GENERAL NOTES

1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.
2. THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
3. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE VERIZON REPRESENTATIVE OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES, THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
4. THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
5. THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
6. THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS OTHERWISE NOTED OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
8. THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUMS OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
9. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY, OR LOCAL GOVERNMENT AUTHORITY.
11. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVEMENTS, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
12. THE CONTRACTOR SHALL MAINTAIN THE GENERAL WORK AREA AS CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DEBRIS, TRASH, AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. DETAILS OF EQUIPMENT TO BE INCLUDED IN RFQ PACKAGE. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
13. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT.
14. THE CONTRACTOR SHALL NOTIFY THE VERIZON REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE VERIZON REPRESENTATIVE.
15. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC. ON THE JOB.
16. ALL UNISTRUT, HARDWARE, AND OUTDOOR JUNCTION BOXES SHALL BE GALVANIZED STEEL. FOR FIELD CUTS OF GALVANIZED ITEMS, FIRST COAT SHALL BE COLD GALVANIZED AND SECOND COAT SHALL BE MARINE GRADE GALVANIZED.
17. GENERAL CONTRACTOR TO PROVIDE PORTABLE BATHROOM FACILITIES DURING CONSTRUCTION.
18. RETURN ANY UNUSED MATERIALS WITH REQUIRED DOCUMENTATION TO THE VERIZON WAREHOUSE WITHIN 14 DAYS OF PROJECT COMPLETION. RETURNED MATERIAL NEEDS TO BE ACCOMPANIED WITH AN RMA FORM AND PACKAGING REQUIREMENTS STIPULATED BY THE VERIZON CONSTRUCTION ENGINEER.
19. WITHIN 24 HOURS, CONTRACTOR SHALL OPEN A REMEDY TICKET WITH THE VERIZON NOCC AND PERFORM DAILY VISUAL MONITORING, OR PROVIDE A WIRELESS MONITORING DEVICE UNTIL THE SITE IS ON AIR.
20. FILL OUT THE PROVIDED ENVIRONMENTAL EVALUATION SUMMARY (EES) AND SUBMIT WITHIN 24 HOURS OF COMPLETION OF THE WORK OUTLINED IN ATTACHMENT 'A' OF THE FORM.
21. CONTRACTOR IS RESPONSIBLE FOR STORAGE OF ALL MATERIALS PROVIDED BY VERIZON, AND IS LIABLE FOR THOSE MATERIALS ONCE PICKED UP FROM THE WAREHOUSE.
22. CONTRACTOR SHALL PERFORM A PUNCH WALK WITH VERIZON CONSTRUCTION & OPERATION REPRESENTATIVE PRIOR TO DECLARING CONSTRUCTION COMPLETE.
23. GENERAL CONTRACTOR SHALL PROVIDE A 10LBS. DRY-CHEMICAL FIRE EXTINGUISHER ON SITE DURING CONSTRUCTION. UPON COMPLETION OF ALL WORK, CONTRACTOR SHALL REMOVE FIRE EXTINGUISHER FROM SITE.

CODE ANALYSIS
OVERALL SITE

APPLICABLE BUILDING CODES:	2017 DC BUILDING CODE
	2015 IBC WITH 2017 DCMR12A SUPPLEMENT
	2015 IEBC WITH 2017 DCMR12J SUPPLEMENT.
	2014 NEC WITH 2017 DCMR12C SUPPLEMENT
	2015 IFGC WITH 2017 DCMR12D SUPPLEMENT.
	2015 IFC WITH 2017 DCMR12H SUPPLEMENT
	2012 IGCC WITH 2017 DCMR12K SUPPLEMENT
	2015 IECC WITH 2017 DCMR121 SUPPLEMENT
	2015 IPC WITH 2017 DCMR126 SUPPLEMENT
	2015 IMC WITH 2017 DCMR12E SUPPLEMENT
INDUSTRY STANDARDS:	ASCE/SEI 7-2010
	2010 ANSI/AISC 360
	2010 ANSI/AISC 341
	2010 ANSI S1000-07/S2
	2009 AISI S1000-07/S1
	2004 ASTM A325 OR A490
	2015 AWS D1.1
	2014 ACI 318
	2011 ACI 530
	2011 ACI 530.1
	2016 TIA 222-G
	2015 TIA 607-C
	2012 IEEE81
	2005 IEEE1100
	2002 IEEE C62.41
	TELCORDIA GR-1275
	TELCORDIA GR-1503
	1991 ANSI T1.311 FOR TELECOM
	2011 NFPA 780
	LIGHTNING PROTECTION CODE 2011

SITE INFORMATION

USE GROUP:	UTILITY (U)
CONSTRUCTION TYPE:	IIB
PROPOSED COMPOUND AREA:	2,250 SQ. FT.
PAD AREA: (VERIZON EQUIPMENT PAD)	44 SQ. FT.
PAD AREA: (VERIZON GENERATOR PAD)	34 SQ.FT.
ELECTRIC UTILITY COMPANY:	PRIVATE POWER (BASE)
NATURAL GAS UTILITY COMPANY:	WASHINGTON GAS

GENERATOR USE

THE PROPOSED VERIZON GENERATOR IS AN OPTIONAL STAND-BY UNIT AND DOES NOT SUPPLY LIFE SAFETY EQUIPMENT. THE GENERATOR IS USED TO BACKUP THE TELEPHONE EXCHANGE EQUIPMENT IN ORDER TO KEEP THE CELL SITE IN FULL OPERATION IN THE EVENT OF NORMAL UTILITY POWER FAIL. THEREFORE, NFPA 110 DOES NOT APPLY.

INDEX OF DRAWINGS

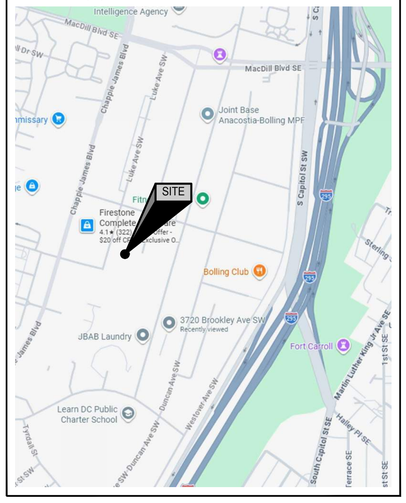
CS-1	SITE LOCATION AND VICINITY PLAN, INDEX OF DRAWINGS, AND CODE ANALYSIS
C-1	SITE PLAN
C-2	SITE DETAILS
C-3	ADDITIONAL SITE DETAILS
C-4	LANDSCAPING PLAN
C-5	EROSION & SEDIMENT CONTROL I
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S-2	STRUCTURAL DETAILS
S-3	STRUCTURAL DETAILS
S-4	STRUCTURAL DETAILS & NOTES
P-1	GAS PIPING PLAN, GAS RISER, AND NOTES
E-1	ELECTRICAL SPECIFICATIONS, SYMBOLS LIST, AND SCHEDULE
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E-4	GROUNDING SITE PLAN AND NOTES
E-5	DETAILS
E-6	DETAILS

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BOLLING TD POLE ANTENNA INSTALLATION
3720 BROOKLEY AVENUE SW WASHINGTON, DC 20032
(VERIZON FUZE PROJECT ID: 17735342)

RAND MCNALLY LICENSE # R.L.04-5-47

VICINITY PLAN



PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF THE CONSTRUCTION OF NEW VERIZON CONCRETE EQUIPMENT AND GENERATOR PADS FOR MOUNTING OF VERIZON EQUIPMENT AND STAND-BY GENERATOR WITHIN A PROPOSED CELLULAR COMPOUND. THE ASSOCIATED NINE (9) ANTENNAS WILL BE MOUNTED ON PROPOSED 120'-0" BALLASTED MONOPOLE TOWER AT A RAD CENTER OF 116'-0".

DIRECTIONS TO SITE

FROM JUNCTION DRIVE:
- MERGE ONTO MD-32 EAST
- TAKE EXIT #10C TO MERGE ONTO BALTIMORE-WASHINGTON PARKWAY
- KEEP LEFT TO STAY ON BALTIMORE-WASHINGTON PARKWAY, FOLLOW SIGNS FOR I-295 SOUTH
- KEEP LEFT TO STAY ON STATE HIGHWAY 295, FOLLOW SIGNS FOR I-295 SOUTH
- TAKE EXIT #2B MERGE ONTO S CAPITOL STREET SW
- TAKE MALCOLM X AVENUE EXIT TOWARD JBAB
- TURN RIGHT ONTO MACDILL BOULEVARD SE
- TURN LEFT ONTO BROOKLEY AVENUE SW
- TURN RIGHT ONTO MCCHORD STREET
- TURN LEFT ONTO LUKE AVENUE SW
- DESTINATION WILL BE ON THE LEFT

VERIZON REVIEW

BUILDING OWNER	DATE
ENGINEERING	DATE
OPERATIONS	DATE
CONSTRUCTION	DATE

TEI

TELEGENT ENGINEERING INC.
2216 Commerce Road, Suite 1
Forest Hill, MD 21050
410-692-5816
www.tel-eng.com

I AM RESPONSIBLE FOR DETERMINING THAT THE ENGINEERING DESIGNS INCLUDED IN THIS APPLICATION ARE IN COMPLIANCE WITH ALL LAWS AND REGULATIONS OF THE DISTRICT OF COLUMBIA. I HAVE PERSONALLY PREPARED, OR DIRECTLY SUPERVISED THE DEVELOPMENT OF THE ENGINEERING DESIGNS INCLUDED IN THIS APPLICATION.

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REVISIONS:

NO.	DESCRIPTION	DATE

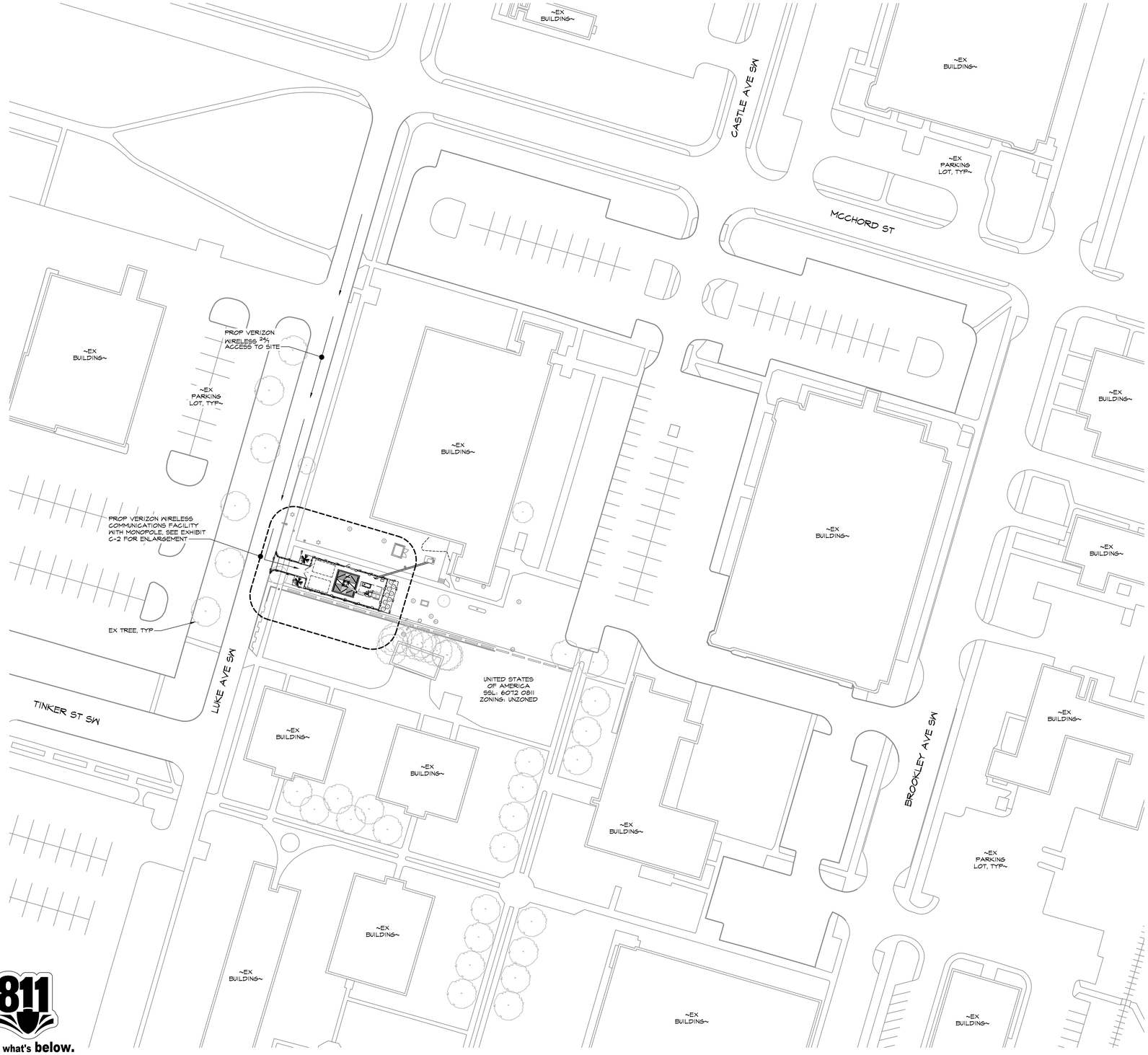
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PROJECT NO: 26011N
DATE:
SCALE: AS NOTED

