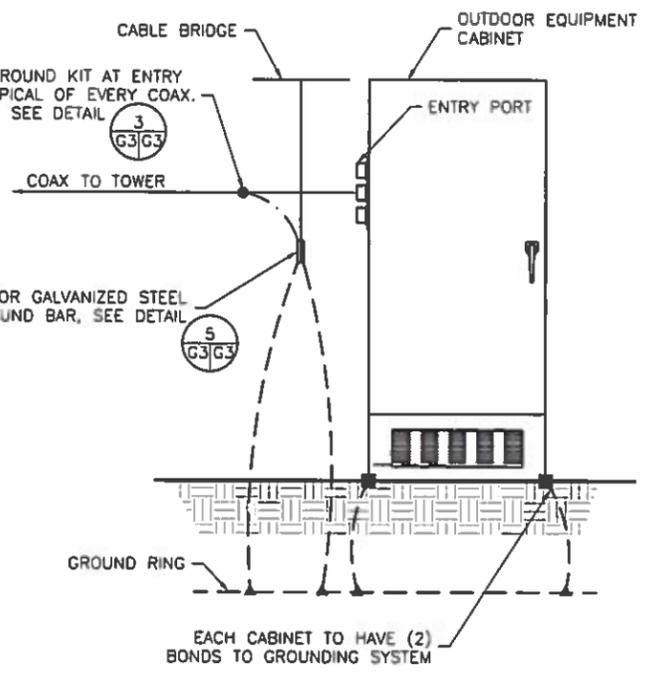
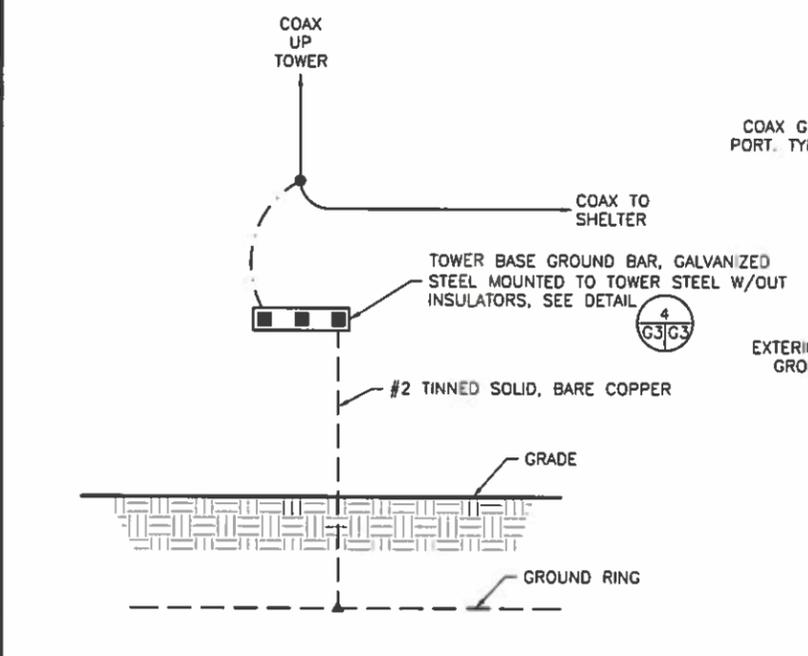


THEFT DETERRENT:
ALL EXTERIOR GROUND BARS TO BE GALVANIZED STEEL ATTACHED WITH TAMPER PROOF HARDWARE AND WITH ALARM CONNECTIONS PER LESSEE GROUNDING STANDARD NSTD46 REVISION DATE 2-1-11. SEE NOTES BELOW.



- NOTES:**
- 1 ALL HARDWARE TO BE TAMPER PROOF STAINLESS STEEL PER NSTD46 REVISION DATE 2-1-11.
 - 2 COAT ALL SURFACES WITH KOPR-SHEILD BEFORE MATING.
 - 3 ALL LUGS SHALL BE 2-BOLT CONNECTIONS.
 - 4 EXTERIOR BUS BARS: 4"x20"x1/4" GALVANIZED STEEL.
 - 5 INTERIOR BUS BARS: 4"x20"x1/4" COPPER.
 - 6 ALL LEADS TO MGB MUST BE LABELED ACCORDING TO NSTD46 REV 2-1-11 SECTION 3.8, FIG. 3.4. WHEN FUTURE REVISIONS ARE ISSUED THE CORRESPONDING INFORMATION FROM THE MOST RECENT REVISION SHALL BE USED.
 - 7 EXTERIOR GROUND BARS SHALL HAVE ALARM CONNECTIONS FOR THEFT PROTECTION AS SPECIFIED IN NSTD46 REV DATE 2-1-11 SECTION 5.3.

GROUNDING SCHEMATIC DETAILS
SCALE: N.T.S.



NOTICE:
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TYPICAL GROUNDING ELEVATION
SCALE: N.T.S.

APPROVED FOR CONSTRUCTION

DESIGNED FOR:
verizonwireless
4821 EUBANK NE
ALBUQUERQUE, NEW MEXICO 87111

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REV	DESCRIPTION	DATE	CHK	BY
0	APPROVED FOR CONSTRUCTION	10/27/15	SB	LRP
1	REVISED PER NEW TOWER/COMPOUND LOCATION	05/20/16	SB	LRP

STATE OF TEXAS
VERNON R. WILLSON
90690
LICENSED PROFESSIONAL ENGINEER
6/20/16

PROJECT NAME:
ELP AMPOSTA
NEW 48'-0" LIGHTPOLE W/ CONCEALMENT CANISTER (OVERALL HEIGHT: 50'-0" A.G.L.)
RAW LAND COMMUNICATION SITE

PROJECT ADDRESS:
BELVIDERE ST. & WESTWIND DR.
EL PASO, TEXAS 79912
EL PASO COUNTY

SHEET TITLE:
GROUNDING DETAILS

SAVE DATE:
6/20/2016 10:23 AM

SHEET NUMBER:
G3

GENERAL ANTENNA NOTES:

- CONTRACTOR TO VERIFY MECHANICAL DOWNTILT WITH FINAL SLF/RF ENGINEER.
- DUAL POLAR ANTENNAS REQUIRE TWO RUNS OF COAX PER ANTENNA.
- CONTRACTOR TO VERIFY ALL ACTUAL LENGTHS IN FIELD PRIOR TO INSTALLATION AND NOTIFY THE FIELD ENGINEER FOR VERIFICATION OF SIZES OF CABLES.
- CONTRACTOR TO PROVIDE AS BUILT FOR THE LENGTH OF CABLES UPON COMPLETION OF INSTALLATION.
- CONTRACTOR TO PROVIDE FINAL CABLE LENGTHS AND RETURN LOSSES FOR ALL CABLES.
- ALL AZIMUTHS REFERENCE TRUE NORTH. CONSULT REQUIRED QUADRANGLE MAP FOR NECESSARY MECHANICAL DECLINATION.

NEW LESSEE ANTENNA SCHEDULE:

ATTACH LEVEL (COR)	AZIMUTHS (DEG., TN)	ANTENNA TYPE	ANTENNA QUANTITY	MOUNT TYPE	COAX (QUANTITY) SIZE (NOMINAL)	ESTIMATED COAX CABLE LENGTH	MECHANICAL DOWN TILT
38'-0"	80° 190° 290°	QUINTEL QS6658-3 6' PANEL ANTENNA	6	SEE ANTENNA MOUNT SCHEDULE	(12) 1/2" SUPER FLEX + (6) RET	~205' (EACH) ~215' (EACH)	REFER TO SLF
46'-0"							

NOTES:

- FOR EXACT ANTENNA INFORMATION REFER TO THE RF DESIGN.
- ALL NEW COAX SHALL BE INSTALLED INSIDE MONOPOLE (IF POSSIBLE).
- CONTRACTOR TO INSTALL DIPLEXERS IN SHELTER AND ON TOWER AS REQUIRED BY RF DESIGN. (IF APPLICABLE)

ANTENNA COLOR CODE:

ANTENNA FUNCTION	COLOR
CDMA-800 B-BAND	RED
CDMA-800 A-BAND	WHITE
PCS-1900	YELLOW
LTE-700	PURPLE
ANTENNA SECTOR	
ALPHA	GREEN
BETA	ORANGE
GAMMA	BROWN

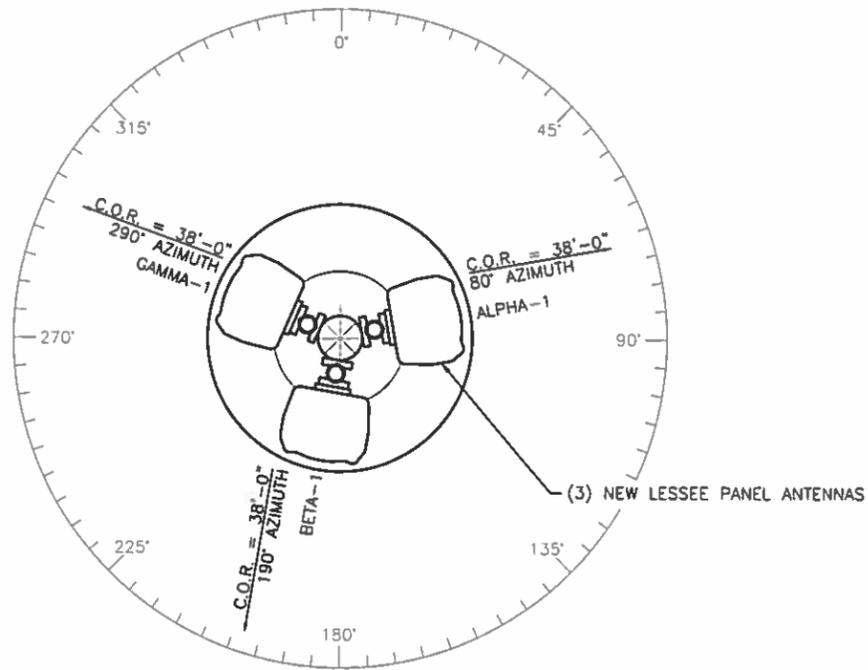
ANTENNA COLOR CODE:

SECTOR	ANTENNA LOCATIONS	FIRST STRIPE (PCS) OR (LTE) OR (A-BAND) OR (B-BAND)	SECOND STRIPE	THIRD STRIPE
ALPHA	1	RED OR WHITE OR YELLOW OR PURPLE	GREEN	-
	2			GREEN
	3			GREEN
	4			GREEN
BETA	1	RED OR WHITE OR YELLOW OR PURPLE	ORANGE	-
	2			ORANGE
	3			ORANGE
	4			ORANGE
GAMMA	1	RED OR WHITE OR YELLOW OR PURPLE	BROWN	-
	2			BROWN
	3			BROWN
	4			BROWN

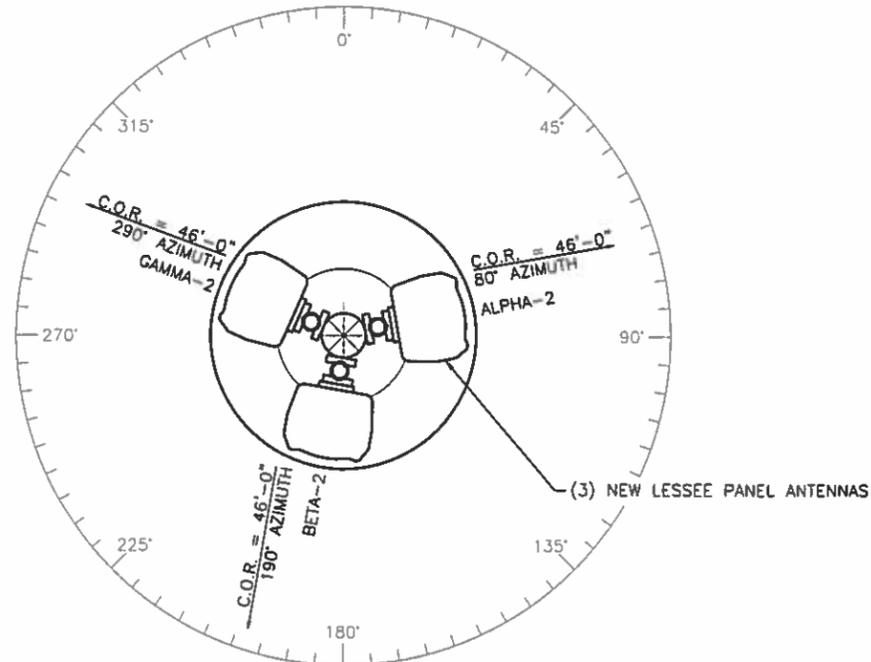
ANTENNA MOUNT SCHEDULE:

QUANTITY	DESCRIPTION	PART NUMBER(S)
6	PIPE TO PIPE MOUNTING KIT	C10-158-100

NOTE: ALL PRODUCTS ARE FROM "SABRE SITE SOLUTIONS"
PHONE: (866) 428-6937 / (712) 293-1964 WWW.SABRESITESOLUTIONS.COM



ANTENNA SECTION @ 38'-0"
SCALE: 1/2" = 1'-0"
NORTH



ANTENNA SECTION @ 46'-0"
SCALE: 1/2" = 1'-0"
NORTH

NOTICE:

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APPROVED FOR CONSTRUCTION

DESIGNED FOR:

verizonwireless

4821 EUBANK NE
ALBUQUERQUE, NEW MEXICO 87111

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REV	DESCRIPTION	DATE	CHK	BY
0	APPROVED FOR CONSTRUCTION	10/30/15	EP	DGD
1	REVISED PER REAL ESTATE COMMENTS	04/27/16	EP	DGD
2	REVISED PER JURISDICTION COMMENTS	05/17/16	EP	DGD
3	REVISED PER NEW TOWER/COMPOUND LOCATION	06/21/16	EP	DGD

DESIGNED BY:



PROJECT NAME:
ELP AMPOSTA
NEW 48'-0" LIGHT POLE W/ CONCEALMENT CANISTER
(OVERALL HEIGHT: 50'-0" A.G.L.)
RAW LAND COMMUNICATION SITE

PROJECT ADDRESS:
1020 BELVIDERE ST.
EL PASO, TEXAS 79912
EL PASO COUNTY

SHEET TITLE:
ANTENNA INFORMATION

SAVE DATE:
6/21/2016 12:57 PM

SHEET NUMBER:
RF1



MultiServ™ Multiband 8 Port Antenna

2x698-787MHz, 2x824-894MHz, 4x1695-2400MHz

The Quintel MultiServ™ Multiband 8 Port Antenna with patented QTilt™ technology uniquely delivers four independent services in a single slim-line antenna. This enables existing antenna constrained network sites to be upgraded to add new services such as LTE in the 700, AWS & WCS bands with the replacement of one antenna.

