



SITE NAME: NIX WAY
5G LSUB6 - CARRIER ADD

1863 THOMAS JEFFERSON PARKWAY
CHARLOTTESVILLE, VA 22902
ALBEMARLE COUNTY

SITE INFORMATION

PROJECT DESCRIPTION:	PROJECT CONSISTS OF REMOVING (6) ANTENNAS, (3) RRUS, (6) DIPLEXERS & (6) COAX CABLES FOLLOWED BY INSTALLING MOUNT MODS, (3) RRUDSM DUAL RADIO MOUNTS (3) ANTENNAS, (3) INTEGRATED ANTENNA/RRUS, (2) OVPS, (6) RRUS, & (2) HYBRID CABLES ON THE TOWER, AND INSTALLING (2) OPVS, UPCONVERTERS, WITH CORRESPONDING EQUIPMENT AND KITS AS LISTED IN RFDS AT GROUND LEVEL. THE FINAL TOWER CONFIGURATION WILL BE (3) ANTENNAS, (3) INTEGRATED ANTENNA/RRUS, (6) RRUS, (2) HYBRID CABLES, & (2) OVPS.
SITE ADDRESS:	1863 THOMAS JEFFERSON PARKWAY CHARLOTTESVILLE, VA 22902
LATITUDE (NAD 83):	37° 58' 44.6016" (37.979056)
LONGITUDE (NAD 83):	-78° 25' 20.1" (-78.42225)
GROUND ELEVATION:	444.4' ± (AMSL)
JURISDICTION:	ALBEMARLE COUNTY
ZONING:	RA
PARCEL ID #:	09200-00-00-056B3
PARCEL AREA:	8.98 ACRES
PARCEL OWNER:	LEROY AND HELEN MOYER 1863 THOMAS JEFFERSON PARKWAY CHARLOTTESVILLE, VA 22902
TOWER OWNER:	VERIZON WIRELESS 1831 RADY CT RICHMOND, VA 23222
STRUCTURE TYPE:	MONOPOLE
STRUCTURE HEIGHT:	80'±AGL
RAD CENTERS:	77' (AGL) & 85.5' (AGL)
TOTAL LEASE AREA:	588 SQ FT
POWER PROVIDER:	DOMINION VA POWER (866) 366-4357
TELCO PROVIDER:	CENTURY LINK (866) 768-1847

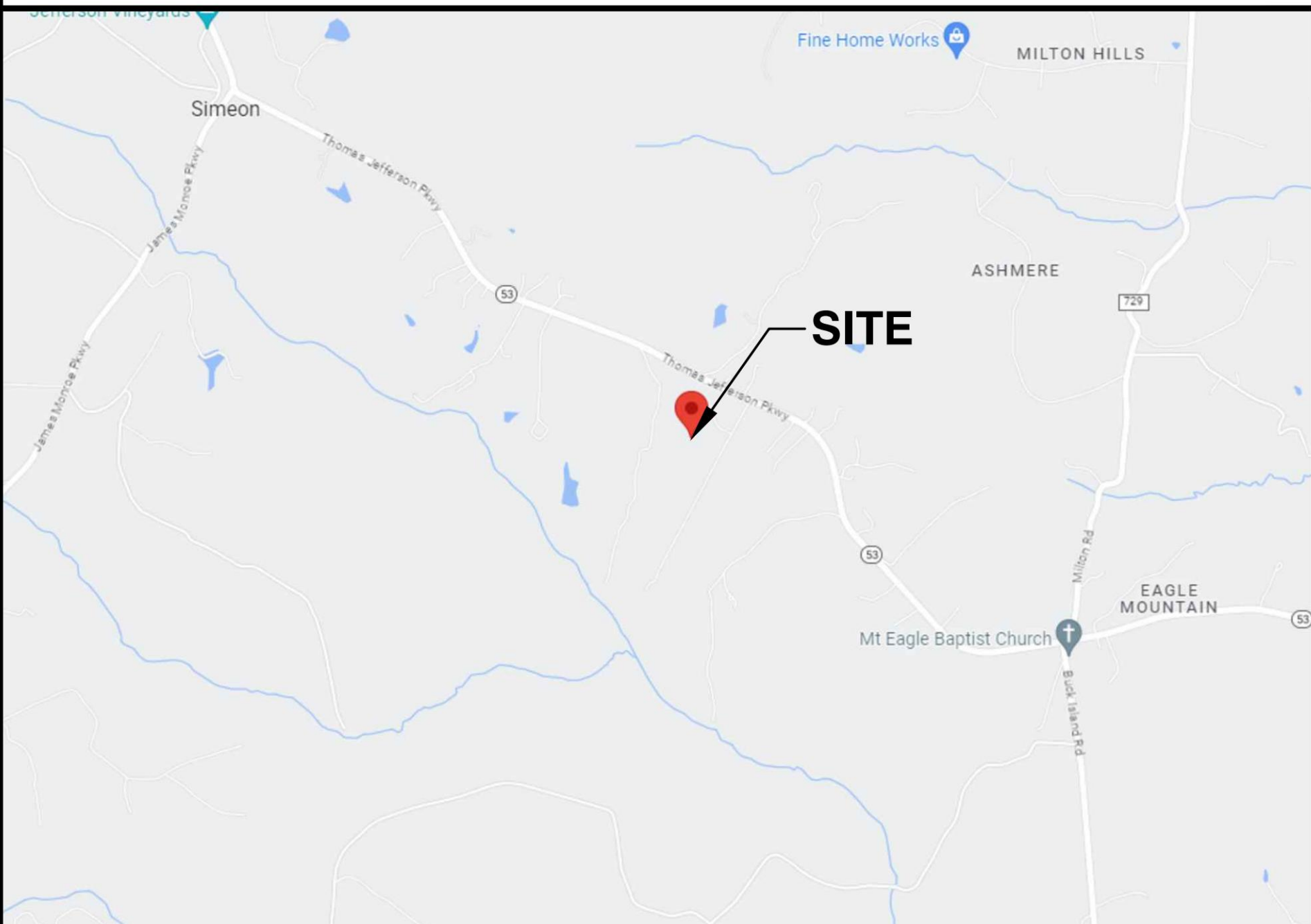
EMERGENCY INFORMATION:

FIRE & RESCUE DEPARTMENT:	(434) 296-5833
POLICE DEPARTMENT:	(434) 997-9041

PROJECT TEAM

APPLICANT:	VERIZON WIRELESS 1831 RADY COURT RICHMOND, VA 23222
CONSTRUCTION MANAGEMENT FIRM:	NETWORK BUILDING + CONSULTING, LLC. 120 EASTSHORE DRIVE, SUITE 300 GLEN ALLEN, VA 23059 (804) 548-4079
ENGINEERING FIRM:	NB+C ENGINEERING SERVICES, LLC. 120 EASTSHORE DRIVE, SUITE 300 GLEN ALLEN, VA 23059 (804) 548-4079 tsnarr@nbccllc.com

VICINITY MAP



DIRECTIONS

FROM 2501 GOODES BRIDGE RD:
DEPART GOODES BRIDGE RD TOWARD ELK RD. TURN RIGHT ONTO US-360 E / HULL ST RD. TAKE RAMP RIGHT FOR VA-150 NORTH TOWARD POWHITE PKWY. TAKE RAMP RIGHT AND FOLLOW SIGNS FOR VA-76-TOLL NORTH. KEEP LEFT TO STAY ON VA-76 N / BELTLINE EXPY. KEEP STRAIGHT ONTO I-195 N. TAKE RAMP FOR I-64 W. AT EXIT 121, TAKE RAMP RIGHT FOR VA-20 TOWARD CHARLOTTESVILLE / SCOTTSVILLE. TURN LEFT ONTO VA-20 S. TURN LEFT ONTO VA-53 / THOMAS JEFFERSON PKWY. KEEP RIGHT TO STAY ON VA-53 / THOMAS JEFFERSON PKWY. THE SITE WILL BE ON THE RIGHT.

CODE COMPLIANCE

- ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING CODES.
- 2021 VIRGINIA CONSTRUCTION CODE
 - 2020 NATIONAL ELECTRICAL CODE
 - 2021 NFPA 101, LIFE SAFETY CODE
 - 2021 VIRGINIA STATEWIDE FIRE PREVENTION CODE
 - AMERICAN CONCRETE INSTITUTE
 - AISC MANUAL OF STEEL CONSTRUCTION 15TH EDITION
 - ANSI/TIA-222-H
 - TIA 607
 - INSTITUTE FOR ELECTRICAL & ELECTRONICS ENGINEER 81
 - IEEE C2 NATIONAL ELECTRIC SAFETY CODE LATEST EDITION
 - TELCORDIA GR-1275
 - ANSI/T 311

CONTRACTOR PMI REQUIREMENTS

PMI ACCESSED AT:	HTTPS://PMI.VZWSMART.COM
SMART TOOL VENDOR PROJECT NUMBER:	10204529
VERIZON LOCATION CODE (PSLC):	237747
*** PMI AND REQUIREMENTS ALSO EMBEDDED IN MOUNT ANALYSIS REPORT	

MOUNT MODIFICATION REQUIRED

YES

VERIZON APPROVED VENDORS

* REFER TO MOUNT MODIFICATION DRAWINGS.

DRAWING INDEX

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APPENDIX	MOUNT MODIFICATION DRAWINGS

DO NOT SCALE DRAWINGS

THESE DRAWINGS ARE FORMATTED TO BE FULL-SIZE AT 24"X36". CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE DESIGNER / ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR MATERIAL ORDERS OR BE RESPONSIBLE FOR THE SAME. CONTRACTOR SHALL USE BEST MANAGEMENT PRACTICE TO PREVENT STORM WATER POLLUTION DURING CONSTRUCTION.

APPLICANT

APPLICANT:	VERIZON WIRELESS 1831 RADY COURT RICHMOND, VA 23222 MEG BROWN (804) 543-9908
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ENGINEER



NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 548-4079

APPLICANT



1831 RADY COURT
RICHMOND, VA 23222

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NB+C PROJ. #100352
1863 THOMAS JEFFERSON
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DESIGN RECORD

REVISIONS

REV	DATE	DESCRIPTION	BY
4	02/01/24	REVISED	CCS
3	10/31/23	REVISED	KLB
2	08/22/23	REVISED	AT
1	08/08/23	FINAL ZDs	AT
0	06/27/23	PRELIMINARY ZDS	CCS

PROFESSIONAL STAMP



ENGINEER

TRENT TRAVIS SNARR, P.E.
VIRGINIA PROFESSIONAL ENGINEER
LICENSE #49978

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1

SITE ACTIVITY REQUIREMENTS:

1. PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. THIS INCLUDES, BUT IS NOT LIMITED TO, BUILDING, ELECTRICAL, MECHANICAL, FIRE, FLOOD ZONE, ENVIRONMENTAL AND ZONING. AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPLETED, ALL REQUIRED PERMITS SHALL BE SATISFIED AS CLOSED OUT ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS.
2. ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBLY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREON, AND SHALL MEET ANIS/ASSE A10.48 (LATEST EDITION): FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION, TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH ANSI/TIA-322 (LATEST EDITION).
3. ALL SITE WORK TO COMPLY WITH OAS-STD-10068 "INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES" STANDARD FOR INSTALLATION OF MOUNTS AND APPURTENANCES, AND LATEST VERSION OF ANSI/TIA-1019-A-2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS."
4. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY TOWER OWNER PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
5. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
7. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
8. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION E) CONSTRUCTION SAFETY PROCEDURES.
9. ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS, LATEST APPROVED REVISION.
10. CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH AT THE COMPLETION OF THE WORK. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
11. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, TOWER OWNER AND/OR LOCAL UTILITIES.
12. THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED BY LOCAL JURISDICTION AND SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF EQUIPMENT, ROOMS, AND SHELTERS.
13. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.
14. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
15. THE AREAS OF THE OWNERS PROPERTY DISTURBED THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE CONSTRUCTION DRAWINGS AND/OR PROJECT SPECIFICATIONS.
16. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE N CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
17. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
18. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
19. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.
20. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

GROUNDING NOTES:

1. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATIONS, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
2. THE CONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND B1) FOR GROUND ELECTRODE SYSTEMS, THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.
4. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
5. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
6. EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 BARE SOLID TINNED COPPER FOR OUTDOOR BTS.
7. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK. CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BUS ARE PERMITTED.
8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
15. APPROVED ANTIOXIDANT COATINGS (I.E. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
17. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
18. BOND ALL METALLIC OBJECTS WITHIN 6FT OF MAIN GROUND RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.
19. GROUND CONDUCTORS USED FOR THE FACILITY GROUNDING AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CUPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC CONDUIT SHALL BE USED, WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (I.E., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
20. ALL GROUNDS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 BARE SOLID TINNED COPPER N 3/4" NON-METALLIC, FLEXIBLE CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD-WELD TERMINATION POINT. THE EXPOSED END OF THE CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).
21. BUILDINGS WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY).

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE AC 301, AC 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
2. UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 PSF.
3. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. NO MORE THAN 90 MINUTES SHALL PASS FROM BATCH TIME TO TIME OF PLACEMENT UNLESS APPROVED BY THE ENGINEER OF RECORD. TEMPERATURE OF CONCRETE SHALL NOT EXCEED 90 DEGREE FAHRENHEIT AT TIME OF PLACEMENT.
4. CONCRETE EXPOSED TO FREEZE-THAW CYCLES SHALL CONTAIN AIR ENTRAINING ADMIXTURES. AMOUNT OF AIR ENTRAINMENT TO BE BASED ON SIZE OF AGGREGATE AND F3 CLASS EXPOSURE (VERY SEVERE). CEMENT USED TO BE TYPE II PORTLAND CEMENT WITH A MAXIMUM WATER-TO-CEMENT RATIO (W/C) OF 0.45.
5. ALL STEEL REINFORCING SHALL CONFORM TO ASTM A615, ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. ALL SPLICES SHALL BE CLASS "B" TENSION SPLICES, UNLESS NOTED OTHERWISE. ALL HOOKS SHALL BE STANDARD 90° HOOKS, UNLESS NOTED OTHERWISE. YIELD STRENGTH (FY) OF STANDARD DEFORMED BARS ARE AS FOLLOW:
#4 BARS AND SMALLER.....40 KSI
#5 BARS AND LARGER.....60 KSI
6. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH..... 3"
CONCRETE EXPOSED TO EARTH OR WEATHER:
#6 BARS AND LARGER.....2"
#5 BARS AND SMALLER.....1-1/2"
7. CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
SLAB AND WALLS.....3/4"
BEAMS AND COLUMNS.....1-1/2"
8. A TOOLED EDGE OR A 3/4 CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

GENERAL NOTES:

1. THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE ENGINEERS IN THIS OR SIMILAR LOCALITIES. ITS ASSUMED THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKPEOPLE WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.
2. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY FOR PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT LIMITED TO, BRACING, FRAMEWORK, SHORING, ETC. SITE VISITS BY THE ENGINEER OR HIS REPRESENTATIVE WILL NOT INCLUDE INSPECTION OF THESE ITEMS AND IS FOR STRUCTURAL OBSERVATION OF THE FINISHED STRUCTURE ONLY.
3. NOTES AND DETAILS IN THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES, AND SPECIFICATIONS, THE GREATER, MORE STRICT REQUIREMENTS, SHALL GOVERN. IF FURTHER CLARIFICATION IS REQUIRED CONTACT THE ENGINEER OF RECORD.
4. SUBSTANTIAL EFFORT HAS BEEN MADE TO PROVIDE ACCURATE DIMENSIONS AND MEASUREMENTS ON THE DRAWINGS TO ASSIST IN THE FABRICATION AND/OR PLACEMENT OF CONSTRUCTION ELEMENTS BUT IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE DIMENSIONS, MEASUREMENTS, AND/OR CLEARANCES SHOWN IN THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION OR CUTTING OF ANY NEW OR EXISTING CONSTRUCTION ELEMENTS.
5. IF ITS DETERMINED THAT THERE ARE DISCREPANCIES AND/OR CONFLICTS WITH THE CONSTRUCTION DRAWINGS THE ENGINEER OF RECORD IS TO BE NOTIFIED AS SOON AS POSSIBLE.
6. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF VERIZON WIRELESS AND THE TOWER OWNER.
7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
8. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
9. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CARRIER AND TOWER OWNER PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
10. CONTRACTOR IS TO PERFORM A SITE INVESTIGATION AND IS TO DETERMINE THE BEST ROUTING OF ALL CONDUITS FOR POWER, TELCO AND FOR GROUNDING CABLES AS SHOWN IN THE POWER, TELCO, AND GROUNDING PLAN.
11. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE TOWER OWNER.
12. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
13. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