TITLE:
SITE LOCATION AND VICINITY PLAN, INDEX OF DRAWINGS

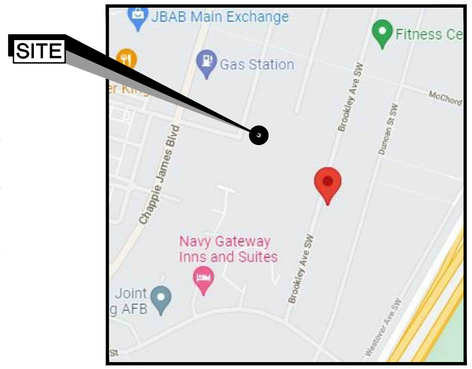
SHEET:
CS-1

REVIEW SET 08/20/26

TEI# 26011N



SITE PLAN
SCALE: 1" = 50'-0"



VICINITY MAP
SCALE: 1" = 1000'

SITE NOTES:

1. APPLICANT: VERIZON WIRELESS
10170 JUNCTION DRIVE, STE 300
ANNAPOLIS JUNCTION, MD 20701
TEL. (301) 512-2000
FAX (301) 512-2186

2. PROPERTY OWNER: UNITED STATES OF AMERICA
C/O DEPT OF AIR FORCE
1665 AIR FORCE
PENTAGON
WASHINGTON, DC 20330

3. SITE DATA: DEED BOOK: 3848 PAGE: J
SSL: 6072 0811
TRACT AREA: 153,714,942 SF
NEIGHBORHOOD: 016
ADDRESS: 3720 BROOKLEY AVE SW
WASHINGTON, DC 20032
EXISTING USE: MILITARY / TELECOMMUNICATIONS

4. ZONING: UNZONED

5. HORIZONTAL AND VERTICAL CONTROL SHOWN HEREON IS BASED ON AN FAA 1-A SURVEY CERTIFICATION BY MORRIS & RITCHIE ASSOCIATES, INC., DATED AUGUST 18, 2026.
LATITUDE: N38° 50' 23.78" (38.839938°)
LONGITUDE: W77° 00' 54.41" (-77.015264°)
GROUND ELEVATION: 17.0' AMSL (AVG.)
PROPOSED STRUCTURE HEIGHT: 120.0' AGL
TOP OF HIGHEST APPURTENANCE: 125.0" AGL
TOTAL ELEVATION (AMSL): 142.0' AMSL

6. TOTAL DISTURBED AREA = 9,500 SF

7. THE PROPOSED FACILITIES WILL CONSIST OF ONE (1) CONCRETE EQUIPMENT PAD AND ASSOCIATED EQUIPMENT WITHIN A 30'-0"x75'-0" FENCED COMPOUND. NINE (9) ANTENNAS SHALL BE MOUNTED ON A NEW 120'-0" MONOPOLE WITH A RAD CENTER AT AN ELEVATION OF 116'-0" ABOVE GRADE LEVEL FOR THE RECEPTION OF VERIZON WIRELESS TELECOMMUNICATIONS.

8. THE STRUCTURE WILL NOT SUPPORT LIGHTS OR SIGNS UNLESS REQUIRED FOR AIRCRAFT WARNING OR OTHER SAFETY RECORDS.

9. THE APPLICANT WILL PROVIDE A CERTIFICATION FROM A REGISTERED ENGINEER THAT THE STRUCTURE WILL MEET THE APPLICABLE DESIGN STANDARDS FOR WIND LOADS PER THE REQUIREMENTS OF THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION.

10. IF THE ANTENNAS ARE NO LONGER USED FOR TELECOMMUNICATIONS PURPOSES FOR A CONTINUOUS PERIOD OF ONE (1) YEAR, THEY SHALL BE REMOVED BY THE ANTENNA OWNER AT OWNER'S EXPENSE.

11. NO WATER OR SANITARY UTILITIES ARE REQUIRED FOR THE OPERATION OF THIS FACILITY.

12. STORMWATER MANAGEMENT NOTE: NO STORMWATER MANAGEMENT IS REQUIRED FOR THIS SITE.

13. BOUNDARY SHOWN PER COUNTY RECORDS.

14. THIS PLAN PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT. PLAN IS SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD.

15. ALL DETAILS SHOWN ARE "STANDARD" OR "TYPICAL" FOR REFERENCE ONLY. FOR ACTUAL DETAILS, SEE ARCHITECTURAL, STRUCTURAL, OR CONSTRUCTION PLANS BY OTHERS.

16. STRUCTURAL ANALYSIS/DESIGN TO BE PERFORMED BY OTHERS AT CLIENT AND/OR OWNER'S DISCRETION PRIOR TO COMMENCEMENT OF ANY WORK.

17. THE COMMUNICATION FACILITY SHALL BE UNMANNED, WITH INFREQUENT VISITS (FOUR OR FEWER PER YEAR) BY MAINTENANCE PERSONNEL, AND WITH ACCESS AND PARKING FOR NO MORE THAN ONE VEHICLE. THE PROPOSED FACILITY IS NOT FOR HUMAN HABITATION AND THEREFORE HANDICAP ACCESS IS NOT REQUIRED.

18. THE PROPOSED COMMUNICATIONS EQUIPMENT, ANTENNAS AND RELATED MOUNTING DEVICES DO NOT EXCEED TWELVE (12) FEET IN TOTAL HEIGHT.

GENERAL NOTES

1. CONTRACTOR SHALL NOTIFY "MISS UTILITY" (811) 48 HOURS PRIOR TO DOING ANY EXCAVATION IN THIS AREA. CONTRACTOR SHALL CONTACT A SUBSURFACE UTILITY LOCATOR FOR LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL VERIFY EXISTING UTILITY LOCATIONS BY TEST PIT AS NECESSARY. LOCATION OF UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE AND FOR PLANNING PURPOSES ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. DAMAGE TO UTILITIES OR PROPERTY OF OTHER BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPAIRED TO PRECONSTRUCTION CONDITIONS BY THE CONTRACTOR.

2. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ALL STATE AND LOCAL CODES AND ORDINANCES, THE LATEST EDITION THEREOF.

3. ANY PERMITS WHICH MUST BE OBTAINED SHALL BE THE CONTRACTOR'S RESPONSIBILITY. CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS FOR THIS PROJECT FROM ALL APPLICABLE GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.

4. CONTRACTOR SHALL COORDINATE ALL UTILITY CONNECTIONS WITH APPROPRIATE UTILITY OWNERS.

5. THESE PLANS ARE NOT FOR RECORDATION OR CONVEYANCE.

6. EXISTING PAVEMENT AND OTHER SURFACES DISTURBED BY CONTRACTOR (WHICH ARE NOT TO BE REMOVED) SHALL BE REPAIRED TO PRECONSTRUCTION CONDITIONS BY THE CONTRACTOR.

STRUCTURAL CERTIFICATION NOTES

1. "STRUCTURAL PLANS CERTIFIED AS PROVIDED IN SECTION 106.1.4.1 OF THE D.C. CONSTRUCTION CODES SUPPLEMENT AS AMENDED TO DATE."

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

PROTECT YOURSELF, GIVE THREE WORKING DAYS NOTICE.
THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APPURTENANT.

MORRIS & RITCHIE ASSOCIATES, INC.
Civil / Structural Engineers
1220-B East Joppa Road, Suite 600K
Towson, Maryland 21286
410-821-1690
410-821-1746 Fax

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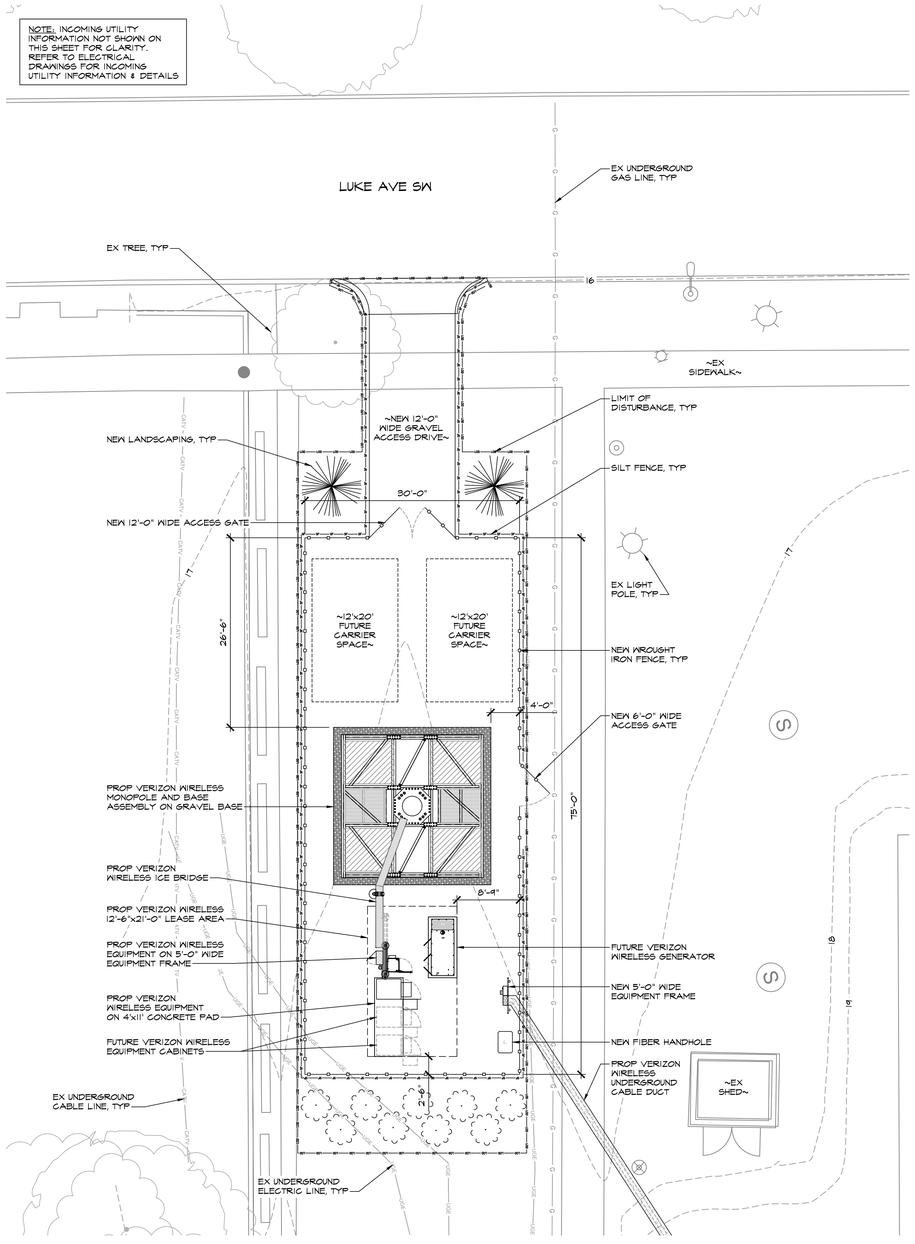
REVISIONS:

NO.	DESCRIPTION	DATE

DESIGNED BY:	AJL
DRAWN BY:	DNT
REVIEWED BY:	AJL
PROJECT NO:	10427.3769
FUZE PROJECT ID:	17735342
DATE:	08/20/2026

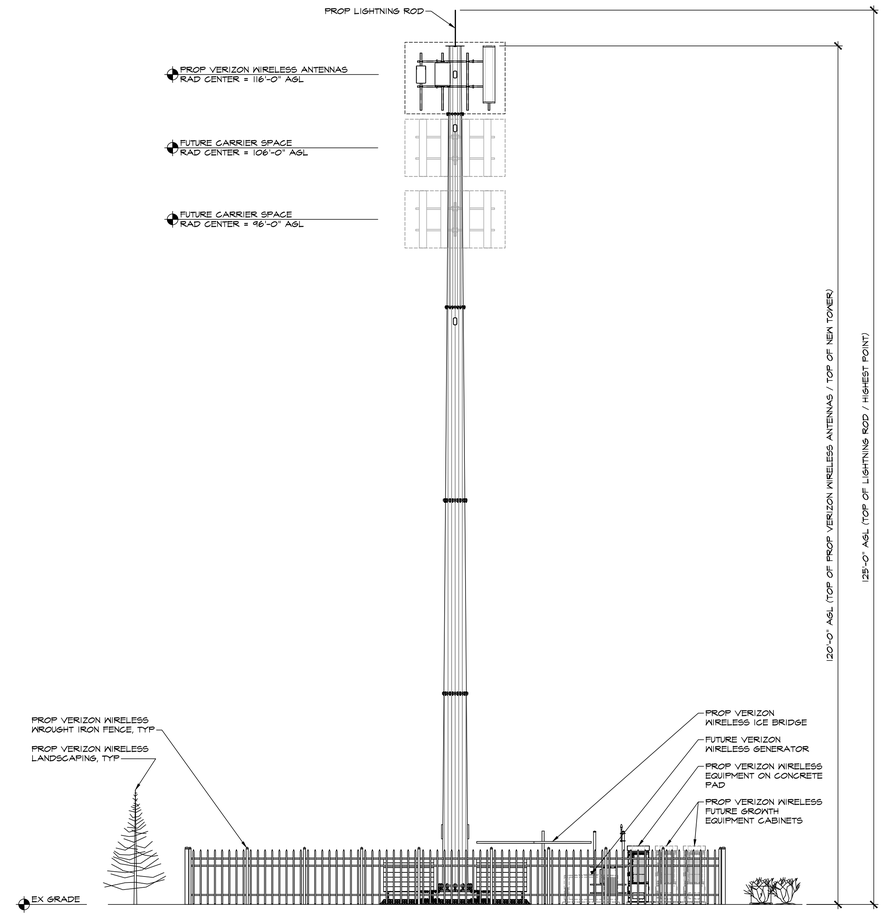
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Site Plan

SHEET:
C-1
CIV001



ENLARGED COMPOUND PLAN

SCALE: 1" = 10'-0"



TOWER ELEVATION

SCALE: 1" = 10'-0"

811

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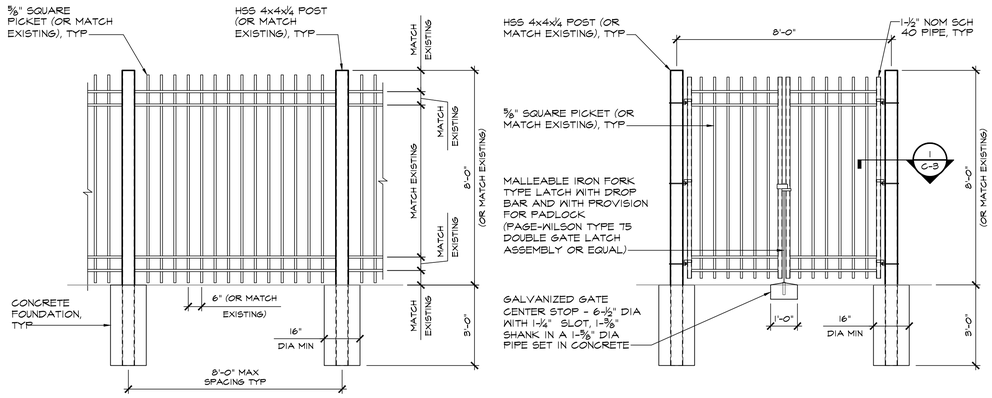
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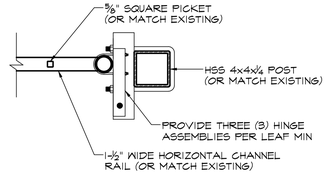
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CIV002



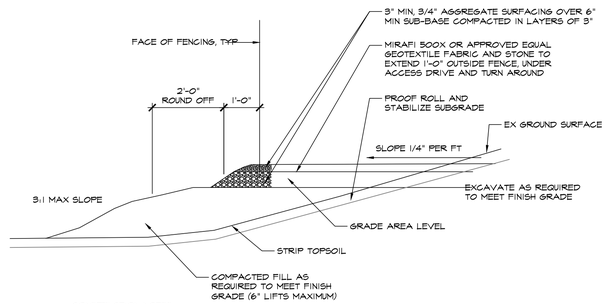
A TYP WROUGHT IRON FENCE AND GATE DETAIL

SCALE: 3/8" = 1'-0"



1 C-3 RAIL TO PIPE CONNECTION

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

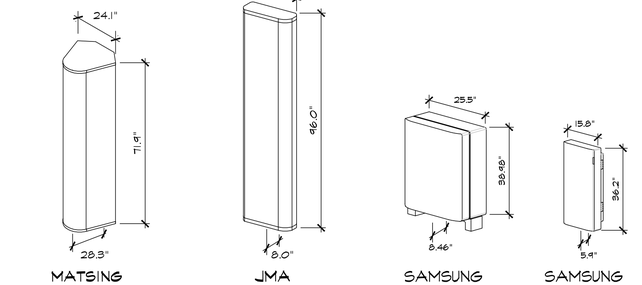


CONSTRUCTION NOTES:

1. CLEAR AND GRUB THE LAND ALONG THE ACCESS DRIVE.
2. REMOVE ALL EXISTING ORGANIC MATERIAL TO SUITABLE SUBGRADE.
3. PLACE GEOTEXTILE FABRIC OVER SUBGRADE AND THEN PLACE AGGREGATE BASE.
4. GRAVEL SUBBASE SPECIFICATION:
   - MARYLAND DOT: SECTION 304 GRADED AGGREGATE BASE COURSE
   - VIRGINIA DHT: SECTION 210 AGGREGATE BASE COURSE
   - DISTRICT OF COLUMBIA: SECTION 209 AGGREGATE BASE COURSE

LEASE AREA, ACCESS DRIVE & TURN AROUND AREA SURFACING

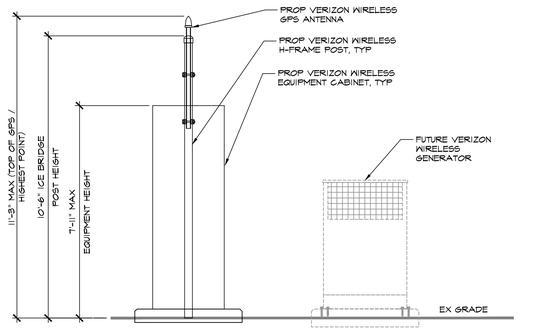
SCALE: 1/2" = 1'-0"



MATSING MS-MBA-3.2-H4-L4 | JMA MX04FR0845-02E | SAMSUNG MF3208d-25A | SAMSUNG MT6433-77A

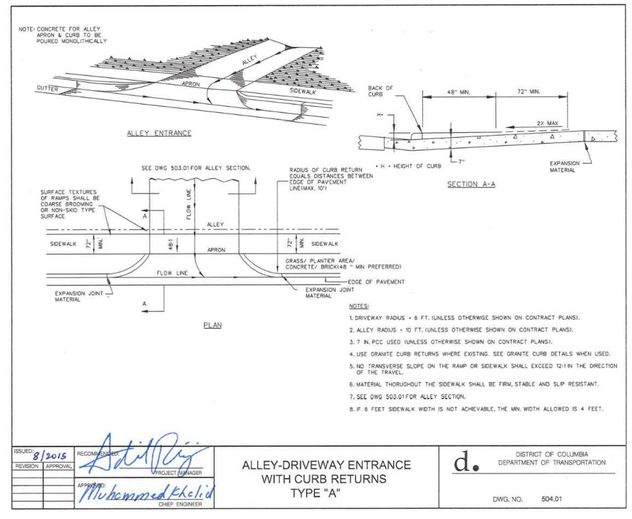
VERIZON WIRELESS ANTENNA DETAILS

NOT TO SCALE



CONCRETE PAD ELEVATION W/ DIESEL GENERATOR

SCALE: 3/8" = 1'-0"



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

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FUZE PROJECT ID:	17735342
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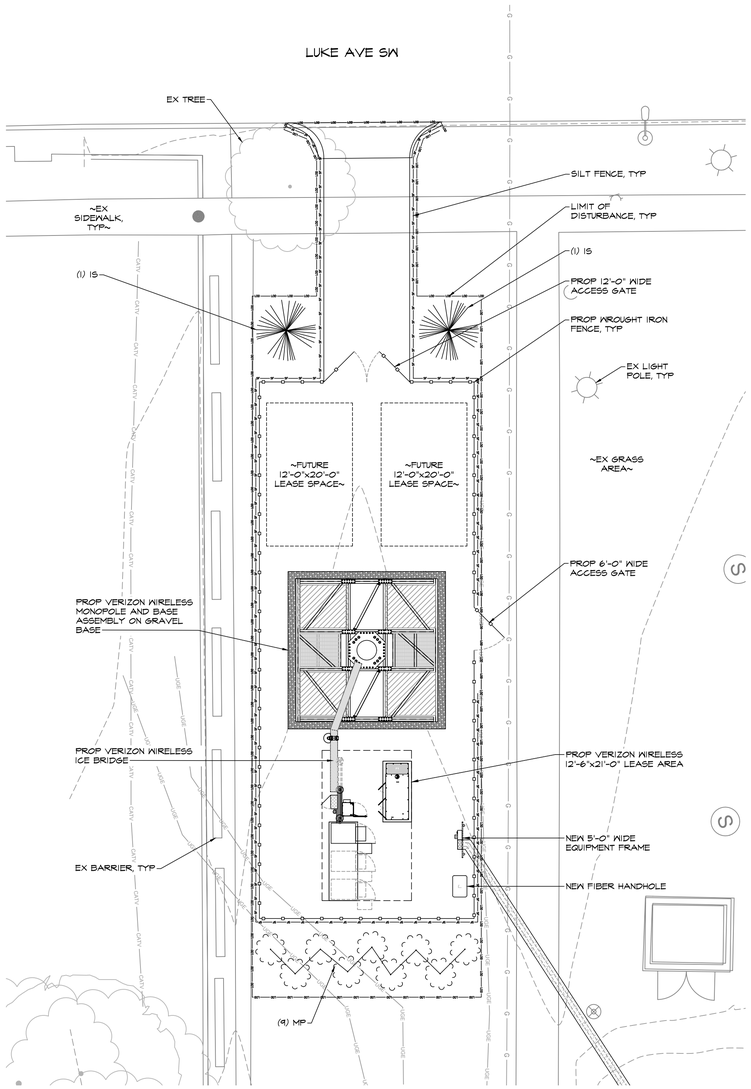
TITLE:

Additional Site Details

SHEET:

C-3

CIV003



ENLARGED COMPOUND PLAN

SCALE: 1" = 10'-0"

AMOUNT	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	SPACING
2	ILEX 'NELLIE R. STEVENS'	NELLIE R. STEVENS HOLLY	8'-0" HT.	B&B	AS SHOWN
9	MYRICA PENNSYLVANICA	BAYBERRY	24"-36" HT.	B&B/CG	AS SHOWN

811

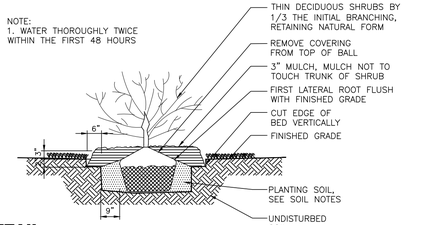
Know what's below. Call before you dig.

