



LATITUDE: 44°34'27.12"N
LONGITUDE: 110°23'2.29"W

NEW 99'-0" SELF-SUPPORT TOWER
(OVERALL HEIGHT: 105'-0" A.G.L.)
RAW LAND COMMUNICATION SITE



DRIVING DIRECTIONS:

LATITUDE:	44°34'27.12"N
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LONGITUDE:	110°23'2.29"W
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FROM THE VERIZON WIRELESS OFFICE LOCATED AT 2730
BOZEMAN AVE HELENA, MT 59601, TAKE CARTER DR TO
U.S. 287 S/PROSPECT AVE FOR 0.9 MI, TAKE THE 3RD
LEFT ONTO U.S. 287 S/PROSPECT AVE FOR 61.9 MI,
TURN LEFT TO MERGE ONTO I-90 E TOWARD BILLINGS
FOR 57.7 MI, TAKE EXIT 333 FOR US-89 S TOWARD
CITY CENTER/YELLOWSTONE/NATIONAL PARK 0.2 MI,
TURN LEFT ONTO US-89 S FOR (PARTIAL TOLL ROAD)
79.2 MI, TURN LEFT ONTO NORRIS CANYON RD (THIS
ROAD IS CLOSED IN WINTER) FOR 11.6 MI, TURN RIGHT
ONTO GRAND LOOP RD FOR 14.9 MI, DESTINATION
LOCATION AT 44°34'27.12"W, 110°23'02.29"W WILL BE ON
THE RIGHT.

DESIGNED FOR:

verizonwireless

2730 BOZEMAN AVE.
HELENA, MONTANA 59601

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DESIGNED BY:

EV	DESCRIPTION	DATE	BY	CHK
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REV	DESCRIPTION	DATE	BY	CHK
A	PRELIMINARY — NOT FOR CONSTRUCTION	09/13/16	RT	—

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PROJECT INDEX:

APPLICANT:
VERIZON WIRELESS
2730 BOZEMAN AVE.
HELENA, MT 59601

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GENERAL PROJECT NOTES:

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| 1. | PRIOR TO SUBMITTING A BID, THE CONTRACTOR SHALL FAMILIARIZE HIMSELF/HERSELF WITH THE SCOPE OF WORK AND ALL CONDITIONS AFFECTING THE PROPOSED PROJECT. |
| 2. | 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. |
| 3. | ALL FIELD MODIFICATIONS BEFORE, DURING, OR AFTER CONSTRUCTION SHALL BE APPROVED IN WRITING BY A VERIZON WIRELESS REPRESENTATIVE. |
| 4. | INSTALL ALL EQUIPMENT AND MATERIALS PER THE MANUFACTURER'S RECOMMENDATIONS, U.N.O. |
| 5. | 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. |
| 6. | CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF THE WORK UNDER THE CONTRACT. |
| 7. | 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. |
| 8. | 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. |
| 9. | 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:	UNITED STATES OF AMERICA – NATIONAL PARK SERVICE YELLOWSTONE NATIONAL PARK		
JURISDICTION:	TETON COUNTY		
PUBLIC RECORD PARCEL NO:	–		
OCCUPANCY CLASSIFICATION:	U – UTILITY & MISC.		
TYPE OF CONSTRUCTION:	TYPE II–B		
ITEM:	REQUIRED/ALLOWED:	PROVIDED:	COMPLIANCE
FIRE SPRINKLERS:	NO	NO	YES
FIRE ALARM:	NO	YES, ALARMED BACK TO MARKET SWITCH FACILITY	YES
BUILDING HEIGHT:	UP TO 50'	10'	YES
BUILDING STORIES:	2	1	YES
BUILDING AREA:	UP TO 9,000 SQ. FT.	228 SQ. FT.	YES
OCCUPANT LOAD:	N/A	UNOCCUPIED	YES
NUMBER OF EXITS:	1	1	YES
FIRE RESISTANCE OF EXTERIOR WALLS:	1 HOUR	1 HOUR	YES
FIRE RESISTANCE RATING OF BUILDING ELEMENTS:	1 HOUR	1 HOUR	YES
PROTECTION OF OPENINGS:	N/A	N/A	YES
NON–SEPERATED OR SEPARATED USES	N/A	N/A	YES
ROOF COVERING MATERIAL:	CLASS B	CLASS B	YES
PLUMBING FIXTURES:	NONE	UNOCCUPIED, NO PLUMBING	YES

PROJECT DESCRIPTION:

THIS PROJECT CONSISTS OF THE FOLLOWING:
INSTALLATION

- ONE (1) PROPOSED HP MICROWAVE ANTENNA
- PROPOSED 25'-5½"x11'-6" SHELTER
- PROPOSED CABLE BRIDGE
- PROPOSED CHAIN-LINK FENCE
- ONE (1) PROPOSED 12' ROLLING GATE
- ONE (1) PROPOSED 99'-0" SELF SUPPORT TOWER
- ONE (1) PROPOSED 5'-0" LIGHTNING ROD

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 NAME:

WY3 QWEST LAKE JC
NEW 99'-0"
SELF-SUPPORT TOWER
(OVERALL HEIGHT: 105'-0" A.G.L.)
RAW LAND COMMUNICATION SITE

PROJECT ADDRESS:

44°34'27.12"N, 110°23'2.29"W
LAKE, WYOMING
TETON COUNTY

SHEET TITLE:

TITLE SHEET

SAVE DATE:

9/23/2016 10:13 AM

SHEET NUMBER:

T1

GENERAL PROJECT NOTES:

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| 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:

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| 1. | <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> |
| 2. | <p>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.</p> |
| 3. | <p>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.</p> |
| 4. | <p>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.</p> |

ANTENNA, MOUNTS & HARDWARE INSTALLATION NOTES:

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| 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). |

INTERIOR SAFETY BOARD SPECIFICATIONS:

CONTRACTOR TO INSTALL A 4'-0"x4'-0"x $\frac{3}{4}$ " PLYWOOD SAFETY BOARD. SAFETY BOARD SHALL BE FASTENED TO INTERIOR WALL OF SHELTER, PAINTED "SAFETY YELLOW", AND CONTAIN THE FOLLOWING ITEMS:
EYE WASH KIT, FIRST AID KIT, SAFETY GLOVES, SAFETY APRON & EAR PROTECTION

STRUCTURAL DESIGN CRITERIA:

ALL LOADS DERIVED FROM REQUIREMENTS OF INTERNATIONAL BUILDING CODE 2012, ASCE 7-10, "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" & ANSI TIA-222-G "STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS".