ENGINEER



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PROFESSIONAL STAMP



ENGINEER

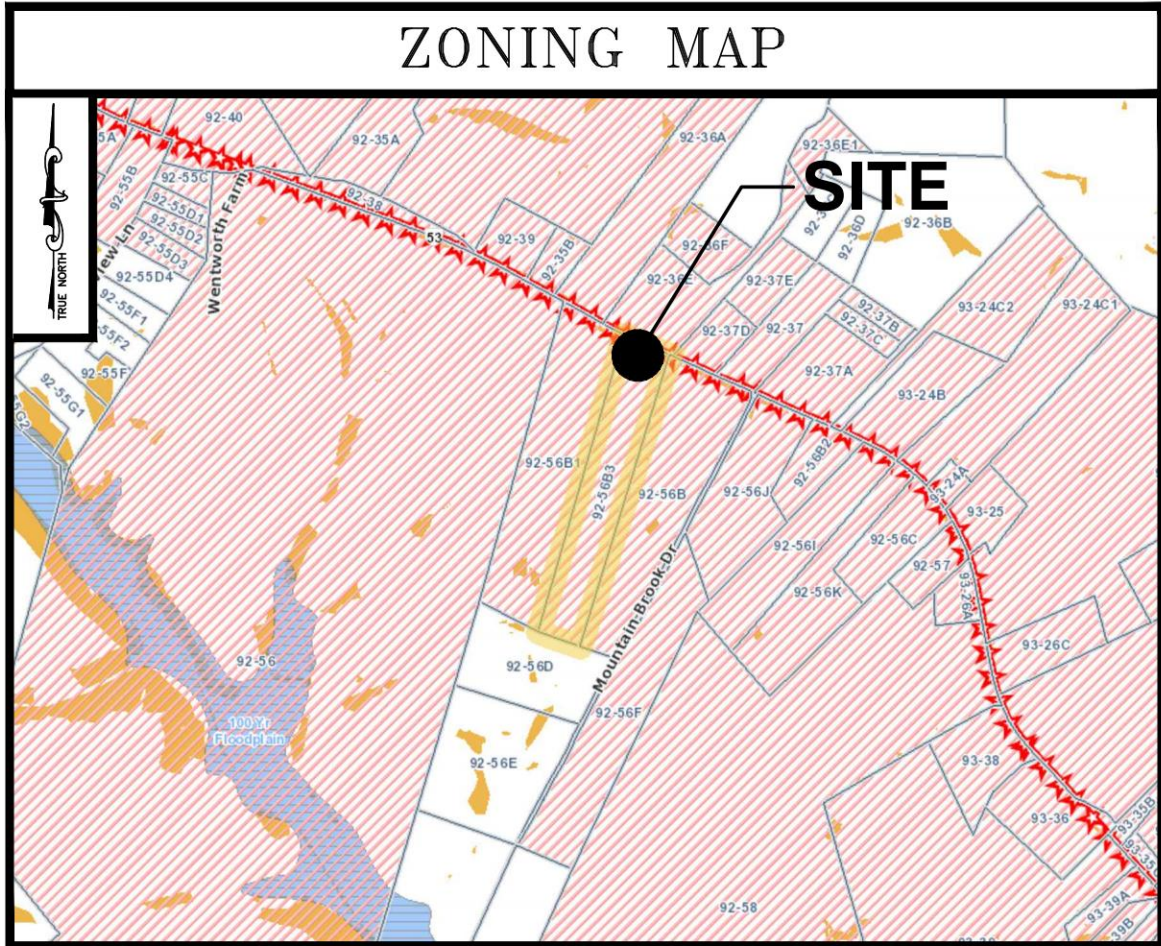
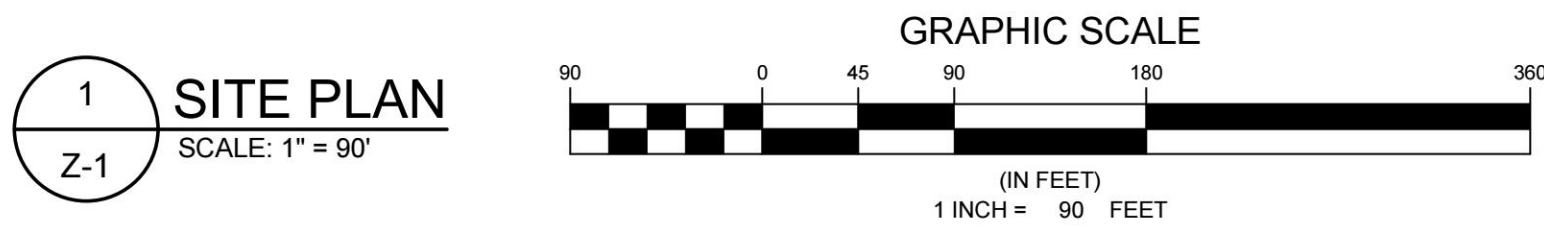
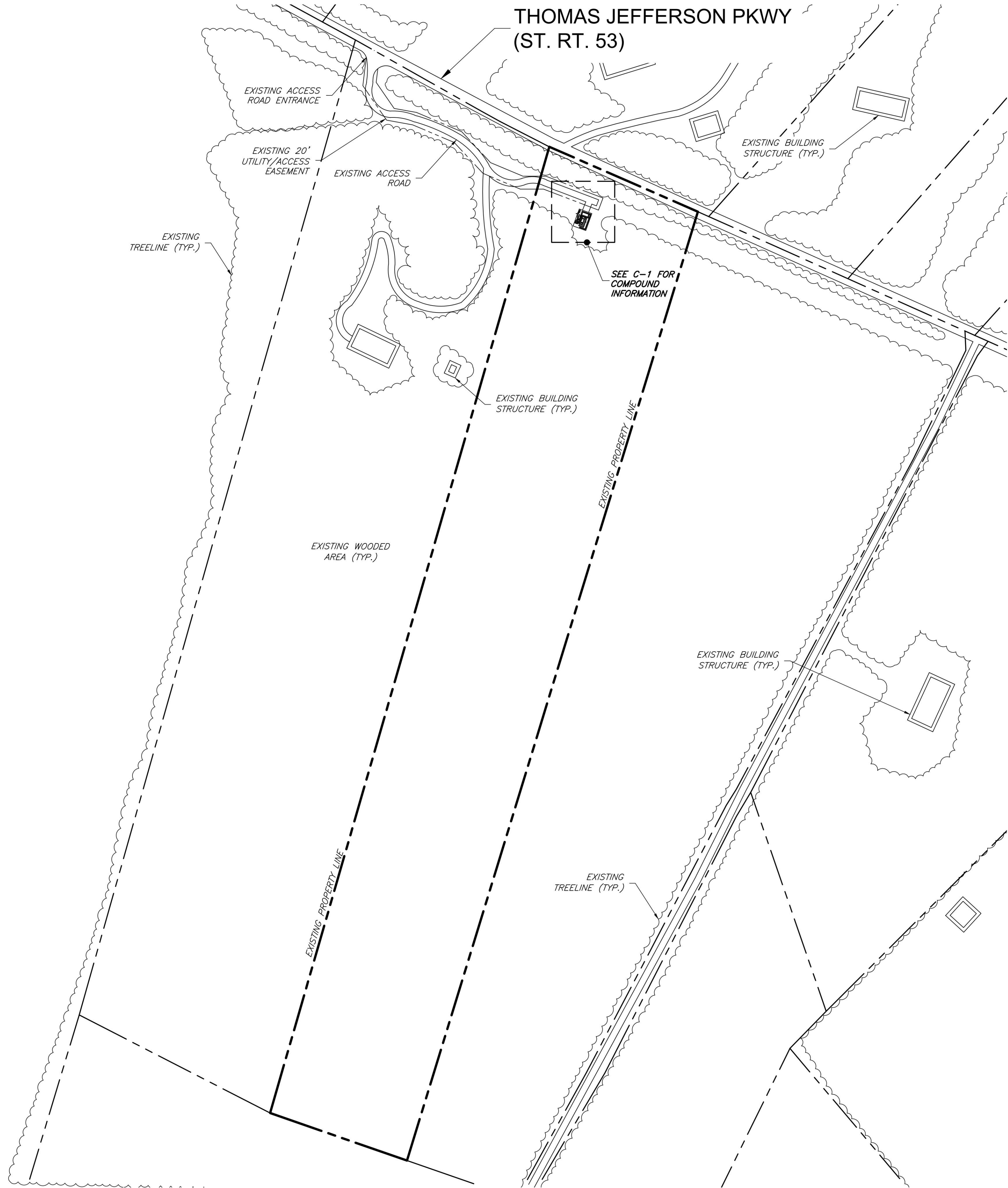
TRENT TRAVIS SNARR, P.E.
VIRGINIA PROFESSIONAL ENGINEER
LICENSE #49978

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

T-2



GENERAL NOTES

1. THIS PLAN IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
2. NO SIGNIFICANT NOISE, SMOKE, DUST, OR ODOR WILL RESULT FROM THIS FACILITY.
3. THE FACILITY IS UNMANNED AND NOT INTENDED FOR HUMAN HABITATION. THERE IS NO HANDICAP ACCESS REQUIRED.
4. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.

LEGEND	
	PROPERTY LINE - SUBJECT PARCEL
	PROPERTY LINE - ABUTTERS
	EXISTING ROAD
	EXISTING FENCE
	PROPOSED EASEMENT
	PROPOSED LEASE AREA
	EXISTING EASEMENT
	PROPOSED FENCE
	EXISTING BUILDING

ENGINEER

APPLICANT

SITE INFORMATION

DESIGN RECORD

PROFESSIONAL STAMP

ENGINEER

SHEET TITLE

SHEET NUMBER

NB+C
TOTALLY COMMITTED.
NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 548-4079

verizon
1831 RADY COURT
RICHMOND, VA 23222

NIX WAY
5G LSUB6 - CARRIER ADD
NB+C PROJ. #100352
1863 THOMAS JEFFERSON
PARKWAY
CHARLOTTESVILLE, VA 22902
ALBEMARLE COUNTY

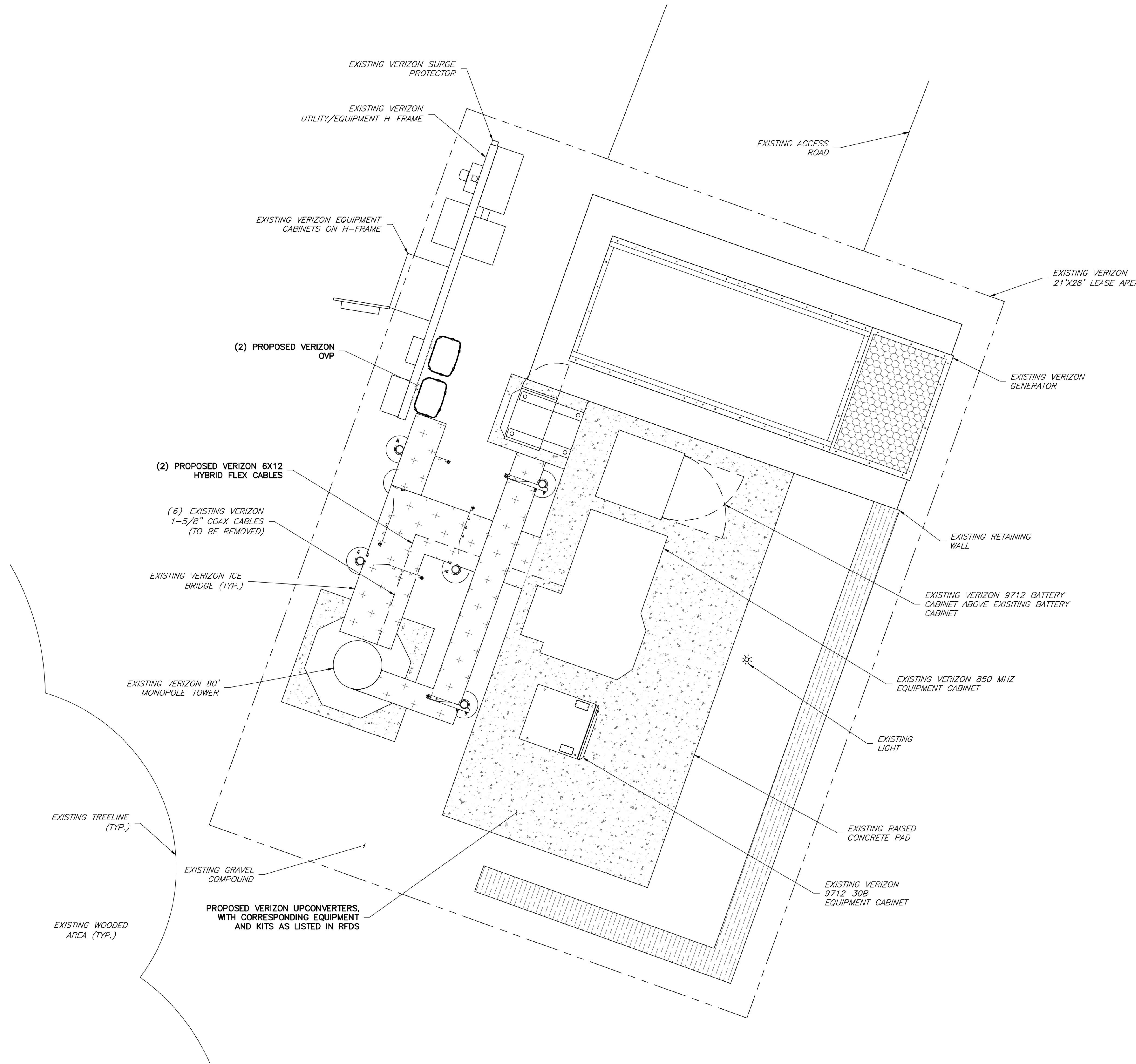
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3	10/31/23	REVISED	KLB
2	08/22/23	REVISED	AT
1	08/08/23	FINAL ZDs	AT
0	06/27/23	PRELIMINARY ZDS	CCS
REV	DATE	DESCRIPTION	BY



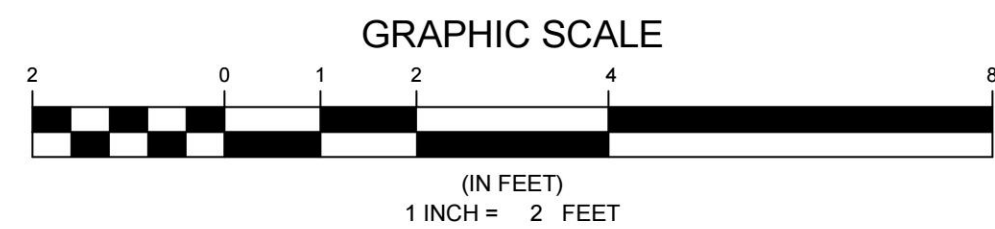
TRENT TRAVIS SNARR, P.E.
VIRGINIA PROFESSIONAL ENGINEER
LICENSE #49978

SITE
PLAN

Z-1



1 COMPOUND PLAN
C-1 SCALE: 1/2" = 1'



ENGINEER

NB+C
TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 548-4079

APPLICANT

verizon

1831 RADY COURT
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NIX WAY
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0	06/27/23	PRELIMINARY ZDS	CCS

PROFESSIONAL STAMP



ENGINEER

TRENT TRAVIS SNARR, P.E.
VIRGINIA PROFESSIONAL ENGINEER
LICENSE #49978

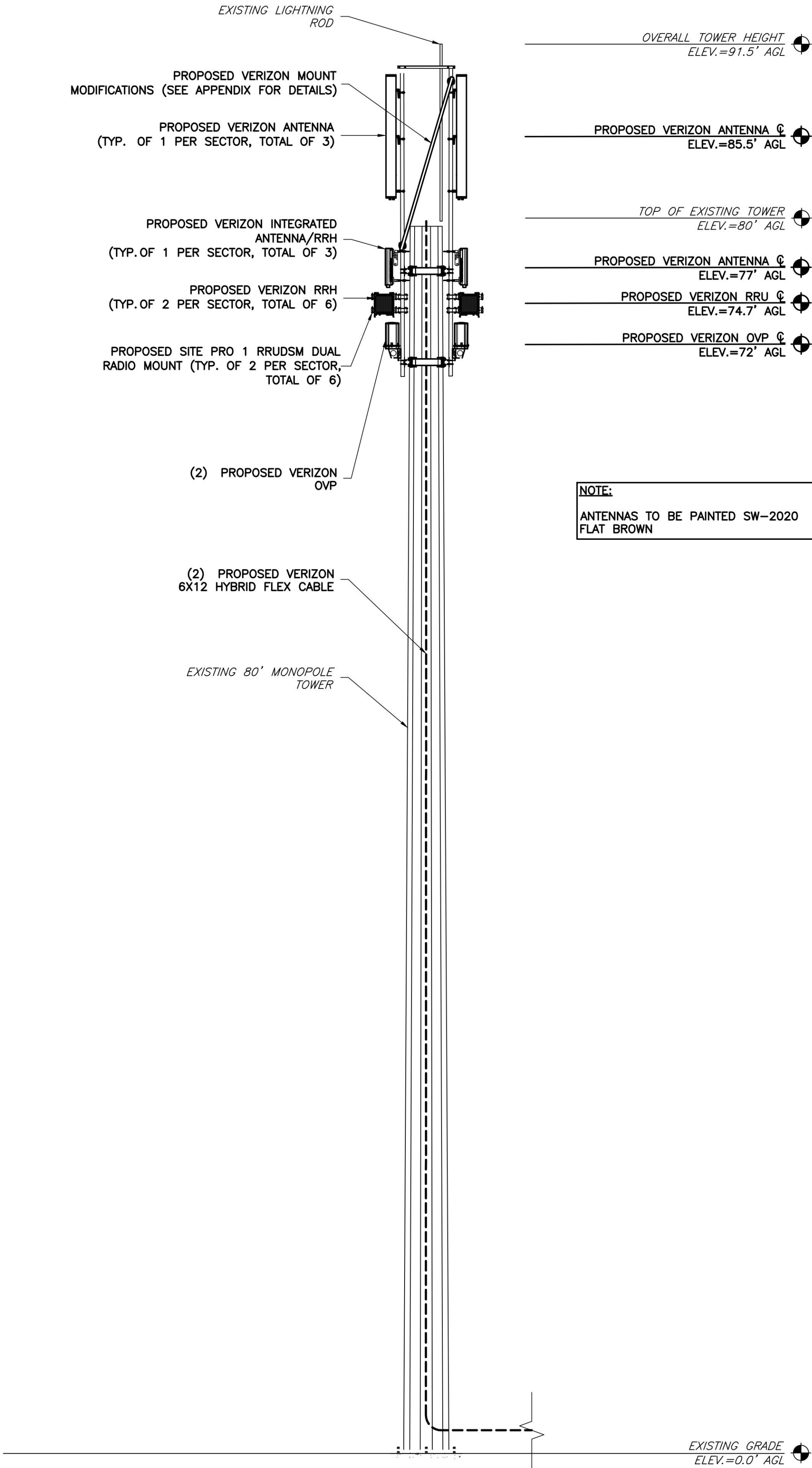
SHEET TITLE

COMPOUND
PLAN

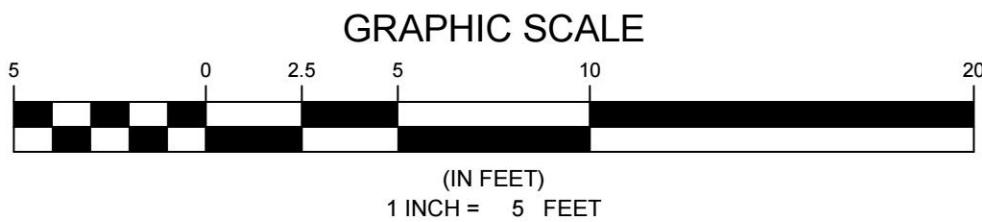
SHEET NUMBER

C-1

STRUCTURAL NOTES:
1. THE PE STRUCTURAL ANALYSIS OF THE EXISTING STRUCTURE WITH THE EXISTING & PROPOSED LOADS WAS PERFORMED BY NB&C. DATED 01/31/24, PROJECT# 100352.
2. POST-MODIFICATION INSPECTION (PMI) REQUIRED ON ALL SITES. REFER TO THE MOUNT ANALYSIS PREPARED BY TOWER ENGINEERING SOLUTIONS, LLC DATED 06/02/23 FOR ADDITIONAL DETAILS.
3. MOUNT MODIFICATIONS ARE REQUIRED BEFORE ANY INSTALL CAN OCCUR, PLEASE REFER TO THE MOUNT MODIFICATION DRAWINGS PROVIDED BY TOWER ENGINEERING SOLUTIONS, LLC DATED, 06/05/23.



1 ELEVATION
C-2 SCALE: 1" = 5'



GENERAL NOTES

1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITIES COMPANY OR OTHER PUBLIC AUTHORITIES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR MUNICIPAL AUTHORITIES.
3. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK. MINOR OMISSIONS OR ERRORS IN THE BID DOCUMENTS SHALL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR THE OVERALL INTENT OF THESE DRAWINGS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED AS A RESULT OF CONSTRUCTION OF THIS FACILITY.
5. THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
6. THE CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING A BID TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
7. CONTRACTOR SHALL VERIFY ANTENNA ELEVATION AND AZIMUTH WITH RF ENGINEERING PRIOR TO INSTALLATION.
8. TRANSMITTER EQUIPMENT AND ANTENNAS ARE DESIGNED TO MEET ANSI/TIA 222-H REQUIREMENTS.
9. ALL STRUCTURAL ELEMENTS SHALL BE HOT DIPPED GALVANIZED STEEL.
10. CONTRACTOR SHALL MAKE A UTILITY "ONE CALL" TO LOCATE ALL UTILITIES PRIOR TO EXCAVATING.
11. IF ANY UNDERGROUND UTILITIES OR STRUCTURES EXIST BENEATH THE PROJECT AREA, CONTRACTOR MUST LOCATE IT AND CONTACT THE APPLICANT & THE OWNER'S REPRESENTATIVE.
12. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION BY TECHNICIANS APPROXIMATELY 2 TIMES PER MONTH.
13. PRIOR TO THE INSTALLATION OF THE PROPOSED EQUIPMENT OR MODIFICATION OF THE EXISTING STRUCTURE, A STRUCTURAL ANALYSIS SHALL BE PERFORMED BY THE OWNER'S AGENT TO CERTIFY THAT THE EXISTING/PROPOSED COMMUNICATION STRUCTURE AND COMPONENTS ARE STRUCTURALLY ADEQUATE TO SUPPORT ALL EXISTING AND PROPOSED ANTENNAS, COAXIAL CABLES AND OTHER APPURTENANCES.
14. PROPERTY LINE INFORMATION WAS PREPARED USING DEEDS, TAX MAPS, AND PLANS OF RECORD AND SHOULD NOT BE CONSTRUED AS AN ACCURATE BOUNDARY SURVEY.
15. THIS PLAN IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
16. THE PROPOSED FACILITY WILL CAUSE ONLY A "DE MINIMIS" INCREASE IN STORMWATER RUNOFF. THEREFORE, NO DRAINAGE STRUCTURES ARE PROPOSED.
17. NO SIGNIFICANT NOISE, SMOKE, DUST, OR ODOR WILL RESULT FROM THIS FACILITY.
18. THE FACILITY IS UNMANNED AND NOT INTENDED FOR HUMAN HABITATION (NO HANDICAP ACCESS REQUIRED).
19. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
20. POWER TO THE FACILITY WILL BE MONITORED BY A SEPARATE METER.
21. ALL EQUIPMENT MUST BE MOUNTED AT ELEVATIONS SHOWN IN DETAIL 6/A-2 (+/- 6").