PROTECT YOURSELF, GIVE THREE WORKING DAYS NOTICE

THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APPURTENANT.

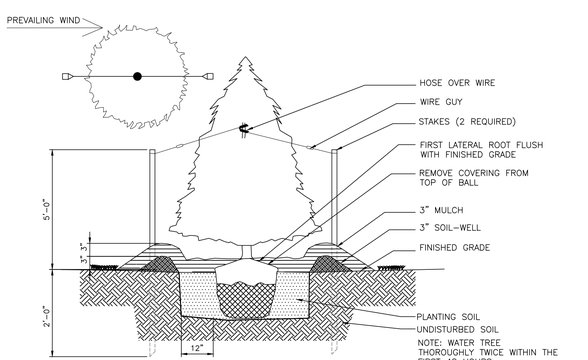
LEGEND

- PROPERTY LINE
- EX. ADJOINING PROPERTY LINE
- EX. BUILDING
- EX. EDGE OF PAVING
- EX. EDGE OF GRAVEL
- 7 EX. 1' CONTOUR
- 8 EX. 2' CONTOUR
- 10 EX. 10' CONTOUR
- EX. TREE LINE
- EX. TREES
- EX. OVERHEAD POLE
- × 10.55 EX. SPOT ELEVATION
- SOILS BOUNDARY DELINEATION
- NON-TIDAL WETLAND DELINEATION
- 25' NON-TIDAL WETLAND BUFFER
- LIMIT OF DISTURBANCE (LOD)
- PROP. GRAVEL
- PROP. TREE LINE
- PROP. CHAIN-LINK FENCE
- PROP. 1' CONTOUR
- PROP. 2' CONTOUR
- PROP. 10' CONTOUR
- PROP. EASEMENT
- PROP. DECIDUOUS TREE
- PROP. EVERGREEN TREE
- PROP. DECIDUOUS SHRUB
- PROP. EVERGREEN SHRUB
- PROP. ERNST LAWN MIX



SHRUB DETAIL

NOT TO SCALE



EVERGREEN TREE DETAIL

NOT TO SCALE

MAINTENANCE AGREEMENT

MAINTENANCE AGREEMENT:

ALL PLANTS SHALL BE GUARANTEED TO REMAIN ALIVE AND HEALTHY "AS PER LONG TERM MAINTENANCE AGREEMENT" AFTER INITIAL ACCEPTANCE. ANY REPLACEMENT PLANTS, REQUIREMENTS, ETC. AND METHOD OF PLACING SHALL COMPLY WITH THE REQUIREMENTS SPECIFIED HEREIN AND ON THE DRAWINGS.

THE COMPANY RESPONSIBLE FOR TREE CARE:
THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AND TREE CARE FOR A PERIOD OF TWO YEARS. SERVICES SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

A. WATERING
- WATERING SHALL BE PROVIDED DURING THE GROWING SEASON AS REQUIRED.
- FIRST GROWING SEASON: ONCE PER WEEK
- SECOND GROWING SEASON: AS NEEDED, BUT NOT LESS THAN ONCE PER MONTH DURING JULY AND AUGUST.

B. REINFORCEMENT PLANTING PROVISIONS
- A MINIMUM OF 100% OF THE TOTAL NUMBER OF TREES PLANTED PER ACRE IS REQUIRED TO SURVIVE AT THE END OF THE MAINTENANCE PERIOD.

C. PROTECTION FROM DISEASE AND INJURY
- PERIODIC INSPECTION SHALL BE MADE FOR ANY EVIDENCE OF DISEASE OR DAMAGE.

PLANTING SPECIFICATIONS AND NOTES

1. LANDSCAPE DRAWINGS ARE FOR LANDSCAPING INFORMATION ONLY. REFER TO SITE PLAN, UTILITY PLAN, SEDIMENT AND EROSION CONTROL PLANS FOR ALL OTHER INFORMATION. THE CONTRACTOR SHALL REVIEW ARCHITECTURAL/ENGINEERING PLANS TO BECOME THOROUGHLY FAMILIAR WITH GRADING AND SURFACE UTILITIES.
2. COORDINATE PLANT MATERIAL LOCATION WITH SITE UTILITIES. UTILITY LOCATIONS ARE APPROXIMATE. EXERCISE CARE WHEN DIGGING IN THESE AREAS. THE CONTRACTOR IS ADVISED OF THE EXISTENCE OF UNDERGROUND UTILITIES ON THE SITE. THEIR EXACT LOCATION SHALL BE VERIFIED IN THE FIELD WITH THE OWNER OR GENERAL CONTRACTOR PRIOR TO THE COMMENCEMENT OF ANY DIGGING OPERATIONS. IN THE EVENT THEY ARE UNCOVERED, THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL DAMAGE TO UTILITIES AND SUCH DAMAGE SHALL NOT RESULT IN ANY ADDITIONAL EXPENSES TO THE OWNER. IF UTILITY LINES ARE ENCOUNTERED IN EXCAVATION OF TREE PITS, OTHER LOCATIONS FOR TREES SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COMPENSATION. NO CHANGES OF LOCATION SHALL BE MADE WITHOUT APPROVAL OF THE OWNER OR LANDSCAPE ARCHITECT.
3. ALL EQUIPMENT AND TOOLS SHALL BE PLACED SO AS NOT TO INTERFERE OR HINDER THE PEDESTRIAN AND VEHICULAR TRAFFIC FLOW.
4. THE CONTRACTOR SHALL INSURE THAT HIS WORK DOES NOT INTERRUPT ESTABLISHED OR PROJECTED DRAINAGE PATTERNS.
5. THE CONTRACTOR SHALL INSURE ADEQUATE VERTICAL DRAINAGE IN ALL PLANT BEDS AND PLANTERS. MAINTAIN POSITIVE DRAINAGE OUT OF PLANTING BEDS AT A MINIMUM 2% SLOPE. ALL GRADES, DIMENSIONS, AND EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR ON SITE BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT OR OWNER.
6. EVERY POSSIBLE SAFEGUARD SHALL BE TAKEN TO PROTECT BUILDING SURFACES, EQUIPMENT, AND FURNISHING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OR INJURY TO PERSON OR PROPERTY WHICH MAY OCCUR AS A RESULT OF HIS NEGLIGENCE IN THE EXECUTION OF THE WORK.
7. THE GENERAL CONTRACTOR IS REQUIRED TO MAKE SURE THAT ANY SOIL STABILIZATION MATERIALS/CONSTRUCTION DEBRIS ETC. IS REMOVED FROM THE LANDSCAPE AREAS PRIOR TO PLANTING.
8. PLANTS SHALL CONFORM TO CURRENT "AMERICAN STANDARDS FOR NURSERY STOCK" BY LATEST EDITION OF ANSI 260.1, PARTICULARLY WITH REGARD TO SIZE, GROWTH, SIZE OF BALL, AND DENSITY OF BRANCH STRUCTURE. ALL PLANTS (B&B OR CONTAINER) SHALL BE PROPERLY IDENTIFIED BY WEATHER-PROOF LABELS SECURELY ATTACHED THERETO BEFORE DELIVERY TO PROJECT SITE. LABELS SHALL IDENTIFY PLANTS BY NAME, SPECIES, AND SIZE. LABELS SHALL NOT BE REMOVED UNTIL THE FINAL INSPECTION BY THE LANDSCAPE ARCHITECT OR AGENT IN CHARGE. PLANT MATERIAL SHALL BE TAGGED AT THE SOURCE BY THE LANDSCAPE ARCHITECT UNLESS THIS REQUIREMENT IS SPECIFICALLY WAIVED. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN CONSENT OF THE OWNER OR LANDSCAPE ARCHITECT. ALL PLANT MATERIAL SHALL BE BALLED AND BURLAPPED (B&B) OR CONTAINER GROWN UNLESS OTHERWISE NOTED. ALL PLANT MATERIALS SHALL BE FULL HEAVY SPECIMENS. PLANTS SHALL BE HIGH QUALITY NURSERY GROWN AND SHALL BE HEALTHY AND VIGOROUS, TYPICAL OF THEIR SPECIES AND VARIETY; AND HAVE WELL-DEVELOPED BRANCHES, DENSELY FOLIATED, AND VIGOROUS ROOT SYSTEMS.
9. TREES SHALL BE FRESHLY DUG AND NURSERY GROWN. THEY SHALL HAVE BEEN GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT OR PROPERLY ACCLIMATED TO CONDITIONS OF THE LOCALITY OF THE PROJECT.
10. TREES SHALL BE FREE FROM DEFECTS AND INJURIES AND CERTIFIED BY APPROPRIATE FEDERAL AND STATE AUTHORITIES TO BE FREE OF DISEASES AND INSECT INFESTATIONS.
11. PLANT MATERIAL AVAILABILITY MAY VARY AT THE TIME OF CONSTRUCTION. ANY SUBSTITUTIONS ARE TO BE OF EQUIVALENT OF SPECIES, QUANTITY, SIZE AND LOCATION. SIZE SUBSTITUTIONS MUST BE THE SAME SIZE (OR LARGER), AND MUST BE APPROVED BY LANDSCAPE ARCHITECT BEFORE INSTALLATION.
12. QUANTITIES OF TREES, EVERGREENS, SHRUBS AND GROUNDCOVER NOTED ON THE PLANT LIST ARE BASED UPON THE GRAPHIC SYMBOLS SHOWN ON THE DRAWINGS. IF THERE IS A DISCREPANCY BETWEEN GRAPHIC SYMBOLS AND QUANTITIES SHOWN IN THE PLANT LIST, THE GREATER QUANTITY SHALL APPLY. CONTACT OWNER'S REPRESENTATIVE IF A DISCREPANCY IS FOUND BETWEEN THE QUANTITIES NOTED IN THE PLANT LIST AND THE SYMBOL COUNT OF PLANT MATERIALS SHOWN ON THE DRAWINGS.
13. THE LANDSCAPE ARCHITECT OR OWNER SHALL HAVE THE RIGHT, AT ANY STAGE OF THE OPERATIONS, TO REJECT ANY AND ALL WORK AND MATERIAL WHICH, IN HIS OPINION, DOES NOT MEET THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS. ALL REJECTED MATERIALS SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR STABILITY AND CONDITIONS OF ALL TREES AND SHRUBS AND SHALL BE LEGALLY LIABLE FOR ANY DAMAGE CAUSED BY INSTABILITY OF ANY PLANT MATERIALS. TREE STAKES SHALL BE SET AT LEAST TWO FEET (2') INTO THE GROUND. TREE STAKING AND GUYING SHALL BE DONE PER DETAILS. CONTRACTOR SHALL ENSURE THAT TREES REMAIN PLUMB AND UPRIGHT FOR THE DURATION OF THE GUARANTEE PERIOD.
15. ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE PROPERTY OWNER OR INSTALLER "AS PER THE LONG TERM MAINTENANCE AGREEMENT". AFTER FINAL INSPECTION AND ACCEPTANCE OF THE WORK. PLANTS SHALL BE ALIVE AND IN SATISFACTORY GROWING CONDITION AT THE END OF THE GUARANTEE PERIOD. THE PLANT MATERIAL SHALL BE GUARANTEED AGAINST DEFECTS, UNSATISFACTORY GROWTH, DISEASE OR DEATH. UNSATISFACTORY, UNHEALTHY, DYING OR DEAD PLANT MATERIAL (IN THE OPINION OF THE LANDSCAPE ARCHITECT) SHALL BE REPLACED WITH THE SAME SIZE AND SPECIES. IT SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO ADEQUATELY AND PROPERLY MAINTAIN THE LANDSCAPED AREAS, WHICH SHALL INCLUDE MOWING OF TURF, WATERING, MULCHING, FERTILIZING, CLEANING OF WEEDS AND DEBRIS, PRUNING AND TRIMMING, REPLACEMENT OF DEAD OR DISEASED PLANTINGS, AND ANY OTHER CARE NECESSARY TO MAINTAIN HEALTHY GROWTH FOR THE WARRANTY PERIOD. THEREAFTER, THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTAINING ALL PLANT MATERIAL IN A HEALTHY CONDITION AT ALL TIMES. DEAD OR DISEASED PLANTS MAY BE REMOVED BUT SHALL BE REPLACED WITH NEW MATERIAL BY THE OWNER WITHIN ONE GROWING SEASON. THE CONTRACTOR MUST BE ABLE TO PROVIDE CONTINUED MAINTENANCE IF REQUESTED BY THE OWNER.
16. UPON FINAL ACCEPTANCE IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE ALL GUYS AND STAKING.
17. THE CONTRACTOR IS RESPONSIBLE FOR TESTING PROJECT SOILS. THE CONTRACTOR IS TO PROVIDE A CERTIFIED SOILS REPORT TO THE OWNER. THE CONTRACTOR SHALL VERIFY THAT THE SOILS ON SITE ARE ACCEPTABLE FOR THE PROPER GROWTH OF THE PROPOSED PLANT MATERIAL. SHOULD THE CONTRACTOR FIND POOR SOIL CONDITIONS, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE SOIL AMENDMENTS AS NECESSARY. THESE AMENDMENTS SHALL INCLUDE, BUT NOT BE LIMITED TO, FERTILIZERS, LIME, AND TOPSOIL. PROPER PLANTING SOILS MUST BE VERIFIED PRIOR TO PLANTING OF MATERIALS. SOIL PH AND FERTILITY SHALL BE BETWEEN 6.0 AND 7.0.