BUILDING STRUCTURES:

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| 1. | WIND LOADS: IBC 2012 §1609 & ASCE 7-10 §28.2 (SIMPLIFIED METHOD)
$V_{3s} = 90$ MPH
OCCUPANCY CAT. = II; EXPOSURE CAT. = C; IMPORTANCE FACTOR = 1.0 |
| 2. | SEISMIC LOADS: IBC 2012 §1613 & ASCE 7-10 §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:

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| 1. | <p>WIND LOADS: IBC 2012 §1609, ASCE 7-10 §6.5.15 & ANSI TIA-222-G
 V = 90 MPH (3-SEC. GUST)
 V = 40 MPH (¼" RADIAL ICE)
 STRUCTURE CLASS. = II; EXPOSURE CAT. = C; IMPORTANCE FACTOR = 1.0</p> |
| 2. | <p>SEISMIC LOADS*: IBC 2012 §1613, ASCE 7-10 §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))
 $V = \frac{\sum \frac{S_{oz}(W_z)}{R}}$ (EQUIVALENT MODAL ANALYSIS PROCEDURE (METHOD 2))</p> |

STEEL NOTES:

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| 1. | ALL STEEL SHALL BE GALVANIZED PER ASTM A123 & CONFORM TO THE FOLLOWING MINIMUM SPECS.:

HSS SHAPES (TUBE) ASTM A500, GR. B (46 KSI)
HSS SHAPES (ROUND) ASTM A500, GR. B (42 KSI)
W-SHAPES ASTM A992, (50 KSI)
CHANNELS, ANGLES & PLATES ASTM A36 | 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" (± ⅜") OF CONCRETE COVER, U.N.O. |
| 2. | ALL BOLTS SHALL BE GALVANIZED PER ASTM A153 AND CONFORM TO ASTM A325 U.N.O. ALL BOLTED CONNECTIONS SHALL BE EQUIPPED WITH AN APPROVED NUT-LOCKING DEVICE. | 2. | ALL BAR BENDS, HOOKS, SPLICES AND OTHER REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ACI 315. |
| 3. | ALL WELDING WORK SHALL CONFORM TO THE AWS D1.1 STRUCTURAL WELDING CODE. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS ONLY. WELDING ELECTRODES SHALL BE E70XX. | 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. | ALL DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO AISC SPECS AND CODES, LATEST EDITION. | 4. | AT ALL CORNERS AND WALL INTERSECTIONS, PROVIDE BENT HORIZONTAL BARS TO MATCH THE HORIZONTAL REINFORCING STEEL. |
| 5. | AT HIS OWN DISCRETION, THE CONTRACTOR MAY SUBMIT DETAILED, ENGINEERED, COORDINATED AND CHECKED SHOP DRAWINGS FOR ALL STRUCTURAL STEEL TO THE ENGINEER OF RECORD TO REVIEW FOR COMPLIANCE WITH DESIGN INTENT PRIOR TO THE START OF FABRICATION AND/OR ERECTION. TOWERCOM IS ABSOLVED OF ALL LIABILITY ASSOCIATED WITH THE MISINTERPRETATION OF THE CONSTRUCTION DOCUMENTS IF CONTRACTOR CHOOSES NOT TO SUBMIT SHOP DRAWINGS. | 5. | PROVIDE VERTICAL DOWELS IN FOOTINGS AND AT CONSTRUCTION JOINTS TO MATCH VERTICAL REINFORCING BAR SIZE AND SPACING. |
| 6. | TORCH-CUTTING OF ANY KIND SHALL NOT BE PERMITTED. | 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. | ALL BOLTS SHALL BE TIGHTENED TO AISC SNUG TIGHT REQUIREMENTS. THE SNUG TIGHT CONDITION IS DEFINED AS THE TIGHTNESS THAT EXISTS WHEN ALL PLIES IN A JOINT ARE IN FIRM CONTACT. THIS MAY BE ATTAINED BY A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF A MAN USING AN ORDINARY SPUD WRENCH. | 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. |

FOUNDATION NOTES:

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| 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). |

CONCRETE NOTES:

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| | <p>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:</p> <ul style="list-style-type: none"> 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 1½". 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: ± ¼" VERTICAL, ± 1" HORIZONTAL. |
| 3. | CHAMFER ALL EXPOSED CORNERS AND FILLET ENTRANT ANGLES ¾" U.N.O. |
| 4. | <p>CONCRETE FINISHING:</p> <ul style="list-style-type: none"> 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 INT). 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:

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| 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" ($\pm \frac{3}{8}$ ") 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. |


DESIGNED FOR:

verizonwireless

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HELENA, MONTANA 59601

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REV	DESCRIPTION	DATE	BY	CHK
A	PRELIMINARY — NOT FOR CONSTRUCTION	09/13/16	RT	—



**TowerCom
TECHNOLOGIES**

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

DESIGNED BY:

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NAME:

WY3 QWEST LAKE JC
NEW 99'-0"
SELF-SUPPORT TOWER
(OVERALL HEIGHT: 105'-0" A.G.L.)
RAW LAND COMMUNICATION SITE

PROJECT ADDRESS:

44°34'27.12"N, 110°23'2.29"W
LAKE, WYOMING
TETON COUNTY

SHEET TITLE:

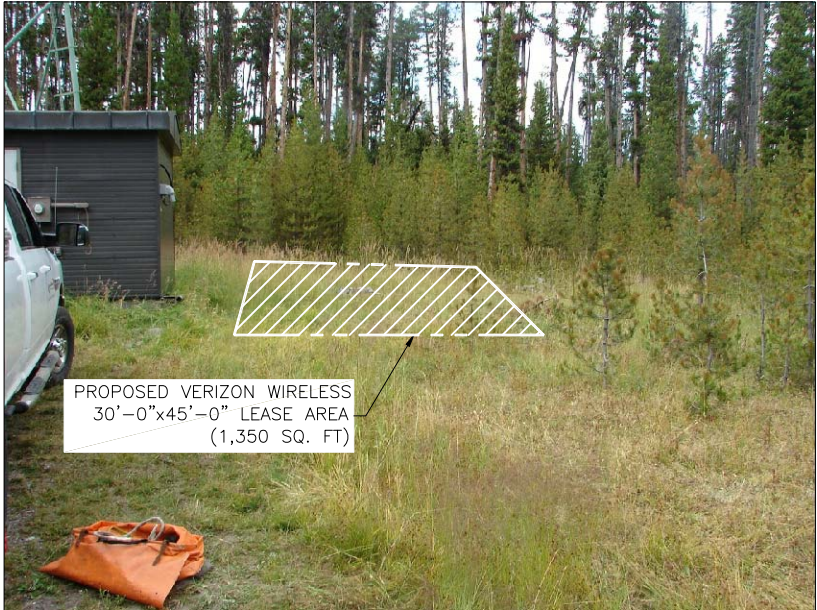
SPECIFICATION SHEET

SAVE DATE:

9/23/2016 10:13 AM

SHEET NUMBER:

SP 1



VIEW OF PROPOSED LEASE AREA

LEGEND OF SYMBOLS:

- REFERENCE LETTER OR NUMBER

SECTION OR DETAIL

SCALE:

SHEET WHERE DRAWN

SHEET WHERE TAKEN

SECTION LETTER

SHEET WHERE DRAWN

SHEET WHERE TAKEN

DETAIL NUMBER

SHEET WHERE DRAWN

SHEET WHERE TAKEN
- ⌀ CENTERLINE

d PENNY
- EQUIPMENT OR FIXTURE NUMBER

KEYED NOTE

T.C. 1631.33
F.L. 1631.00 SPOT ELEVATION

TOP OF WALL
1639.00 CONTROL OR DATUM POINT

----- PROPERTY LINE

-1631- EXISTING CONTOUR

-1631- PROPOSED CONTOUR

⌀ ROUND/DIAMETER


~ APPROXIMATELY

DESIGNED FOR:

verizonwireless

2730 BOZEMAN AVE.
HELENA, MONTANA 59601

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				DATE		BY		CHK					
				09/13/16		RT		—					