ENGINEER

APPLICANT

SITE INFORMATION

DESIGN RECORD

PROFESSIONAL STAMP

ENGINEER

SHEET TITLE

SHEET NUMBER



NIX WAY
5G LSUB6 - CARRIER ADD
NB+C PROJ. #100352
1863 THOMAS JEFFERSON
PARKWAY
CHARLOTTESVILLE, VA 22902
ALBEMARLE COUNTY

REVISIONS

REV	DATE	DESCRIPTION	BY
4	02/01/24	REVISED	CCS
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1	08/08/23	FINAL ZDs	AT
0	06/27/23	PRELIMINARY ZDS	CCS



TRENT TRAVIS SNARR, P.E.
VIRGINIA PROFESSIONAL ENGINEER
LICENSE #49978

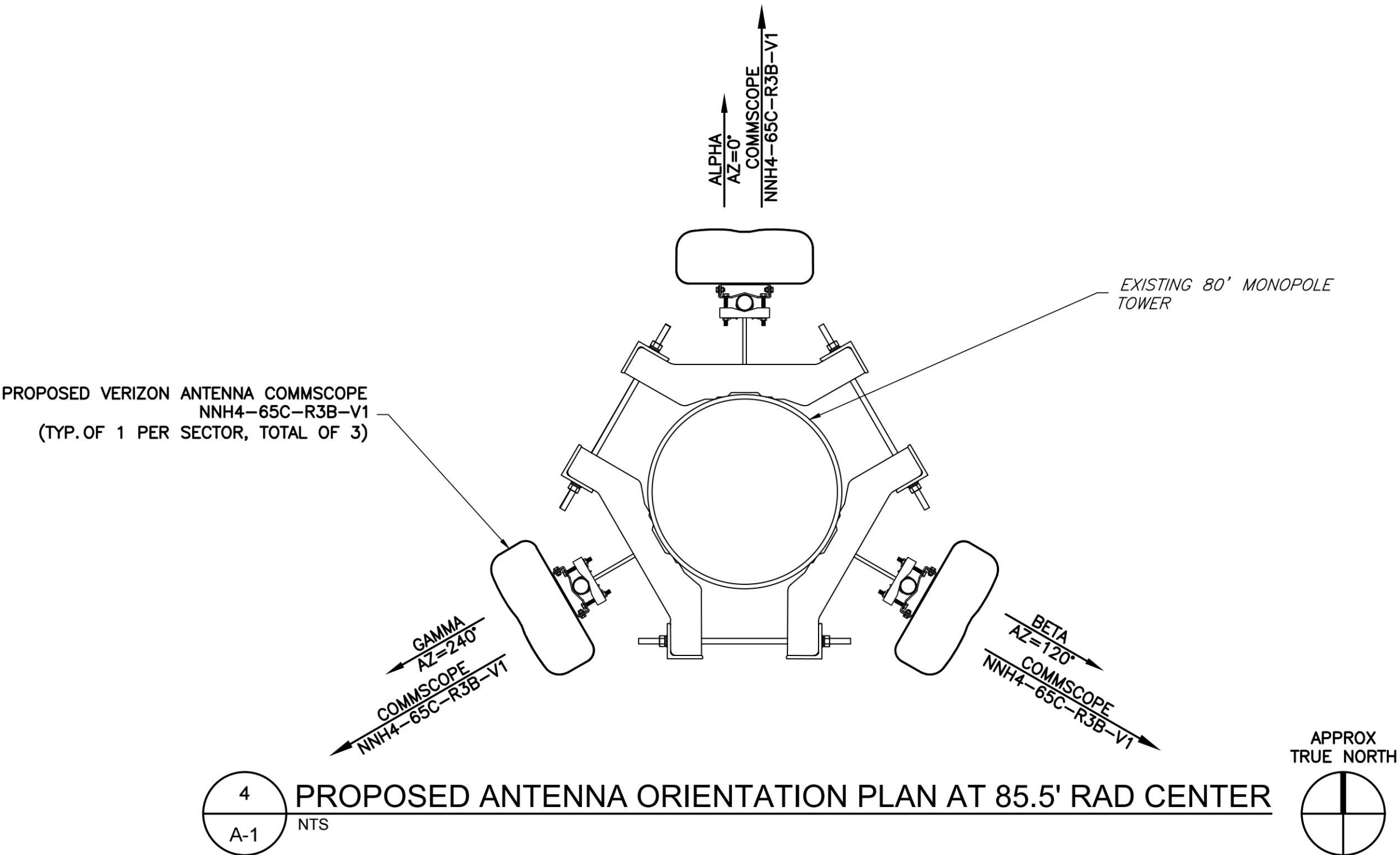
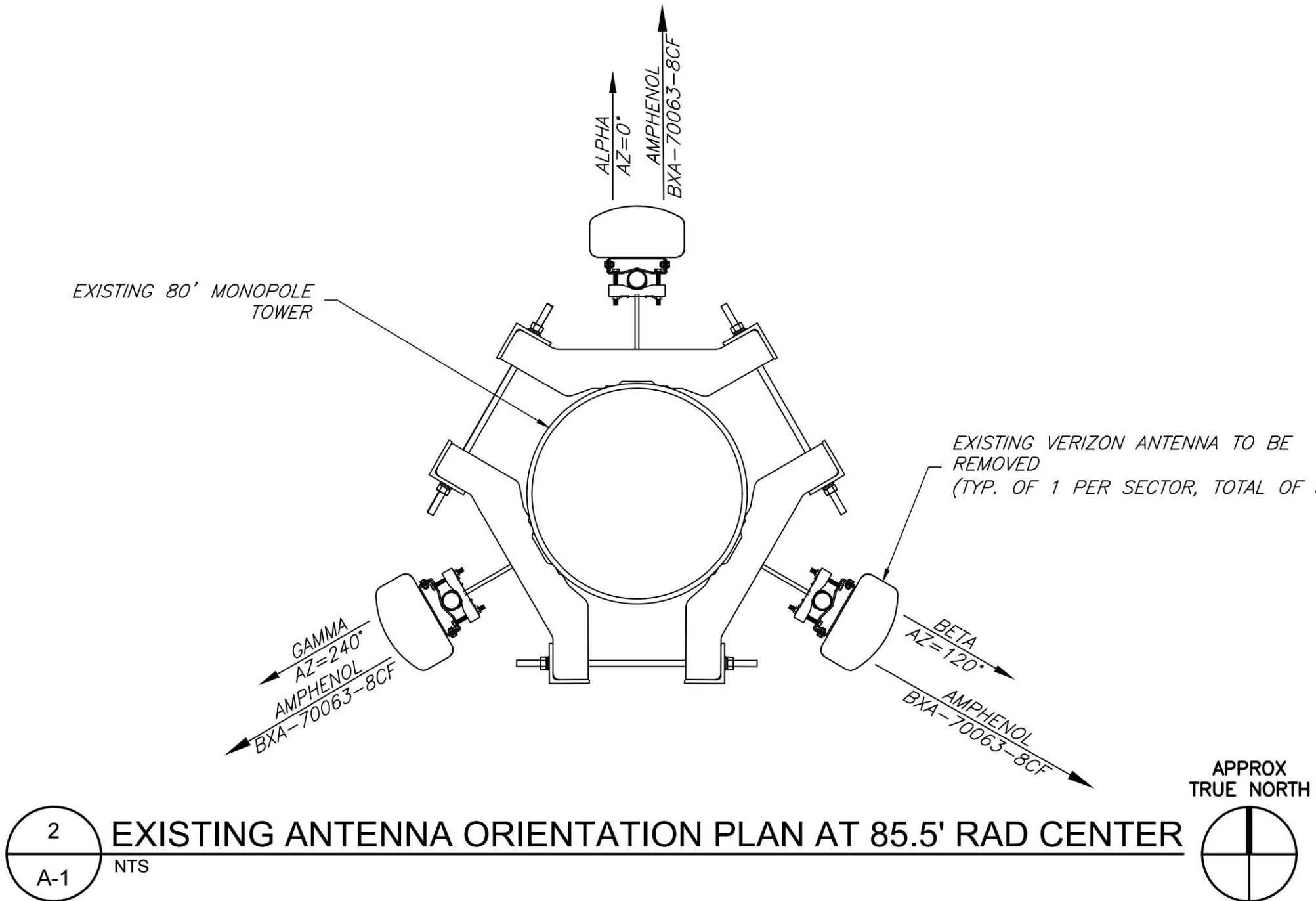
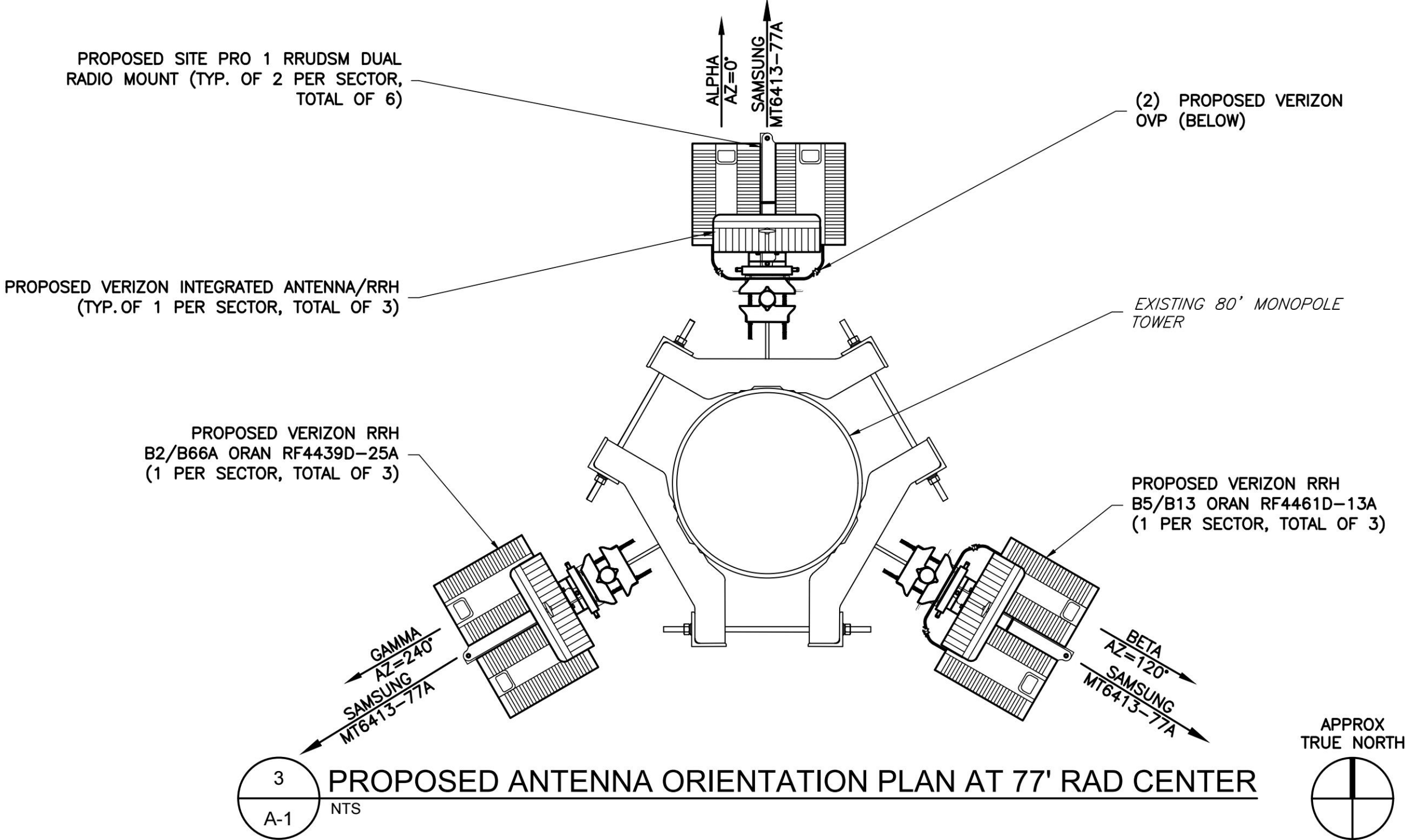
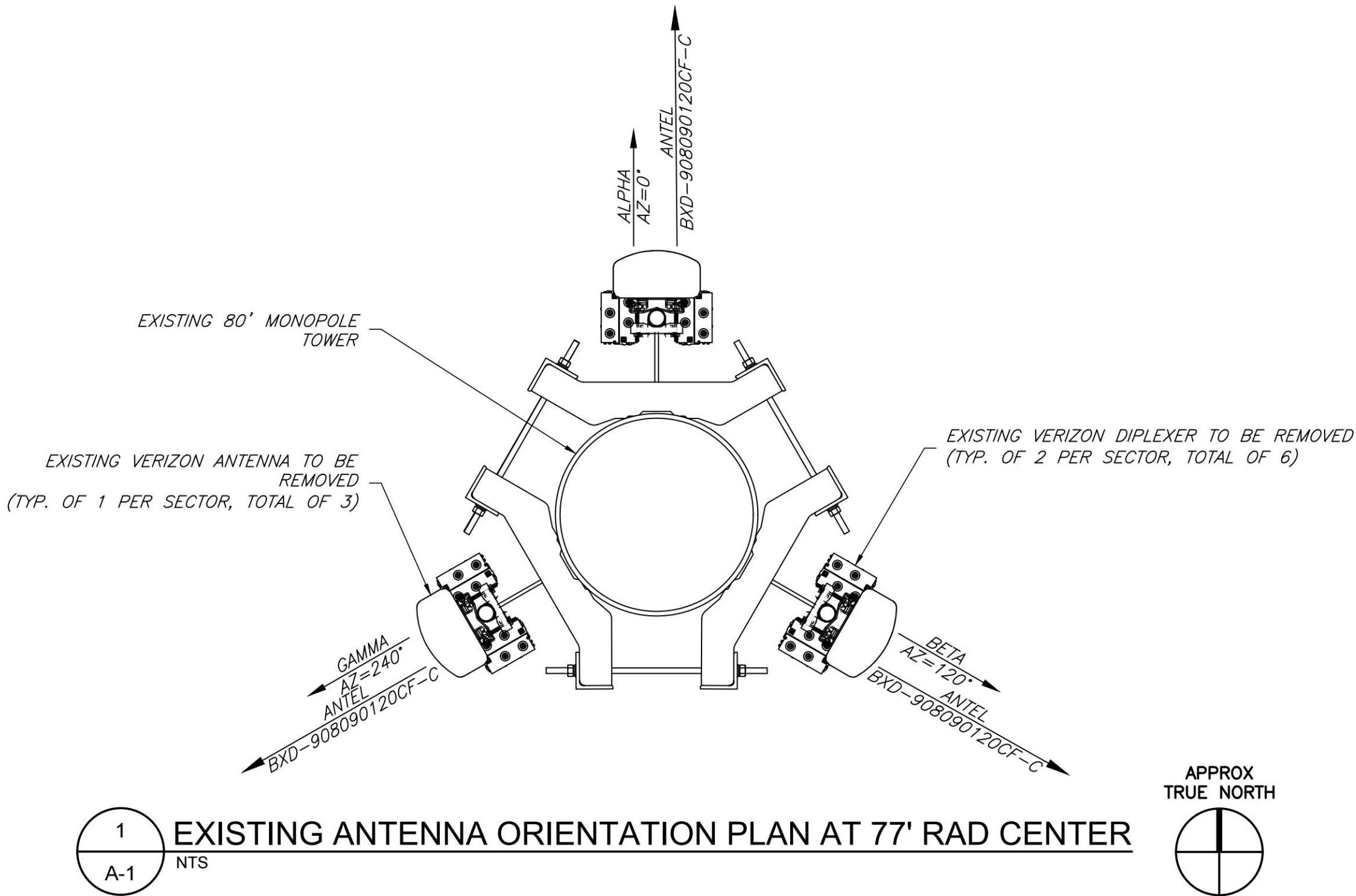
ELEVATION

C-2

STRUCTURAL NOTES:
1. THE PE STRUCTURAL ANALYSIS OF THE EXISTING STRUCTURE WITH THE EXISTING & PROPOSED LOADS WAS PERFORMED BY NB+C. DATED 01/31/24, PROJECT# 100352.
2. POST-MODIFICATION INSPECTION (PMI) REQUIRED ON ALL SITES. REFER TO THE MOUNT ANALYSIS PREPARED BY TOWER ENGINEERING SOLUTIONS, LLC DATED 06/02/23 FOR ADDITIONAL DETAILS.
3. MOUNT MODIFICATIONS ARE REQUIRED BEFORE ANY INSTALL CAN OCCUR, PLEASE REFER TO THE MOUNT MODIFICATION DRAWINGS PROVIDED BY TOWER ENGINEERING SOLUTIONS, LLC DATED, 06/05/23.

ANTENNA INFORMATION CHART								
SECTOR	STATUS	ANTENNA MANUFACTURER	ANTENNA MODEL	RAD CENTER	AZIMUTH	MECHANICAL DOWN TILT	ELECTRICAL DOWN TILT	RRH QUANTITY & MODEL
A1	PROPOSED	COMMSCOPE	NNH4-65C-R3B-V1	85.5'	0°	0°	SEE RFDS	(1) SAMSUNG B5/B13 RRH ORAN RF4461D-13A (1) SAMSUNG B2/B66A RRH ORAN RF4439D-25A
A2	PROPOSED	SAMSUNG	INTEGRATED ANTENNA W/ RRH	77'	0°	0°	SEE RFDS	(1) SAMSUNG MT6413-77A
B1	PROPOSED	COMMSCOPE	NNH4-65C-R3B-V1	85.5'	120°	0°	SEE RFDS	(1) SAMSUNG B5/B13 RRH ORAN RF4461D-13A (1) SAMSUNG B2/B66A RRH ORAN RF4439D-25A
B2	PROPOSED	SAMSUNG	INTEGRATED ANTENNA W/ RRH	77'	120°	0°	SEE RFDS	(1) SAMSUNG MT6413-77A
C1	PROPOSED	COMMSCOPE	NNH4-65C-R3B-V1	85.5'	240°	0°	SEE RFDS	(1) SAMSUNG B5/B13 RRH ORAN RF4461D-13A (1) SAMSUNG B2/B66A RRH ORAN RF4439D-25A
C2	PROPOSED	SAMSUNG	INTEGRATED ANTENNA W/ RRH	77'	240°	0°	SEE RFDS	(1) SAMSUNG MT6413-77A

NOTES:
1. CONTRACTOR TO VERIFY PROPOSED ANTENNA INFORMATION IS THE MOST CURRENT DATA AT TIME OF CONSTRUCTION.
2. CONTRACTOR TO CONFIRM CABLE LENGTHS PRIOR TO CONSTRUCTION.
3. CONTRACTOR TO VERIFY ALL PROPOSED AND EXISTING ANTENNA AND CABLES WERE CONSIDERED AND PASSED A STRUCTURAL ANALYSIS PERFORMED BY A LICENSED ENGINEER PRIOR TO INSTALLATION.