The Quintel MultiServ™ Multiband 8 Port Antenna is an ideal solution for independently optimizing multiple services when rapidly introducing new technologies. Technology agnostic, each band provides flexibility for existing and future technologies such as GSM, CDMA, UMTS, LTE and advanced 2Tx4Rx and 4Tx4Rx MIMO implementations.

The tilt of each band is controlled independently via internal RET actuators compliant to AISG1.1, AISG2.0 and 3GPP protocols. The QS6658-3 provides a total of 4 independent tilts: 1x(698-787MHz) + 1x(824-894MHz) + 1x(1695-2400MHz) Left hand array + 1x(1695-2400MHz) Right hand array.

Features

Antenna component with:

- 700/850 PCS/AWS/WCS bands in one antenna
- Variable electrical tilt per 700, 850 & Left & Right arrays for 1695-2400 bands
- Simple antenna swap out
- Supports MIMO services with 2Tx4Rx & 4Tx4Rx capability at 1695-2400MHz
- AISG & 3GPP compliant internal remote electrical tilt (RET)
- RET configurable for AISG 1.1/2.0 and 3GPP software via upload
- Provides 8 antenna ports in a slim-line form factor

Quick Facts:

Product #:	QS6658-3
Polarisation:	XXX
Services:	4
Height:	72'
Beam Width:	65°

Electrical Characteristics	2x Ports	2x Ports
Operating Frequency	698MHz to 787MHz	824MHz to 894MHz
Azimuth beamwidth	74°	66°
Elevation beamwidth ¹	12°	10°
Gain ¹	13.5dBi	14.0dBi
Polarization	±45°	±45°
Electrical down-tilt range	2°-10°	2°-10°
Upper sidelobes (Within 20° above mainbeam) ¹	-18dB	-16dB
Front to Back Ratio 180° ± 10° (Co Polar) ¹	≥30dB	≥30dB
Interband Isolation ¹	≥30dB	≥28dB
Intra-band Isolation	≥30dB	≥30dB
Return loss (VSWR)	14dB (1.5:1)	14dB (1.5:1)
Squint ¹	<±3deg	<±2deg
Tracking ¹	<±2dB	<±2.5dB
Cross Polar Discrimination (at 0°)	>20dB	>20dB
Power handling (per port)	500 watts	500 watts
Passive Intermodulation (3 rd Order) (2x43dBm)	150dBc	150dBc

Electrical Characteristics	4x Ports			
Operating Frequency	1695-1780MHz	1850-1990MHz	2110-2180MHz	2300-2400MHz
Azimuth beamwidth	73°	72°	65°	63°
Elevation beamwidth ¹	6.2°	5.9°	5.2°	4.7°
Gain ¹	17dBi	17dBi	17.5dBi	18dBi
Polarization	±45°	±45°	±45°	±45°
Electrical down-tilt range	2° - 10°	2° - 10°	2° - 10°	2° - 10°
Upper sidelobes (Within 20° above mainbeam) ¹	-16dB	-16dB	-17dB	-15dB
Front to Back Ratio 180° ± 10° (Co Polar) ¹	≥30dB	≥30dB	≥30dB	≥30dB
Interband Isolation ¹	≥30dB	≥30dB	≥30dB	≥30dB
Intra-band Isolation	≥30dB	≥30dB	≥30dB	≥30dB
Return loss (VSWR)	14dB (1.5:1)	14dB (1.5:1)	14dB (1.5:1)	14dB (1.5:1)
Squint ¹	<±3°	<±3°	<±3°	<±3°
Tracking ¹	<±3dB	<±3dB	<±3dB	<±3dB
Cross Polar Discrimination (at 0°)	>19dB	>18dB	>18dB	>17dB
Power handling (per port)	250 watts	250 watts	250 watts	250 watts
Passive Intermodulation (3 rd Order) (2x43dBm)	<-150dBc	<-150dBc	<-150dBc	<-150dBc

¹ Typical Performance across frequency and downlink.



DESIGNED FOR:

verizonwireless

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3	REVISED PER NEW TOWER/COMPOUND LOCATION	06/21/16	EP	DGD

DESIGNED BY:



PROJECT NAME:

ELP AMPOSTA
NEW 48'-0" LIGHT POLE W/ CONCEALMENT CANSITER
(OVERALL HEIGHT: 50'-0" A.G.L.)
RAW LAND COMMUNICATION SITE

PROJECT ADDRESS:

1020 BELVIDERE ST.
EL PASO, TEXAS 79912
EL PASO COUNTY

SHEET TITLE:

ANTENNA CUT SHEET(S)

SAVE DATE:

6/21/2016 12:57 PM

SHEET NUMBER:

RF2

MEMORANDUM

DATE: June 28, 2016

TO: The Honorable Mayor and City Council
Tommy Gonzalez, City Manager

FROM: Jeff Howell, Senior Planner

SUBJECT: PZST16-00009

The City Plan Commission (CPC), on June 16, 2016, voted 6-0 to recommend **approval** of the special permit to allow for the placement of a ground-mounted personal wireless service facility (PWSF) on the proposed site within one-half mile radius of an existing PWSF site as required by El Paso City Code Section 20.10.455F.

The CPC found that the special permit is in conformance with Plan El Paso. The CPC also determined that the special permit protects the best interest, health, safety and welfare of the public in general; that the proposed use is compatible with adjacent land uses; and the special permit will have no effect on the natural environment, social economic conditions, and property values in the vicinity and the city as a whole.

The Planning Division did receive one letter in opposition to the special permit request.

Property Owner: Raimundo Portilla F. & Jose Manuel Portilla F.
Applicant: Verizon Wireless c/o Black & Veatch Corp.
Representative: Kevin Provance, Black & Veatch Corp., Agent for Verizon Wireless

Attachments:
Staff Report



City of El Paso – City Plan Commission Staff Report

REVISED

Case No: PZST16-00009
Application Type: Special Permit
CPC Hearing Date: June 16, 2016
Staff Planner: Jeff Howell, 915-212-1607, howelljb@elpasotexas.gov
Location: 1020 Belvidere Street
Legal Description: Portion of Lot 1, Block 67A, Chaparral Park Unit 22, City of El Paso, El Paso County, Texas
Acreage: 0.002-acre
Rep District: 1
Existing Zoning: C-1 (Commercial)
Existing Use: Parking Lot
C/SC/SP/ZBA/LNC: N/A
Request: Special Permit to allow a Personal Wireless Service Facility (PWSF)
Proposed Use: Ground-mounted PWSF
Property Owner: Raimundo Portilla F. & Jose Manuel Portilla F.
Applicant: Verizon Wireless c/o Black & Veatch Corp.
Representative: Kevin Provance, Black & Veatch Corp., Agent for Verizon Wireless

SURROUNDING ZONING AND LAND USE

North: C-1 (Commercial) / Commercial shopping center
South: R-4 (Residential) / Duplexes
East: C-1 (Commercial) / Office
West: C-1 (Commercial) / Gas station

PLAN EL PASO DESIGNATION: G-4, Suburban (Walkable) (Northwest Planning Area)

NEAREST PARK: Park Hills Park (6,721 feet)

NEAREST SCHOOL: Polk Elementary School (683 feet)

NEIGHBORHOOD ASSOCIATIONS

Upper Valley Improvement Association
Upper Mesa Hill Neighborhood Association

NEIGHBORHOOD INPUT

Notice of a Public Hearing was mailed to all property owners within 300 feet of the subject property on May 31, 2016. The Planning Division did receive one letter in opposition to the special permit request (Attachment 9).

APPLICATION DESCRIPTION

The applicant is requesting a special permit to allow for the placement of a ground-mounted personal wireless service facility (PWSF) on the proposed site within a one-half mile radius of an existing PWSF site as required by El Paso City Code Section 20.10.455.E. The site plan shows a 100 sq. ft. lease area for a 50-foot high structure with antennas and service equipment enclosure. The antennas and support structure will be camouflaged to resemble a light pole within an existing parking lot, while the equipment will be screened with a rockwall at the edge of the property. The proposed PWSF meets all setback and height requirements for location in a commercial district. The applicant opted to request a landscape buyout as permitted by the landscaping ordinance for PWSF facilities. The nearest PWSF is 0.48 miles to the northeast and is located on Loma de Cristo Drive. A maintenance access easement within a drive aisle is proposed from Belvidere Drive.

PLANNING DIVISION RECOMMENDATION

The Planning Division recommends **approval** of the special permit for a Personal Wireless Service Facility (PWSF), as it meets all the requirements of 20.10.455 PWSF, 20.04.320, Special Permit, and 20.04.150, Detailed Site Development Plan.

ANALYSIS

20.10.455 Personal Wireless Service Facility (PWSF)

E. C-1, C-2 and P-C Commercial Districts, S-D Special Development.

1. Ground-mounted PWSF antenna support structures with appurtenant equipment storage facilities are permitted with the following restrictions:

a. Setbacks.

i. A setback of three feet for each foot of height, measured from the PWSF antenna support structure base to any abutting property line of property in a residential or apartment zoning district, shall be required. In the case where a right-of-way or easement separates the property from a residential or apartment district, the width of such right-of-way or easement shall be included in meeting the setback requirement; provided, however, the setback from any abutting property line of property in a residential or apartment district shall never be less than one foot for each foot of height, measured from the PSWF antenna support structure base.

ii. When the property in which the PWSF is located abuts a parcel of land that is not in a residential or apartment zoning district, a setback of one foot for each foot of height, measured from the PWSF antenna support structure base to that property line, shall be required.

b. Modified Setbacks. The setback set forth in subsection (E)(1)(a)(i) may be reduced, but not below the following: one foot setback for each foot of height if the structure height is fifty feet or less; and two feet setback for each foot of height if the structure height is greater than fifty feet but no greater than seventy-five feet; if the city council, based on written evidence provided by the applicant, finds that:

i. The property on which the PWSF antenna support structure is to be located is the only property reasonably available for use by the applicant that will enable the applicant to reasonably serve the area designated in a manner that is technically feasible and commercially reasonable;

ii. The applicant is unable to collocate its antennas on an existing PWSF antenna support structure that is used by a third person or entity and located such that the applicant is able to reasonably serve the area designated in a manner that is technically feasible and commercially reasonable; and

iii. The applicant cannot use another PWSF antenna support structure that is located such that the applicant is able to reasonable serve the area designated in a manner that is technically feasible and commercially reasonable or that the other PWSF antenna support structures used by the applicant will not safely support additional antennas.

c. Separation Between PWSF Antenna Support Structures. The minimum separation distance between ground-mounted PWSF antenna support structures shall be one-half mile, except as provided in subsection (E)(1)(d). Separation distance shall be measured by drawing or following a straight line between the base of any existing PWSF antenna support structure and the proposed base of a new PWSF antenna support structure.

d. **Modified Separation Between PWSF Antenna Support Structures.** The minimum separation between ground-mounted PWSF antenna support structures may be reduced below one-half mile by city council upon approval of a special permit application based on findings that:

i. The applicant is reasonably unable to use property that is more than one-half mile from another PWSF antenna support structure and be able to reasonably serve the area designated in a manner that is technically feasible and commercially reasonable;

ii. The property on which the PWSF antenna support structure is to be located is the only reasonably available property for use within one-half mile of another PWSF antenna support structure that will enable the applicant to reasonably serve the area designated in a manner that is technically feasible and commercially reasonable;

iii. The area designated by the applicant cannot be reasonably served in a manner that is technically feasible and commercially reasonable by locating additional antennas on the applicant's existing PWSF antenna support structures because such existing PWSF antenna support structures cannot safely support additional antennas;

iv. The applicant is unable to collocate its antennas on an existing PWSF antenna support structure that is owned or operated by a third person or entity and located such that the applicant is able to reasonably serve the area designated in a manner that is technically feasible and commercially reasonable; and

v. The applicant shall submit a list of addresses/locations showing all existing PWSF within a one-half mile radius of the proposed site and a map depicting such locations with the special permit application.