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NAME:
WY3 QWEST LAKE JC
NEW 99'-0"
SELF-SUPPORT TOWER
(OVERALL HEIGHT: 105'-0" A.G.L.)
RAW LAND COMMUNICATION SITE

PROJECT ADDRESS:
44°34'27.12"N, 110°23'2.29"W
LAKE, WYOMING
TETON COUNTY

SHEET TITLE:
PHOTO SHEET

SAVE DATE:
9/23/2016 10:13 AM

SHEET NUMBER:
PS1

GENERAL SITE PLAN NOTES:

1. INFORMATION SHOWN BELOW FOR DEPICTION PURPOSES ONLY. ALL DATA GATHERED FROM PUBLIC RECORDS AND GENERATED FROM AERIAL IMAGES AND SITE VISITS. INFORMATION DOES NOT CONSTITUTE A LEGAL BOUNDARY SURVEY AND SHOULD NOT BE USED FOR SURVEYING OR OTHER RELATED PURPOSES.
2. SITE PLAN DATA AS SHOWN IS BASED UPON A LIMITED SITE MAPPING OF THE SURROUNDING AREA AND ARCHIVED SURVEY DOCUMENTS. DATA AS SHOWN IS FOR REFERENCE ONLY. CONFIRMATION AND PROOF OF LEASE AREA AND/OR EASEMENTS IS BEYOND THE SCOPE OF THIS PROJECT.

PROPOSED VERIZON WIRELESS 7' CHAIN-LINK FENCE, SEE DETAIL 4 C1C5

(1) PROPOSED VERIZON WIRELESS 6'Ø HP MICROWAVE ANTENNA

PROPOSED VERIZON WIRELESS 30'-0"x45'-0" LEASE AREA (1,350 SQ. FT)

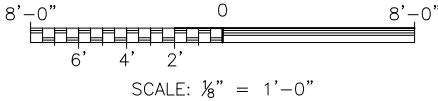
PROPOSED VERIZON WIRELESS 99'-0" SELF-SUPPORT TOWER (105'-0" A.G.L.) (DESIGNED BY OTHERS) (TO BE PAINTED TO MATCH EXISTING TOWER)

EXISTING TOWER FOUNDATION TYP.

EXISTING 100'-5" SELF-SUPPORT TOWER (104'-3" A.G.L.)

EXISTING EXHAUST VENTS
EXISTING EQUIPMENT SHELTER
EXISTING ALARM BOXES

SITE PLAN



EXISTING TELCO BOX

EXISTING TRANSFORMER

PROPOSED VERIZON WIRELESS BACK-UP DIESEL GENERATOR WITH BELLY-MOUNT DIESEL FUEL TANK, SEE DETAIL 5 C1C5

EXISTING POWER PLUG

EXISTING METER

PROPOSED VERIZON WIRELESS CHAIN LINK GATE

PROPOSED VERIZON WIRELESS CABLE BRIDE, SEE DETAIL 3 C1C4

PROPOSED VERIZON WIRELESS 25'-5½"x11'-6" SHELTER WITH ON-BOARD DIESEL GENERATOR WITH BELLY-MOUNTED FUEL TANK AND CONCRETE FOUNDATION

PROPOSED SHELTER CONCRETE FOUNDATION, SEE DETAIL 1 C1C4

PROPOSED CONCRETE STOOP, SEE DETAIL 2 C1C4

PROPOSED VERIZON WIRELESS METER AND DISCONNECT

PROPOSED VERIZON WIRELESS 20'-0" ACCESS/UTILITY EASEMENT

DIRT ACCESS ROAD

ANTICIPATED POWER ROUTING

PRELIMINARY
NOT FOR CONSTRUCTION

DESIGNED FOR:

verizonwireless

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HELENA, MONTANA 59601

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DESIGNED BY:

REV	DESCRIPTION	DATE	BY	CHK
A	PRELIMINARY - NOT FOR CONSTRUCTION	09/13/16	RT	I

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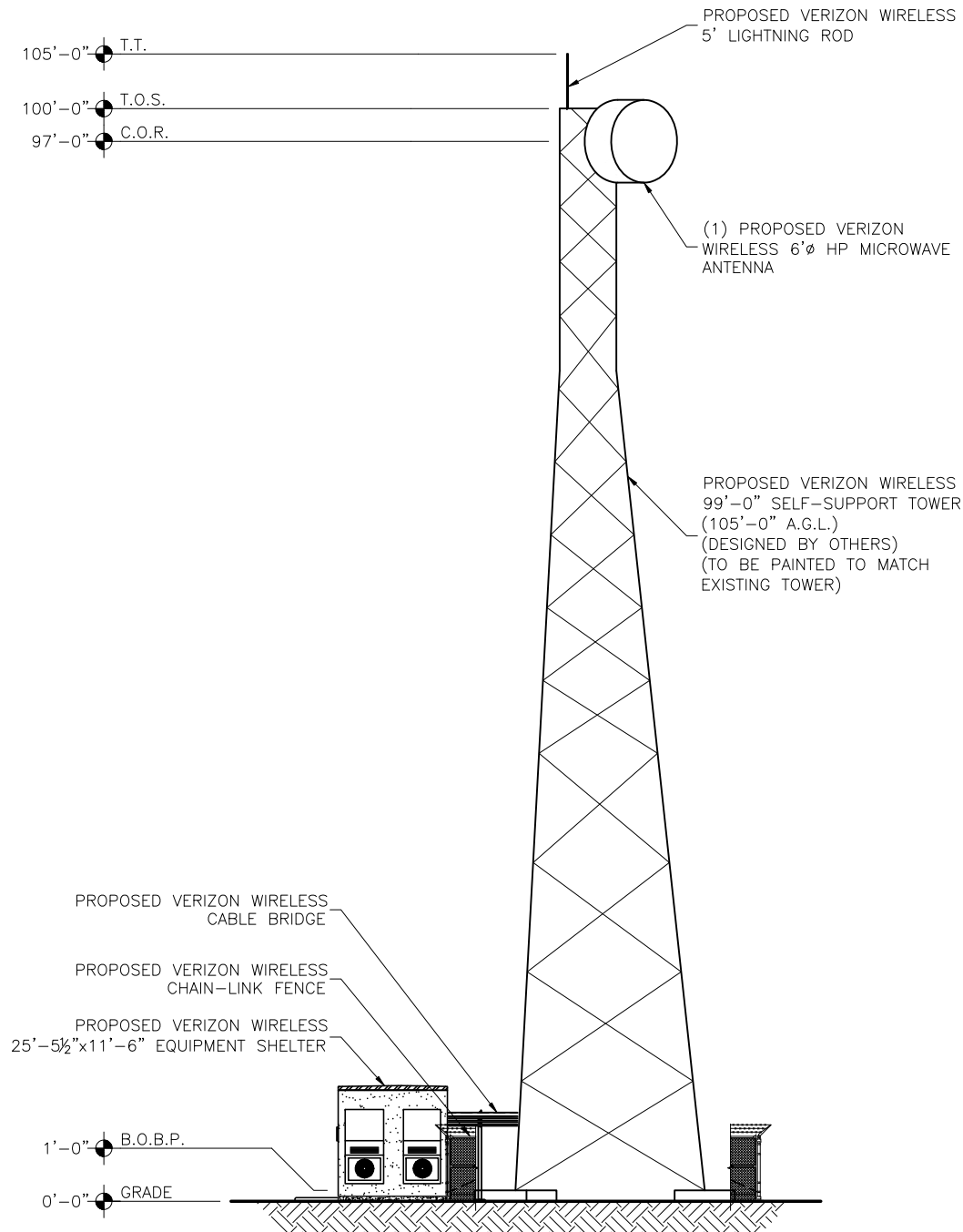
SITE PLAN