ENGINEER

APPLICANT

SITE INFORMATION

DESIGN RECORD

PROFESSIONAL STAMP

ENGINEER

SHEET TITLE

SHEET NUMBER

NB+C
TOTALLY COMMITTED.
NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 548-4079

verizon
1831 RADY COURT
RICHMOND, VA 23222

NIX WAY
5G LSUB6 - CARRIER ADD
NB+C PROJ. #100352
1863 THOMAS JEFFERSON
PARKWAY
CHARLOTTESVILLE, VA 22902
ALBEMARLE COUNTY

REVISIONS

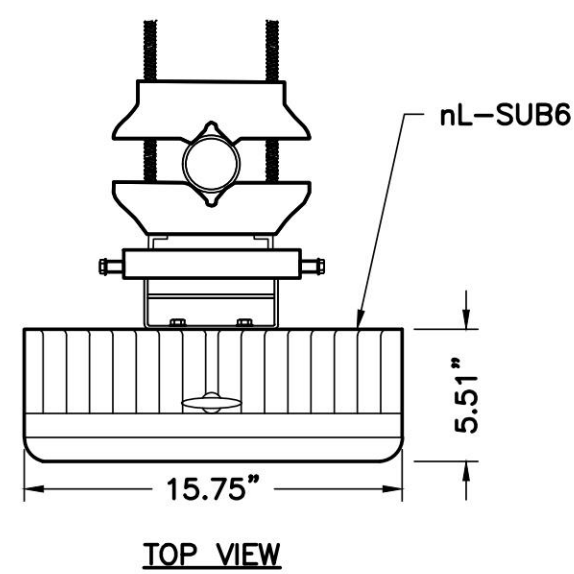
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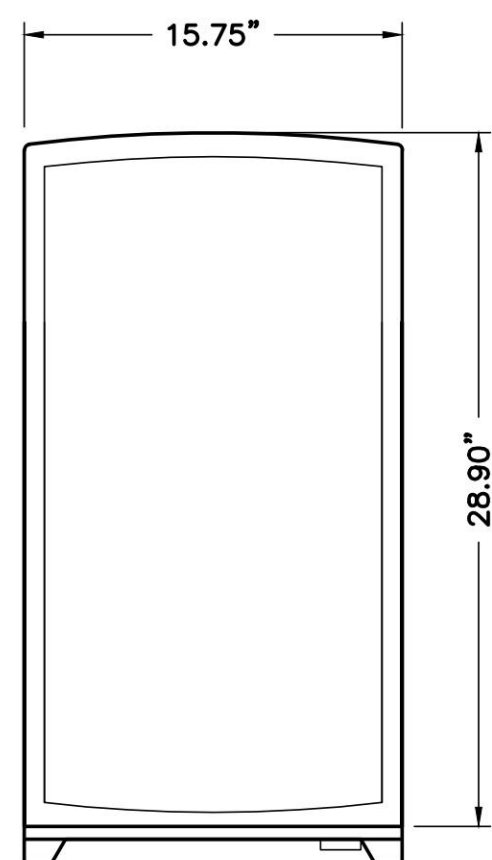
TRENT TRAVIS SNARR, P.E.
VIRGINIA PROFESSIONAL ENGINEER
LICENSE #49978

EQUIPMENT SCHEDULE

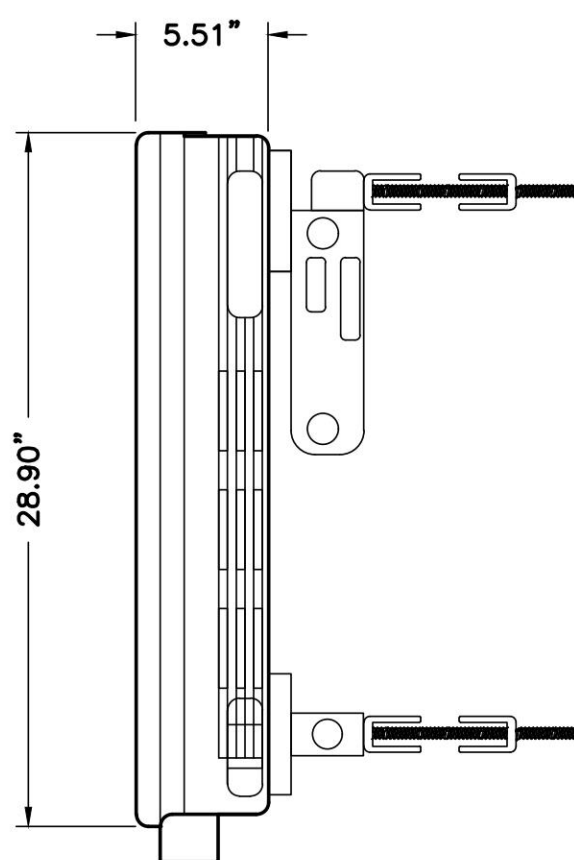
A-1



MECHANICAL SPECIFICATIONS
MANUFACTURER: SAMSUNG
QUANTITY: 3
HEIGHT: 28.90 IN
WIDTH: 15.75 IN
DEPTH: 5.51 IN
WEIGHT: 57.32 LBS

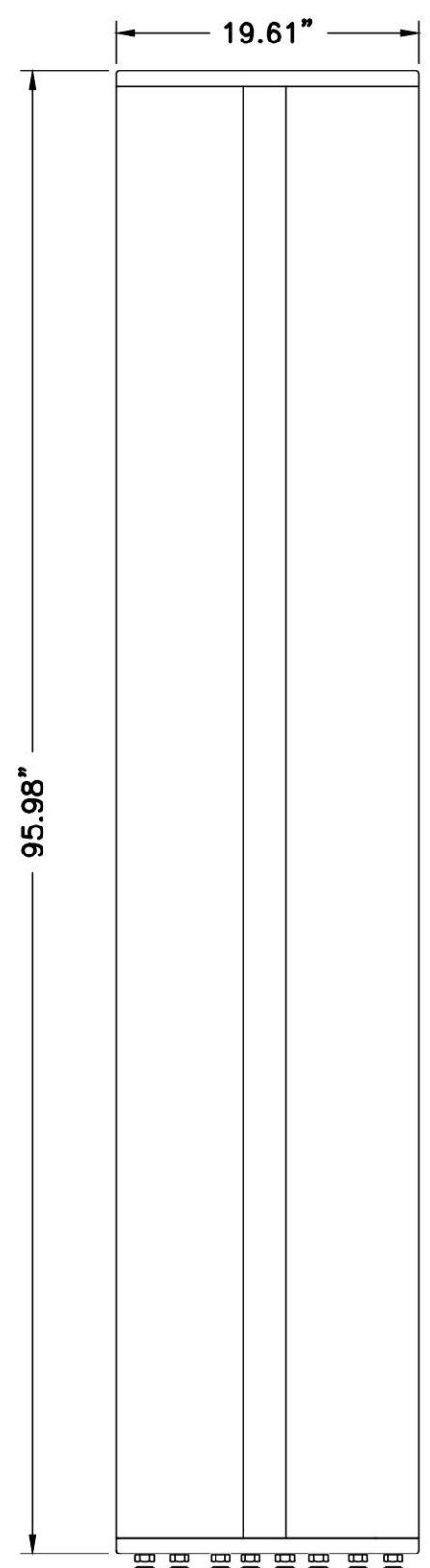
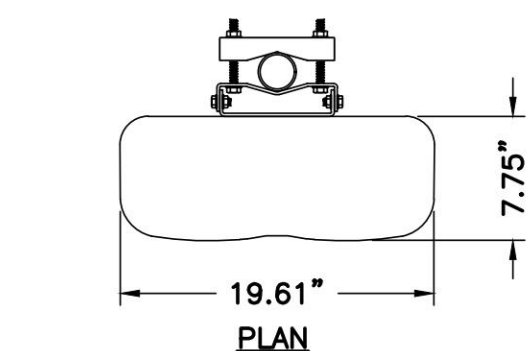


FRONT VIEW

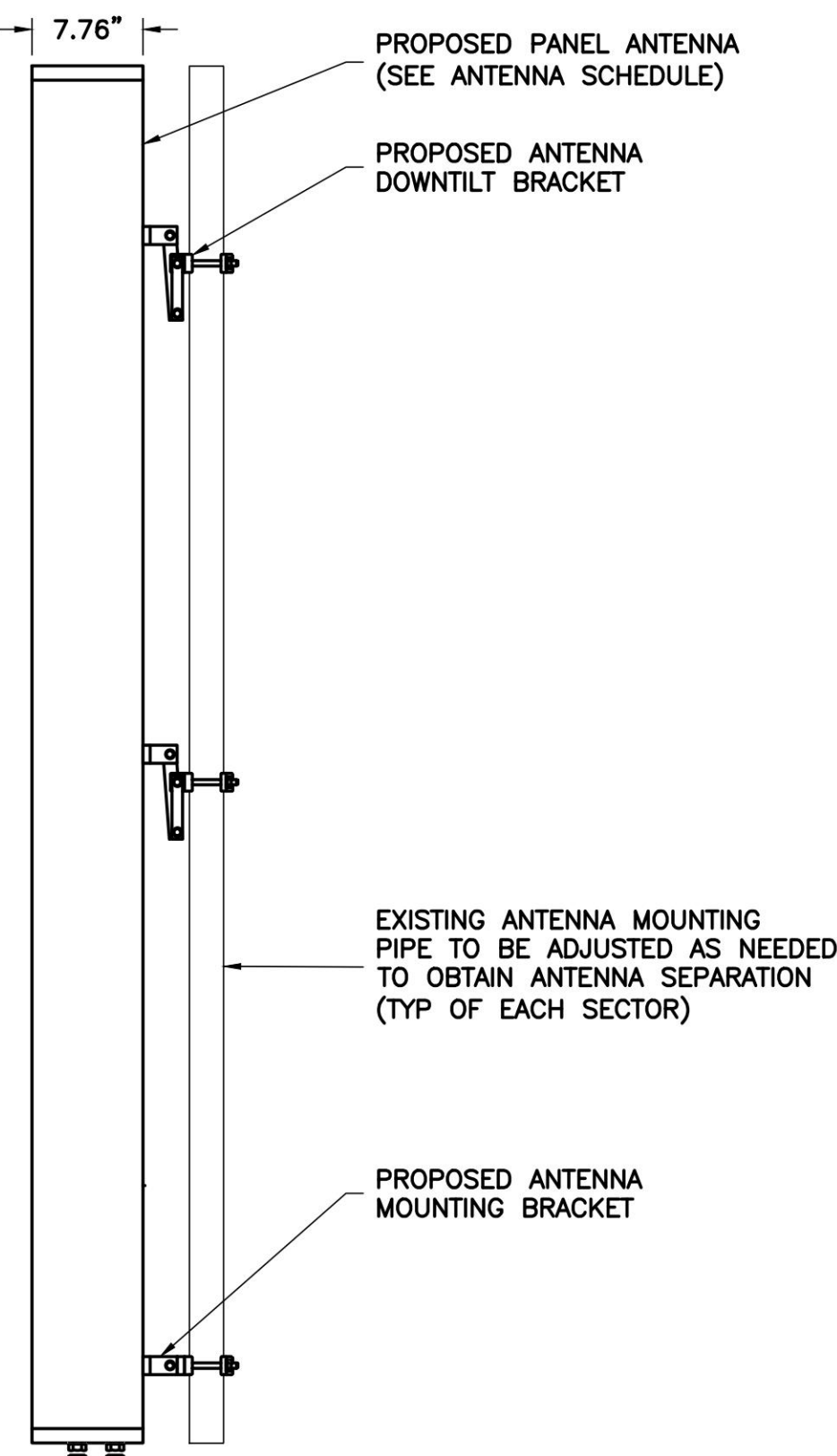


SIDE VIEW

1 MT6413-77A INTEGRATED ANTENNA
A-2 NTS

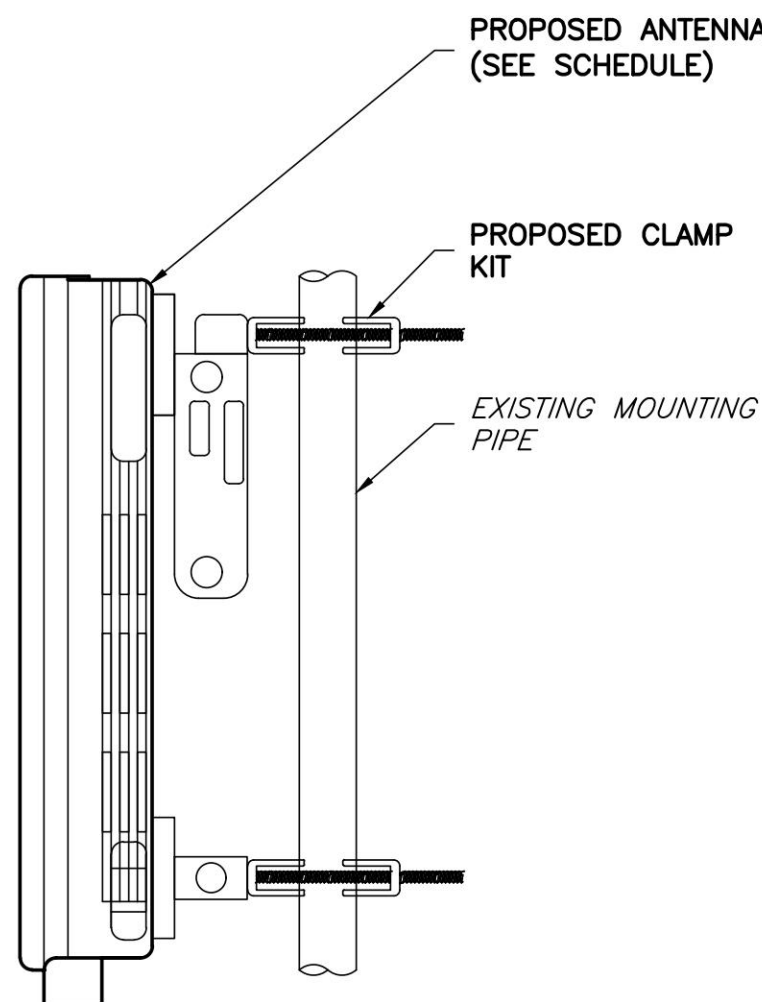


ELEVATION



SIDE

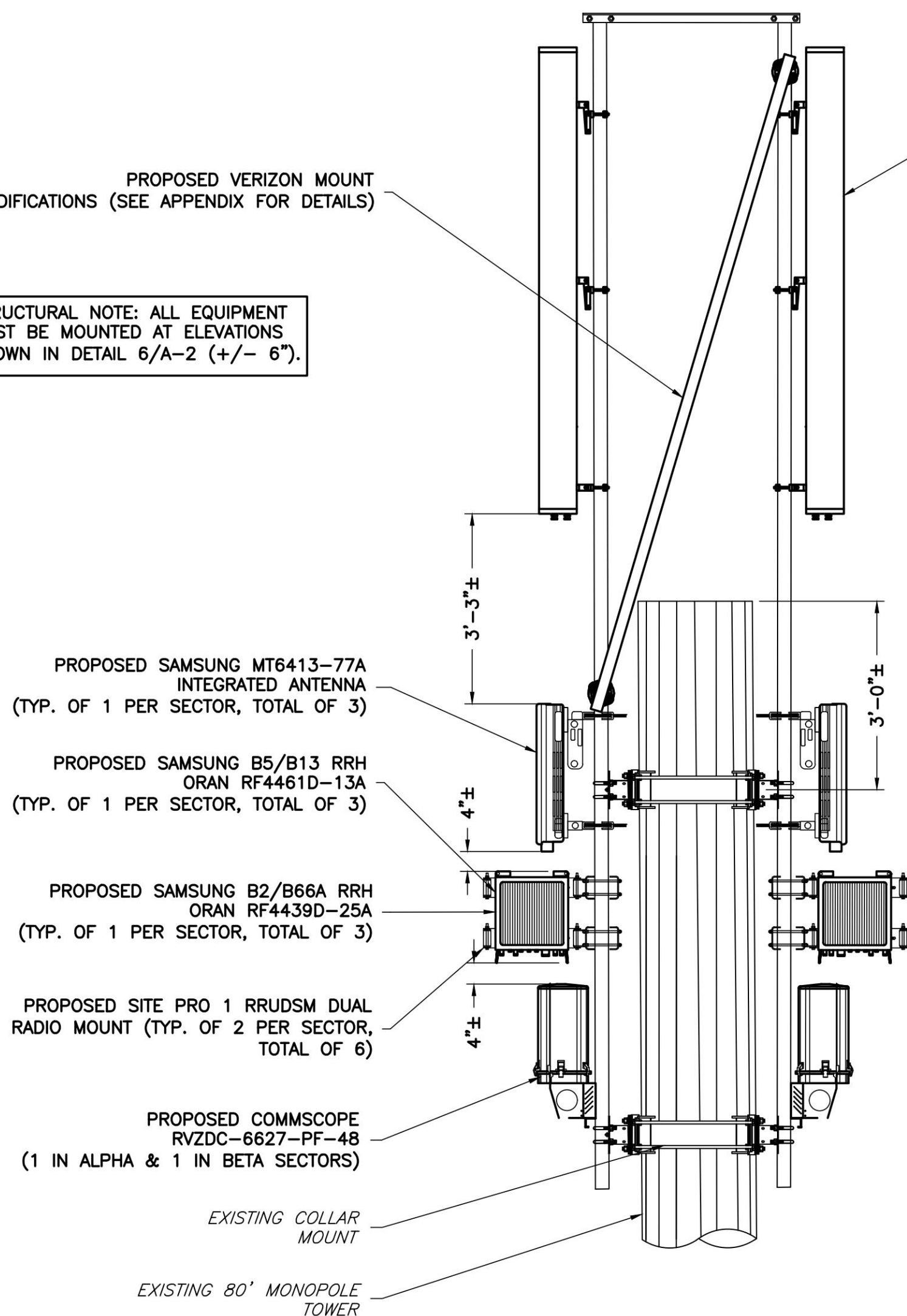
3 NNH4-65C-R3B-V1 ANTENNA DETAILS
A-2 NOT TO SCALE



2 ANTENNA MOUNTING DETAILS
A-2 NTS

PROPOSED VERIZON MOUNT MODIFICATIONS (SEE APPENDIX FOR DETAILS)

STRUCTURAL NOTE: ALL EQUIPMENT MUST BE MOUNTED AT ELEVATIONS SHOWN IN DETAIL 6/A-2 (+/- 6").



4 EQUIPMENT MOUNTING DETAIL
A-2 NOT TO SCALE

PROPOSED COMMSCOPE NNH4-65C-R3B-V1 ANTENNA (TYP. OF 1 PER SECTOR, TOTAL OF 3)

PROPOSED VERIZON ANTENNA @ ELEV.=85.5' AGL

TOP OF EXISTING TOWER ELEV.=80' AGL

PROPOSED VERIZON ANTENNA @ ELEV.=77' AGL

PROPOSED VERIZON RRU @ ELEV.=74.7' AGL

PROPOSED VERIZON OVP @ ELEV.=72' AGL

ENGINEER

APPLICANT

SITE INFORMATION

DESIGN RECORD

PROFESSIONAL STAMP

ENGINEER

SHEET TITLE

SHEET NUMBER

NB+C
TOTALLY COMMITTED.
NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 548-4079

verizon
1831 RADY COURT
RICHMOND, VA 23222

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REVISIONS

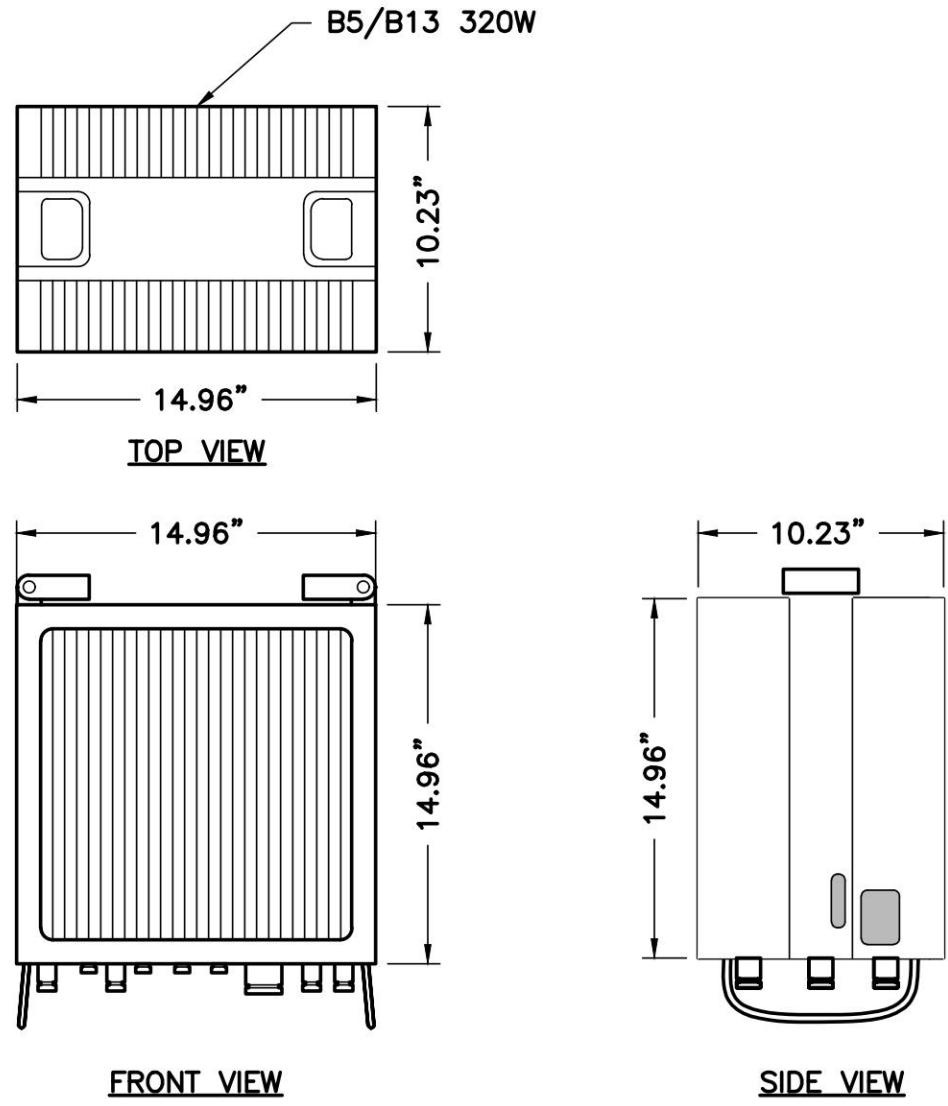
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TRENT TRAVIS SNARR, P.E.
VIRGINIA PROFESSIONAL ENGINEER
LICENSE #49978