The applicant has submitted proof that all 5 findings have been met, (see attachment 6).

e. **Height Restriction.** Ground-mounted PWSF antenna support structures shall not exceed seventy-five feet in height, except as provided in subsection (E)(1)(f).

f. **Modified Height Restriction.** If the applicant is collocating two or more antennas on a structure or if the structure is camouflaged, then the height for a PWSF antenna support structure shall not exceed one hundred feet.

g. **Camouflage and Screening.**

i. **All Ground-Mounted PWSF Shall be Camouflaged.** Camouflaging is a method of disguising or concealing the appearance of an object by changing its usual color, modifying its shape, or locating it in a structure that complements the natural setting, existing and surrounding structures. In the context of this section, camouflaging includes, but is not limited to, making PWSF antenna support structures resemble man-made trees, locating PWSF antenna support structures in bell steeples or clock towers, or on similar alternative-design mounting structures.

ii. **Metallic surfaces shall be painted to reduce glare and reflections.** No exterior paint colors shall be used which have a light reflecting value (LRV) greater than forty percent. The LRV of a paint is available from paint manufacturers and it measures the amount of light reflected by a certain color.

iii. **Screening of antennas on PWSF antenna support structures may include the use of existing parapets, walls, or similar architectural elements provided that it is painted and texturized to integrate with the architecture of the surrounding structure.**

iv. **Landscaping shall comply with all code requirements for landscaping.**

- h. **Other Requirements.** The following must accompany a request for a building permit:
- i. A detailed plan showing the PWSF antenna support structure, antennas and equipment in relation to the surroundings including screening, fencing, camouflage, off-street parking, and access from the PWSF antennas support site to the nearest public street;
 - ii. A verification letter that all required FAA and FCC approvals have been requested and that site-specific structural engineering and nonionizing electromagnetic radiation (NIER) reports are available upon request;
 - iii. Satisfactory completion of a certification of compliance for personal wireless service providers issued by the public safety technology office prior to actual use of the proposed facility accompanied by a verification letter that all required Federal Aviation Administration (FAA) and Federal Communications Commission (FCC) approvals have been requested and that site-specific structural engineering and nonionizing electromagnetic radiation (NIER) reports are available on request from the applicant; and
 - iv. The design of related support structures for new PWSF antenna support structures shall incorporate materials, colors, textures, screening, or camouflaging techniques that will blend them to the extent reasonably possible into the natural setting, existing and surrounding structures. The applicant will be required to provide photographs of predevelopment views versus post-development illustrations, at ninety-degree angles for a full three hundred sixty-degree radius, shown to scale. The building official shall review and consider any of the five items above to mitigate negative visual impacts created by the proposed PWSF antenna support structure and may require reasonable revisions necessary to bring the application into compliance with one or more of the five items above.
- i. A six-foot high screening fence or wall of other than chain-link shall be constructed around the base of a PWSF antenna support structure to provide for security. The gate which provides access to the PWSF antenna support structure shall remain locked at all times except when being used for access by maintenance personnel.
- j. The access driveway and off-street parking space for use by maintenance vehicles shall be paved as approved by the building official.
- k. **Increase in Elevation on Existing PWSF Antenna Support Structure.** Increase in elevation, not to exceed one hundred feet, of an existing permitted PWSF antenna support structure shall be permitted only to allow for collocation of additional antennas. A structural recertification report prepared and sealed by a licensed professional engineer shall be required, and such report shall be reviewed and approved by the building official prior to issuance of a building permit.

The application meets the requirements for PWSF.

20.04.320 Special permit approvals.

- A. Building and occupancy permits shall not be issued to any building or use identified in this title as requiring a special permit until after approval of such special permit by the city council.
- B. Building and occupancy permits shall not be issued for any building or use identified in this title as requiring an approved detailed site development plan as required by Article III, until such approval has been granted.

- C. No building or occupancy permit may be granted for the erection, rehabilitation, enlargement or demolition of any building in a designated historic area or for any building that is a designated historic landmark until prior approval has been granted by the historic landmark commission.
- D. The city council, after hearing and report by the city plan commission, may approve a special permit upon a finding that the proposed development meets the following minimum requirements necessary to protect the public health, safety and general welfare of the community:
 - 1. The proposed development complies, except to the extent waived, varied or modified pursuant to the provisions of this title, with all of the standards and conditions applicable in the zoning district in which it is proposed to be located; complies with any special standards applicable to the particular type of development being proposed, or to the particular area in which the development is proposed; complies with any special approvals required in connection with such development or area;
 - 2. The proposed development is in accordance with and in furtherance of the plan for El Paso, any special neighborhood plans or policies adopted by the city regarding the development area, or any approved concept plan;
 - 3. The proposed development is adequately served by and will not impose an undue burden upon the public improvements and rights-of-way by which it will be served or benefited, or which exist or are planned for installation within its boundaries or their immediate vicinity. A traffic impact study may be required to determine the effects of the proposed development on the public rights-of-way;
 - 4. Any impacts of the proposed development on adjacent property are adequately mitigated with the design, proposed construction and phasing of the site development;
 - 5. The design of the proposed development mitigates substantial environmental problems;
 - 6. The proposed development provides adequate landscaping and/or screening where needed to reduce visibility to adjacent uses;
 - 7. The proposed development is compatible with adjacent structures and uses;
 - 8. The proposed development is not materially detrimental to the enjoyment or valuation of the property adjacent to the site.
- E. The applicant may request that the city plan commission waive one or more of the criteria based on its no applicability to the proposed development. The city plan commission, upon a recommendation of the planning official, shall make a determination on the no applicability of the criteria and shall render a finding based on such determination, and shall forward their recommendation to city council for final review and approval.

The application meets the requirements for special permit.

20.04.140 When required.

Except as stated herein, a detailed site development plan is required prior to development in a special purpose district or with a special permit application and may be required if a zoning condition exists on a particular piece of property. Detailed site development plans are not required for any projects for development in the Mixed Use District (RMU, GMU and IMU) or for any other projects other than those located in special purpose districts or as otherwise required herein.

Detailed Site Development Plan review is required as part of the special permit application.

20.04.150 Procedure.

- D. City plan commission approval. Pursuant to this Code, the city plan commission, in addition to the powers and duties identified in this chapter, shall have final authority on approval of all other detailed site development plans, unless a zoning condition, contract provision, other city code provision or state law require the detailed site development plan to be approved by city council.
 - 1. The planning division shall make its recommendations to the city plan commission within thirty days after a complete application is submitted.

2. The city plan commission shall hold a public hearing at its regular meeting that is within thirty days from receipt of department recommendations.
3. The commission shall consider the following information when approving a proposed detailed site development plan: the boundaries of the tract proposed for development; location and arrangement of structures; determine if the use conforms to applicable zoning regulations, determine if historic landmark commission approval has been granted for architectural design of all structures if located in a historic district and the design conforms to such approval; location of utility rights-of-way and easements and storm water drainage; vehicular and pedestrian ways; on-site parking areas; location of open spaces and landscape planted areas.
4. In no instance shall the city plan commission have authority to vary the yard standards applicable to the district.
5. The city plan commission shall approve the plan if it complies with all applicable code provisions.

Planning Staff has reviewed the detailed site development plan, and verified that it meets all requirements of Sections 20.04.320, Special Permit, and 20.04.150 Detailed Site Development Plan.

Plan El Paso-Future Land Use Map Designation

All applications for special permit shall demonstrate compliance with the following criteria:

G-4 – Suburban (Walkable): This sector applies to modern single use residential subdivisions and office parks, large schools and parks, and suburban shopping centers. This sector is generally stable but would benefit from strategic suburban retrofits to supplement the limited housing stock and add missing civic and commercial uses.

The purpose of the C-1 (Commercial) district is to provide compatible neighborhood convenience goods and services that serve day-to-day needs. It also is to permit locations for business and professional offices and retail category uses within adjacent residential areas of medium and high densities.

COMMENTS:

Planning and Inspections Department – Planning Division - Transportation

No objections to the special permit request.

Planning and Inspections Department – Plan Review

No objections to proposed special permit.

At the time of submittal for building permits the project will need to comply with all applicable provisions of the IBC, Municipal Code, and TAS.

Planning and Inspections Department - Landscaping Division

No objection to proposed special permit per submitted landscape buyout letter.

Planning and Inspections Department - Land Development

1. No objections to proposed special permit for PWSF.
2. Approval of the site plans by CPC constitutes a determination that the applicant is in compliance with the minimum provisions. Applicant is responsible for the adequacy of such plans, insuring that stormwater is in compliance with ordinances, codes, DSC, and DDM. Failure to comply may require the applicant to seek re-approval of the site plans from CPC.

Texas Department of Transportation

No permit is necessary since no work is proposed on TxDOT right of way.

Fire Department

EPFD has no objections.

Sun Metro

Sun Metro does not oppose this request.

El Paso Water Utilities

1. EPWU does not object to this request.

Water:

2. There is an existing 12-inch diameter water main extending along Belvidere Street located approximately 30-feet south from the northern right-of-way-line. This water main is available for service.
3. Previous water pressure readings from fire hydrant # 5110 located at 6615 Belvidere Street and 370' E, N-Side of Westwind, have yielded a static pressure of 132 (psi), a residual pressure of 118 (psi), and a discharge of 1,186 gallons per minute.
4. The owner should, for his own protection and at his own expense, install at the discharge side of each water meter a pressure regulator, strainer and relief valve, to be set for pressure as desired by the customer. The Lot owner shall be responsible for the operation and maintenance of the above-described water pressure regulating device.

Sanitary Sewer:

5. There is an existing 8-inch diameter sanitary sewer main extending along Belvidere Street located approximately 40' from the northern property line. This sanitary sewer main is available for service.

General:

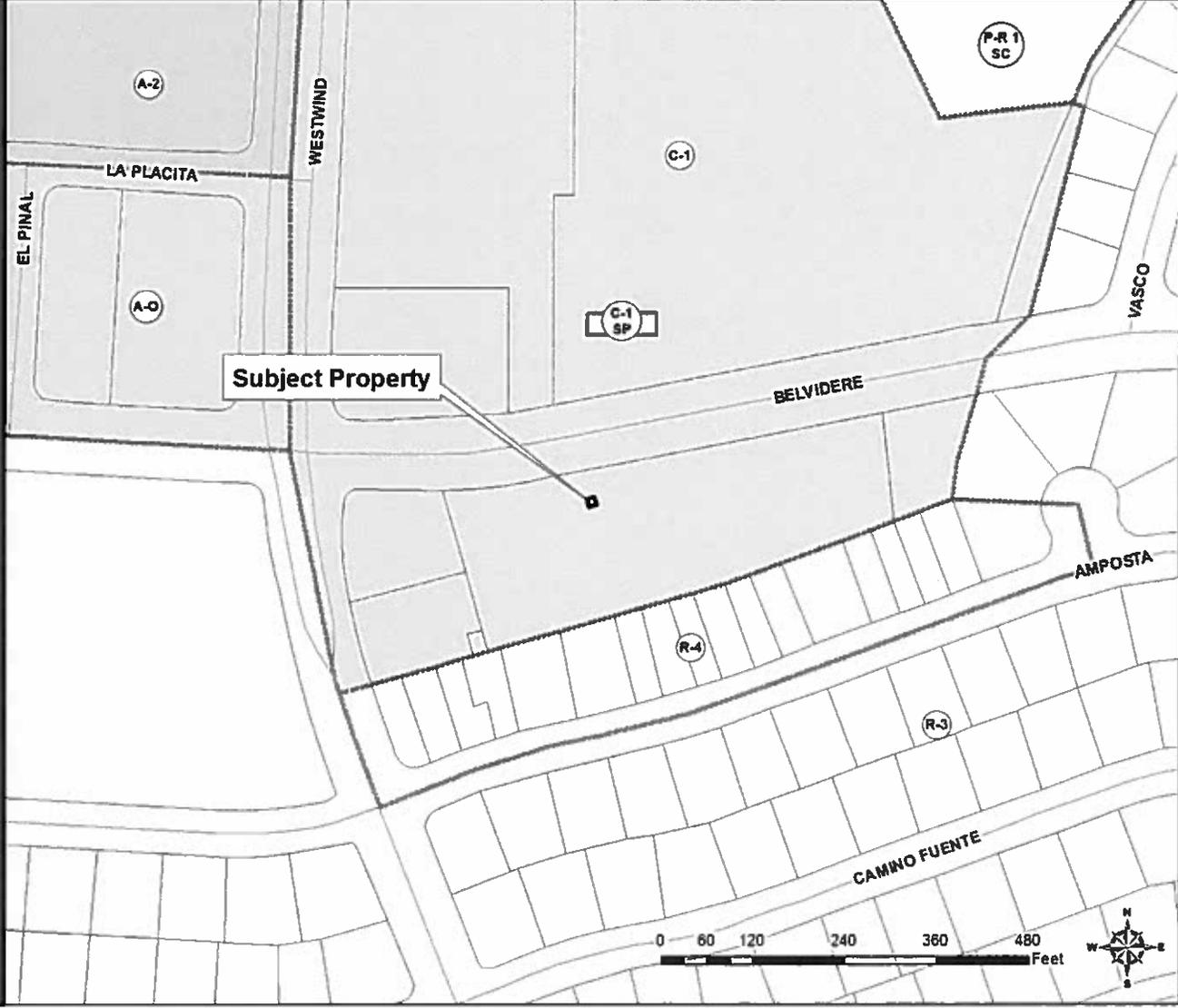
6. EPWU requires a new service application to provide service to the property. New service applications are available at 1154 Hawkins, 3rd floor and should be made 6 to 8 weeks in advance of construction to ensure water for construction work. A site plan, utility plan, grading and drainage plans, landscaping plan, the legal description of the property and a certificate-of-compliance are required at the time of application. Service will be provided in accordance with the current EPWU – PSB Rules and Regulations. The applicant is responsible for the costs of any necessary on-site and off-site extensions, relocations or adjustments of water and sanitary sewer lines and appurtenances.