SAVE DATE:

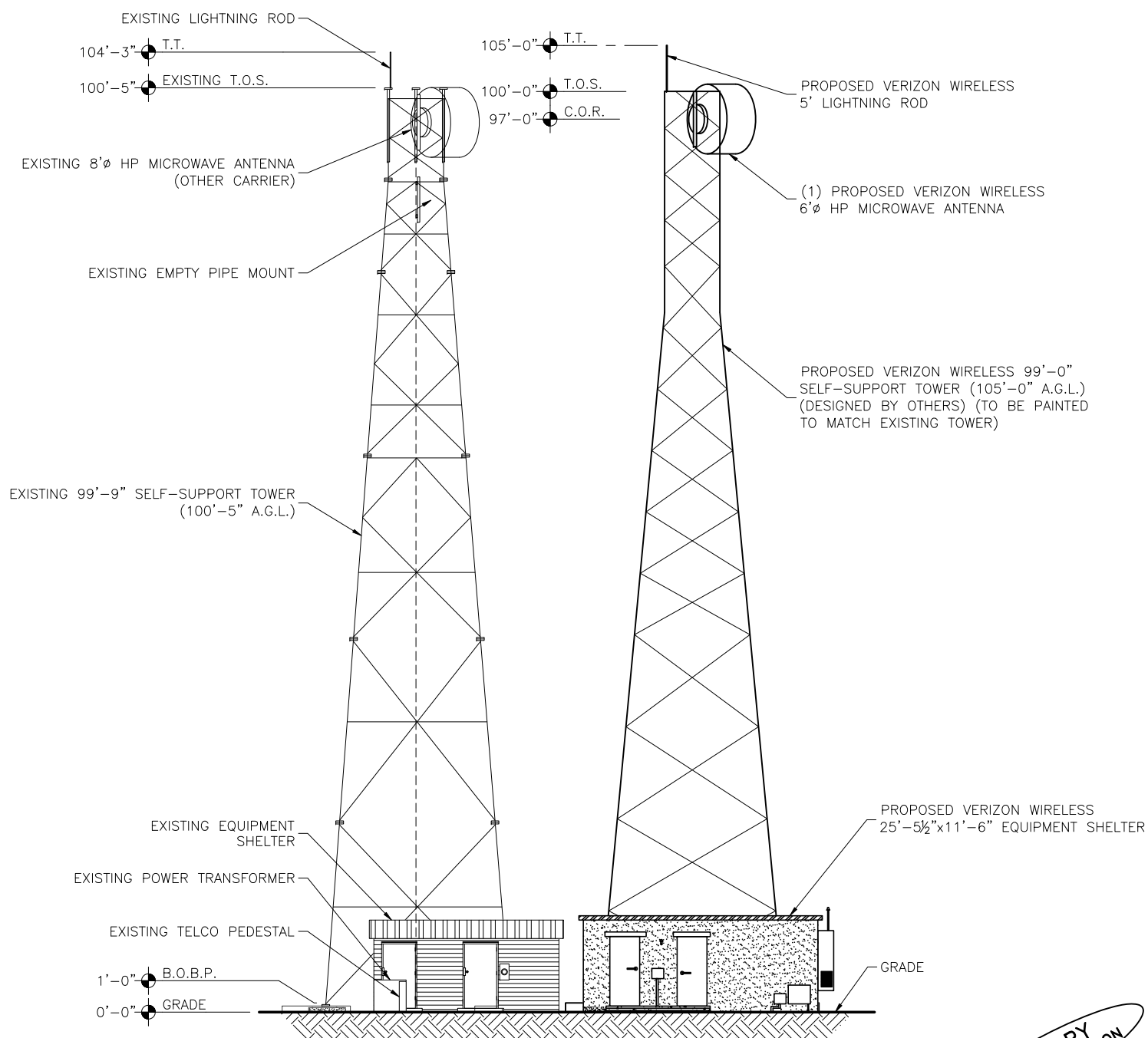
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SHEET NUMBER:

C1



PROPOSED NORTHEAST ELEVATION
SCALE: 1/16" = 1'-0"



PROPOSED SOUTHEAST ELEVATION
SCALE: 1/16" = 1'-0"

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

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**TowerCom**
TECHNOLOGIES

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SHEET TITLE:

ELEVATIONS

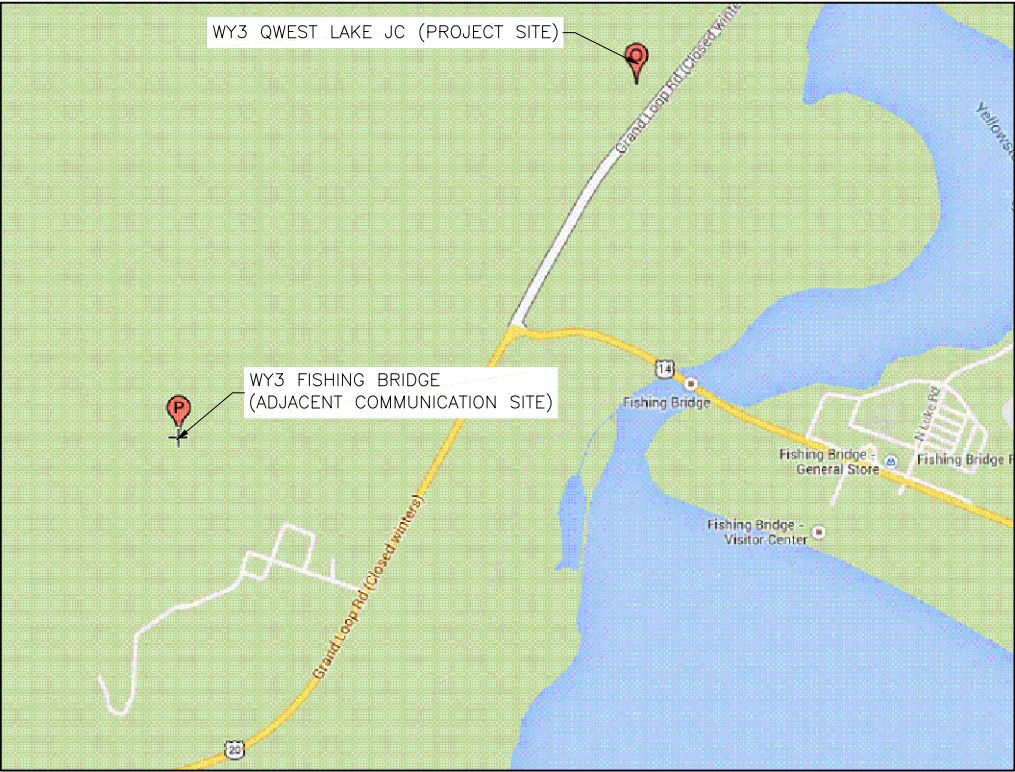
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C2