    A. ORGANIC MATTER CONTENT: COMPOST SHALL BE ADDED TO TOPSOIL IN A 70:30 RATIO OF TOPSOIL TO COMPOST.
    B. SOIL COMPACTION: OPTIMAL IS <1.65G/CUBIC CM.
21. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL RUBBISH, TRASH, DEBRIS, AND ORGANIC MATERIAL IN A LAWFUL MANNER. THE CONTRACTOR SHALL DISPOSE OF STUMPS AND MAJOR ROOTS OF ALL PLANTS TO BE REMOVED. ANY DEPRESSIONS CAUSED BY REMOVAL OPERATIONS SHALL BE REFILLED WITH FERTILE, FRIABLE SOIL PLACED AND COMPACTED SO AS TO REESTABLISH PROPER GRADE FOR NEW PLANTING AND/OR LAWN AREAS.
22. ALL TREE PITS, SHRUB BEDS, AND PREPARED PLANTING BEDS ARE TO BE COMPLETELY EXCAVATED IN ACCORDANCE WITH THE PLANTING DETAILS. CONTRACTOR SHALL DIG PLANTING PITS AND BEDS, AMEND SOIL (AS SPECIFIED), BACKFILL PLANTING AREAS, AND INSTALL PLANTS ONLY WHEN SOIL CONDITIONS ARE NOT WET, AND WHEN MIXING AND BACKFILLING WILL NOT ADVERSELY AFFECT SOIL STRUCTURE.
23. CONTRACTOR SHALL SLIGHTLY ADJUST PLANT LOCATIONS IN THE FIELD AS NECESSARY TO BE CLEAR OF DRAINAGE SWALES AND UTILITIES. TREES SHALL BE LOCATED A MINIMUM OF FIVE FEET (5') FROM SEWER/WATER CONNECTIONS. CONTRACTOR SHALL BE LIABLE FOR DAMAGE TO ANY AND ALL PUBLIC AND PRIVATE UTILITIES, WATER AND SEWER LINES.
24. TREES AND SHRUBS SHALL BE PLANTED DURING ACCEPTABLE PLANTING SEASONS:

	DECIDUOUS		EVERGREEN	
SEASON	B&B	CONTAINER	B&B	CONTAINER
SPRING	3/1-5/15	3/1-6/15	3/1-5/15	3/15-6/15
FALL	10/1-11/15	9/1-12/1	9/1-11/15	9/1-11/15

25. ALL PLANT BEDS SHALL HAVE A WEED BARRIER AND BE TOP DRESSED WITH A MINIMUM 2" AND A MAXIMUM OF 3" LAYER OF MULCH WITHIN TWO DAYS AFTER PLANTING. THIS SHALL BE SHREDDED HARDWOOD BARK, AND SHALL COVER ENTIRELY THE PLANTING BED. MULCH SHALL HAVE BEEN SHREDDED WITHIN THE LAST SIX MONTHS. ALL TREES PLANTED IN TURF SHALL BE INSTALLED WITH A 3' DIAMETER HARDWOOD MULCH RING. PLANTS SHALL BE WATERED TO THE POINT OF OVERFLOW OR SATURATION TWICE WITHIN 48 HOURS OF PLANTING.
26. ALL PLANTING BEDS ADJACENT TO LAWN, SOD, OR SEEDED AREAS SHALL BE SPADE EDGED.
27. WHERE THE CONDITION EXISTS THAT BALLED AND BURLAPPED TREES ARE DELIVERED IN WIRE BASKETS, THE WIRE BASKETS SHALL BE CUT DOWN THE SIDE OF EACH MESH AND PEELED AWAY FROM THE ROOTBALL OR REMOVED IN ENTIRETY. NO PORTION OF THE WIRE BASKET SHALL REMAIN INTACT AROUND THE SIDES OF THE ROOTBALL OR EXTEND ABOVE FINISHED GRADE. THE CROWN OF ROOT BALL SHALL BE SET SO THAT THE TOP 1/8 OF THE ROOT BALL SITS ABOVE FINISHED GRADE.
28. ALL AREAS NOT COVERED BY PAVING, PLANTING BEDS, OR SPECIFIED OTHERWISE ON THE LANDSCAPE PLAN SHALL BE PLANTED WITH SOD OR AS NOTED ON THE EROSION AND SEDIMENT CONTROL PLANS. DISTURBED AREAS SHALL BE SEEDED AND STABILIZED AS PER EROSION AND SEDIMENT CONTROL PLANS. ALL AREAS TO BE SEEDED/SODDED SHALL HAVE A FOUR (4) INCH LAYER OF TOPSOIL. FOR ALL PLANTING AREAS INDICATED ON THE LANDSCAPE PLAN PLACE A TWELVE (12) INCH LAYER OF TOPSOIL. PLANTING AREAS NOT IMPACTED BY SITE GRADING SHALL HAVE NO ADDITIONAL TOPSOIL INSTALLED.
29. PLANTING MIX:
PLANTING MIX SHALL BE PREPARED AT APPROVED ON-SITE STAGING AREA USING APPROVED ON-SITE EXISTING SOIL. EXISTING SOIL IN BED AREAS SHALL BE AMENDED TO A DEPTH OF 12", MIX MINIMUM THE LANDSCAPE CONTRACTOR SHALL MIX TOPSOIL WITH EXISTING SURFACE SOILS TO PREVENT LAYERING. SMOOTH SURFACE WITH NO HIGH OR LOW SPOTS. NO DIRT CLODS GREATER THAN 2" IN DIAMETER.

    A. EXISTING SOIL IN BED AREAS SHALL BE AMENDED. MIX MINIMUM QUANTITIES OF 20 CUBIC YARDS OR SUFFICIENT MIX FOR ENTIRE JOB IF LESS THAN 20 CUBIC YARDS IS REQUIRED.
    B. THOROUGHLY MIXED IN THE FOLLOWING PROPORTIONS FOR TREE AND SHRUB PLANTING MIX: 0.5 CY EXISTING SOIL; 0.2 CY SHARP SAND; 0.3 CY WOOD RESIDUALS; 4.5 LBS TREBLE SUPERPHOSPHATE; 5.0 LBS DOLOMITE LIMESTONE (ELIMINATE FOR ACID LOVING PLANTS)
    C. FOR BED PLANTING, SHRUBS AND GROUNDCOVER SPACES 24 INCHES OR CLOSER, INCORPORATE THE FOLLOWING INGREDIENTS PER 20 SF AND INCORPORATE INTO TOP 8 INCHES OF EXISTING SOILS BY ROTOTILLING OR SIMILAR METHOD OF INCORPORATION: 0.2 CY SHARP SAND; 0.3 CY ORGANIC MATERIAL; 4.5 LBS TREBLE SUPERPHOSPHATE; 5.0 LBS DOLOMITE LIMESTONE (ELIMINATE FOR ACID LOVING PLANTS)
30. FOR ALL PLANTING AREAS LOCATED IN STORM WATER MANAGEMENT FACILITIES CONTRACTOR SHALL INSTALL PLANTS IN PERMEABLE SOIL AND MULCHED AS SPECIFIED PER THE STORMWATER MANAGEMENT DRAWINGS.
31. FOR SEEDING TYPES AND LOCATIONS REFER TO E&S DRAWINGS.
32. ALL PLANTINGS SHALL FOLLOW THE SPECIFICATIONS AND INSTRUCTIONS LISTED IN THE LONG TERM MAINTENANCE AGREEMENT.

MRA
MORRIS & RITCHIE ASSOCIATES, INC.
Civil / Structural Engineers
1220-B East Joppa Road, Suite 600K
Towson, Maryland 21286
410-821-1690
410-821-1746 Fax

I AM RESPONSIBLE FOR DETERMINING THAT THE ENGINEERING DESIGNS INCLUDED IN THIS APPLICATION ARE IN COMPLIANCE WITH ALL LAWS AND REGULATIONS OF THE DISTRICT OF COLUMBIA. I HAVE PERSONALLY PREPARED, OR DIRECTLY SUPERVISED THE DEVELOPMENT OF THE ENGINEERING DESIGNS INCLUDED IN THIS APPLICATION.

verizon

BOLLING TD POLE
ANTENNA INSTALLATION
3720 BROOKLEY AVENUE SW
WASHINGTON, DC 20032
(DISTRICT OF COLUMBIA)

REVISIONS:		
NO.	DESCRIPTION	DATE

DESIGNED BY:	AJL
DRAWN BY:	DNT
REVIEWED BY:	AJL
PROJECT NO:	10427.3769
FUZE PROJECT ID:	17735342
DATE:	08/20/2026

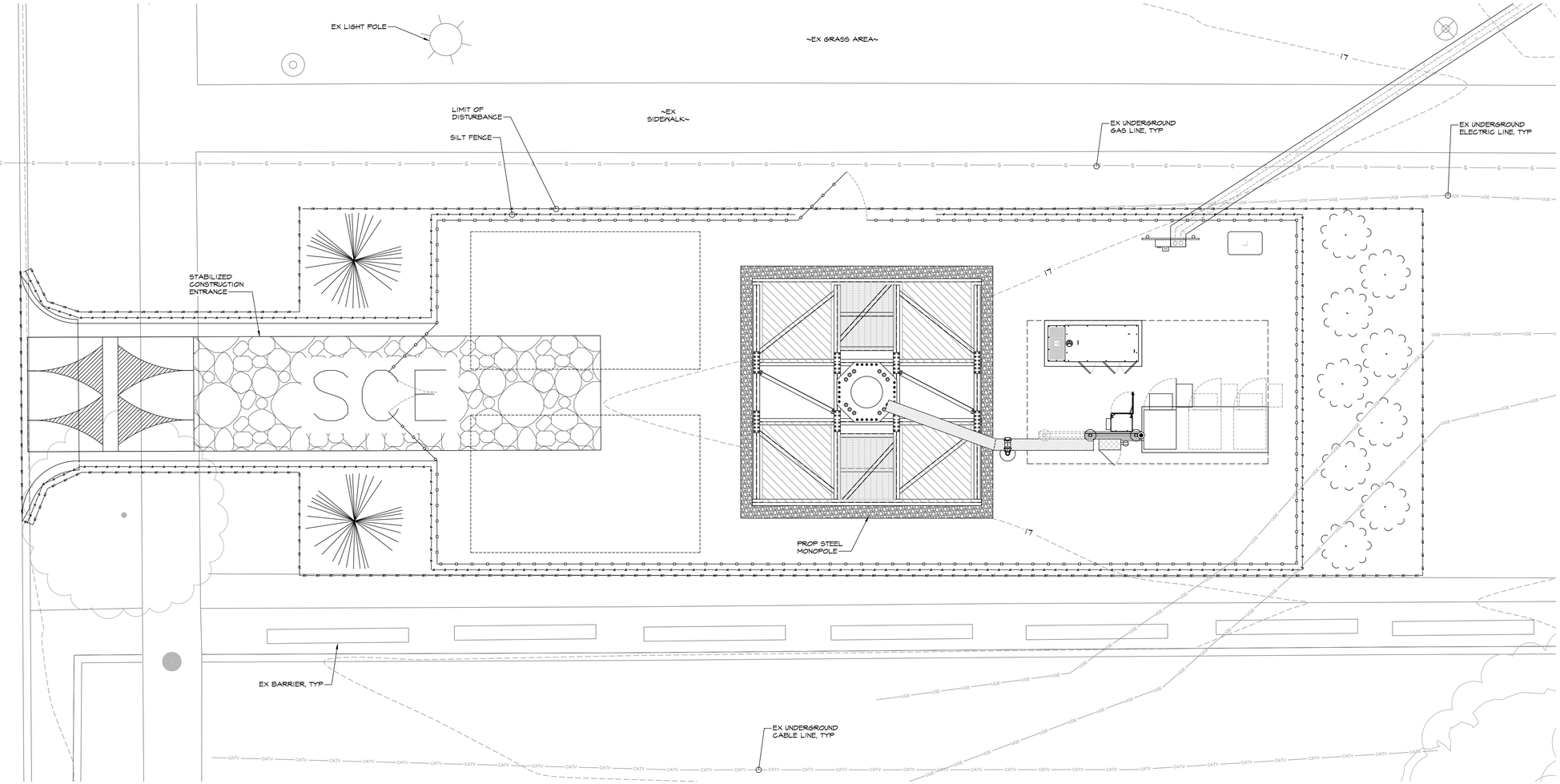
TITLE:

Landscaping Plan

SHEET:

C-4

CIV004



ENLARGED COMPOUND PLAN
SCALE: 1" = 5'-0"

0 5' 10'

GENERAL NOTES

1. FOLLOWING INITIAL LAND DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR INTERIM STABILIZATION MUST BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS FOR THE SURFACES OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND SLOPES GREATER THAN THREE (3) HORIZONTAL TO ONE (1) VERTICAL (3:1); AND FOURTEEN (14) DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. THESE REQUIREMENTS DO NOT APPLY TO AREAS SHOWN ON THE PLAN THAT ARE USED FOR MATERIAL STORAGE OTHER THAN STOCKPILING, OR FOR THOSE AREAS ON THE PLAN WHERE ACTUAL CONSTRUCTION ACTIVITIES ARE BEING PERFORMED. MAINTENANCE SHALL BE PERFORMED AS NECESSARY SO THAT STABILIZED AREAS CONTINUOUSLY MEET THE APPROPRIATE REQUIREMENTS OF THE DISTRICT OF COLUMBIA STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL (ESC). [21 DCMR § 542.9 (O)]
2. ESC MEASURES SHALL BE IN PLACE BEFORE AND DURING LAND DISTURBANCE. [21 DCMR § 543.6]
3. CONTACT DDOE INSPECTION (202) 535-2977 TO SCHEDULE A PRECONSTRUCTION MEETING AT LEAST THREE (3) BUSINESS DAYS BEFORE THE COMMENCEMENT OF A LAND-DISTURBING ACTIVITY. [21 DCMR § 503.7 (A)]
4. A COPY OF THE APPROVED PLAN SET WILL BE MAINTAINED AT THE CONSTRUCTION SITE FROM THE DATE THAT CONSTRUCTION ACTIVITIES BEGIN TO THE DATE OF FINAL STABILIZATION AND WILL BE AVAILABLE FOR DDOE INSPECTORS. [21 DCMR § 542.15]
5. ESC MEASURES SHALL BE IN PLACE TO STABILIZE AN EXPOSED AREA AS SOON AS PRACTICABLE AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED BUT NO LATER THAN FOURTEEN (14) DAYS FOLLOWING CESSATION, EXCEPT THAT TEMPORARY OR PERMANENT STABILIZATION SHALL BE IN PLACE AT THE END OF EACH DAY OF UNDERGROUND UTILITY WORK THAT IS NOT CONTAINED WITHIN A LARGER DEVELOPMENT SITE. [21 DCMR § 543.7]
6. STOCKPILED MATERIAL BEING ACTIVELY USED DURING A PHASE OF CONSTRUCTION SHALL BE PROTECTED AGAINST EROSION BY ESTABLISHING AND MAINTAINING PERIMETER CONTROLS AROUND THE STOCKPILE. [21 DCMR § 543.16 (A)]
7. STOCKPILED MATERIAL NOT BEING ACTIVELY USED OR ADDED TO SHALL BE STABILIZED WITH MULCH, TEMPORARY VEGETATION, HYDRO-SEED OR PLASTIC WITHIN FIFTEEN (15) CALENDAR DAYS AFTER ITS LAST USE OR ADDITION. [21 DCMR § 543.16 (B)]
8. PROTECT BEST MANAGEMENT PRACTICES FROM SEDIMENTATION AND OTHER DAMAGE DURING CONSTRUCTION FOR PROPER POST CONSTRUCTION OPERATION. [21 DCMR § 543.5]
9. REQUEST A DDOE INSPECTOR'S APPROVAL AFTER THE INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. [21 DCMR § 542.12 (A)]
10. REQUEST A DDOE INSPECTOR'S APPROVAL AFTER FINAL STABILIZATION OF THE SITE AND BEFORE THE REMOVAL OF EROSION AND SEDIMENT CONTROLS. [21 DCMR § 542.12 (B)]
11. FINAL STABILIZATION MEANS THAT ALL LAND-DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND EITHER OF THE FOLLOWING TWO CRITERIA HAVE BEEN MET: (1) A UNIFORM (FOR EXAMPLE, EVENLY DISTRIBUTED, WITHOUT LARGE BARE AREAS) PERENNIAL VEGETATIVE COVER WITH A DENSITY OF SEVENTY PERCENT (70%) OF THE NATIVE BACKGROUND VEGETATIVE COVER FOR THE AREA HAS BEEN ESTABLISHED ON ALL UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES, OR (2) EQUIVALENT PERMANENT STABILIZATION MEASURES HAVE BEEN EMPLOYED (SUCH AS THE USE OF RIPRAP, GABIONS, OR GEOTEXTILES). [21 DCMR § 542.12 (B.1, B.2)]
12. FOLLOW THE REQUIREMENTS OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY APPROVED STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND MAINTAIN A LEGIBLE COPY OF THIS SWPPP ON SITE. [21 DCMR § 543.10 (B)]
13. POST A SIGN THAT NOTIFIES THE PUBLIC TO CONTACT DDOE IN THE EVENT OF EROSION OR OTHER POLLUTION. THE SIGN WILL BE PLACED AT EACH ENTRANCE TO THE SITE OR AS DIRECTED BY THE DDOE INSPECTOR. EACH SIGN WILL BE NO LESS THAN 18 X 24 INCHES IN SIZE AND MADE OF MATERIALS THAT WILL WITHSTAND WEATHER FOR THE DURATION OF THE PROJECT. LETTERING WILL BE AT LEAST 1 INCH IN HEIGHT AND EASILY READABLE BY THE PUBLIC FROM A DISTANCE OF TWELVE FEET (12 FT). THE SIGN MUST DIRECT THE PUBLIC, IN SUBSTANTIALLY THE FOLLOWING FORM: "TO REPORT EROSION, RUNOFF, OR STORMWATER POLLUTION" AND WILL PROVIDE THE CONSTRUCTION SITE ADDRESS, DDOE'S TELEPHONE NUMBER (202-535-2977), DDOE'S E-MAIL ADDRESS (IEB.SCHEDULING@DC.GOV), AND THE 311 MOBILE APP HEADING ("CONSTRUCTION-EROSION RUNOFF"). [21 DCMR § 543.22]
14. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL UTILITY AND COMMUNICATION SERVICES TO ADJACENT PROPERTIES DURING CONSTRUCTION.
15. NECESSARY PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXISTING SERVICES AND MAINS TO REMAIN, AND ANY DAMAGE TO THEM DUE TO HIS NEGLIGENCE SHALL BE REPAIRED IMMEDIATELY AT HIS OWN EXPENSE.
16. THE CONTRACTOR SHALL NOTE THAT IN CASE OF A DISCREPANCY BETWEEN THE SCALED AND THE FIGURED DIMENSIONS SHOWN ON THESE PLANS, THE FIGURED DIMENSIONS SHALL GOVERN.
17. CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
18. THE CONTRACTOR IS RESPONSIBLE FOR HAVING ALL UNDERGROUND UTILITIES FIELD LOCATED AND MARKED PRIOR TO CONSTRUCTION.

LEGEND

- PROPERTY LINE
- R/W
- EX. EASEMENT LINE
- Glb(B) — SOILS LINE & (HYDROLOGIC GROUP)
- EX. BUILDING
- EX. CONCRETE
- 495 — EX. 1' CONTOUR
- 495 — EX. 5' CONTOUR
- OH — EX. OVERHEAD LINE
- UGE — EX. UNDERGROUND ELECTRIC LINE
- EX. TREE LINE
- EX. TREES
- LOD — LIMIT OF DISTURBANCE (L.O.D)
- 495 — PROP. 1' CONTOUR
- 495 — PROP. 5' CONTOUR
- PROP. GRAVEL
- SF — PROP. SILT FENCE
- SSF — PROP. SUPER SILT FENCE
- PROP. TYPE 'A-2' EARTH DIKE
- SCE — STABILIZED CONSTRUCTION ENTRANCE (50' MIN.)
- MOUNTABLE BERM (TYPE 'B')

PROJECT NARRATIVE

THIS PROJECT STARTS WITH INSTALLING SILT FENCE ALONG THE DOWNHILL PORTION OF THE SITE AS SEDIMENT CONTROL. THEN CONTRACTOR SHALL INSTALL SAFETY FENCE, UNDERGROUND CONCRETE DUCT BANK AND OTHER RELATED UTILITIES. AFTER WHICH A TRANSLUCENT GROUND MATTING WILL BE INSTALLED. ONCE ALL ITEMS SHOWN ON THE CONSTRUCTION PLANS HAVE BEEN INSTALLED, ALL GRAVEL AND SEDIMENT CONTROLS WILL BE REMOVED AND THE AREA PERMANENTLY STABILIZED SO THAT NO IMPERVIOUS AREA IS BEING CREATED OR REMOVED.

SEQUENCE OF CONSTRUCTION

1. THE LIMITS OF DISTURBANCE MUST BE FIELD MARKED PRIOR TO GRADING, INSTALLATION OF SEDIMENT CONTROL MEASURES, CONSTRUCTION, OR OTHER LAND DISTURBING ACTIVITIES.
2. CONDUCT A PRE-CONSTRUCTION MEETING. NOTIFY DDOE AT (202) 535-2977 AT LEAST 3 BUSINESS DAYS BEFORE COMMENCING WORK. WORK MAY NOT COMMENCE UNTIL THE PERMITTEE OR THE RESPONSIBLE PERSONNEL HAVE MET ON SITE WITH THE SEDIMENT & EROSION CONTROL INSPECTOR TO REVIEW THE APPROVED PLANS.
3. WITH THE INSPECTOR'S APPROVAL, CLEAR MINIMUM AREA NECESSARY TO INSTALL SEDIMENT CONTROLS.
   a. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND OPTIONAL WASH RACKS AS NEEDED BY THE CONTRACTOR.
   b. INSTALL ALL SILT FENCE.
4. UPON COMPLETION OF THE INSTALLATION OF THE SEDIMENT CONTROL DEVICES, BUT BEFORE PROCEEDING WITH OTHER EARTH DISTURBANCE OR GRADING, AN INSPECTION SHALL BE PROVIDED BY THE ENGINEER, AND SEDIMENT CONTROL DEVICES SHALL BE APPROVED BY THE DDOE INSPECTOR.
5. INSTALL TEMPORARY CONSTRUCTION FENCE.
6. INSTALL UNDERGROUND CONCRETE DUCT BANK AND ALL RELATED UTILITIES AS INDICATED ON CONSTRUCTION PLANS.
7. REMOVE TEMPORARY GRAVEL AND PERMANENTLY STABILIZE DISTURBED AREAS.
8. WITH THE SEDIMENT CONTROL INSPECTOR'S APPROVAL, REMOVE ALL REMAINING SEDIMENT CONTROLS, AND STABILIZE ANY REMAINING DISTURBED AREAS.