Attachments

1. Zoning Map
2. Future Land Use Map
3. Aerial Map
4. Detailed Site Development Plan
5. Simulation Pictures
6. Landscape Buyout Request
7. Findings Analysis-Separation
8. Coverage Map
9. Letter of opposition

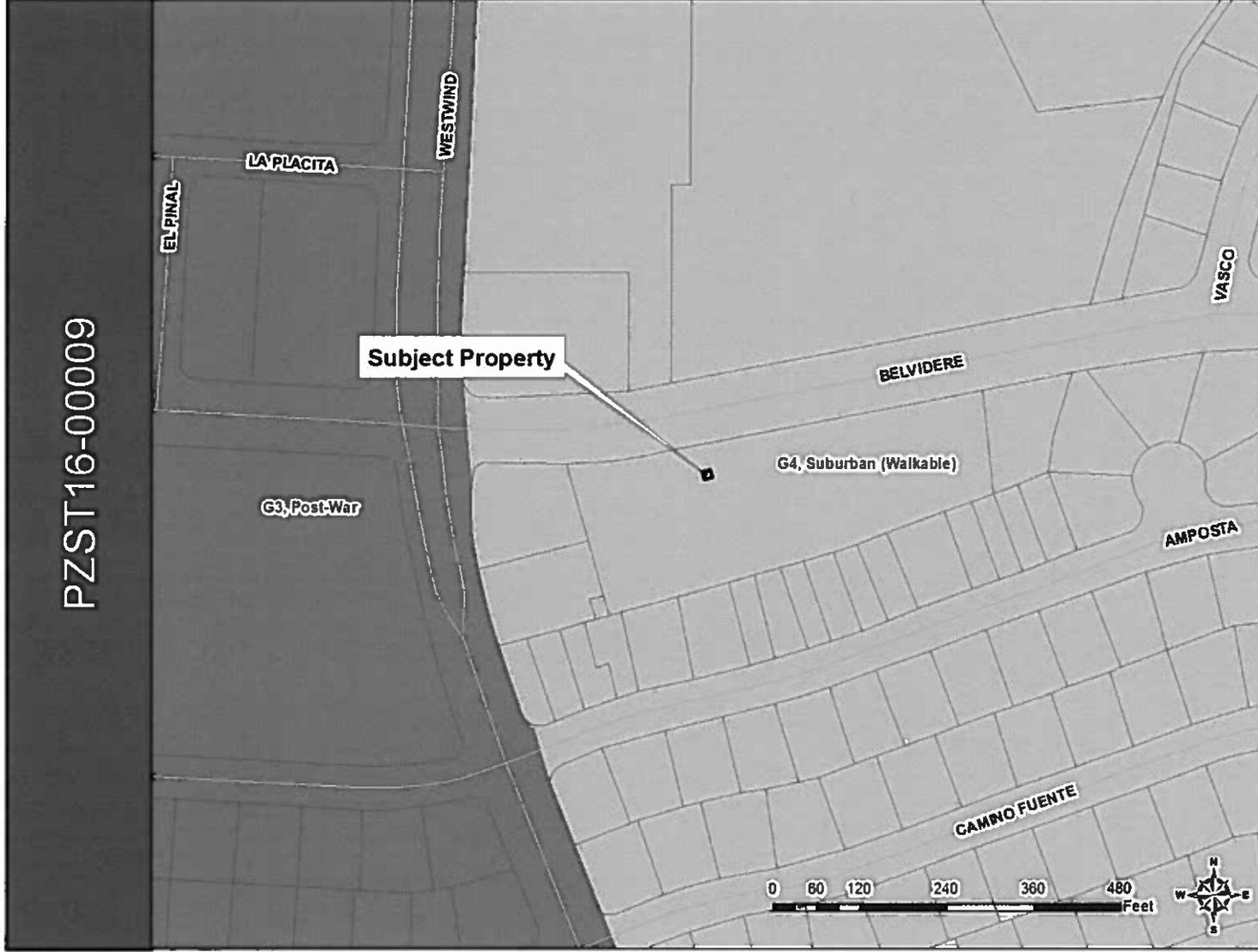
ATTACHMENT 1: ZONING MAP

PZST16-00009



ATTACHMENT 2: FUTURE LAND USE MAP

PZST16-00009



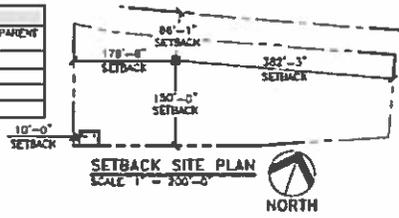
ATTACHMENT 3: AERIAL MAP

PZST16-00009



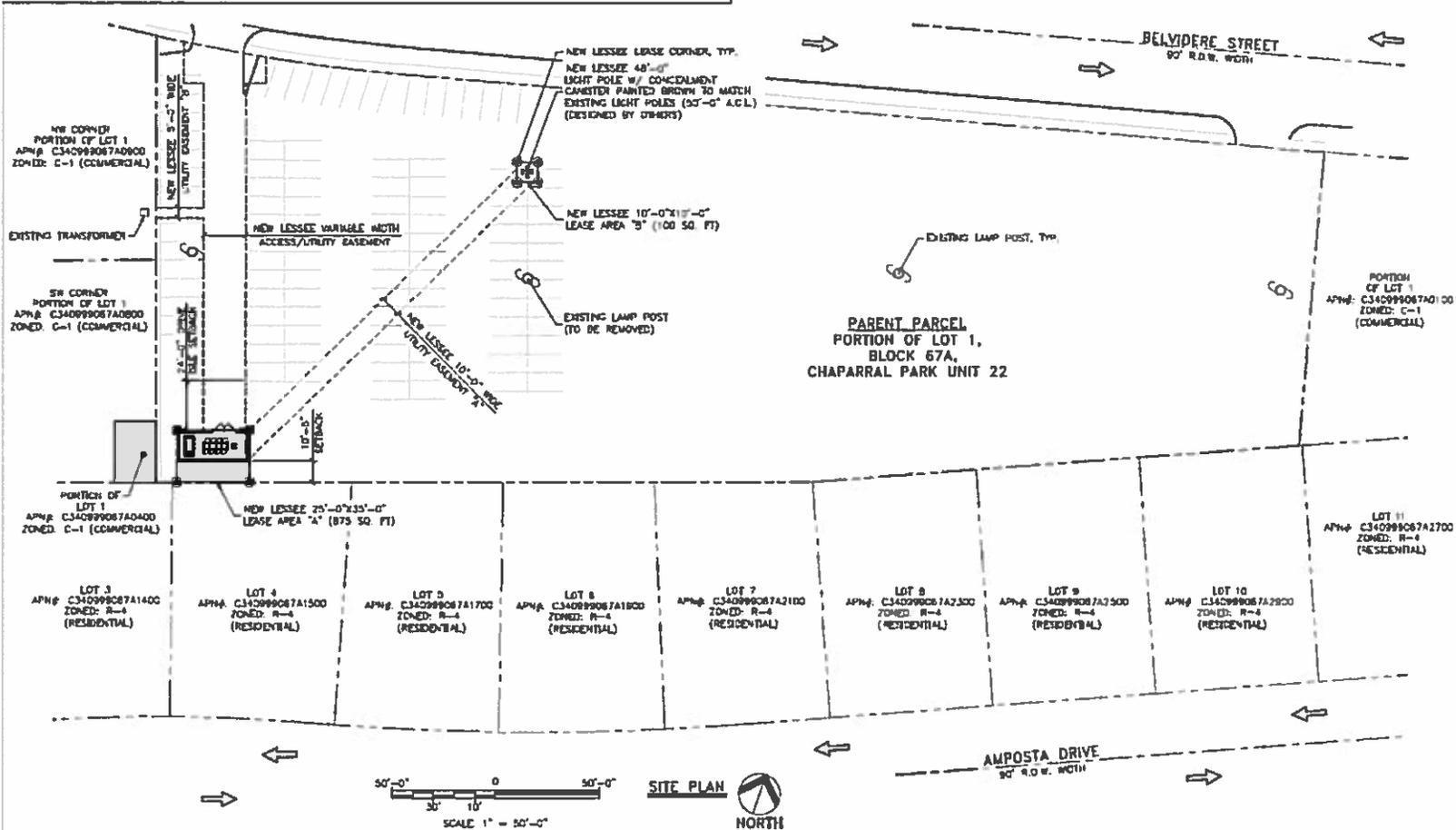
ATTACHMENT 4: DETAILED SITE DEVELOPMENT PLAN

SETBACK TABLE		
	TOWER BASE TO PARENT PROPERTY LINE	LEASE BOUNDARY TO PARENT PROPERTY LINE
NORTH	86'-1"	82'-2"
SOUTH	150'-0"	148'-0"
WEST	178'-0"	174'-8"
EAST	382'-3"	378'-3"



LANDSCAPE NOTE:
 1 THIS PROJECT WILL NOT INCLUDE ANY PROVISIONS FOR LANDSCAPING. INSTEAD, VERIZON WIRELESS WILL UTILIZE THE LANDSCAPE BUYOUT OPTION OFFERED BY THE CITY OF EL PASO

APPROVED
FOR CONSTRUCTION



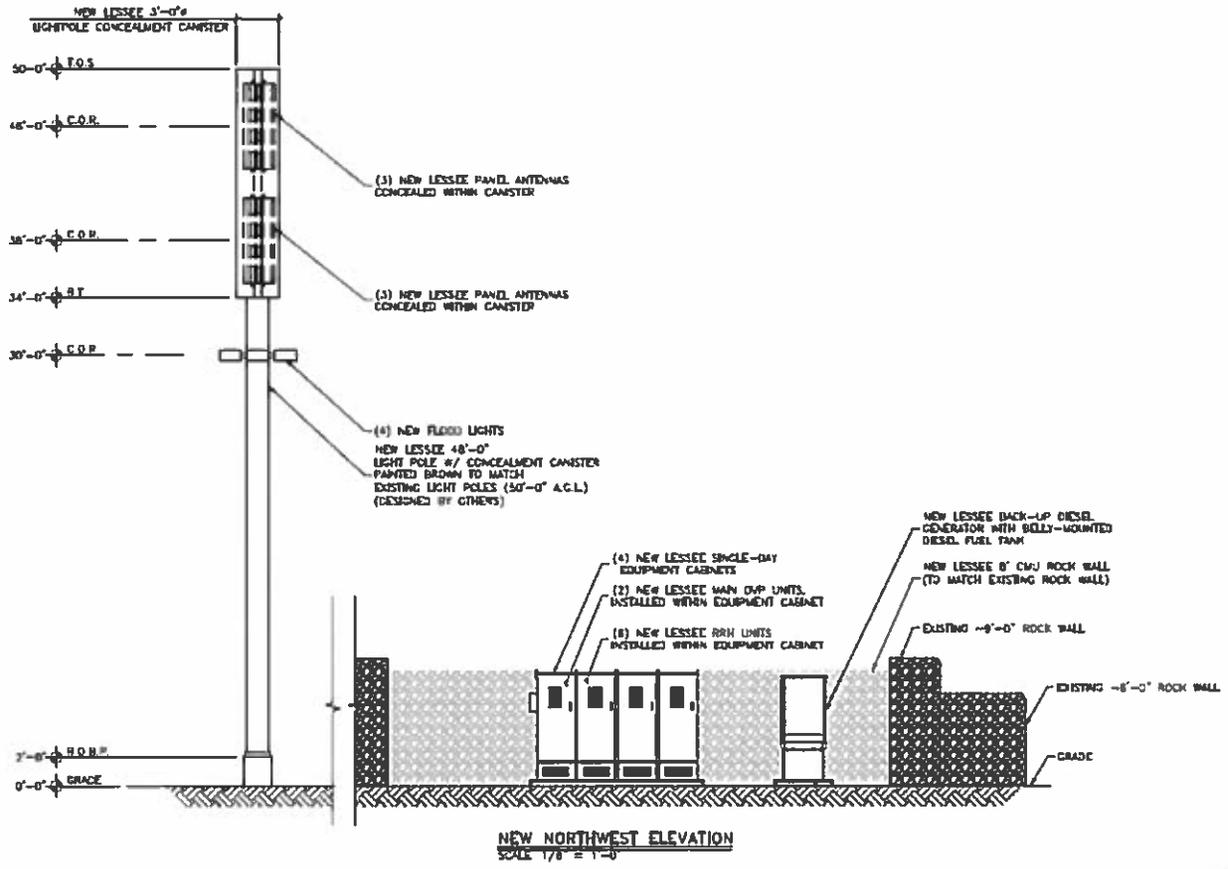
June 16, 2016

GENERAL NOTES:

1. NEW LESSEE 8' CMU ROCK WALL IS TO MATCH SAME STYLE MATERIAL AND TEXTURE OF EXISTING ROCK WALL.
2. NEW LESSEE FLOOD LIGHTS IS TO BE DARK-SKY COMPLIANT PER SECTION 18.18.

KEY:

○ C.O.R.	= CENTER OF ROTATION
AL	= ATTACHMENT LEVEL
BT	= BOTTOM TIP LEVEL
TT	= TOP TIP LEVEL
A.G.L.	= ABOVE GRADE LEVEL
B.O.B.P.	= BOTTOM OF BASE PLATE
T.O.S.	= TOP OF STRUCTURE



APPROVED
FOR CONSTRUCTION

ATTACHMENT 5: SIMULATION PICTURES



EXISTING



PROPOSED

PZST16-00009



EXISTING



PROPOSED



BEFORE

EXISTING



AFTER

PROPOSED

ATTACHMENT 6: LANDSCAPE BUYOUT REQUEST

Verizon Wireless ELP Amposta

v. The applicant shall submit a list of addresses/locations showing all existing PWSF within a one-half mile radius of the proposed site and a map depicting such locations with the special permit application."

The proposed PWSF facility will conform to all other applicable City of El Paso regulations. However, VZW is requesting a modification to the setback requirement pursuant to Section §20.10.455(E)(1)(b). Due to the fact that VZW is proposing a 50' Light Standard, VZW would like the setback to the south property line modified to a one foot setback for each foot of height of the proposed 50' structure that abuts a residential district. In addition, VZW is requesting a modification to the ½ mile separation distance between PWSF antenna structures, thus requiring a Special Use Permit. The closest tower to this proposed location is 0.48 miles and is owned by Crown Castle International. VZW acknowledges that it is subject to approval by both the City Plan Commission and City Council for this separation distance modification.

In addition, pursuant to Ordinance Chapter 18.46.080, titled "Required landscapable areas," Subsection A., of the City of El Paso, Texas, Zoning Ordinance, Verizon Wireless' is requesting a waiver from the required landscape requirements. Due to the commercial nature of the property and its use as a parking lot that is partially surrounded by a rock wall, the proposed PWSF will blend in with the existing surroundings.