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FIBER CONDUIT MAP




FIBER CONDUIT AERIAL MAP



FIBER CONDUIT CONTOUR MAP

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TETON COUNTY

SHEET TITLE:
FIBER CONDUIT MAPS

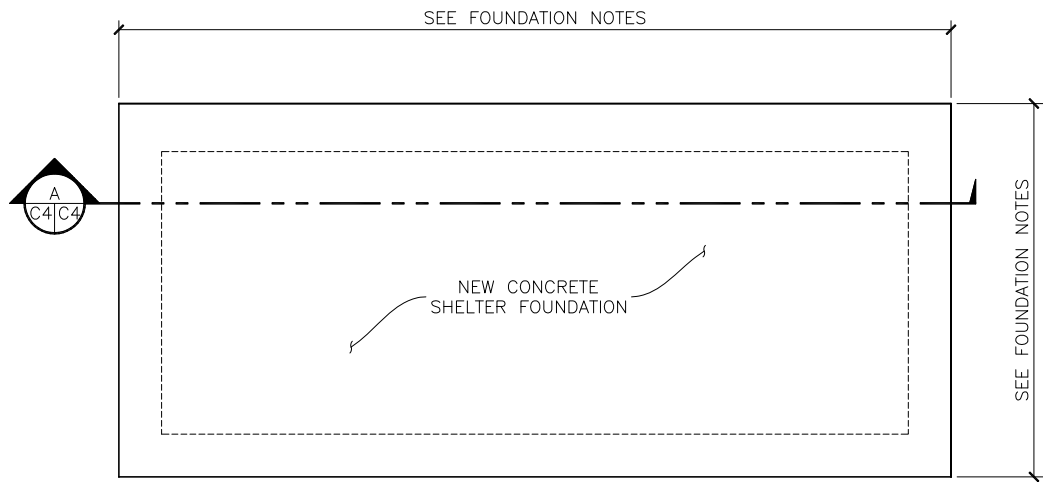
SAVE DATE:
9/23/2016 10:13 AM

SHEET NUMBER:
C3

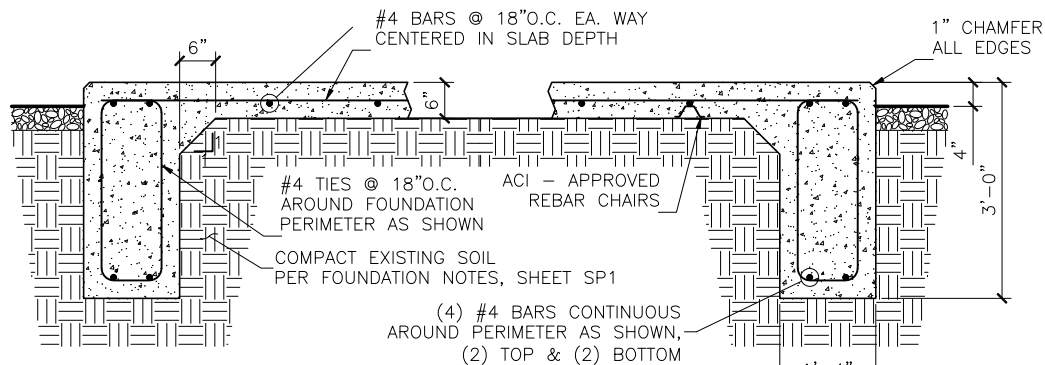
PRELIMINARY
NOT FOR CONSTRUCTION

SHELTER FOUNDATION NOTES:

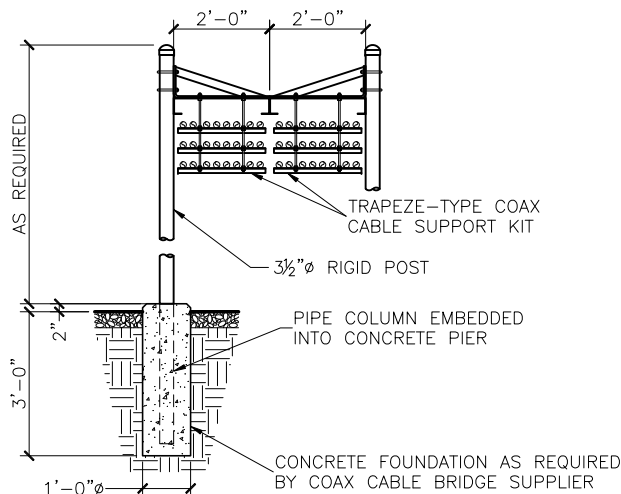
- 1 CONTRACTOR SHALL VERIFY EXTENTS OF FOUNDATION AND COORDINATE WITH EQUIPMENT SHELTER DRAWINGS. (BY OTHERS)
- 2 FASTEN EQUIPMENT SHELTER TO FOUNDATION ACCORDING TO EQUIPMENT SHELTER DRAWINGS (BY OTHERS)
- 3 COORDINATE CONSTRUCTION OF SHELTER FOOTING WITH ADJACENT CMU WALL FOOTING. (IF APPLICABLE)



1 SHELTER FOUNDATION PLAN
SCALE: N.T.S.



A SHELTER FOUNDATION SECTION
SCALE: N.T.S.