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

PROTECT YOURSELF, GIVE THREE WORKING DAYS NOTICE

THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APPURTENANT.

MORRIS & RITCHIE ASSOCIATES, INC.
Civil / Structural Engineers
1220-B East Joppa Road, Suite 600K
Towson, Maryland 21286
410-821-1690
410-821-1746 Fax

I AM RESPONSIBLE FOR DETERMINING THAT THE ENGINEERING DESIGNS INCLUDED IN THIS APPLICATION ARE IN COMPLIANCE WITH ALL LAWS AND REGULATIONS OF THE DISTRICT OF COLUMBIA. I HAVE PERSONALLY PREPARED, OR DIRECTLY SUPERVISED THE DEVELOPMENT OF THE ENGINEERING DESIGNS INCLUDED IN THIS APPLICATION.

verizon

BOLLING TD POLE
ANTENNA INSTALLATION
3720 BROOKLEY AVENUE SW
WASHINGTON, DC 20032
(DISTRICT OF COLUMBIA)

REVISIONS:

NO.	DESCRIPTION	DATE

DESIGNED BY:	AJL
DRAWN BY:	DNT
REVIEWED BY:	AJL
PROJECT NO:	10427.3769
FUZE PROJECT ID:	17735342
DATE:	08/20/2026

TITLE: **Erosion & Sediment Control Plan I**

SHEET: **C-5**

CIV005

PERMANENT SEEDING DETAILS

Permanent Seeding Summary

Seed Mixture					Fertilizer Rate (10-20-20)			Lime Rate
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	N	P_2O_5	K_2O	
					45 lb/ac	90 lb/ac	90lb/ac	2 tons/ac
					(1.0 lb/ 1,000 ft²)	(2 lb/ 1,000 ft²)	(2 lb/ 1,000 ft²)	(90 lb/ 1,000 ft²)

Turfgrass Mixtures

Select a seed mixture from Table 2.6, using Table 2.7 (conditions by mix) as a guideline. Some guidance for common mixes is as follows:

1. Kentucky Bluegrass (full sun mixture) – For use in areas that receive intensive management. The recommended certified Kentucky bluegrass cultivars seeding rate is 1.5 to 2.0 pounds per 1,000 square feet. Choose a minimum of three bluegrass cultivars ranging from a minimum of 10% to a maximum of 35% of the mixture by weight.
2. Kentucky Bluegrass/Perennial Rye (full sun mixture) – For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management. The certified perennial ryegrass cultivars/certified Kentucky bluegrass seeding rate is 2 pounds mixture per 1,000 square feet. A minimum of three Kentucky bluegrass cultivars must be chosen, with each cultivar ranging from 10% to 35% of the mixture by weight.
3. Tall Fescue/Kentucky Bluegrass (full sun mixture) – For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. The recommended mixture includes 95% to100% certified tall fescue cultivars and 0% to5% certified Kentucky bluegrass cultivars. The seeding rate is 5 to 8 pounds per 1,000 square feet. One or more cultivars may be blended.
4. Kentucky Bluegrass/Fine Fescue (shade mixture) – For use in areas with shade in bluegrass lawns or for establishment in high quality, intensively managed turf area. The mixture includes 30% to 40% certified Kentucky bluegrass cultivars and 60% to 70% of certified fine fescue. The seeding rate is 1½ to 3 pounds per 1,000 square feet. A minimum of 3 Kentucky bluegrass cultivars must be chosen, with each cultivar ranging from a minimum of 10% to a maximum of 35% of the mixture by weight.

   Note: Select turfgrass varieties from those listed in the most current Maryland-Virginia Turfgrass Variety Recommendation Work Group list (http://www.pubs.ext.vt.edu/).

2.10.5 Construction Specifications

Site Preparation

1. Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.
2. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
3. Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed area over 5 acres.
4. Distribute lime and fertilizer evenly and incorporate them into the top 3 to 5 inches of soil by disking or other suitable means.
5. Where the subsoil is either highly acidic or composed of heavy clays, spread ground limestone at the rate of 4 to 8 tons per acre (200 to 400 pounds per 1,000 square feet) prior to the placement of topsoil.

Seedbed Preparation

1. Temporary Seeding
   (a) Seedbed preparation must consist of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened, do not roll or drag smooth but leave in the roughened condition. Track sloped areas (greater than 3:1) leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
   (b) Apply fertilizer and lime as prescribed on the plans.
   (c) Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means.
2. Permanent Seeding – Maintain areas previously graded in conformance with the drawings in a true and even grade, then scarified or otherwise loosened to a depth of 3 to 5 inches to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.

   Apply soil amendments as per soil test or as included on the plans.

   Mix soil amendments into the top 3 to 5 inches of topsoil by disking or other suitable means. Rake lawn areas to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Where site conditions will not permit normal seedbed preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Track steep slopes (steeper than 3:1) by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1 to 3 inches of soil should be loose and friable. Seedbed loosening may not be necessary on newly disturbed areas.
3. Methods of Seeding – Apply seed uniformly with hydroseeder (slurry includes seed, fertilizer and mulch), broadcast or drop seeder, or a cultipacker seeder.
   (a) Hydroseeding
      i) If fertilizer is being applied at the time of seeding, the application rates will not exceed the following: nitrogen, maximum of 100 pounds per acre total of soluble nitrogen; P_2O_5 (phosphorous), 200 pounds per acre; K_2O (potassium), 200 pounds per acre.
      ii) Lime – Use only ground agricultural limestone, (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons per acre are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
      iii) Seed and fertilizer must be mixed on site and seeding must be done immediately and without interruption.
      iv) Fiber mulch may be incorporated into the hydroseeding mixture. Consult Section 2.7 Mulching for standards and specifications for mulch materials.
   (b) Dry Seeding – This includes use of conventional drop or broadcast spreaders.
      i) Incorporate seed spread dry into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Tables 2.4 or 2.7. The seeded area must then be rolled with a weighted roller to provide good seed to soil contact.
      ii) Where practical, apply seed in two directions perpendicular to each other. Apply half the seeding rate in each direction.
   (c) Drill or Cultipacker Seeding – Mechanized seeders that apply and cover seed with soil.
      i) Cultipacking seeders are required to bury the seed in such a fashion as to provide at least ¼ inches of soil covering. Seedbed must be firm after planting.
      ii) Where practical, apply seed in two directions perpendicular to each other. Apply half the seeding rate in each direction.
4. Sod Installation – During periods of excessively high temperature or in areas having dry subsoil, the subsoil must be lightly irrigated immediately prior to laying the sod.

   The first row of sod must be laid in a straight line with subsequent rows placed parallel to and tightly wedged against each other. Lateral joints must be staggered to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids, which would cause air drying of the roots.

   Wherever possible, lay sod with the long edges parallel to the contour and with staggering joints. Roll and tamp, peg, or otherwise secure sod to prevent slippage on slopes and to ensure solid contact between sod roots and the underlying soil surface.

   Immediately water sod following rolling or tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. Complete the operations of laying, tamping and irrigating for any piece of sod within eight hours.
5. Incremental Stabilization – Cut Slopes

   Dress, prepare, seed, and mulch all cut slopes as the work progresses. Excavate and stabilize slopes in equal increments not to exceed 15 feet.

   The construction sequence is as follows (refer to Figure 2.1):
   (a) Excavate and stabilize all temporary swales, side ditches, or berms that will be used to convey runoff from the excavation.
   (b) Perform phase 1 excavation, dress, and stabilize.
   (c) Perform phase 2 excavation, dress, and stabilize. Overseed phase 1 areas as necessary.
   (d) Perform final phase excavation, dress, and stabilize. Overseed previously seeded areas as necessary.

      Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.

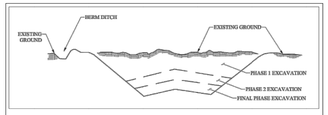


Figure 2.1 Incremental stabilization – cut.

6. Incremental Stabilization of Embankments – Fill Slopes

   Construct embankments in lifts as prescribed on the plans.

   Immediately stabilize slopes when the vertical height of the multiple lifts reaches 15 feet, or when the grading operation ceases as prescribed in the plans.

   At the end of each day, construct temporary berms and pipe slope drains along the top edge of the embankment to intercept surface runoff and convey it down the slope in a non-erosive manner to a sediment trapping device.

   The construction sequence is as follows (refer to Figure 2.2):
   (a) Excavate and stabilize all temporary swales, side ditches, or berms that will be used to divert runoff around the fill. Construct Slope Silt Fence on low side of fill as shown in Figure 2.2, unless other methods shown on the plans address this area.
   (b) Place phase 1 embankment, dress and stabilize.
   (c) Place phase 2 embankment, dress and stabilize.
   (d) Place final phase embankment, dress and stabilize. Overseed previously seeded areas as necessary.

      Note: Once the placement of fill has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.

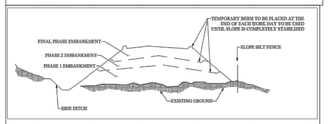


Figure 2.2 Incremental stabilization – fill.

2.10.6 Maintenance

Grass Maintenance

1. Inspect all seeded areas for failures and make necessary repairs, replacements, and reseedings within the planting season.
2. Once the vegetation is established, the site must have 95% ground cover to be considered adequately stabilized.
3. If the stand provides less than 40% ground coverage, reestablish following original lime, fertilizer, seedbed preparation and seeding recommendations.
4. If the stand provides between 40% and 94% ground coverage, overseeding and fertilizing using half of the rates originally applied may be necessary.
5. Maintenance fertilizer rates for permanent seedings are shown in Table 2.9.

Table 2.9 Maintenance Fertilization for Permanent Seeding

Seeding Mixture	Type	Seeding Rate lb/ac	Seeding Rate lb/1,000 ft²	Time	Mowing
Tall fescue makes up 70% or more of cover.	10-10-10	500	11.5	Yearly or as needed.	Not closer than 3 inches, if occasional mowing is desired.
	30-10-10	400	9.2	Fall	
Birdsfoot trefoil.	0-20-0	400	9.2	Spring, the year following establishment, and every 4 to 5 years, after.	Mow no closer than 2 inches.
Fairly uniform stand of tall fescue or birdsfoot trefoil.	5-10-10	500	11.5	Fall, the year following establishment, and every 4 to 5 years, after.	Not required, no closer than 4 inches in the fall after seed has matured.
Weeping lovegrass fairly uniform plant distribution.	5-10-10	500	11.5	Spring, the year following establishment, and every 3 to 4 years, after.	Not required, not closer than 4 inches in fall after seed has matured.
Red & chewings fescue, Kentucky bluegrass, hard fescue mixtures.	20-10-10	250	5.8	September, 30 days later.	Mow no closer than 2 inches for red fescue and Kentucky bluegrass, 3 inches for fescue.
		100	2.3	December, May 20, June 30, if needed.	
Red & chewings fescue, Kentucky bluegrass, hard fescue mixtures.	20-10-10	250	5.8	September, 30 days later.	Mow no closer than 2 inches for red fescue and Kentucky bluegrass, 3 inches for fescue.
		100	2.3	December, May 20, June 30, if needed.	

Sod Maintenance

1. In the absence of adequate rainfall, perform watering daily or as often as necessary during the first week and in sufficient quantities to maintain moist soil to a depth of 4 inches. Water during the heat of the day to prevent wilting.
2. After the first week, sod watering is required as necessary to maintain adequate moisture content.
3. Do not attempt the first mowing of sod until the sod is firmly rooted. Do not remove more than a third of the grass leaf by the initial cutting or subsequent cuttings. Maintain grass height between 2 to 3 inches unless otherwise specified.