EQUIPMENT DETAILS I

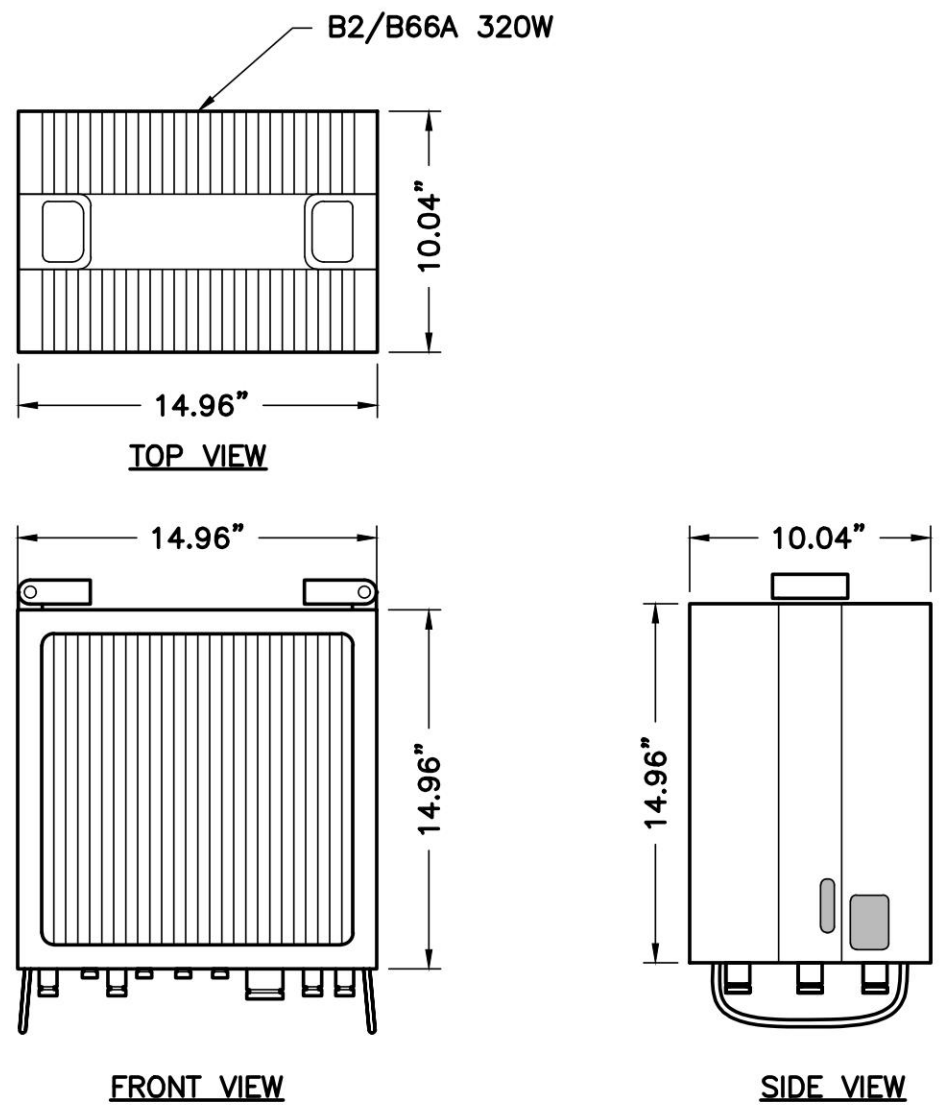
A-2



SIZE AND WEIGHT TABLE

MANUFACTURER	QUANTITY	HEIGHT	WIDTH	DEPTH	WEIGHT W/O BRACKET
SAMSUNG	3	14.96"	14.96	10.23"	79.1 LBS
MOUNTING LOCATION	TOWER				

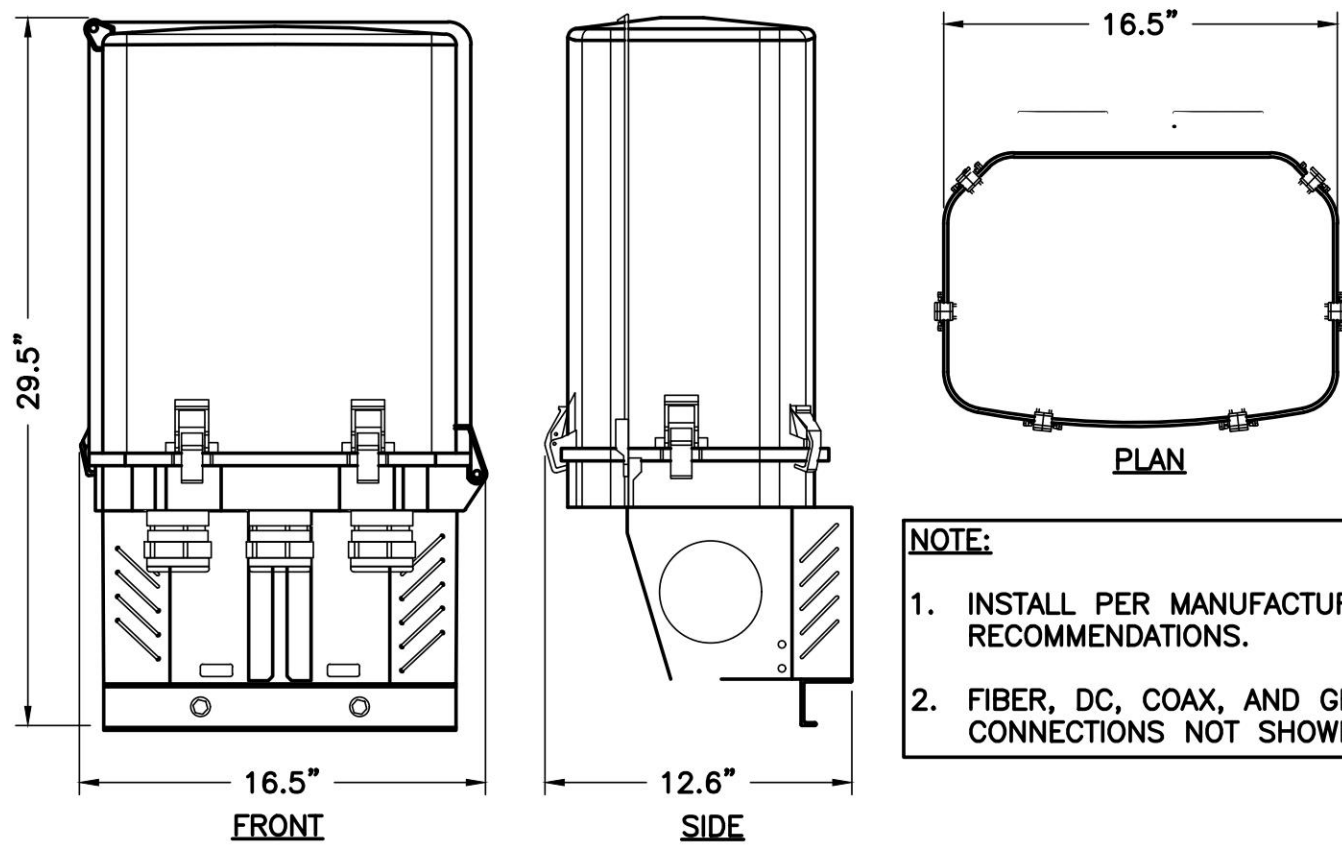
1 B5/B13 RF4461D-13A RRH (REMOTE RADIO HEAD)
A-3 NTS



SIZE AND WEIGHT TABLE

MANUFACTURER	QUANTITY	HEIGHT	WIDTH	DEPTH	WEIGHT W/O BRACKET
SAMSUNG	3	14.96"	14.96	10.04"	74.7 LBS
MOUNTING LOCATION	TOWER				

2 B2/B66A RF4439D-25A RRH (REMOTE RADIO HEAD)
A-3 NTS



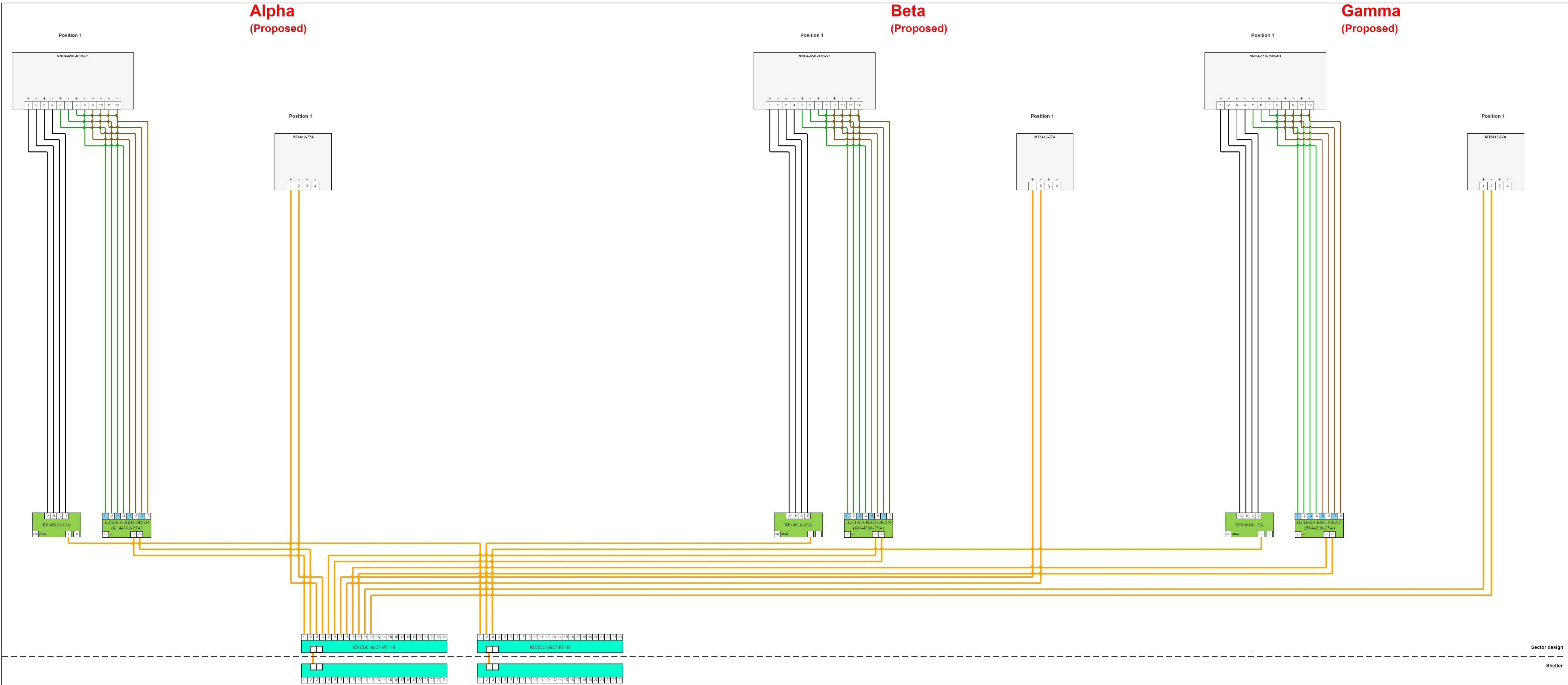
SIZE AND WEIGHT TABLE

MANUFACTURER	QUANTITY	HEIGHT	WIDTH	DEPTH	WEIGHT W/O BRACKET
RVZDC-6627-PF-48	2	29.5"	16.5"	12.6"	32.0 LBS
MOUNTING LOCATION	TOWER				




3 RAYCAP DISTRIBUTION BOX DETAIL
A-3 NTS

- NOTE:
1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
 2. FIBER, DC, COAX, AND GROUND CONNECTIONS NOT SHOWN.

ENGINEER	<div><div>NB+CTM</div><div>TOTALLY COMMITTED.</div><div>NB+C ENGINEERING SERVICES, LLC. 120 EASTSHORE DRIVE, SUITE 300 GLEN ALLEN, VA 23059 (804) 548-4079</div></div>																																				
APPLICANT	<div><div>verizon</div><div>1831 RADY COURT RICHMOND, VA 23222</div></div>																																				
SITE INFORMATION	<div>NIX WAY 5G LSUB6 - CARRIER ADD NB+C PROJ. #100352 1863 THOMAS JEFFERSON PARKWAY CHARLOTTESVILLE, VA 22902 ALBEMARLE COUNTY</div>																																				
DESIGN RECORD	<div>REVISIONS</div> <table><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td>4</td><td>02/01/24</td><td>REVISED</td><td>CCS</td></tr><tr><td>3</td><td>10/31/23</td><td>REVISED</td><td>KLB</td></tr><tr><td>2</td><td>08/22/23</td><td>REVISED</td><td>AT</td></tr><tr><td>1</td><td>08/08/23</td><td>FINAL ZDs</td><td>AT</td></tr><tr><td>0</td><td>06/27/23</td><td>PRELIMINARY ZDS</td><td>CCS</td></tr><tr><td>REV</td><td>DATE</td><td>DESCRIPTION</td><td>BY</td></tr></table>													4	02/01/24	REVISED	CCS	3	10/31/23	REVISED	KLB	2	08/22/23	REVISED	AT	1	08/08/23	FINAL ZDs	AT	0	06/27/23	PRELIMINARY ZDS	CCS	REV	DATE	DESCRIPTION	BY
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PROFESSIONAL STAMP	<div><div>COMMONWEALTH OF VIRGINIA</div><div>TRENT TRAVIS SNARR</div><div>Lic. No. 49978</div><div>DATE 02/01/24</div><div>PROFESSIONAL ENGINEER</div></div>																																				
ENGINEER	<div>TRENT TRAVIS SNARR, P.E. VIRGINIA PROFESSIONAL ENGINEER LICENSE #49978</div>																																				
SHEET TITLE	<div>EQUIPMENT DETAILS II</div>																																				
SHEET NUMBER	<div>A-3</div>																																				

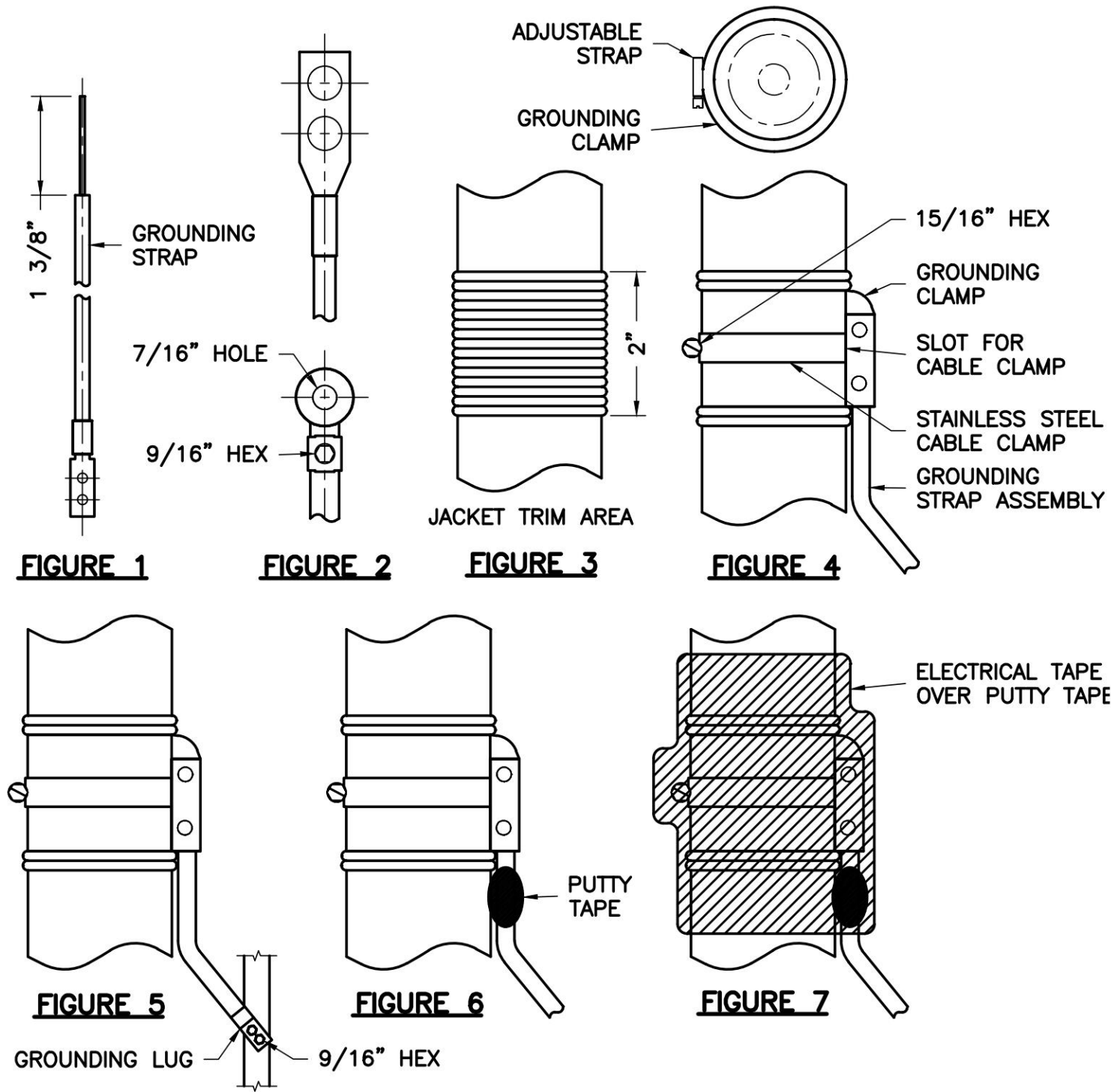


1 RF PLUMBING DIAGRAM
A-4 NTS

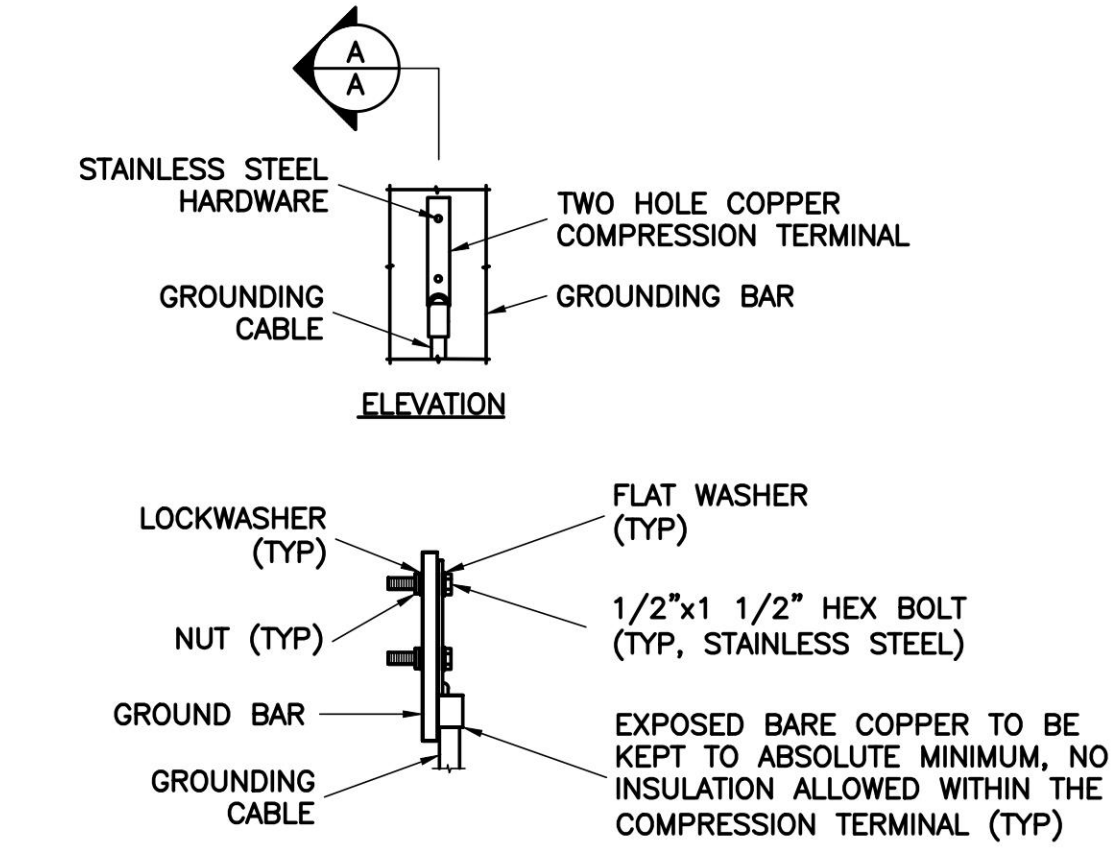
ENGINEER	<div><p>TOTALLY COMMITTED.</p><p>NB+C ENGINEERING SERVICES, LLC. 120 EASTSHORE DRIVE, SUITE 300 GLEN ALLEN, VA 23059 (804) 548-4079</p></div>																												
APPLICANT	<div><p>1831 RADY COURT RICHMOND, VA 23222</p></div>																												
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SHEET NUMBER	<p>A-4</p>																												