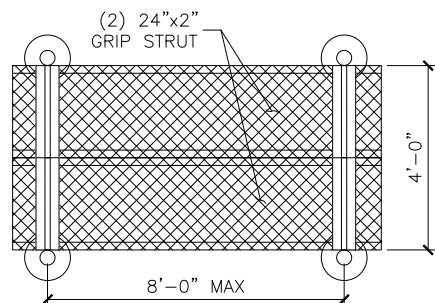


ELEVATION

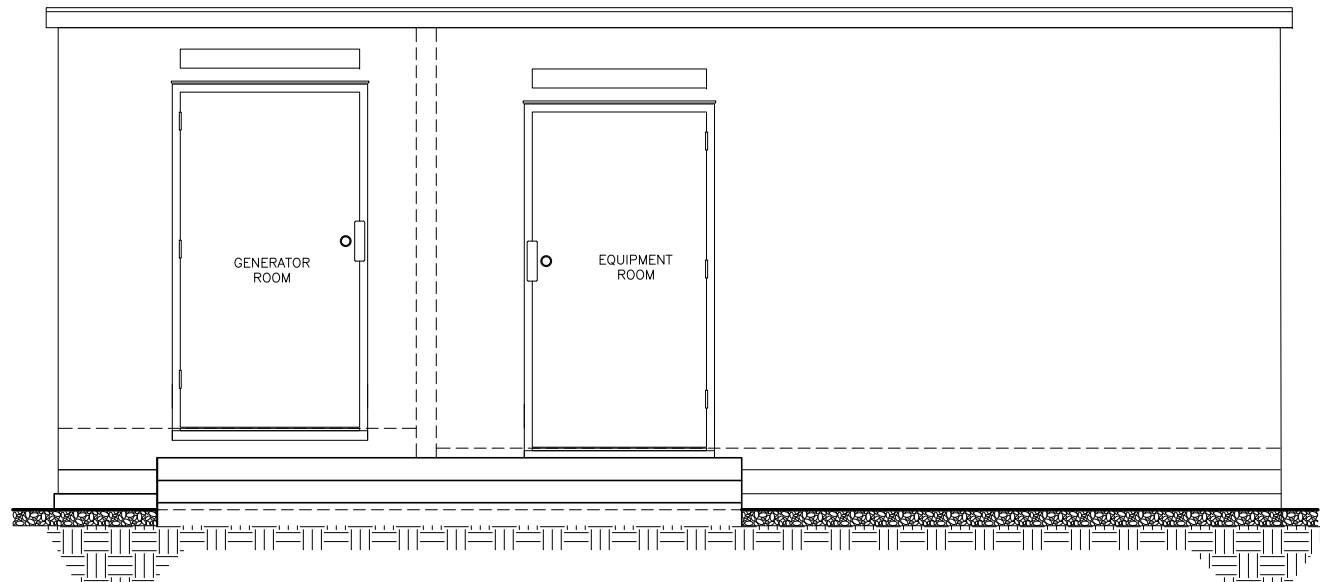
3 CABLE BRIDGE DETAIL
SCALE: N.T.S.

CABLE BRIDGE NOTE:

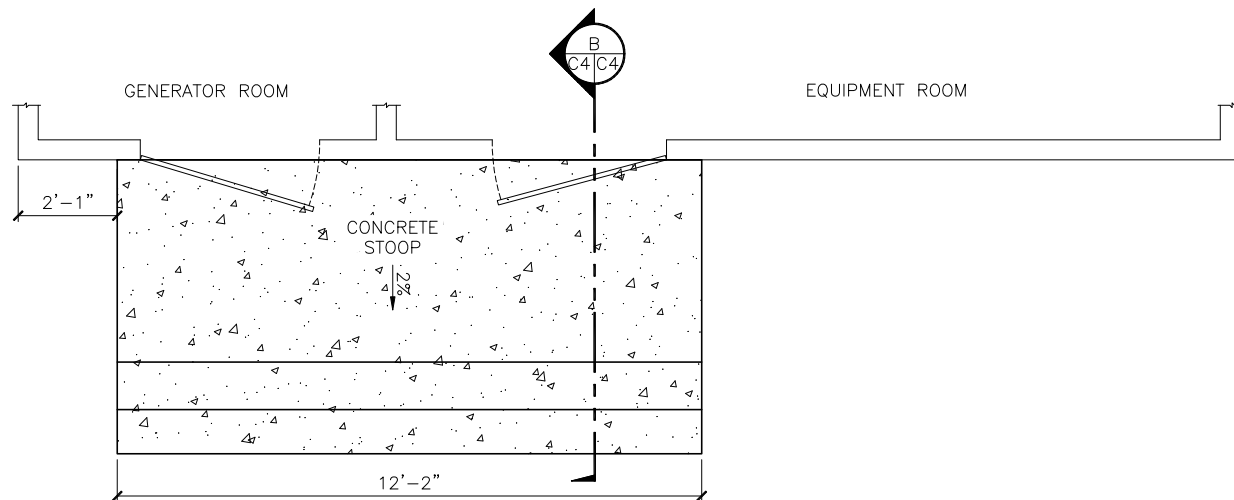
- 1 SEPARATION BETWEEN THE TOWER AND THE CABLE BRIDGE SHALL NOT EXCEED 4".
- 2 CABLE BRIDGE IS TO BE SELF SUPPORTING AND SHALL NOT TO BE CONNECTED TO THE SHELTER OR THE TOWER.



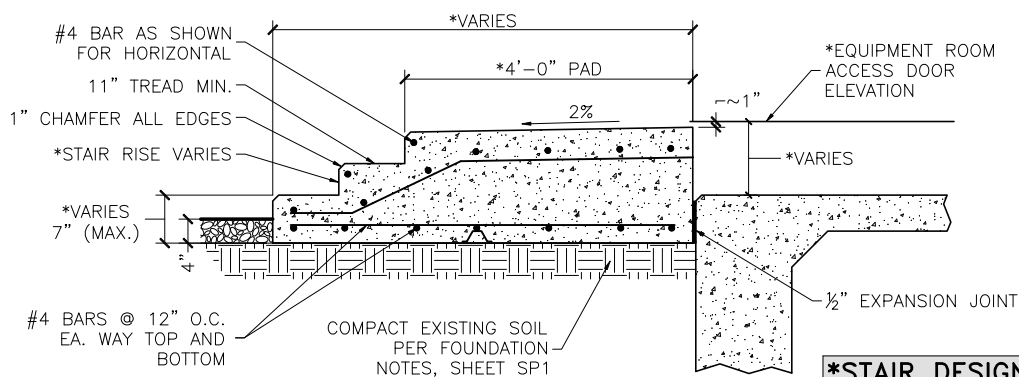
PLAN VIEW



CONCRETE STOOP ELEVATION
SCALE: N.T.S.



2 CONCRETE STOOP PLAN
SCALE: N.T.S.



B *EQUIPMENT ROOM STOOP (ALT 2)
SCALE: 3/8" = 1'-0"

***STAIR DESIGN CRITERIA:**

STAIR RISE	STAIR TREAD	PAD LENGTH
7" (MAX.) 4" (MIN.)	11" (MIN.)	48" (TYP.) SEE SITE PLAN FOR EXCEPTIONS

*CONTRACTOR TO FIELD DESIGN THE NUMBER & HEIGHT OF STAIRS DEPENDING ON THE HEIGHT OF THE EQUIPMENT ROOM AND GENERATOR ROOM ACCESS DOORS. CONTRACTOR TO MAINTAIN A 1" CLEAR BELOW ACCESS DOORS.

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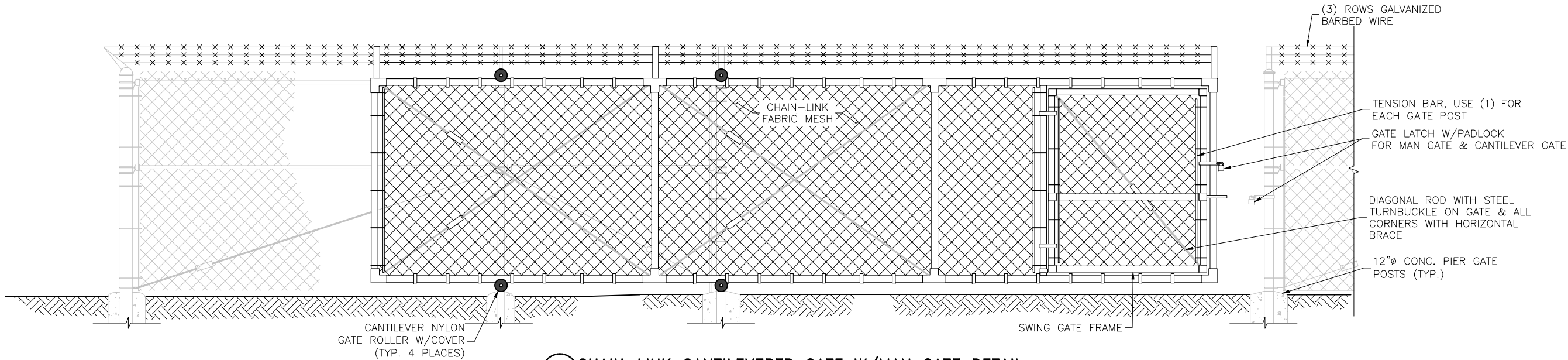
SECTIONS & DETAILS