Further, all other setbacks will be complied with and no streets, rights-of-way or easements will be encroached upon. After construction, this site will provide 911 and emergency communication as well as improved wireless service in this section of the City of El Paso.

Statement of Operations

Once the construction of the wireless telecommunications facility is complete and the telephone switching equipment is fine-tuned, visitation to the site by service personnel for routine maintenance will occur approximately once a month. The site is entirely self-monitored and connects directly to a central office where sophisticated computers alert personnel to any equipment malfunction or breach of security. The wireless telecommunications facility will be unstaffed, with no regular hours of operation and no impact to existing traffic patterns.

Compliance with Federal Regulations

Verizon Wireless will comply with all applicable FCC rules governing construction requirements, technical standards, interference protection, power and height limitations, and radio frequency standards. In addition, the company will comply with all applicable FAA rules on site location and operation.

ATTACHMENT 7: FINDINGS ANALYSIS-SEPARATION

Verizon Wireless ELP Amposta

- c. Separation Between PWSF Antenna Support Structures. The minimum separation distance between ground-mounted PWSF antenna support structures shall be one-half mile, except as provided in subsection (E)(1)(d). Separation distance shall be measured by drawing or following a straight line between the base of any existing PWSF antenna support structure and the proposed base of a new PWSF antenna support structure.

Refer to Tower Location map and tower spreadsheet list Exhibit for the existing PWSFs located within a one-half (1/2) mile from VZW's proposed stealth PWSF. Only one (1) existing PWSF exists less than one-half (1/2) mile from the proposed stealth PWSF. That is Crown Castle LD. #822420 which is 0.48 miles away from VZW's proposed site location. VZW is requesting a waiver from the separation distance requirement due to technology and topographic constraints, specifically providing for improved wireless coverage and increased voice and data capacity to the immediate area. The rationale for this is explained in Exhibit H, VZW's Radio Frequency Engineer's statement.

- d. Modified Separation Between PWSF Antenna Support Structures. The minimum separation between ground-mounted PWSF antenna support structures may be reduced below one-half mile by city council upon approval of a special permit application based on findings that:

- i. The applicant is reasonably unable to use property that is more than one-half mile from another PWSF antenna support structure and be able to reasonably serve the area designated in a manner that is technically feasible and commercially reasonable;

VZW is unable to utilize the adjacent Crown Castle and American Tower existing towers as shown the Location Map of existing wireless carriers. These existing towers are located too far away from this specific geographic area to provide additional capacity for VZW's existing ELP Resler and ELP Loma sites.

- ii. The property on which the PWSF antenna support structure is to be located is the only reasonably available property for use within one-half mile of another PWSF antenna support structure that will enable the applicant to reasonably serve the area designated in a manner that is technically feasible and commercially reasonable;

VZW looked at a possible collocation upgrade with the Crown Castle site located 0.48 miles from this proposed PWSF for the possibility of a collocation upgrade. Collocating on Crown's Castle's tower would not provide the necessary off-loading of capacity traffic and coverage for the existing ELP Resler and ELP Loma sites and also would not help to eliminate the coverage gap in this area since there are no existing VZW sites in this geographic area. Furthermore, the existing Crown Castle site is an existing stealth light pole standard and would have to be deconstructed and reconstructed to handle the additional antenna loading VZW requires. This would potentially impact the visual designs of these parking lot light poles if modified to accommodate VZW antenna loading.

(Refer to Exhibit I, VZW's Radio Frequency Engineer's map for adjacent VZW sites in the vicinity.)

- iii. The area designated by the applicant cannot be reasonably served in a manner that is technically feasible and commercially reasonable by locating additional antennas on the applicant's existing PWSF antenna support structures because such existing PWSF antenna support structures cannot safely support additional antennas;

This proposed PWSF is designed to provide extra capacity within the VZW wireless network for the existing ELP Resler and ELP Loma sites. Refer to Exhibit H, VZW's Radio Frequency Engineer's map for adjacent VZW sites in the vicinity. Installing additional antennas at the ELP Resler and ELP Loma site will not adequately increase the capacity and coverage service in the immediate area.

- iv. The applicant is unable to collocate its antennas on an existing PWSF antenna support structure that is owned or operated by a third person or entity and located such that the applicant is able to reasonably serve the area designated in a manner that is technically feasible and commercially reasonable; and

The relative location of this property makes it unique for the purposes of locating a PWSF based on the need for strict adherence to the grid plan. As part of its initial deployment in the State of Texas, engineers at VZW have identified the need for a PWSF within the City of El Paso. Based on a computerized engineering study considering local population density and topography, engineers at VZW have issued a "Search Ring" identifying the necessary location for a PWSF in this area. This Search Ring represents the area in which a facility must be located to allow it to function as an integral unit in the wireless network system in the State of Texas and the El Paso area. PWSF facilities are laid out in a grid pattern and the spacing, height and location of this component site are critical for the successful operation of the network. The subject property meets the engineering criteria for the necessary PWSF in this area. If the strict letter of the regulations were carried out, the PWSF could not be constructed due to the separation distance regulation of one-half mile. The hardship has resulted from the need to locate a PWSF within the grid pattern at a height that is necessary for antennas to receive and transmit signals. The hardship is a result of wireless technology and has not been created by any person having an ownership interest in the property.

- v. The applicant shall submit a list of addresses/locations showing all existing PWSF within a one-half mile radius of the proposed site and a map depicting such locations with the special permit application.

Refer to Tower Location map and tower spreadsheet list Exhibit for the existing PWSFs located within a one-half (1/2) mile from VZW's proposed stealth PWSF.

- e. Height Restriction. Ground-mounted PWSF antenna support structures shall not exceed seventy-five feet in height, except as provided in subsection (E)(1)(f).

Refer to the Site Plans, Sheet C3 for the height dimension of VZW's proposed stealth PWSF at 50'. VZW is proposing a 50' stealth Light Pole Standard that meets the required overall height.

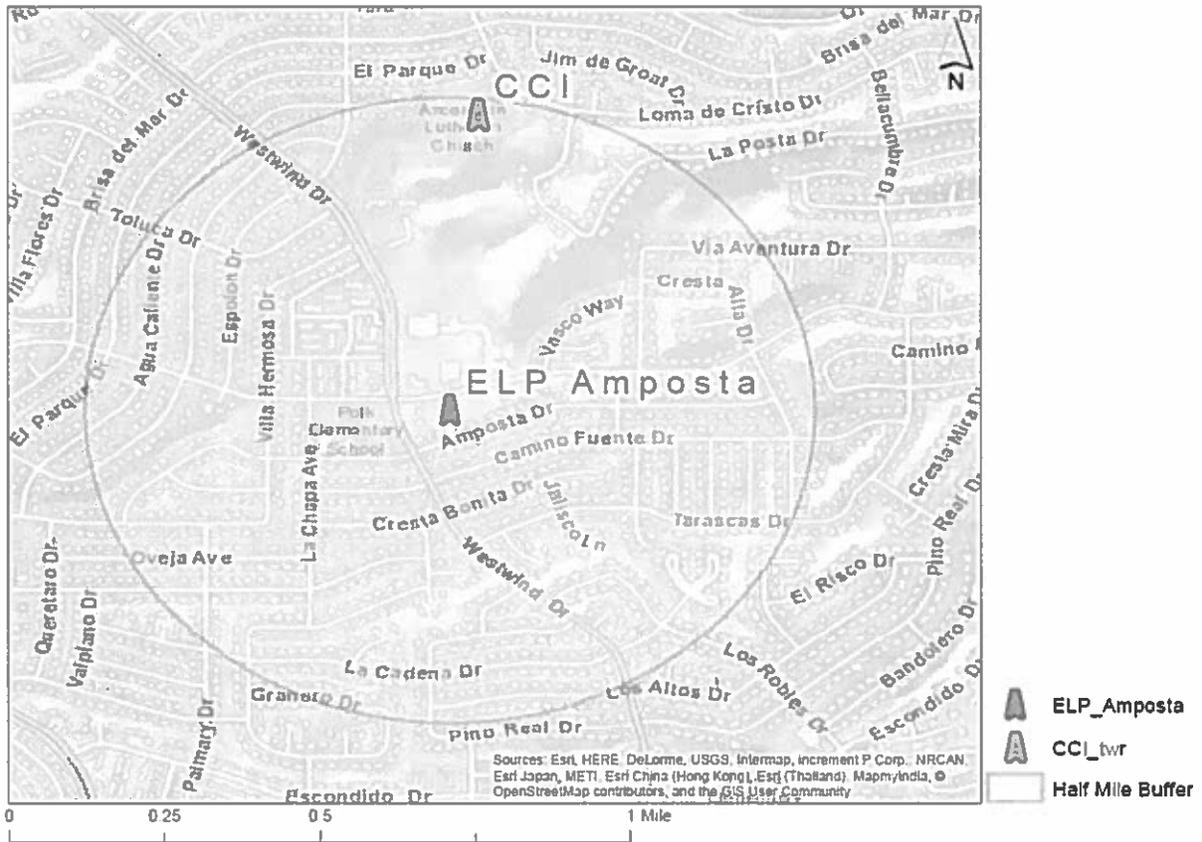
- f. Modified Height Restriction. If the applicant is collocating two or more antennas on a structure or if the structure is camouflaged, then the height for a PWSF antenna support structure shall not exceed one hundred feet.

Not applicable.

- g. Camouflage and Screening.

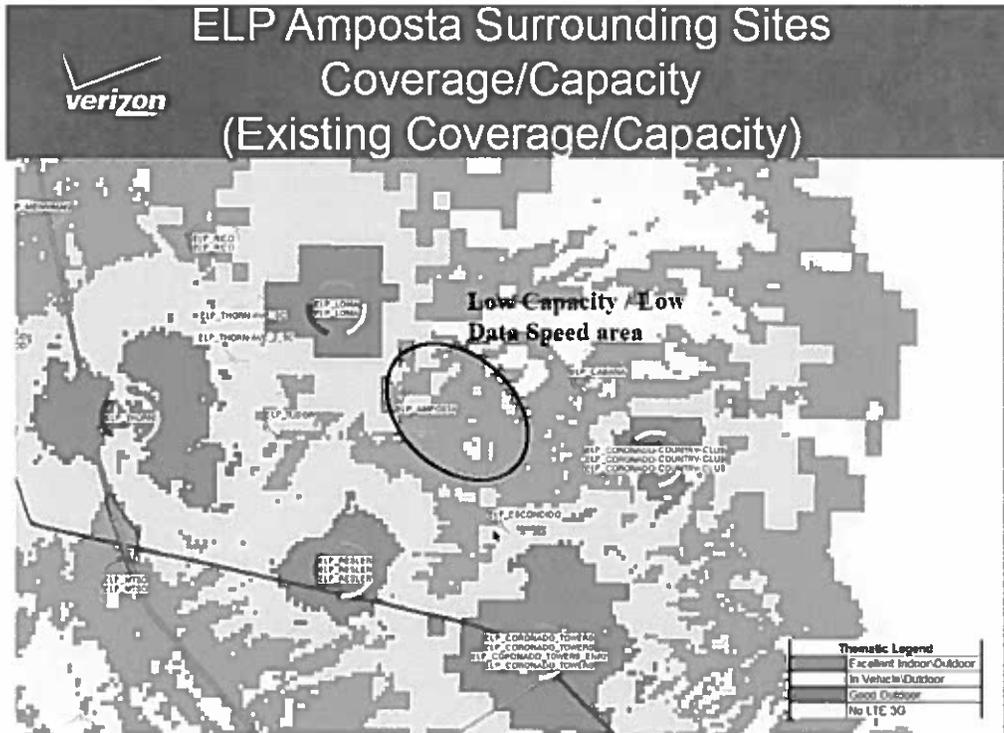
- i. All Ground-Mounted PWSF Shall be Camouflaged. Camouflaging is a method of disguising or concealing the appearance of an object by changing its usual color,

VZW ELP AMPOSTA - 1/2 MILE RADIUS

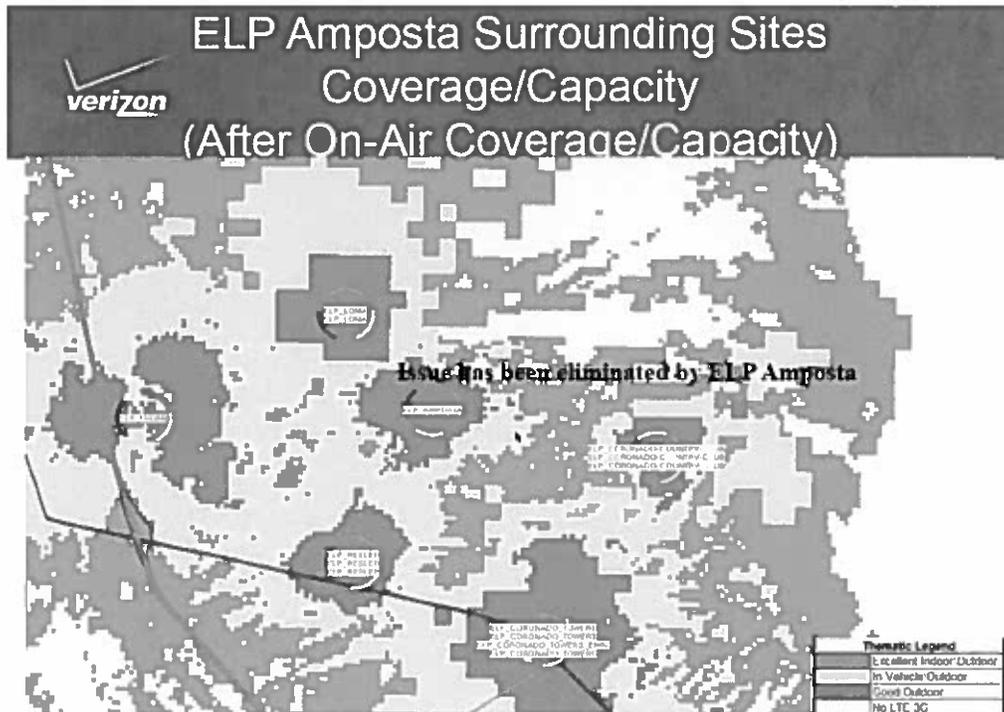


LATITUDE	LONGITUDE	TWR OWNER	SITE NUMBER	SITE NAME	ADDRESS	TWR TYPE	STRUCTURE HT	DISTANCE FROM Behndere & Westwind (MILES)
31.8590	-106.5398	CCI	822420	Ascension Lutheran	6520 Loma de Cristo Drive, El Paso, TX 79912	Lightpole	40'	0.48

ATTACHMENT 8: COVERAGE MAP



EXISTING



PROPOSED

ATTACHMENT 9: LETTER OF OPPOSITION

City Council Chamber, 1st Floor, City Hall

In reference with the Case No. PZST16-00009 about the installation of a communication antenna Verizon, I express my rejection for this facility for the following reasons:

1.- Health.- The antenna will operate with very high frequency waves that although there is no evidence of harm, there is no evidence of no harm. What is true is that the electromagnetic field produced , causes heating in the cells of the human body, and could be dangerous for people who is reaching by them.