GROUNDING NOTES

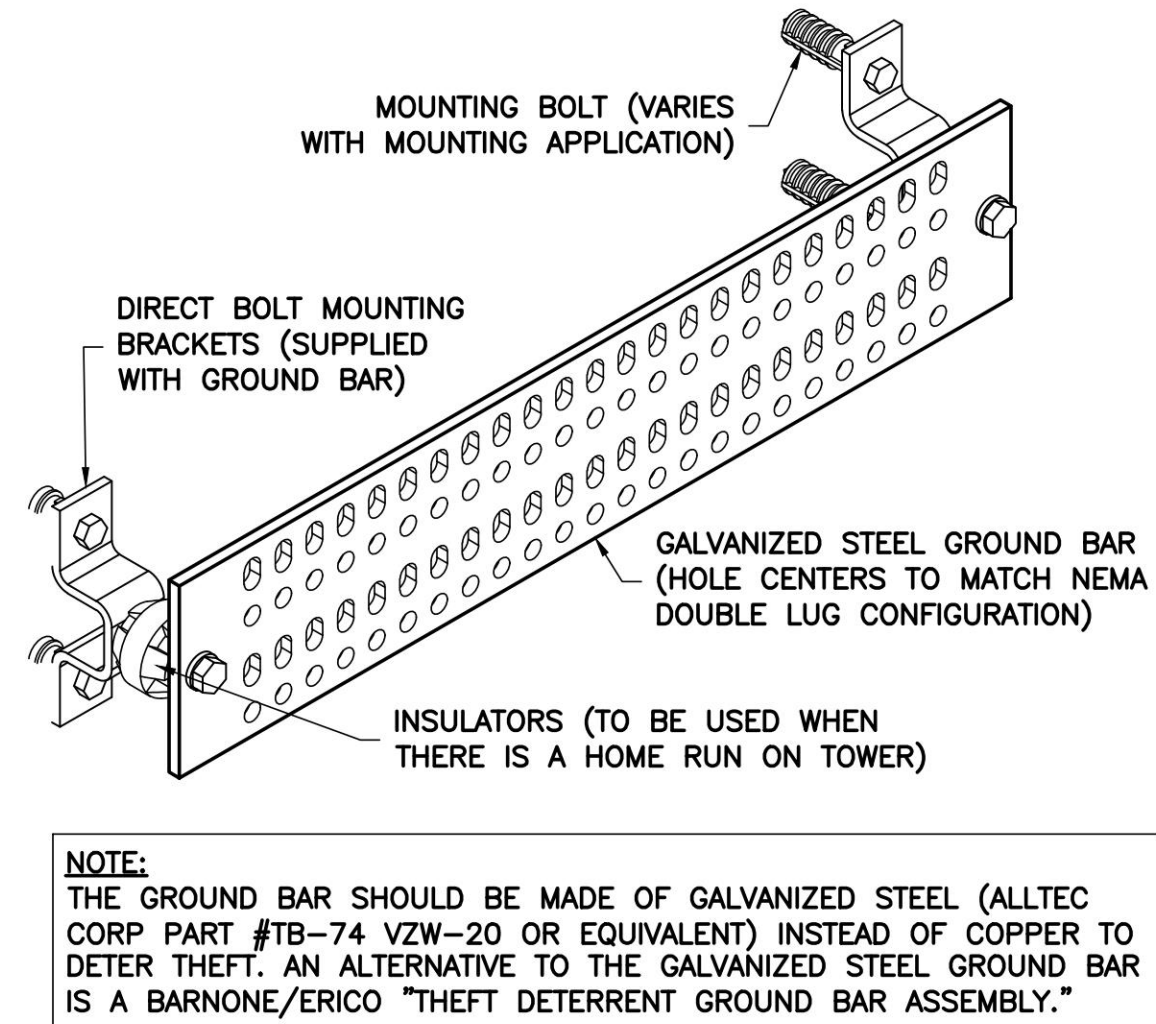
- GROUNDING SHALL COMPLY WITH NEC ART. 250. ADDITIONALLY, GROUNDING, BONDING AND LIGHTING PROTECTION SHALL BE DONE IN ACCORDANCE WITH VERIZON WIRELESS GROUNDING STANDARDS.
- GROUND CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURERS CABLE GROUNDING KITS SUPPLIED BY PROJECT OWNER.
- USE #6 COPPER STRANDED WIRE WITH GREEN COLOR INSULATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND #2 SOLID TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE DRAWING.
- ALL POWER AND GROUND CONNECTIONS TO BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY HARGER (OR APPROVED EQUAL) RATED FOR OPERATION AT NO LESS THAN 75°C OR CADWELD EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
- ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE, EXCEPT AS OTHERWISE INDICATED. GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLE. ALWAYS MAKE AT LEAST 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY. BOND ANY METAL OBJECTS WITHIN 6 FEET OF PROJECT OWNER EQUIPMENT OR CABINET TO MASTER GROUND BAR OR GROUNDING RING.
- CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.
- APPLY OXIDE INHIBITING COMPOUND TO ALL MECHANICAL GROUND CONNECTIONS.
- CONTRACTOR SHALL PROVIDE AND INSTALL OMNI DIRECTIONAL ELECTRONIC MARKER SYSTEM (EMS) BALLS OVER EACH GROUND ROD AND BONDING POINT BETWEEN EXISTING TOWER/ MONOPOLE GROUNDING RING AND EQUIPMENT GROUNDING RING.
- CONTRACTOR SHALL TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION. 5 OHMS MINIMUM RESISTANCE REQUIRED.
- CONTRACTOR SHALL CONDUCT ANTENNA, CABLE, AND LNA RETURN-LOSS AND DISTANCE-TO-FAULT MEASUREMENTS (SWEEP TESTS) AND RECORD RESULTS FOR PROJECT CLOSE OUT.



1 TYPICAL COAX WEATHERPROOFING DETAIL
G-1 NTS

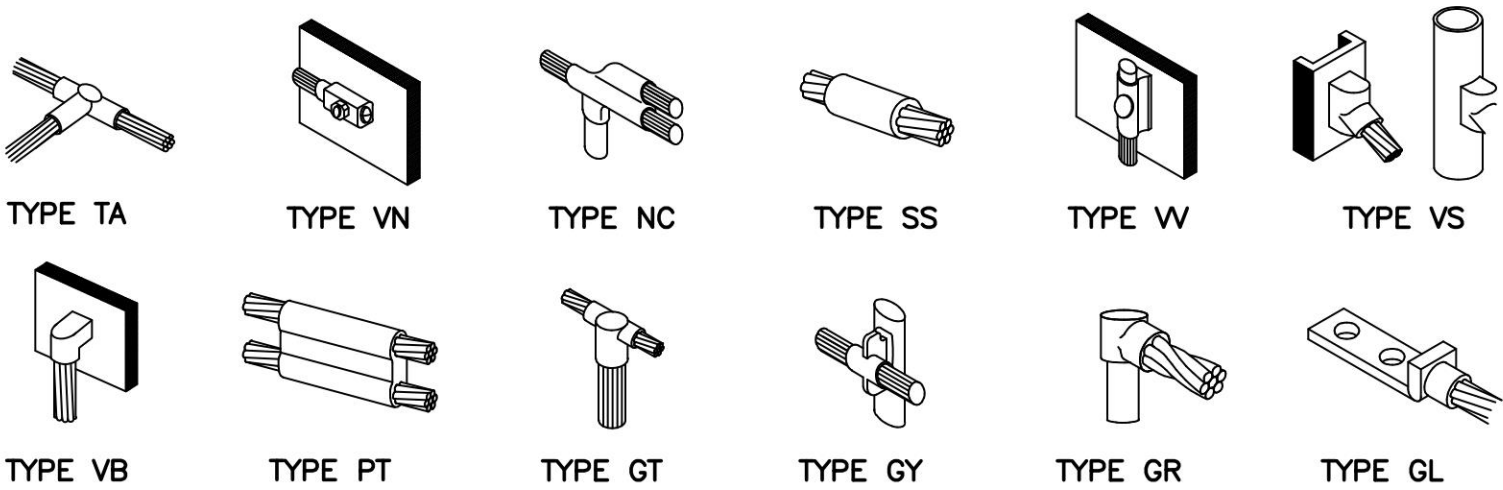


2 TYPICAL GROUND BAR CONNECTION DETAIL
G-1 NTS

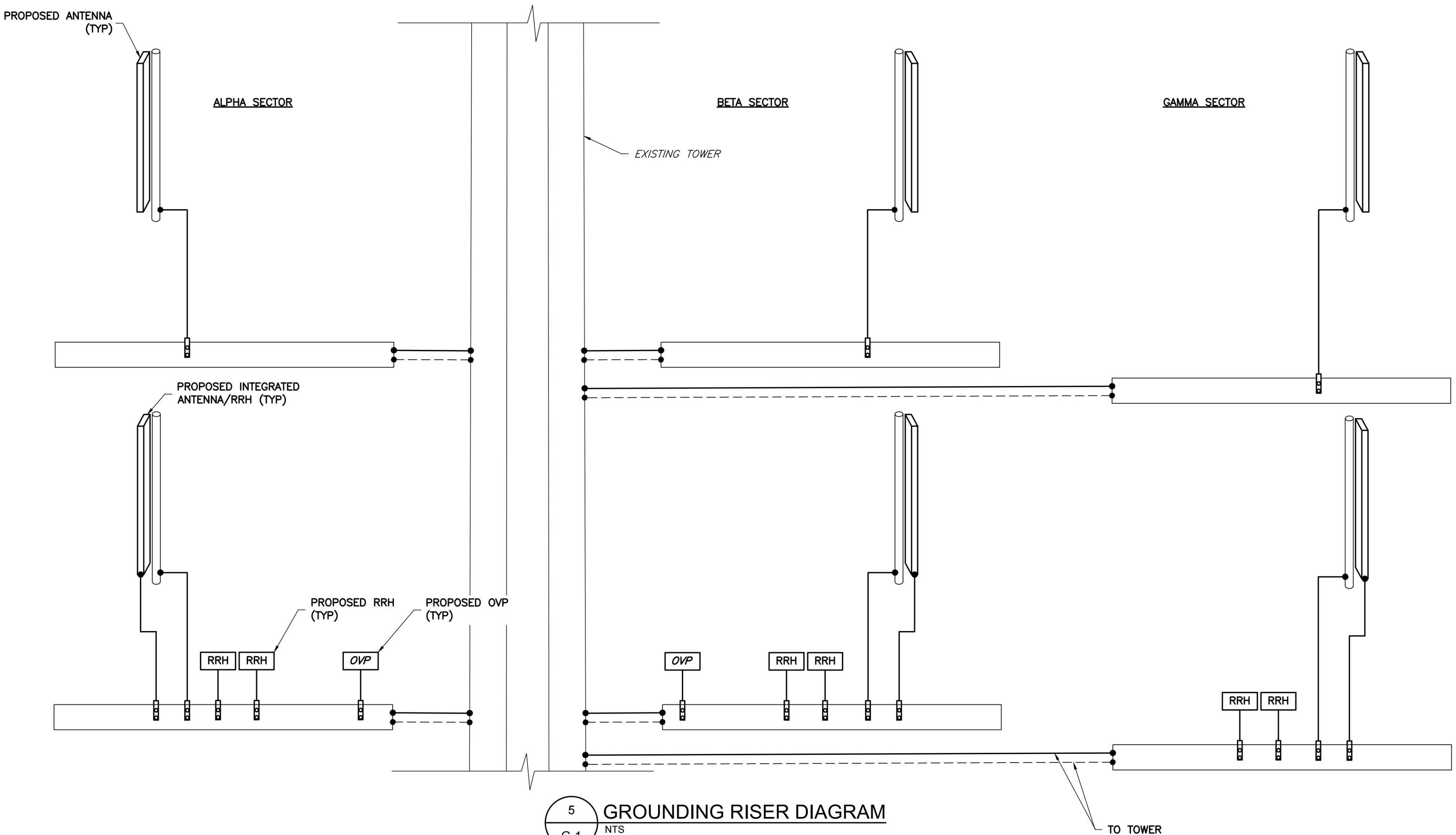


NOTE:
THE GROUND BAR SHOULD BE MADE OF GALVANIZED STEEL (ALLTEC CORP PART #TB-74 VZW-20 OR EQUIVALENT) INSTEAD OF COPPER TO DETER THEFT. AN ALTERNATIVE TO THE GALVANIZED STEEL GROUND BAR IS A BARNONE/ERICO "THEFT DETERRENT GROUND BAR ASSEMBLY."

3 GROUND BAR DETAIL
G-1 NTS



4 CADWELD GROUNDING CONNECTION DETAILS
G-1 NTS



5 GROUNDING RISER DIAGRAM
G-1 NTS

ENGINEER

APPLICANT

SITE INFORMATION

DESIGN RECORD

PROFESSIONAL STAMP

ENGINEER

SHEET TITLE

SHEET NUMBER

NB+C
TOTALLY COMMITTED.
NB+C ENGINEERING SERVICES, LLC.
120 EASTSHORE DRIVE, SUITE 300
GLEN ALLEN, VA 23059
(804) 548-4079

verizon
1831 RADY COURT
RICHMOND, VA 23222

NIX WAY
5G LSUB6 - CARRIER ADD
NB+C PROJ. #100352
1863 THOMAS JEFFERSON
PARKWAY
CHARLOTTESVILLE, VA 22902
ALBEMARLE COUNTY

REVISIONS

REV	DATE	DESCRIPTION	BY
4	02/01/24	REVISED	CCS
3	10/31/23	REVISED	KLB
2	08/22/23	REVISED	AT
1	08/08/23	FINAL ZDS	AT
0	06/27/23	PRELIMINARY ZDS	CCS



TRENT TRAVIS SNARR, P.E.
VIRGINIA PROFESSIONAL ENGINEER
LICENSE #49978

GROUNDING
RISER DIAGRAM
& DETAILS

G-1

MOUNT MODIFICATION DRAWINGS

PROPOSED CARRIER: VERIZON

TOWER OWNER: VERIZON WIRELESS
TOWER OWNER SITE #: 348 NIX WAY


CARRIER SITE NUMBER: 5000114713-VZW
CARRIER SITE NAME: NIX WAY

COORDINATES (LATITUDE: 37.979056°, LONGITUDE: -78.422250°)


FUZE ID # 16933069

Contractor PMI Requirements			
PMI Accessed At		https://pmi.vzwsmart.com	
Smart Tool Vendor Project Number	10204529	Post MOD Analysis Report Project Number	10204529
VzW Location Code (PSLC)	5000114713	Report Dated	6/2/2023
*** PMI and Requirements embedded in Mount Analysis Report			
VzW APPROVED SMART KIT VENDORS			
Refer to Mount Modification Drawings Page for VzW SMART KIT Approved Vendors			

SHEET	SHEET TITLE	REV
ST-1	TITLE SHEET	0
SBOM	BILL OF MATERIALS	0
SGN-1	GENERAL NOTES	0
SCF-1	CLIMBING FACILITY DETAILS	0
SS-1	ANTENNA MOUNT MODIFICATION DETAILS	0
SS-2	STANDARD DETAILS	0
SS-3	MOUNT PHOTOS	0
-	SPECIFICATION SHEETS	



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GENERAL NOTES

- ALL WORK SHALL COMPLY WITH THE ANSI/TIA-222-H, ANSI/ASSP A10.48, AND ANY OTHER GOVERNING BUILDING CODES AND OSHA SAFETY REGULATIONS.
- ALL WORK INDICATED ON THE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN TELECOMMUNICATIONS TOWER, POLE AND FOUNDATION CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND FABRICATION OF ALL MISCELLANEOUS PARTS (SUCH AS SHIMS), TEMPORARY SUPPORTS, AND GUYINGS, ETC., PER ANSI/ASSP A10.48, TO COMPLETE THE ASSEMBLY AS SHOWN IN THE DRAWINGS.
- CONTRACTOR SHALL PROCEED WITH THE INSTALLATION WORK CAREFULLY SO THE WORK WILL NOT DAMAGE ANY EXISTING CABLE, EQUIPMENT OR THE STRUCTURE.
- THE USE OF GAS TORCH OR WELDER, ARE NOT ALLOWED ON ANY TOWER STRUCTURE WITHOUT THE CONSENT OF THE TOWER OWNER.
- GENERALLY THE CONTRACTOR IS RESPONSIBLE TO CONDUCT AN ONSITE VISIT SURVEY OF THE JOB SITE AFTER AWARD, AND REPORT ANY ISSUES WITH THE SITE TO **TES** BEFORE PROCEEDING CONSTRUCTION.
- TEMPORARILY RELOCATE ANY EXISTING COAX ATTACHED TO THE LEGS AND/OR ANY OTHER MEMBERS WHERE OBSTRUCTION WITH THE PROPOSED MODIFICATION MAY OCCUR.
- IT IS THE RESPONSIBILITY OF THE GC TO VERIFY THAT THERE IS NO INTERFERENCES (WITH SAFETY CLIMB BRACKETS, TRANSMISSION LINES, ETC.) PRIOR TO MOBILIZATION AND INSTALLATION OF THESE MODIFICATIONS.
- PLEASE NOTIFY TES IMMEDIATELY IF ANY INSTALLATION ISSUES OCCUR RELATED TO THIS DRAWING @ 972-483-0607 OR EMAIL-**PMISUPPORT@TESTOWER.US**

FABRICATION

- ALL STEEL SHALL MEET OR EXCEED THE MINIMUM STRENGTH AS SPECIFIED IN THE DRAWINGS. IF YIELD STRENGTH WAS NOT NOTED IN THE DRAWINGS, CONTRACTORS SHALL CONTACT TES FOR DIRECTION.
- ALL FIELD CUT EDGES SHALL BE GROUND SMOOTH. ALL FIELD CUT AND DRILLED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZINC KOTE GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

WELDING

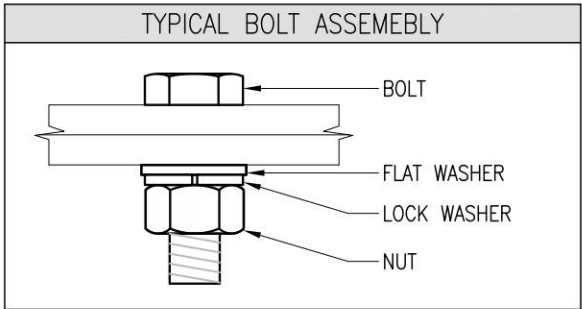
- ALL WELDING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS AND IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, UNO. (E70XX UNLESS NOTED OTHERWISE).
- PRIOR TO FIELD WELDING GALVANIZED MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING APPROX. 0.5" BEYOND THE PROPOSED FIELD WELD SURFACES.
- ALL WELDS SHALL BE INSPECTED VISUALLY. A MINIMUM OF 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. 100% OF WELDS SHALL BE INSPECTED IF DEFECTS ARE FOUND.
- WELD INSPECTIONS SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
- AFTER INSPECTION, ALL FIELD WELDED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZINC KOTE GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

BOLTED ASSEMBLIES AND TIGHTENING OF CONNECTIONS

- ALL HIGH STRENGTH BOLTS SHALL CONFORM TO THE PROVISIONS OF THE SPECIFICATIONS FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS AS APPROVED BY THE RCSC.
- FLANGE BOLTS SHALL BE TIGHTENED BY THE AISC "TURN-OF-THE-NUT" METHOD. THE FOLLOWING TABLE SHOULD BE USED FOR THE "TURN-OF-THE-NUT" TIGHTENING.
- SPLICE BOLTS AND ALL OTHER BOLTS IN BEARING TYPE CONNECTIONS SHALL BE TIGHTENED TO A SNUG-TIGHT CONDITION.
- THE SNUG-TIGHT CONDITION IS DEFINED AS THE TIGHTNESS ATTAINED BY EITHER A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER WITH AN ORDINARY SPUD WRENCH TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.
- FOR THREADED ROD CONNECTIONS, TRIM EXCESS THREADED ROD TO NO MORE THAN 3" PAST THE NUT AND COAT WITH ZINC KOTE GALVANIZING COMPOUND.