SAVE DATE:

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SHEET NUMBER:

C4



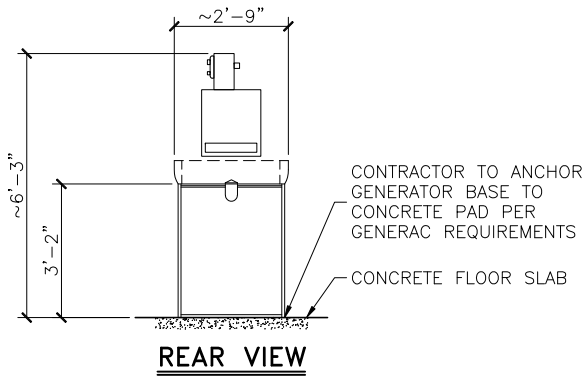
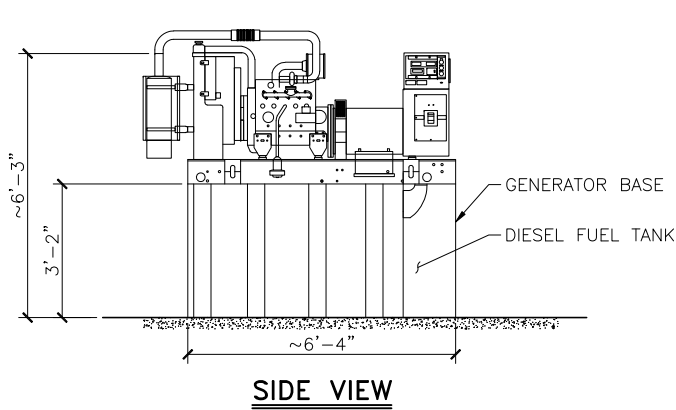
4
C1/C5 **CHAIN-LINK CANTILEVERED GATE W/MAN GATE DETAIL**
SCALE: N.T.S.

INDOOR GENERATOR INFORMATION:

1. 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.
2. THIS GENERATOR OPERATES AT AN AVERAGE SOUND LEVEL OF 67 DECIBELS WHICH IS COMPARABLE TO THE SOUND LEVEL OF A NORMAL CONVERSATION BETWEEN TWO PEOPLE (70 DECIBELS).
3. THE DIESEL TANK FOR THE GENERATOR SHALL BE AST-TYPE WITH SECONDARY CONTAINMENT. 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.
4. ANY AND ALL DIESEL FUEL SPILLS, NO MATTER THE SIZE, MUST BE REPORTED.
5. DIESEL TANK MUST BE SUPPLIED WITH A FLOOR-LEVEL LEAK DETECTION ALARM.
6. IN ADDITION TO THE SECONDARY CONTAINMENT PROVIDED BY THE DIESEL TANK, A THIRD EMERGENCY BACK-UP CONTAINMENT IS PROVIDED BY THE ENTIRE GENERATOR ROOM FLOOR. THE FLOOR STORAGE VOLUME IS LARGE ENOUGH TO CONTAIN ALL TANK FUEL IN ADDITION TO ENGINE OIL AND ANTIFREEZE.
7. PROPOSED DIESEL GENERATOR W/ BELLY MOUNTED 210 GALLON DIESEL FUEL TANK.
8. REFERENCE SHEETS M1-M3 FOR PROPOSED DIESEL FUEL TANK SPECIFICATIONS.

CHAIN-LINK GATE/FENCE SPECIFICATIONS:

(INSTALL FENCING PER ASTM F567 / SWING GATES PER ASTM F900)			NOTES:
GATE POST	4.500" O.D. SCHEDULE 40 PIPE FOR GATE WIDTHS UP TO 6 FEET, PER ASTM F1083.		POST & FENCE PIPE SIZES ARE FENCE INDUSTRY STANDARD. ALL PIPE TO BE GALV. (HOT-DIP, ASTM A120 GRADE "A" STEEL). CROSS BRACE ALL POSTS EXCEPT INTERMEDIATES.
LINE POST	2.375" O.D. SCHEDULE 40 PIPE PER ASTM F1083. 10'-0" MAX. SPACING BETWEEN POSTS.		
CORNER POST	3.500" O.D. SCHEDULE 40 PIPE PER ASTM F1083.		
TOP RAIL/BRACE RAIL	1.875" O.D. SCHEDULE 40 PIPE, PER ASTM F1083.		
GATE FRAME	1.875" O.D. SCHEDULED 40 PIPE, PER ASTM F1083.		CONTRACTOR TO INSTALL (2) GATE HOLDBACKS TO HOLD GATE OPEN DURING USE.
GATE LATCH	1.375" O.D. PLUNGER ROD W/ MUSHROOM TYPE CATCH AND LOCK.		-
FABRIC	9 GA. CORE WIRE SIZE 2" MESH, CONFORMING TO ASTM A392.		-
TIE WIRE	MINIMUM 11 GA. GALVANIZED STEEL AT POSTS AND RAILS A SINGLE WRAP OF FABRIC TIE AND AT TENSION WIRE BY HOG RINGS SPACED MAX. 24" INTERVALS.		-
TENSION WIRE	7 GA. GALVANIZED STEEL.		-
BARBED WIRE	DOUBLE STRAND 12-1/2" O.D. TWISTED WIRE TO MATCH WITH FABRIC 14 GA. 4 PT. BARBS SPACED ON APPROXIMATELY 5" CENTERS.		LOCAL ORDINANCE OF BARBED WIRE PERMIT REQUIREMENTS SHALL BE COMPLIED WITH IF REQUIRED.