2.- Environment. The tower height damages the view of the surroundings, causing visual discomfort in a residential area.

3.- Value of Land.- My property is about 300 Ft in a straight line and I think that the value of my property would decrease.

Jose F Camacho

6620 Amposta

El Paso, TX 79912



Recommendation/Public Input

- Planning Division recommendation: Approval
- CPC Vote: Approval Recommendation (6-0)
- Public Input: One letter in opposition to the Special Permit request.

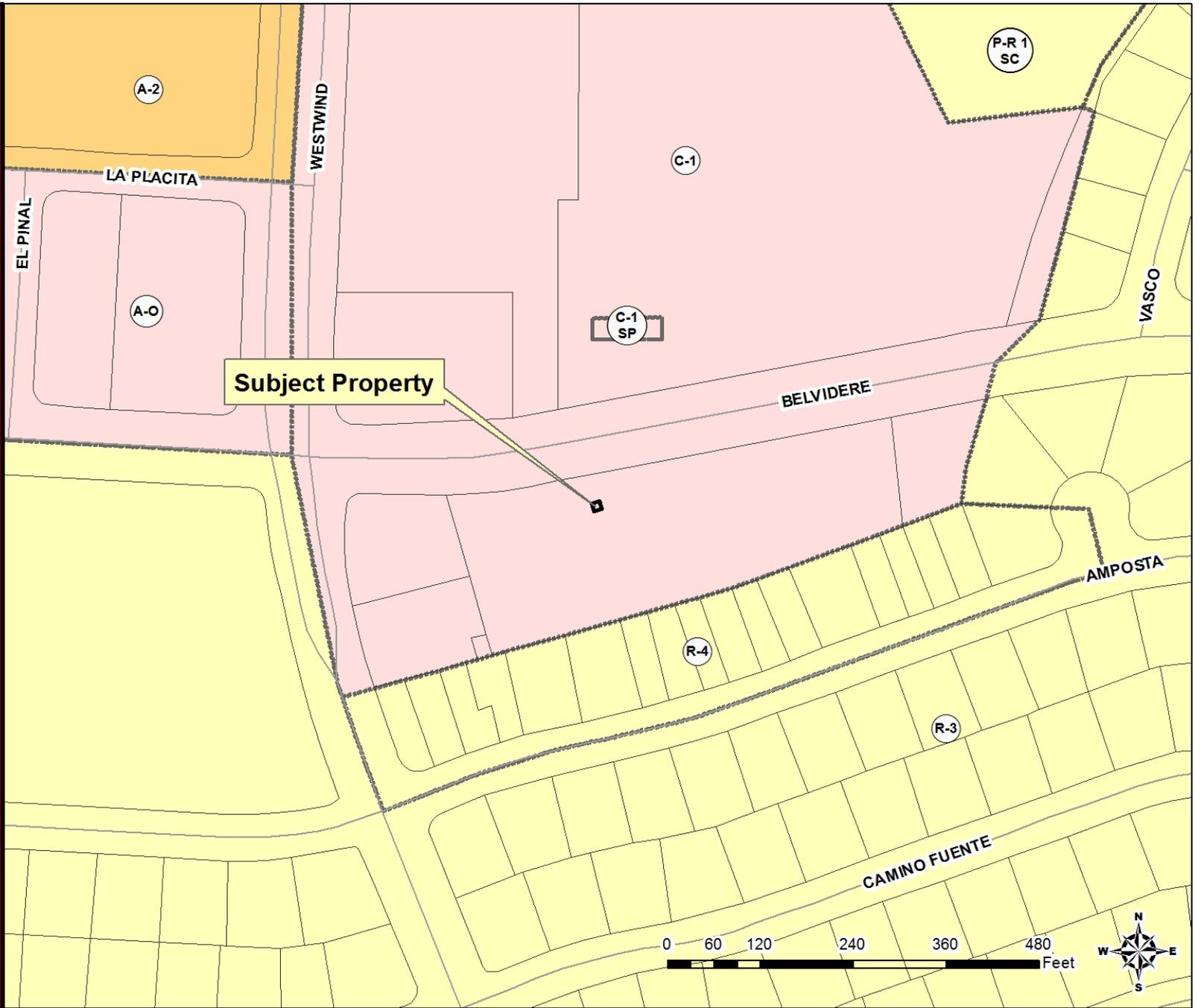
Strategic Goal #3 Promote the Visual Image of El Paso

3.1 Provide business friendly permitting and inspection processes

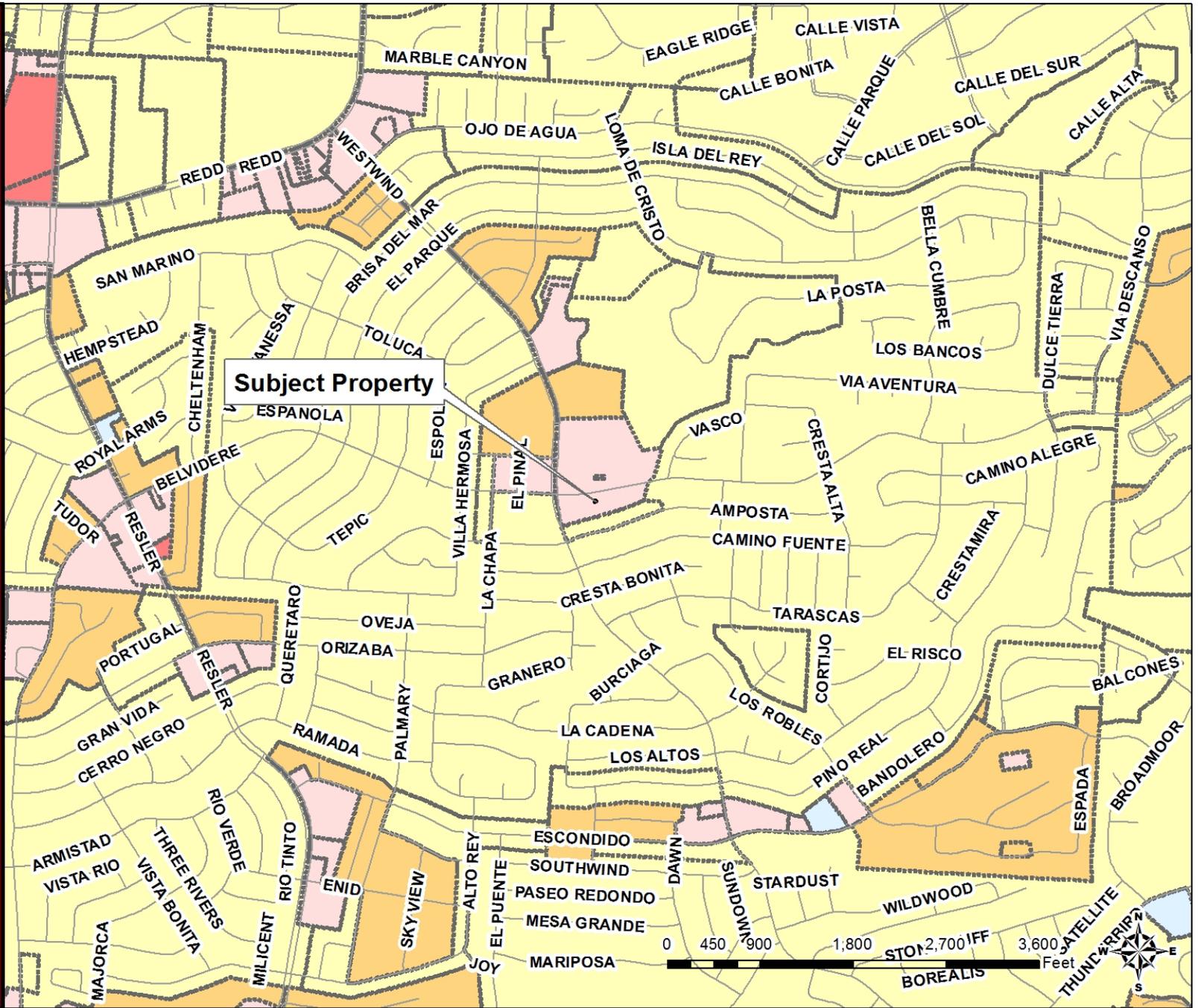
3.2 Improve the visual impression of the community