VERIFICATION AND INSPECTION

- IF APPLICABLE, VERIFICATION INSPECTION TO BE PERFORMED SHALL BE IN ACCORDANCE TO IBC-2018 SECTION 1705.2 FOR STEEL CONSTRUCTION AND TABLE 1705.3 FOR CONCRETE CONSTRUCTION.



NOTES

- ALL DIMENSIONS REPRESENTED IN THIS SHEET ARE AISC MINIMUM REQUIREMENTS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF DISTANCES ARE LESS THAN THOSE PROVIDED.
- THE DIMENSIONS PROVIDED ARE MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS OF PROPOSED MEMBERS WITHIN THESE DRAWINGS MAY VARY FROM THE AISC MINIMUM REQUIREMENTS.
- SHORT SLOT HOLES SHALL ONLY BE USED WHEN DEPICTED IN THE DRAWINGS.
- MATCH EXISTING GAGES WHEN APPLICABLE, UNLESS MINIMUM EDGE DISTANCE ARE COMPROMISED.

TABLE 8.2 NUT ROTATION FROM SNUG-TIGHT
CONDITION FOR TURN-OF-NUT PRETENSIONING^{a,b}

BOLT LENGTH ^c	DISPOSITION OF OUTER FACE OF BOLTED PARTS		
	BOTH FACES NORMAL TO BOLT AXIS	ONE FACE NORMAL TO BOLT AXIS, OTHER SLOPED NOT MORE THAN 1:20 ^d	BOTH FACES SLOPED NOT MORE THAN 1:20 FROM NORMAL TO BOLT AXIS ^d
NOT MORE THAN 4d _b	1/3 TURN	1/2 TURN	2/3 TURN
MORE THAN 4d _b BUT NOT MORE THAN 8d _b	1/2 TURN	2/3 TURN	5/6 TURN
MORE THAN 8d _b BUT NOT MORE THAN 12d _b	2/3 TURN	5/6 TURN	1 TURN

^a NUT ROTATION IS RELATIVE TO BOLT REGARDLESS OF THE ELEMENT (NUT OR BOLT) BEING TURNED. FOR REQUIRED NUT ROTATIONS OF 1/2 TURN AND LESS, THE TOLERANCE IS PLUS OR MINUS 30 DEGREES; FOR REQUIRED NUT ROTATIONS OF 2/3 TURN AND MORE, THE TOLERANCE IS PLUS OR MINUS 45 DEGREES.

^b APPLICABLE ONLY TO JOINTS IN WHICH ALL MATERIAL WITHIN THE GRIP IS STEEL.

^c WHEN THE BOLT LENGTH EXCEEDS 12d_b, THE REQUIRED NUT ROTATION SHALL BE DETERMINED BY ACTUAL TESTING IN A SUITABLE TENSION CALIBRATOR THAT SIMULATES THE CONDITIONS OF SOLIDLY FITTING STEEL.

^d BEVELED WASHER NOT USED.

SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, JUNE 30, 2004
RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS

NOMINAL HOLE DIMENSIONS		
BOLT DIAMETER	STANDARD HOLE	SHORT SLOT
1/2"	9/16"	9/16" X 11/16"
5/8"	11/16"	11/16 X 7/8"
3/4"	13/16"	13/16" X 1"
7/8"	15/16"	15/16" X 1 1/8"
1"	1 1/16"	1 1/16" X 1 5/16"

BOLT EDGE AND SPACING		
BOLT DIAMETER	MIN EDGE	SPACING
1/2"	7/8"	1 1/2"
5/8"	1 1/8"	1 7/8"
3/4"	1 1/4"	2 1/4"
7/8"	1 1/2"	2 5/8"
1"	1 3/4"	3"

The diagram shows a rectangular plate with two circular bolt holes. Dimension lines indicate the minimum edge distance from the center of a hole to the nearest edge, and the minimum spacing between the centers of two adjacent holes.

WORKABLE GAGES	
ANGLE SIZE	GAGE
1 3/4"	1"
2"	1 1/8"
2 1/2"	1 3/8"
3"	1 3/4"
3 1/2"	2"
4"	2 1/2"

The diagram shows a right-angled gage being used to measure the corner of an angle. The gage is labeled "GAGE".

ALLOWABLE COPING	
<p>1.5 X L (MAX)</p>	LIMIT OF ALLOWABLE COPED PORTION OF ANGLE WITHOUT ENGINEERS PRIOR WRITTEN APPROVAL

The diagram shows an angle with a portion of its corner being coped (cut out). A dimension line indicates the maximum allowable length of the coping is 1.5 times the leg length (L). A note states that this is the limit of allowable coping without the engineer's prior written approval.



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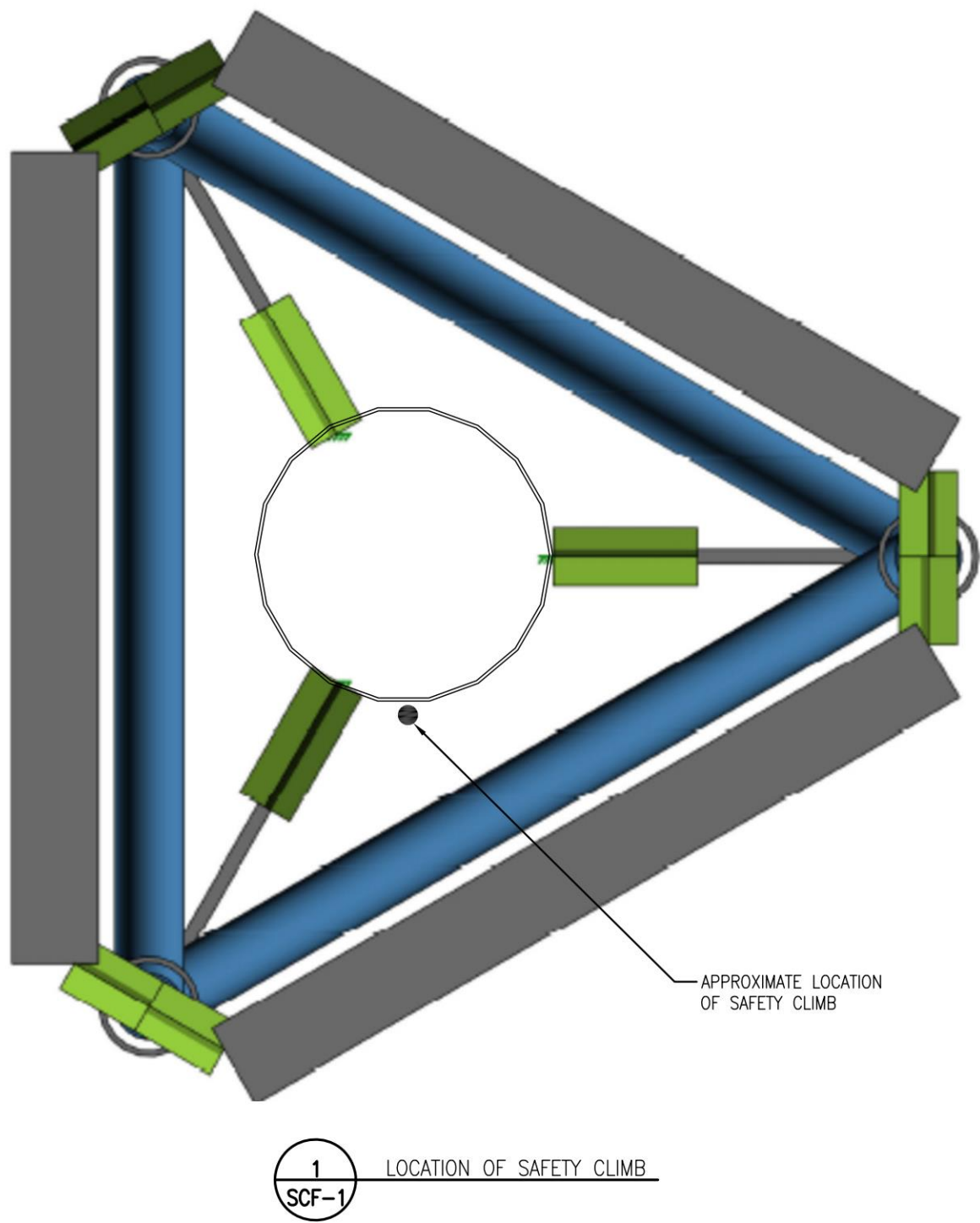
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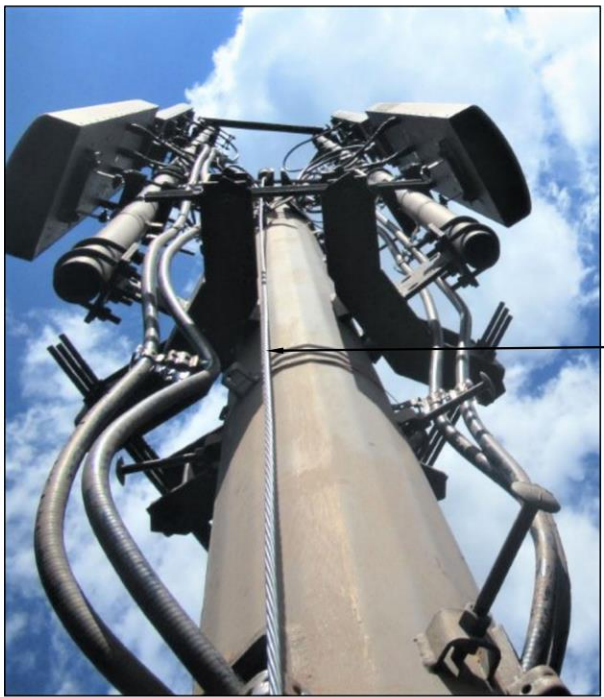
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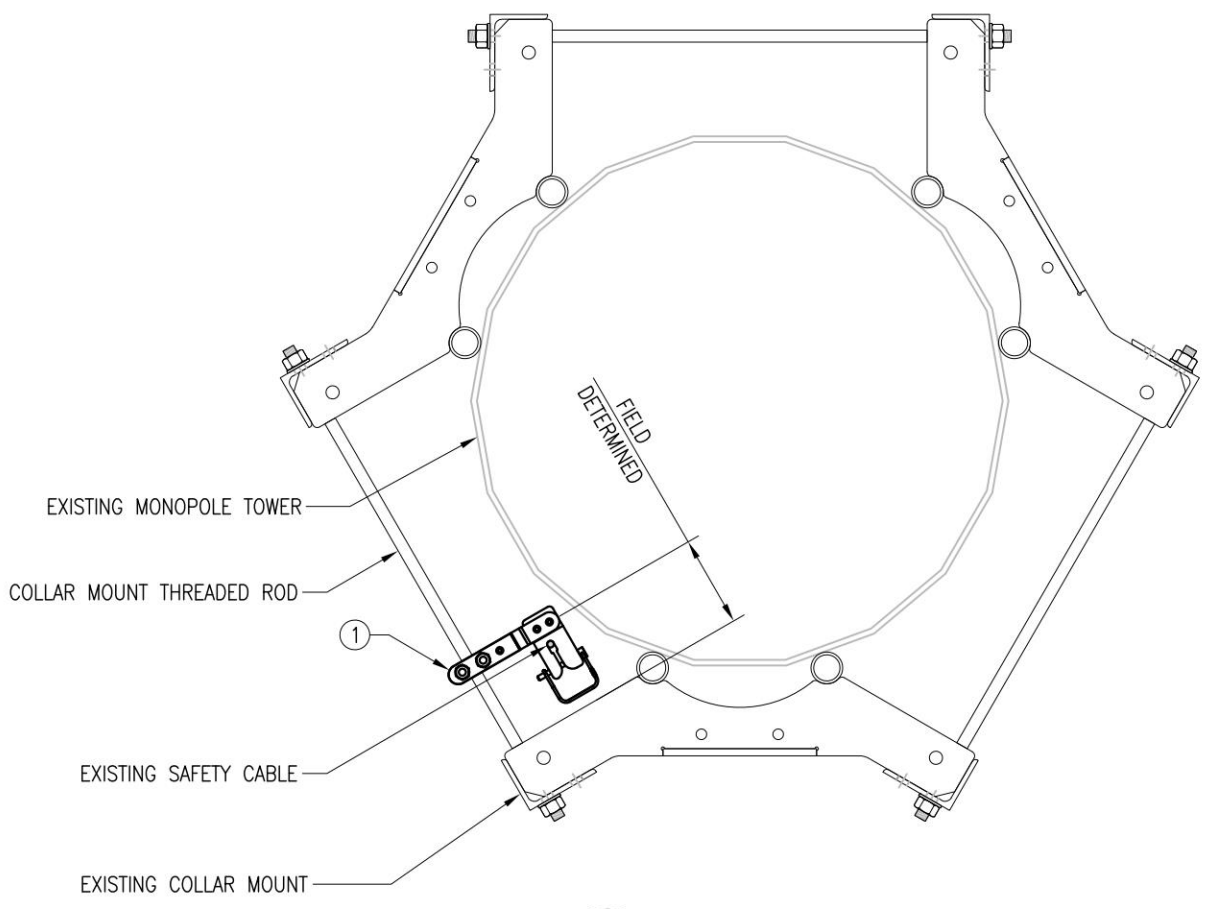
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NOTE:
1. INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB OR ANY SYSTEM INSTALLED ON THE STRUCTURE.




PICTURE OF SAFETY CLIMB



ITEM NO.	QTY.	PART NO.	DESCRIPTIONS
1	2	PV-CMX-CG-BO	PERFECT VISION INTERMEDIATE WIRE ROPE GUIDE U



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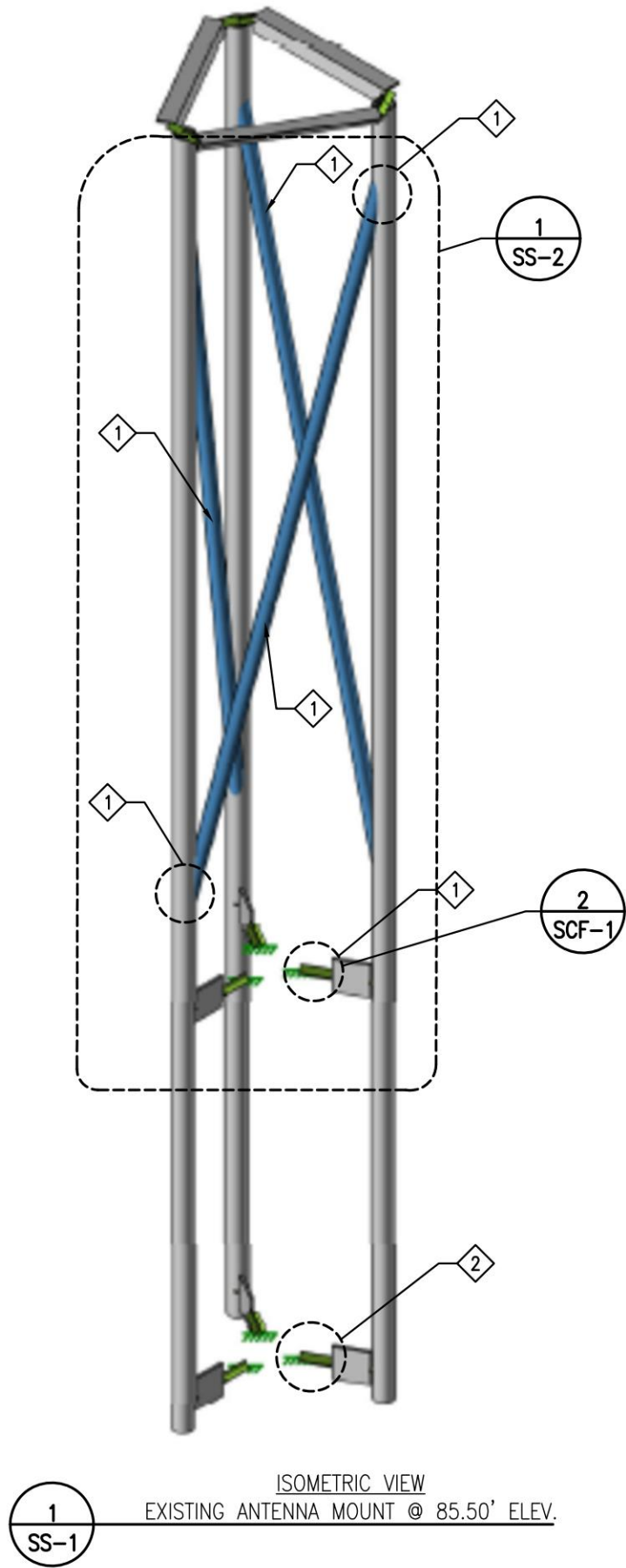
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CLIMBING FACILITY
DETAILS

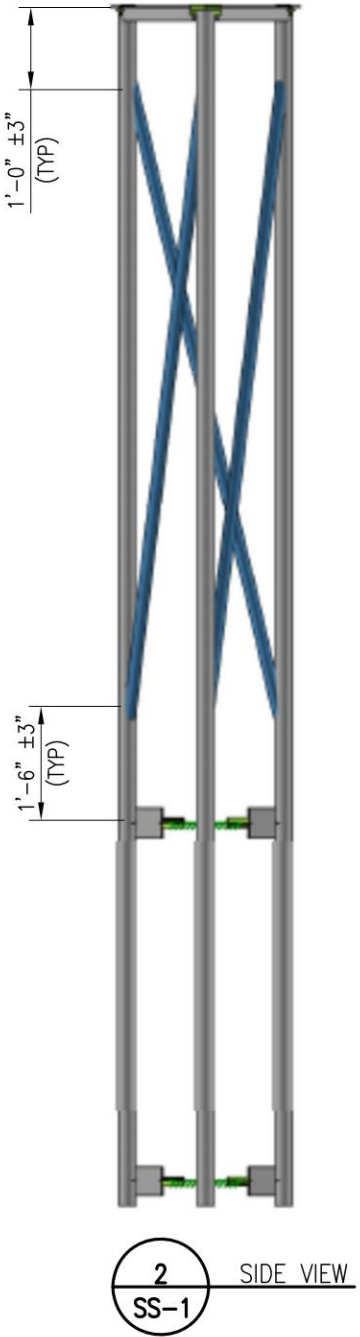
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SHEET NUMBER:
SCF-1

REV #:
0




MOUNT MODIFICATION SCHEDULE		
SL. NO.	MOUNT MODIFICATION DESCRIPTION	REFERENCE SHEET NO.
1	INSTALL NEW VZWSMART UNIVERSAL ADJUSTABLE CROSSOVER, THEN INSTALL NEW DIAGONAL BRACING PIPE 2 SCHE40 (2.375" OD X 0.154" THK) x 174" LONG	VZWSMART-PIPE, VZWSMART-MSK14, SS-2
2	INSTALL NEW PERFECT VISION INTERMEDIATE WIRE ROPE GUIDE	SCF-1
FIELD CUTTING AND FIELD DRILLING MAY BE NECESSARY TO ACHIEVE THE REQUIRED DIMENSIONS		
FOR THREADED ROD CONNECTIONS, TRIM EXCESS THREADED ROD TO NO MORE THAN 3" PAST THE NUT AND COAT WITH ZINC KOTE GALVANIZING COMPOUND.		
IF EXISTING TOWER IS PAINTED, CONTRACTOR TO VERIFY WITH TOWER OWNER IF NEW MODIFICATION MEMBERS ARE TO BE PAINTED TO MATCH EXISTING TOWER COLOR.		
THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEAN-UP, REMOVAL AND DISPOSAL OF EXCESS MATERIALS USED AND REMOVED FROM THE STRUCTURE AT THE COMPLETION OF THE PROJECT.		
MEMBERS IN BLUE COLOR ARE NEW REINFORCEMENTS AND MEMBERS IN AQUA COLOR (IF SHOWN) ARE RELOCATED MEMBERS		