5
C1/C5 **GENERATOR DETAIL**
SCALE: N.T.S.

DESIGNED FOR:

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PRELIMINARY
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**WY3 QWEST LAKE JC
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TETON COUNTY**

SHEET TITLE:

SECTIONS & DETAILS

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9/23/2016 10:13 AM

SHEET NUMBER:

C5

GENERAL ANTENNA NOTES:

- | | |
|----|---|
| 1. | CONTRACTOR TO VERIFY MECHANICAL DOWNTILT WITH FINAL SMR/RF ENGINEER. |
| 2. | DUAL POLAR ANTENNAS REQUIRE TWO RUNS OF COAX PER ANTENNA. |
| 3. | CONTRACTOR TO VERIFY ALL ACTUAL LENGTHS IN FIELD PRIOR TO INSTALLATION AND NOTIFY THE FIELD ENGINEER FOR VERIFICATION OF SIZES OF CABLES. |
| 4. | CONTRACTOR TO PROVIDE AS BUILT FOR THE LENGTH OF CABLES UPON COMPLETION OF INSTALLATION. |
| 5. | CONTRACTOR TO PROVIDE FINAL CABLE LENGTHS AND RETURN LOSSES FOR ALL CABLES. |
| 6. | ALL AZIMUTHS REFERENCE TRUE NORTH. CONSULT REQUIRED QUADRANGLE MAP FOR NECESSARY MECHANICAL DECLINATION. |

PROPOSED VERIZON WIRELESS MICROWAVE SCHEDULE:

ATTACH LEVEL (COR)	AZIMUTHS (DEG., TN)	ANTENNA TYPE	ANTENNA QUANTITY	MOUNT TYPE	COAX (QUANTITY) SIZE (NOMINAL)	ESTIMATED COAX CABLE LENGTH	FACING
97'-0"	350°	RFS UXA6-59 6' HP MICROWAVE ANTENNA	1	SEE ANTENNA MOUNT SCHEDULE	(1) EW52	~120'	WY1 MT WASHBURN

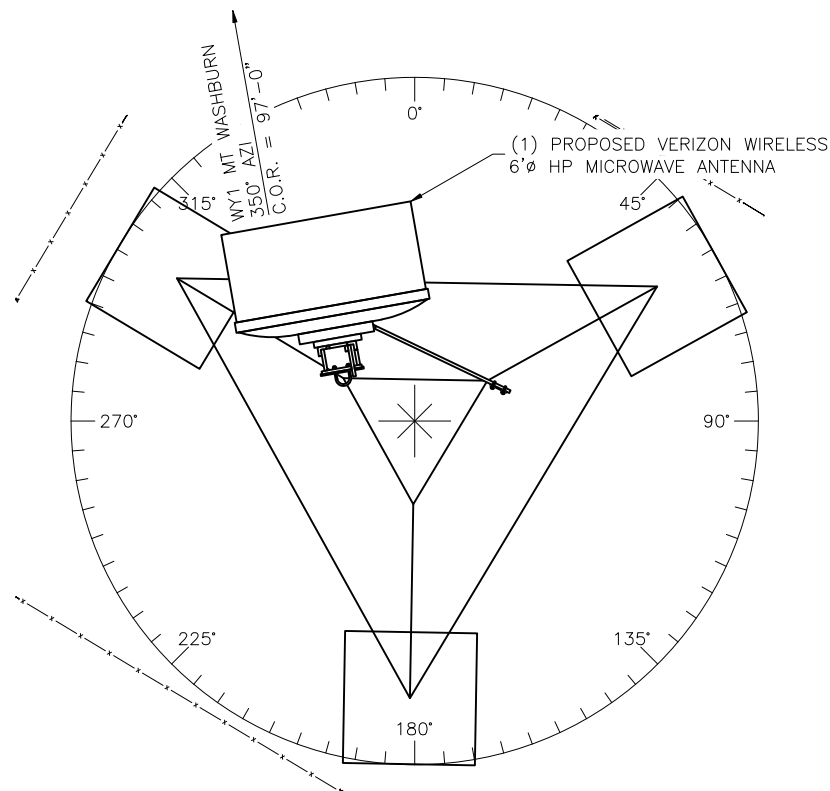
NOTES:

1. FOR EXACT MICROWAVE INFORMATION REFER TO THE MICROWAVE DESIGN.

ANTENNA MOUNT SCHEDULE:

QUANTITY	DESCRIPTION	PART NUMBER(S)
1	UNIVERSAL MICROWAVE MOUNTING KIT	C10-153 OR C10-172

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



MICROWAVE SECTION @ 97'-0"

SCALE: N.T.S.



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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MICROWAVE ANTENNA INFORMATION

SAVE DATE:

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RF 1

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All information contained in the present datasheet is subject to confirmation at time of ordering

Technical Data Sheet UXA6-59CC

PrimeLine Antenna, Ultra High Performance, High Cross Polar Discrimination, Dual Polarized, 6 ft



Product Description
(Only available in North and Central America)

RFS PrimeLine Antennas are designed for all microwave applications that require best RF performance, especially where interference could be an issue.
A choice between tested and validated ultra-high (ETSI EN 302 217 Class 3 and FCC Class A) electrical performance.
Sizes ranging from 0.6 m (2 ft) to 4.6 m (15 ft)
Dual-polarized models with the ability to change frequencies in the field in most cases



Features/Benefits

- Extremely high XPD performance for complete isolation between the radions in each polarization
- Excellent radiation patern envelope (RPE), particularly in cross-polar area
- Support for winds up to 200 km/h (125 mph) with high-wind versions that support winds up to 252 km/h (155 mph) and an optional sway bar for added assurance in case mistakes are made during installation
- A single-piece configuration and compact packaging to reduce transportation costs
- Frequencies ranging from 4 GHz to 23 GHz with support for one ultra wideband frequency range (5.725-7.125 GHz) to reduce antenna requirements and simplify logistics

Technical Features

Product Type	Point to point antennas
Frequency, GHz	5.925 - 6.425
Diameter, ft (m)	6 (1.8)
Profile	PrimeLine
Reflector	1-part
Swaybar	1: (2.0 m x Ø60 mm)
optional Swaybar	1: SMA-SK-60-2000A (2.0 m x Ø60mm)
Performance	Ultra High, High Cross Polar Discrimination
Polarization	Dual
Regulatory Compliance	ETSI EN 302217 Range 1, class 3 , FCC Category A
3dB beamwidth, (degrees)	1.9
Antenna Input	CPR137G
Low Band Gain, dBi	38.4
Mid Band Gain, dBi	38.7
High Band Gain, dBi	39
F/B Ratio, dB	69
XPD, dB	40
IPL, dB	45
Max VSWR / R L, dB	1.06 (30.7)
Elevation Adjustment, degrees	± 5
Azimuth Adjustment, degrees	± 5
Polarization Adjustment, degrees	± 5
Radome	flexible
Antenna color	White RAL 9010
Mounting Pipe Diameter minimum, mm (in)	114 (4.5)
Mounting Pipe Diameter maximum, mm (in)	114 (4.5)
Approximate Weight, kg (lb)	95 (209)
Survival Windspeed, km/h (mph)	200 (125)
Operational Windspeed, km/h (mph)	190 (118)
Further Accessories	SMA-WK-6A : Wind Kit SMA-SKQ-UNIVERSAL-L : Universal sway bar fixation kit

RFS The Clear Choice ®

UXA6-59CC

Rev: A / 05. Apr 12

Print Date: 23.10.2014

Please visit us on the internet at <http://www.rfsworld.com/>

Radio Frequency Systems

DESIGNED FOR:

verizonwireless

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SELF-SUPPORT TOWER
(OVERALL HEIGHT: 105'-0" A.G.L.)
RAW LAND COMMUNICATION SITE

PROJECT ADDRESS:

44°34'27.12"N, 110°23'2.29"W
LAKE, WYOMING
TETON COUNTY

SHEET TITLE:

MICROWAVE ANTENNA CUT SHEET

SAVE DATE:

9/23/2016 10:13 AM

SHEET NUMBER:

RF2