PZST16-00009

2



PZST16-00009



PZST16-00009

4



Subject Property

0 60 120 240 360 480 Feet



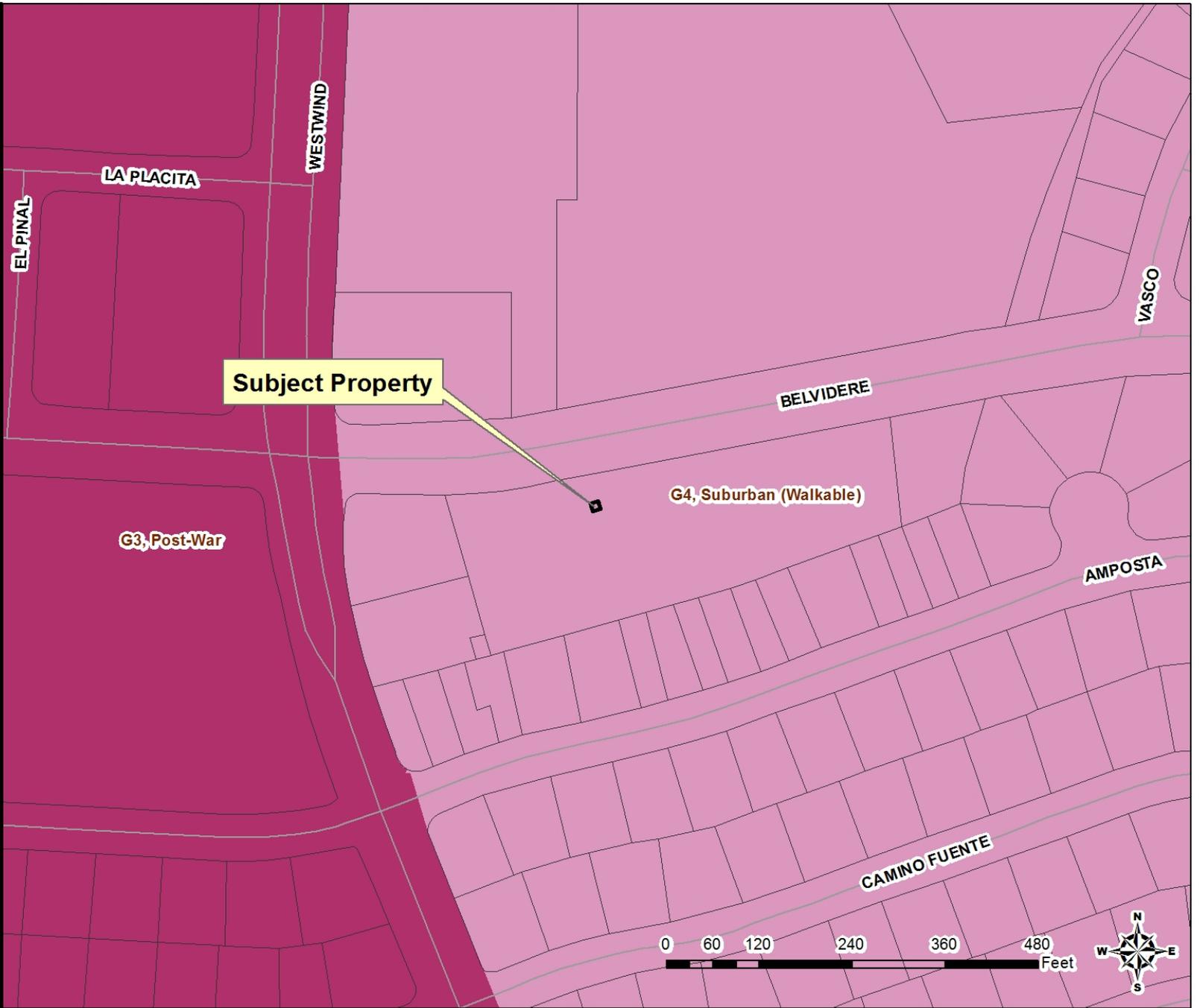
PZST16-00009

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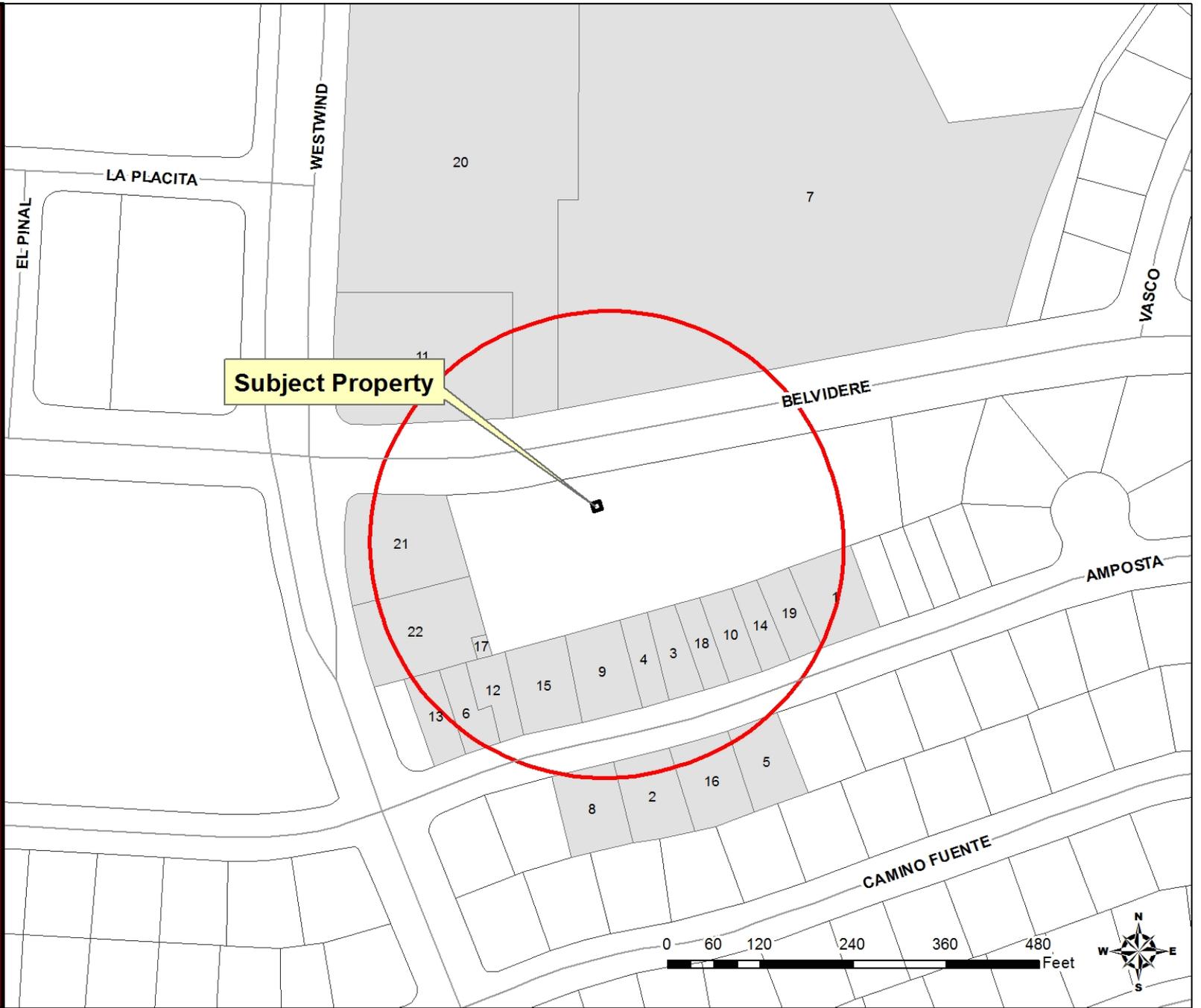
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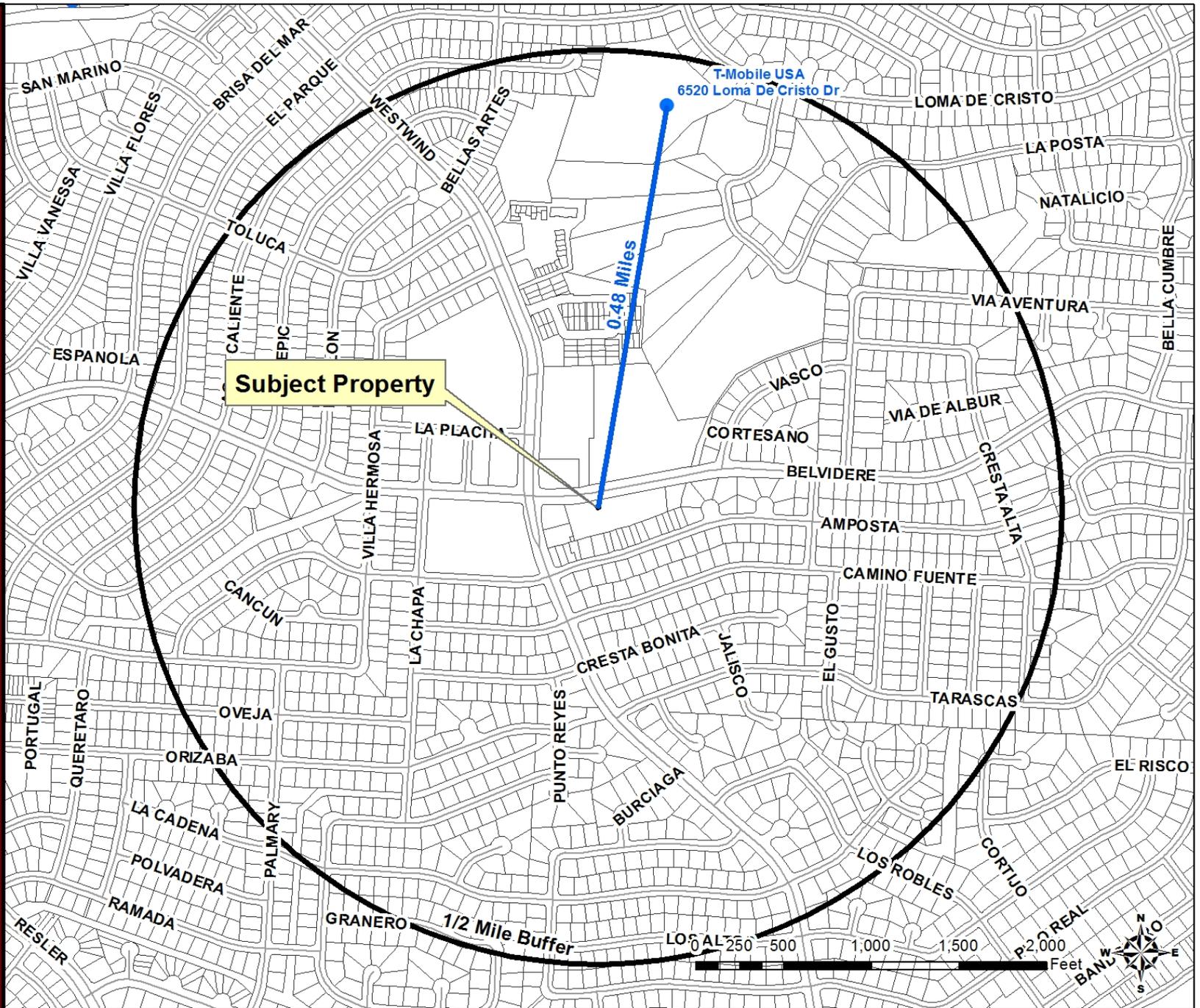
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SITE NOTES:

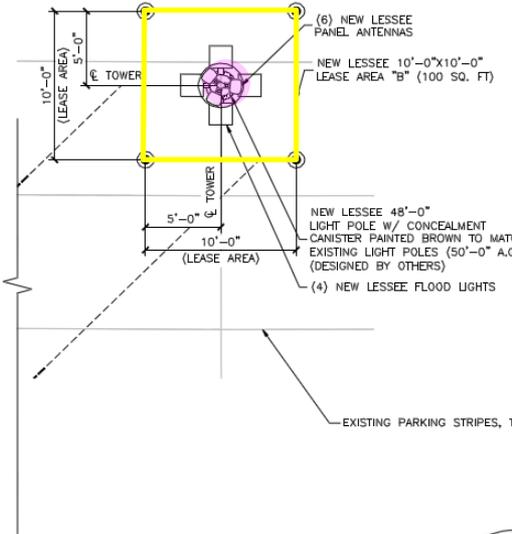
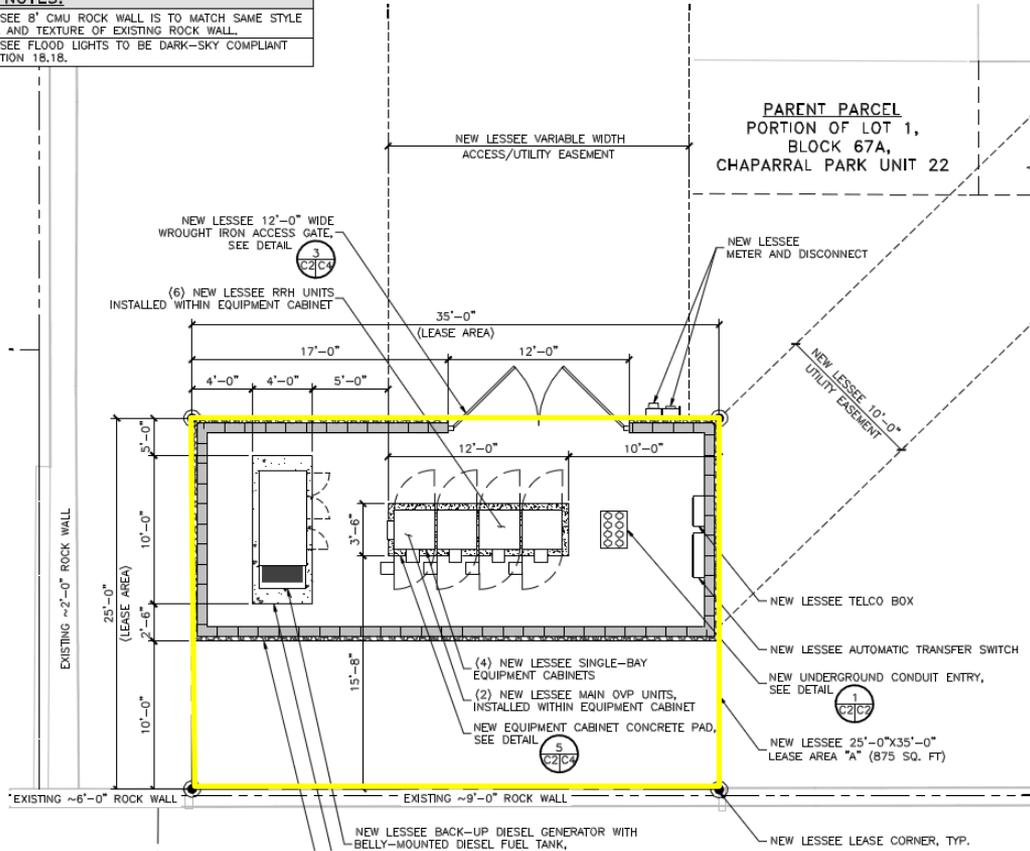
1. PRIOR TO EXCAVATION, CONTRACTOR SHALL CHECK THE AREA FOR UNDERGROUND FACILITIES.
2. CONTRACTOR TO PLACE MONOPOLE FOUNDATION BASED ON FINISHED COMPOUND GRADE.

GENERAL NOTES:

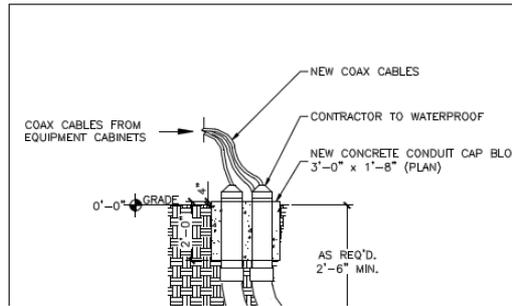
1. NEW LESSEE 8' CMU ROCK WALL IS TO MATCH SAME STYLE MATERIAL AND TEXTURE OF EXISTING ROCK WALL.
2. NEW LESSEE FLOOD LIGHTS TO BE DARK-SKY COMPLIANT PER SECTION 18.18.