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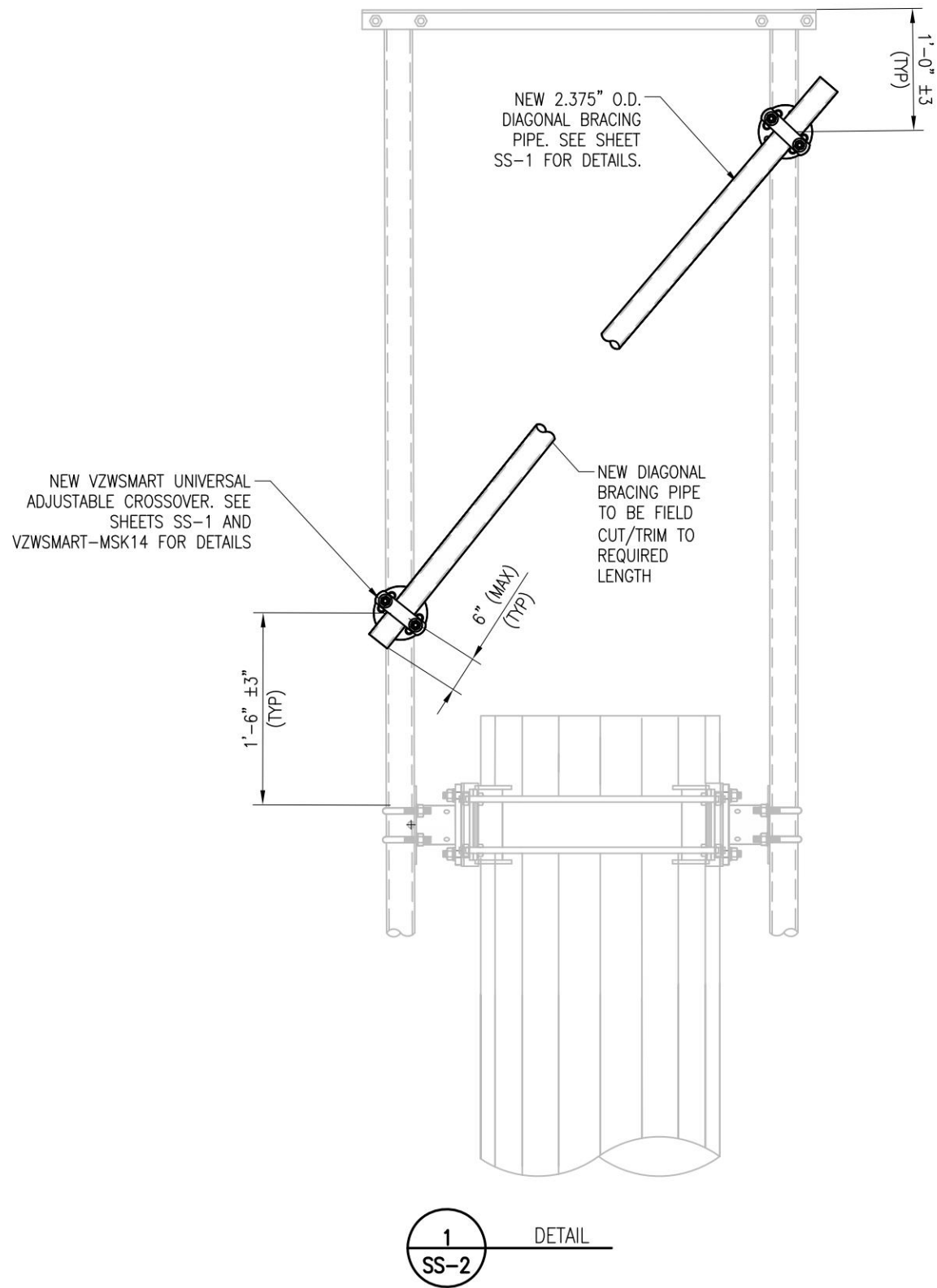
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ANTENNA MOUNT
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NOTES:
1. HOT-DIPPED GALVANIZED PER ASTM A123.



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NOTE:
EXISTING RRUS/EQUIPMENT MAY BE RELOCATED
ALONG THE MEMBER TO ACCOMMODATE THE
INSTALLATION OF NEW MOUNT MODIFICATION



EXISTING ANTENNA MOUNT
@ 85.50' ELEV

PHOTO 1



PHOTO 2

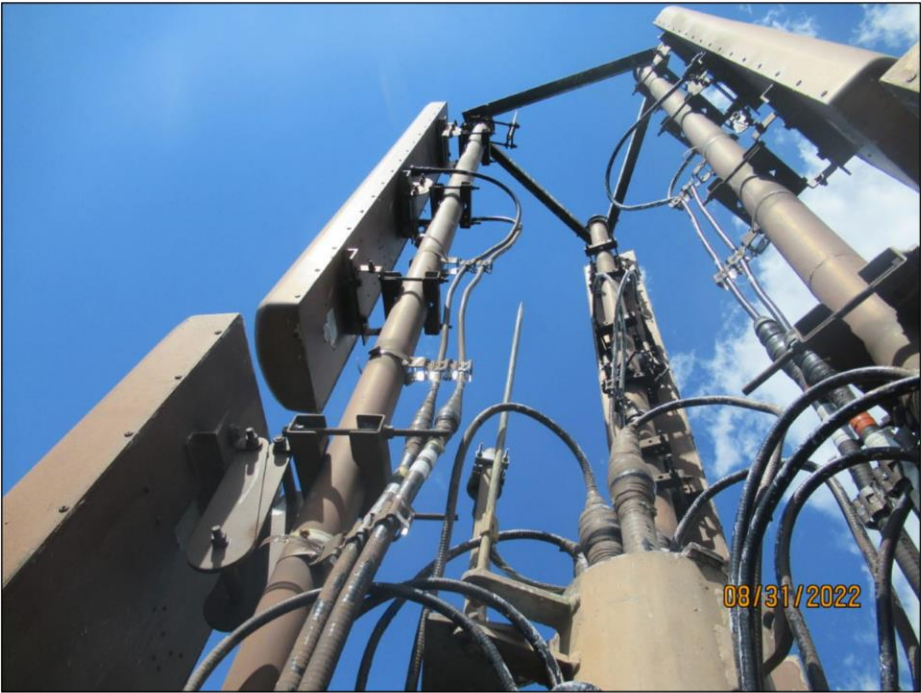


PHOTO 3



PHOTO 4



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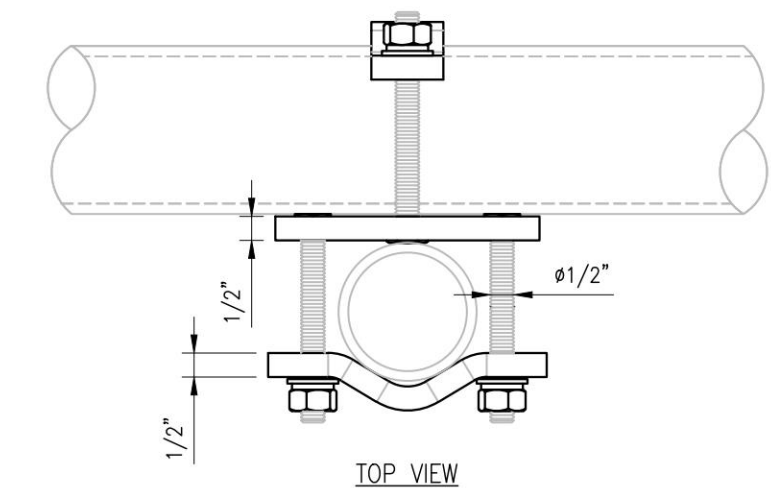
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MOUNT PHOTOS

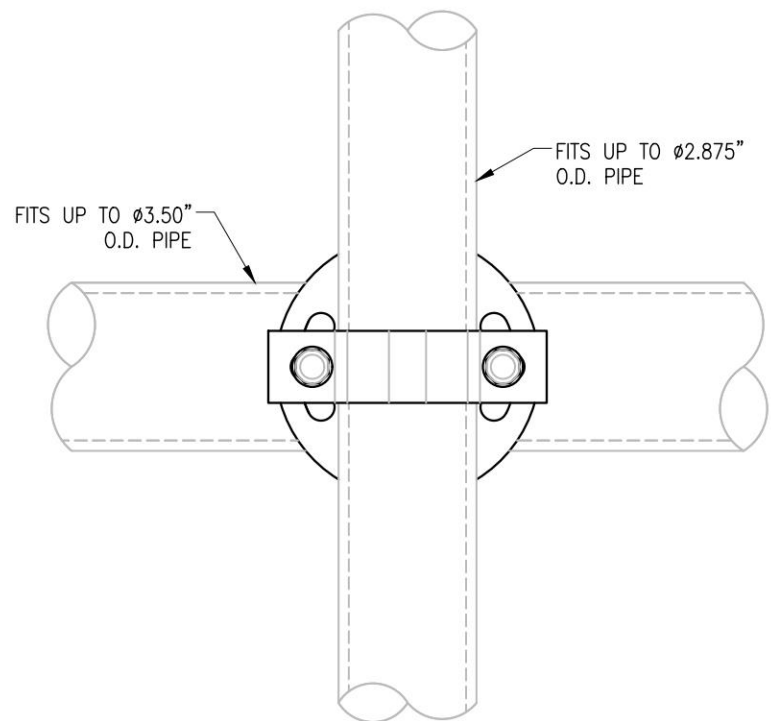
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SHEET NUMBER: SS-3
REV #: 0

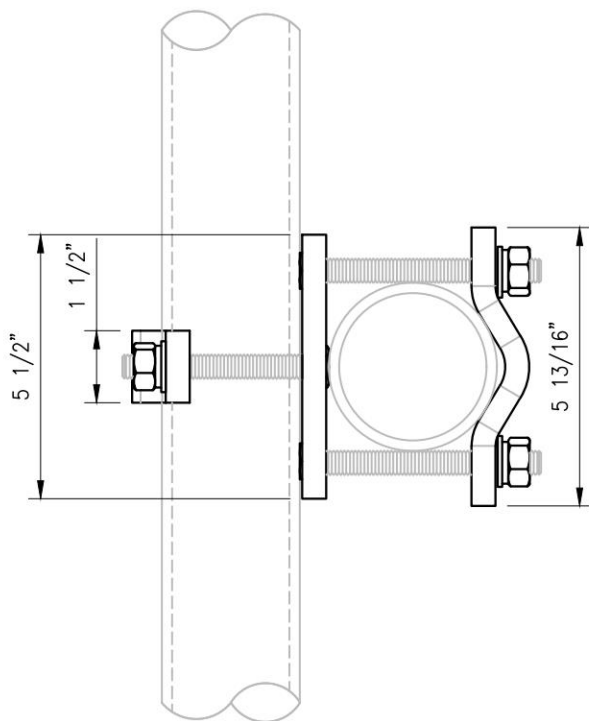
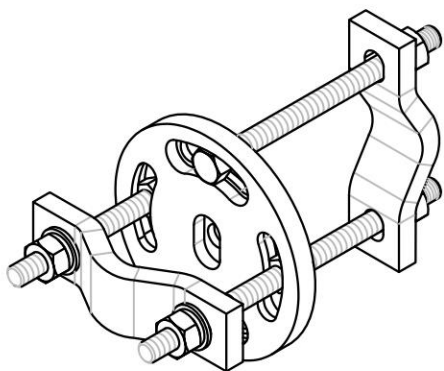
THE FOLLOWING DRAWINGS ARE INCLUDED FOR REFERENCE ONLY
PLEASE REFER TO THE INSTALLATION DRAWINGS FOR ACTUAL INSTALLATION DETAILS



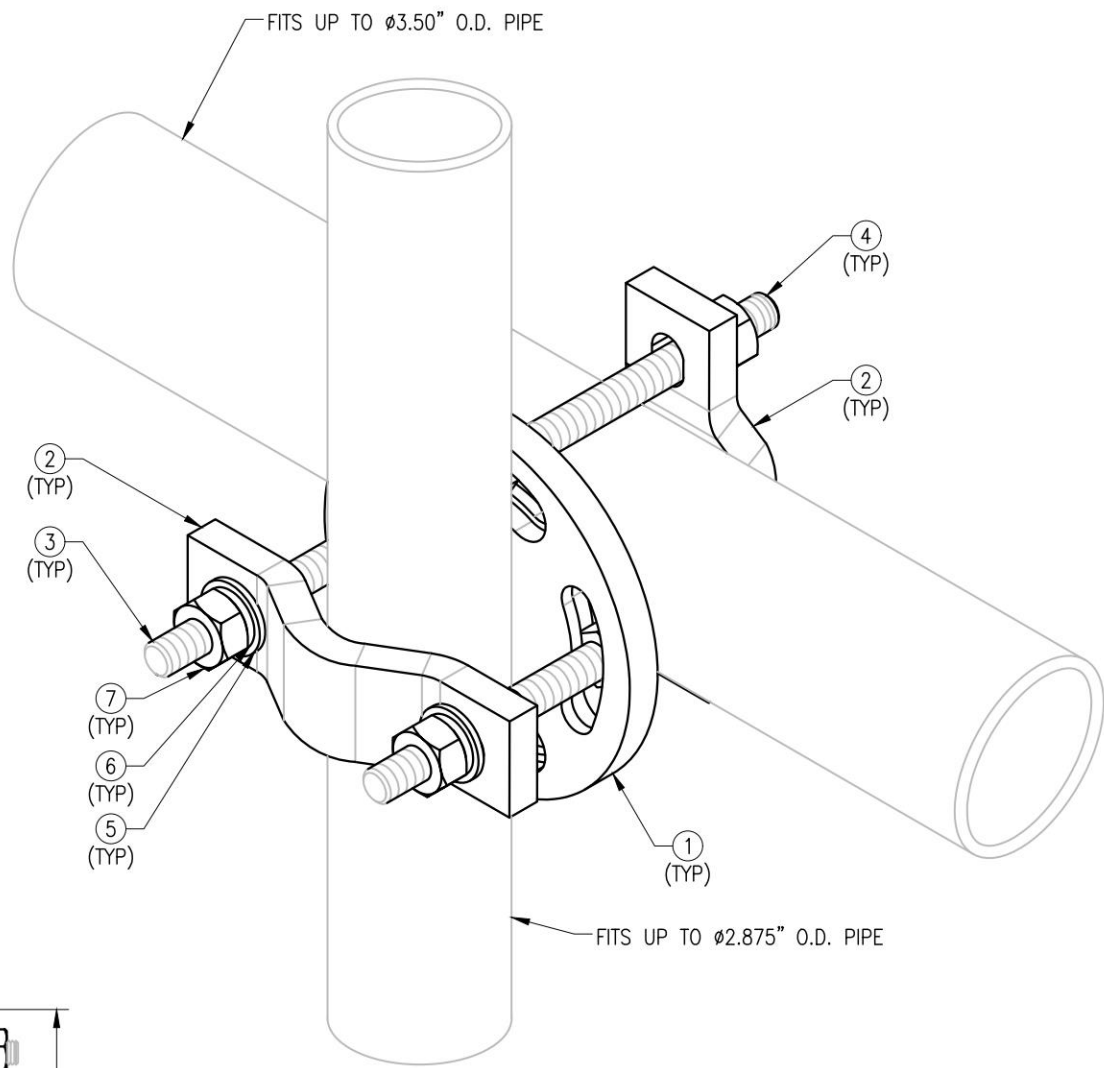
TOP VIEW



FRONT VIEW



SIDE VIEW



VZWSMART-MSK14 (UNIVERSAL ADJUSTABLE CROSSOVER)					
ITEM NO.	QTY.	PART NO.	DESCRIPTION	SHEET #	WT
1	1	CCC512	CIRCULAR CROSSOVER CLAMP	MSK14-F1	2.20
2	2	SCP10	SMALL DISH CLAMP HALF	MSK14-F2	2.40
3	2	---	BOLT 1/2" X 4" FULL THREAD SAE GR-5	---	0.48
4	2	---	BOLT 1/2" X 6 1/2" FULL THREAD SAE GR-5	---	0.72
5	4	FW-500	1/2" HDG USS FLAT WASHER	---	0.08
6	4	LW-500	1/2" HDG LOCK WASHER	---	0.04
7	4	NUT-500	1/2" HDG HEX NUT	---	0.28
GALVANIZED WT					6.19

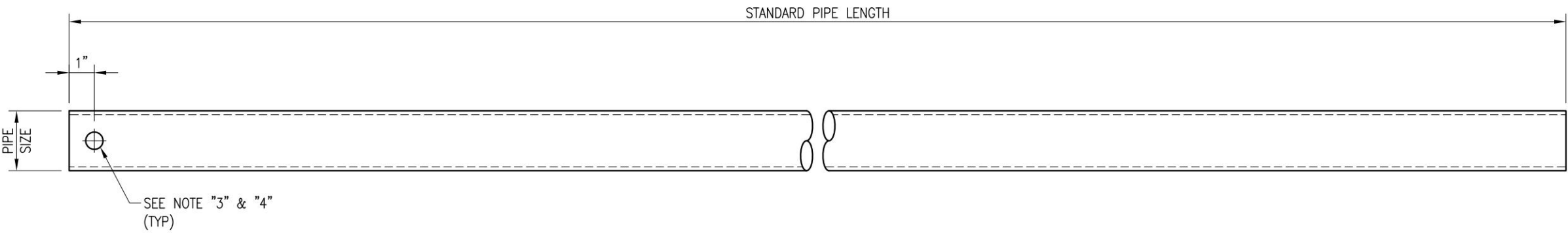
NOTES:
1. HOT-DIPPED GALVANIZED PER ASTM A123.

DRAWN BY: JBM CHECKED BY: HMA/KW

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	JBM	06/13/22
2			
3			
4			
5			

SHEET TITLE:
VZWSMART-MSK14
UNIVERSAL ADJUSTABLE
CROSSOVER

SHEET NUMBER: VZWSMART-MSK14
REV #: 0



VZWSMART Standard Pipe		
VZWSMART Number	Size	Length
P40-238X048	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	48"
P40-238X072	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	72"
P40-238X096	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	96"
P40-238X120	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	120"
P40-238X126	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	126"
P40-238X150	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	150"
P40-238X174	PIPE 2 SCH40 (2.375" OD x 0.154" THK)	174"
P40-278X048	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	48"
P40-278X072	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	72"
P40-278X096	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	96"
P40-278X120	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	120"
P40-278X126	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	126"
P40-278X150	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	150"
P40-278X174	PIPE 2.5 SCH40 (2.875" OD x 0.203" THK)	174"
P40-312X048	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	48"
P40-312X072	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	72"
P40-312X126	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	126"
P40-312X150	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	150"
P40-312X174	PIPE 3 SCH40 (3.5" OD x 0.216" THK)	174"

NOTE:
APPROVED SMART KIT VENDORS ARE ALLOWED TO SUBSTITUTE AT THEIR DISCRETION
PIPES LISTED ON THIS PAGE FOR CUSTOM LENGTH COMPONENTS OF MATCHING SIZE.
SUBSTITUTIONS SHALL MEET THE ORIGINAL STRUCTURAL INTENT.

- NOTES:**
1. ALL PIPE GRADE A53-B OR BETTER.
 2. HOT-DIPPED GALVANIZED PER ASTM A123.
 3. ALL HOLES ARE 11/16" DIA. U.N.O
 4. HOLES MAY OR MAY NOT BE PRESENT, DEPEND UPON MANUFACTURE DISCRETION.
 5. ALL FIELD CUT AND DRILLED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZINGA OR ZINC COTE PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

VzW
SMART Tool[©]
Vendor



DRAWN BY: BT CHECKED BY: HMA/KW

REV.	DESCRIPTION	BY	DATE
△	FIRST ISSUE	BT	08/04/21
△			
△			
△			
△			

SHEET TITLE:

VZWSMART
STANDARD PIPE

SHEET NUMBER: REV #:

VZWSMART-PIPE 0