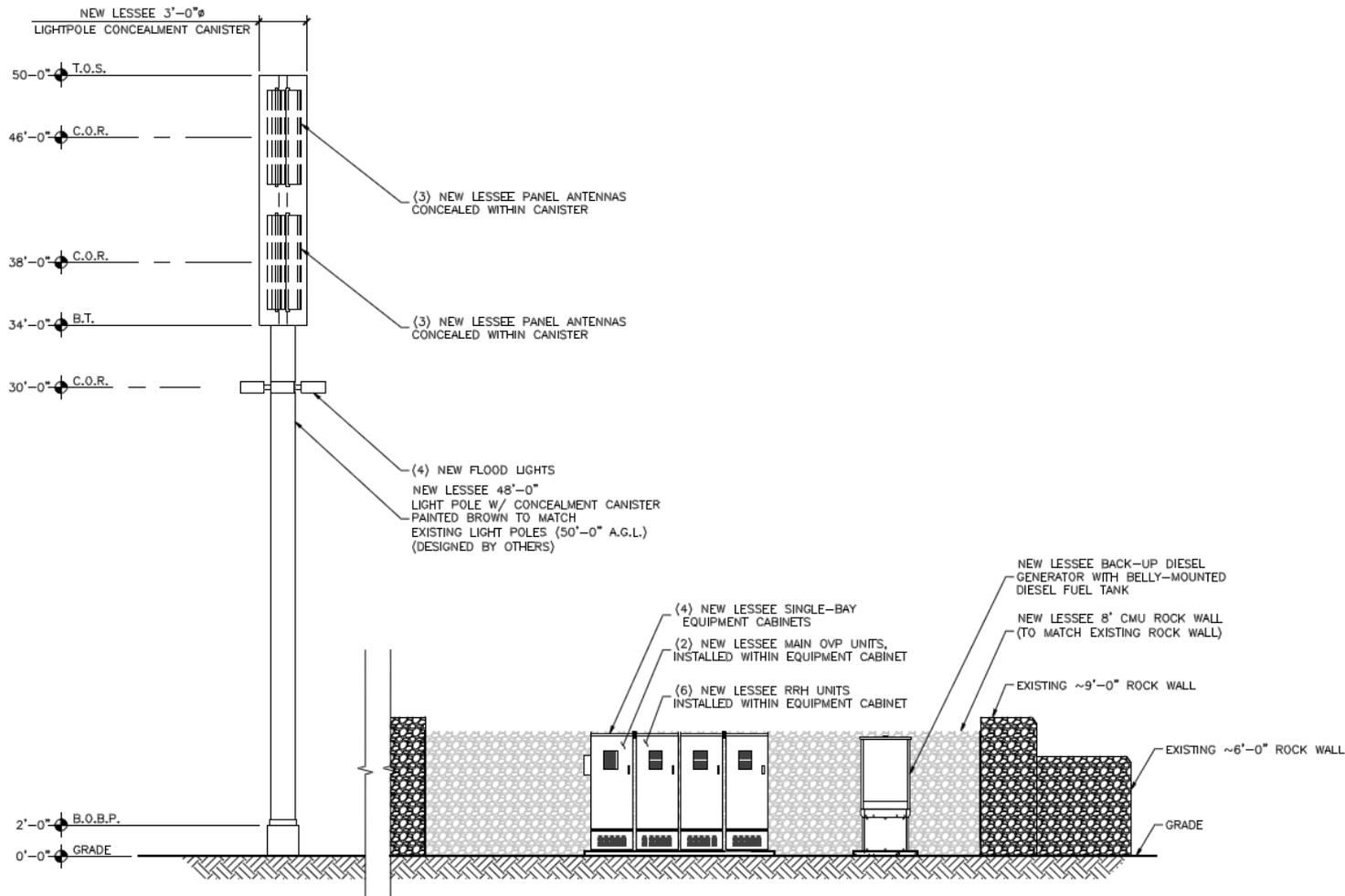
LANDSCAPE NOTE:

1. THIS PROJECT WILL NOT INCLUDE ANY PROVISIONS FOR LANDSCAPING. INSTEAD, VERIZON WIRELESS WILL UTILIZE THE LANDSCAPE BUYOUT OPTION OFFERED BY THE CITY OF EL PASO.



APPROVED FOR CONSTRUCTION





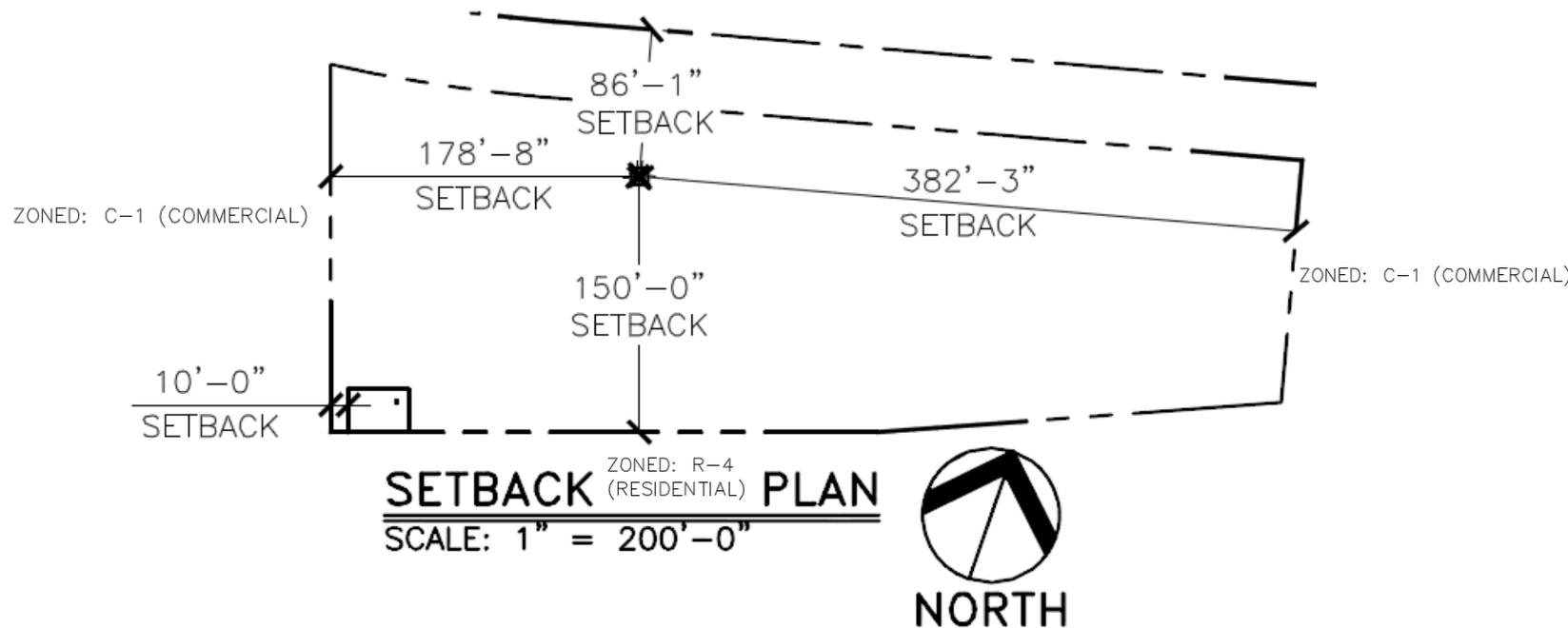
NEW NORTHWEST ELEVATION
SCALE: 1/8" = 1'-0"



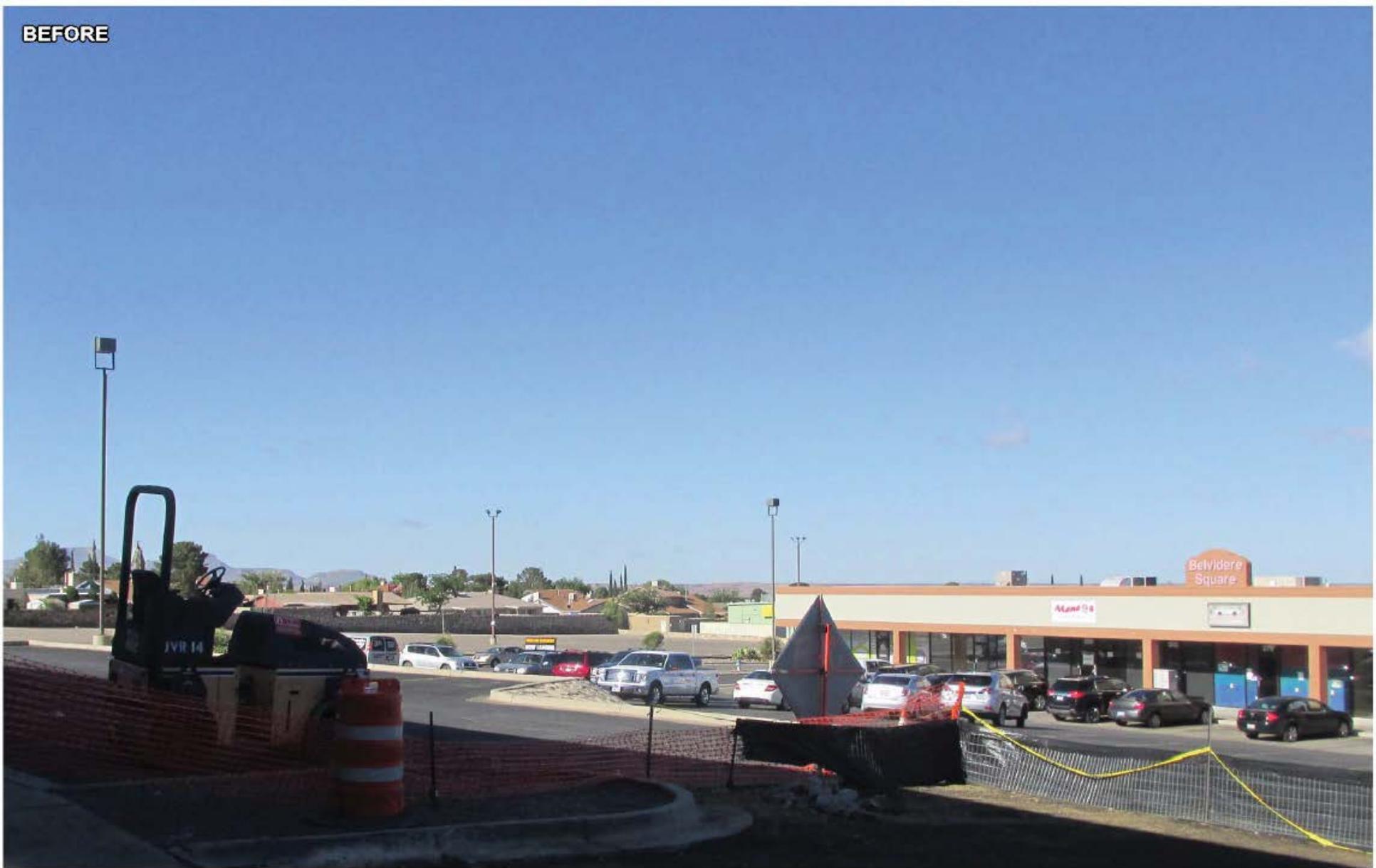
SETBACK TABLE:

	TOWER BASE TO PARENT PROPERTY LINE	LEASE BOUNDARY TO PARENT PROPERTY LINE
NORTH	86'-1"	82'-2"
SOUTH	150'-0"	146'-0"
WEST	178'-8"	174'-8"
EAST	382'-3"	378'-3"

ZONED: C-1 (COMMERCIAL)

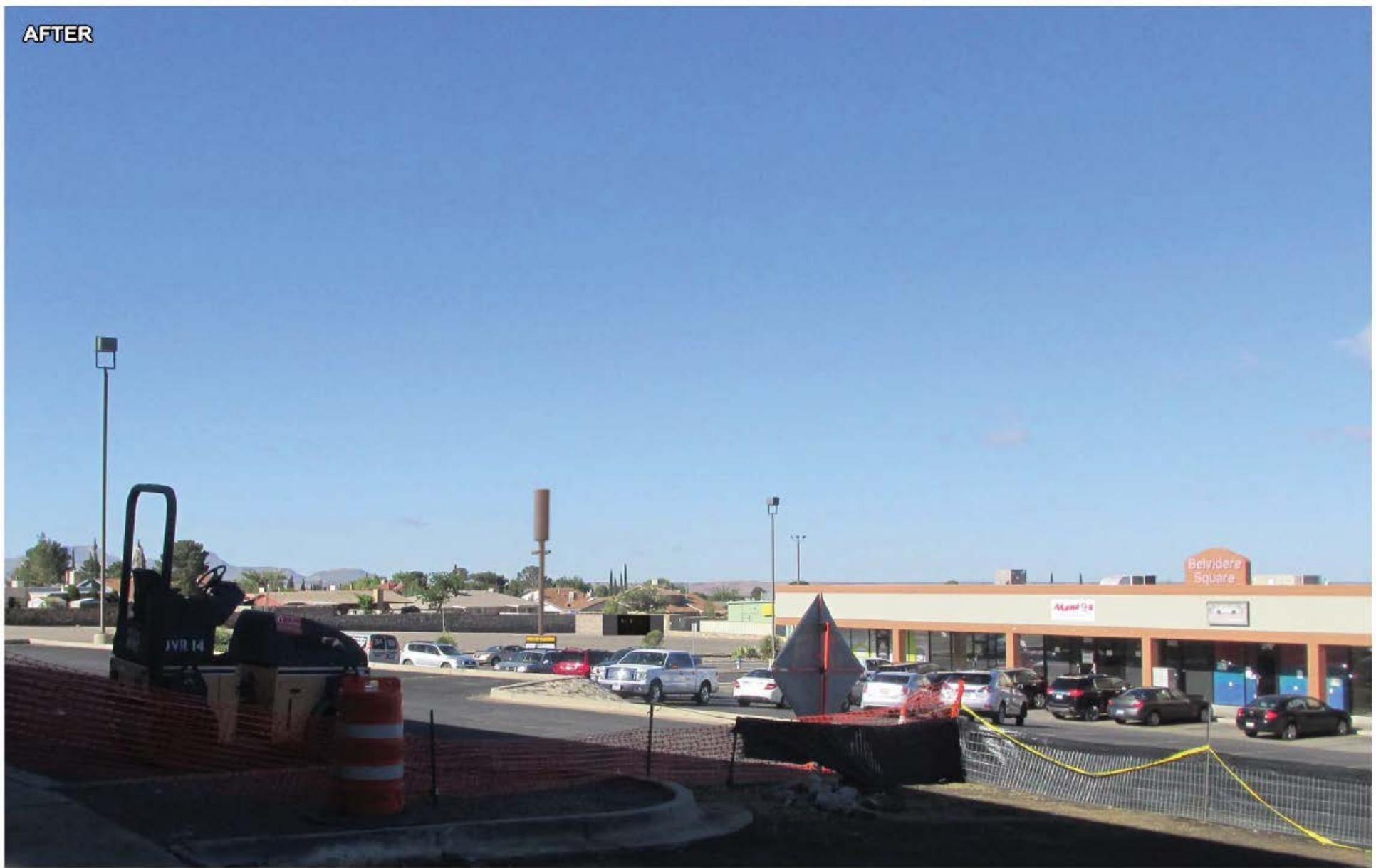


BEFORE



14

AFTER



15

BEFORE



16

AFTER



17

BEFORE



18

AFTER



19



Subject Property



North



South



East



West

PZST16-00009

25