Table 2.8 Recommended Planting Dates for Permanent Cover

Type of Plant Material	Planting Dates
Seeds - Cool-Season Grasses (includes mixes with forbs and/or legumes)	Feb 15 to Apr 30 Aug 15 to Oct 31 Nov 1 to Nov 30[3]
Seeds - Warm-Season/Cool-Season Grass Mixes (includes mixes with forbs and/or legumes)	Feb 15 to Apr 30[4] May 1 to May 31[5]
Sod - Cool-Season	Feb 15 to Apr 30 May 1 to Sep 30[5] Oct 1 to Dec 15[3, 6]

Notes:
1. When seeding toward the end of the listed planting dates, or when conditions are expected to be less than optimal, select an appropriate merse crop from Table 2.4 Temporary Seeding for Site Stabilization and plant together with the permanent seeding mix.
2. When planted during the growing season, most of these materials must be purchased and kept in a dormant condition until planting.
3. Recommend adding a nurse crop, as noted above, if planting during this period.
4. Warm-season grasses need a soil temperature of at least 50 degrees F in order to germinate. If soil temperatures are colder than 50 degrees, or moisture is not adequate, the seeds will remain dormant until conditions are favorable. In general, planting during the latter portion of this period allows more time for weed emergence and weed control prior to planting. When selecting a planting date, consider the need for weed control vs. the likelihood of having sufficient moisture for later plantings, especially on droughty sites.
5. Additional planting dates during which supplemental watering may be needed to ensure plant establishment.
6. Frequent freezing and thawing of wet soils may result in frost-heaving of materials planted in late fall, if plants have not sufficiently rooted in place. Sod usually needs 4 to 6 weeks to become sufficiently rooted.

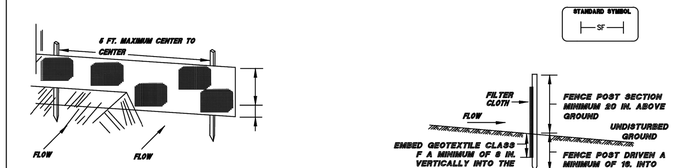
Minimum Soil Criteria

Minimum soil conditions required for permanent vegetative establishment include the following:

1. Soil pH must be between 6.0 and 7.0.
2. Soluble salts must be less than 500 parts per million (ppm).
3. The soil must contain less than 40% clay but enough fine grained material (> 30% silt plus clay) to provide the capacity to hold a moderate amount of moisture. As an exception, it is acceptable to plant lovegrass or sericea lespedeza in sandy soil (< 30% silt plus clay).
4. Soil must contain 1.5% minimum organic matter by weight.
5. Soil must contain sufficient pore space to permit adequate root penetration.
6. If these conditions cannot be met by soils on site, topsoil must be added as required in Section 2.6 Topsoiling.

Soil Amendments (Fertilizer and Lime Specifications)

1. Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites with disturbed areas over 5 acres. Soil analysis may be performed by the University of the District of Columbia or a certified commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
2. Fertilizers must be uniform in composition, free flowing, and suitable for accurate application by approved equipment. Manure may be substituted for fertilizer with prior approval from DDEE. Deliver all fertilizers to the site fully labeled per applicable laws and bear the name, trade name or trademark, and warranty of the producer.
3. Lime materials must be ground limestone (hydrated or burnt lime may be substituted) containing at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone must be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 98% to 100% will pass through a #20 mesh sieve.



CONSTRUCTION SPECIFICATIONS

1. *FENCE POSTS MUST BE A MINIMUM OF 36 IN. LONG DRIVEN 16 IN. MINIMUM INTO THE GROUND. WOOD POSTS MUST BE OF SOUND QUALITY HARDWOOD WITH 1-1/2 IN. MINIMUM WIDTH WHEN SQUARE CUT, OR 1-3/4 IN. MINIMUM DIAMETER WHEN ROUND. STEEL POSTS MUST BE STANDARD T OR U SECTION WEIGHING NOT LESS THAN 1.00 POUND PER LINEAR FOOT.*
2. *FASTEN GEOTEXTILE SECURELY TO EACH FENCE POST WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION. GEOTEXTILE MUST MEET THE FOLLOWING REQUIREMENTS (GEOTEXTILE CLASS F):*

PROPERTY	VALUE	TEST METHOD
TENSILE STRENGTH	50 LBS/IN (MIN.)	ASTM D-4595
TENSILE MODULUS	20 LBS/IN (MIN.)	ASTM D-4595
FLOW RATE	0.3 GAL/FT² /MINUTE (MAX.)	ASTM D-5141
FILTERING EFFICIENCY	75% (MIN.)	ASTM D-5141

3. *WHERE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, OVERLAP, FOLD, AND STAPLE THEM TO PREVENT SEDIMENT BYPASS.*
4. *INSPECT SILT FENCE AFTER EACH RAINFALL EVENT, AT LEAST DAILY DURING SUSTAINED RAINFALL EVENTS, AND MAINTAIN WHEN BULGES OCCUR OR WHEN SEDIMENT ACCUMULATION REACHES 30% OF THE FABRIC HEIGHT.*

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REFERENCE	

SILT FENCE-1

DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT

DWG. NO 301.1

SILT FENCE DESIGN CRITERIA:

TABLE 3.1: SILT FENCE SLOPE LENGTH AND FENCE LENGTH CONSTRAINTS

SLOPE STEEPNESS	SLOPE LENGTH (MAXIMUM) (FEET)	SILT FENCE LENGTH (MAXIMUM) (FEET)
FLATTER THAN 50:1 (2%)	*UNLIMITED*	*UNLIMITED*
> 50:1 TO 10:1 (2% to 10%)	*125*	*1,000*
> 10:1 TO 5:1 (10% to 20%)	*100*	*750*
> 5:1 TO 3:1 (20% to 33%)	*60*	*500*
> 3:1 TO 2:1 (33% to 50%)	*40*	*250*
> 2:1 (> 50%)	*20*	*125*

NOTE:
- *IN AREAS OF LESS THAN 2% SLOPE AND SANDY SOILS (USDA GENERAL CLASSIFICATION SYSTEM, SOIL CLASS A) MAXIMUM SLOPE LENGTH AND SILT FENCE LENGTH WILL BE UNLIMITED. IN THESE AREAS A SILT FENCE MAY BE THE ONLY PERIMETER CONTROL REQUIRED.*
- *TO AVOID CIRCUMVENTION, EXTEND THE ENDS OF THE SILT FENCE UPSLOPE TO PREVENT WATER AND SEDIMENT FROM FLOWING AROUND THE ENDS OF THE FENCE.*

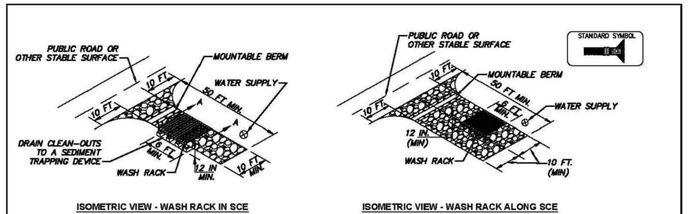
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SILT FENCE-2

DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT

DWG. NO 301.2

SOURCE: 2011 MARYLAND STANDARDS & SPECIFICATIONS



CONSTRUCTION SPECIFICATIONS

1. *USE A WASH RACK DESIGNED AND CONSTRUCTED/MANUFACTURED FOR THE ANTICIPATED TRAFFIC LOADS. CONCRETE, STEEL, OR OTHER MATERIALS ARE ACCEPTABLE. PRE-FABRICATED UNITS SUCH AS CATTLE GUARDS ARE ACCEPTABLE. USE MINIMUM DIMENSION OF 6 FEET x 10 FEET. ORIENT DIRECTION OF RIDS AS SHOWN ON THE DETAIL. APPROACHES TO THE WASH RACK SHOULD BE A MINIMUM OF 25 FEET ON BOTH SIDES.*
2. *INSTALL PRIOR TO, ALONG SIDE OF, OR AS PART OF THE SCE.*
3. *DIRECT WASH WATER TO AN APPROVED SEDIMENT TRAPPING DEVICE.*
4. *KEEP AREA UNDER WASH RACK FREE OF ACCUMULATED SEDIMENT. IF DAMAGED, REPAIR OR REPLACE WASH RACK.*

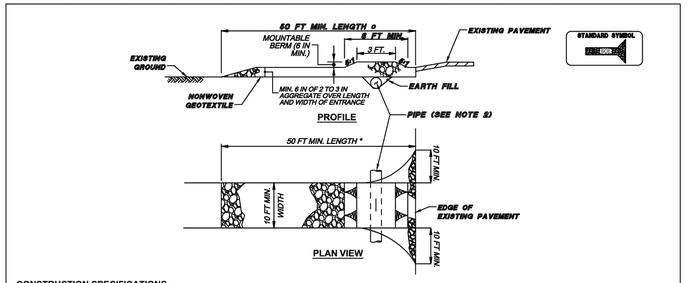
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STABILIZED CONSTRUCTION ENTRANCE WITH WASH RACK

DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT

DWG. NO 202.1

SOURCE: 2011 MARYLAND STANDARDS & SPECIFICATIONS



CONSTRUCTION SPECIFICATIONS

1. *PLACE THE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE A MINIMUM LENGTH OF 50 FEET (*50 FEET FOR SINGLE-FAMILY RESIDENCE LOT) AND A MINIMUM WIDTH OF 10 FEET. FLARE THE SCE AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.*
2. *PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE MAINTAINING POSITIVE DRAINAGE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. PROVIDE PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN THE SCE IS NOT LOCATED AT A HIGH SPOT.*
3. *PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE.*
4. *PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.*
5. *MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.*

DATE	APPR
REVISED	
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REFERENCE	

STABILIZED CONSTRUCTION ENTRANCE

DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT

DWG. NO 201.1

SOURCE: 2011 MARYLAND STANDARDS & SPECIFICATIONS

TEMPORARY SEEDING DETAILS

Table 2.4 Temporary Seeding for Site Stabilization

Plant Species	Seeding Rate[1] lb/ac	Seeding Rate[1] lb/1,000 ft²	Seeding Depth (inches)[2]	Recommended Seeding Dates Plant Hardiness Zone[3] 7a and 7b
Cool-Season Grasses				
Annual Ryegrass	40	1.0	0.5	Feb. 15 to Apr. 30; Aug. 15 to Nov. 30
Barley	96	2.2	1.0	Feb. 15 to Apr. 30; Aug. 15 to Nov. 30
Oats	72	1.7	1.0	Feb. 15 to Apr. 30; Aug. 15 to Nov. 30
Wheat	120	2.8	1.0	Feb. 15 to Apr. 30; Aug. 15 to Nov. 30
Cereal Rye	112	2.8	1.0	Feb. 15 to Apr. 30; Aug. 15 to Dec. 15
Warm-Season Grasses				
Foxtail Millet	30	0.7	0.5	May 1 to Aug. 14
Pearl Millet	20	0.5	0.5	May 1 to Aug. 14

Notes:
[1]Seeding rates for the warm-season grasses are in pounds of pure live seed (PLS). Actual planting rates must be adjusted to reflect percent seed germination and purity, as tested. Adjustments are usually not needed for the cool-season grasses.

Seeding rates listed above are for temporary seedings, when planted alone. When planted as a nurse crop with permanent seed mixes, use 1/3 of the seeding rate listed above for barley, oats, and wheat. For smaller-seeded grasses (annual ryegrass, pearl millet, foxtail millet), do not exceed more than 5% (by weight) of the overall permanent seeding mix. Generally, do not use cereal rye as a nurse crop unless planting will occur in very late fall beyond the seeding dates for other temporary seedings. Cereal rye has allelopathic properties that inhibit the germination and growth of other plants. If it must be used as a nurse crop, seed at 1/3 of the rate listed above.

Oats are the recommended nurse crop for warm-season grasses.

[2]For sandy soils, plant seeds at twice the depth listed above.

[3]The planting dates listed are averages and may require adjustment to reflect local conditions.

Fertilizer Rate (10-10-10)	Lime Rate
436 lb/ac	2 tons/ac
(10 lb/ 1,000 ft²)	(90 lb/ 1,000 ft²)

Mix	Recommended Cultivar	Seeding Rate[1] lb/ac	Seeding Rate[1] lb/ 1,000 ft²	Soil Drainage Class[2]	Max. Height (in.)	Maint. Level[3]	Remarks
Cool-Season Grass Mixes							
9. Creeping Red Fescue (*Festuca rubra var. rubra*)	Navigator II	60	1.38	W-MW	1-2	C-D	This mix has good shade tolerance.
Kentucky Bluegrass (*Poa pratensis*)	Recommended turfGrypes[4]	15	0.34				

Notes:
1. Seeding Rates: Seeding rates for the warm-season grasses are in pounds of Pure Live Seed (PLS). Actual planting rates must be adjusted to reflect percent seed germination and purity, as tested. Adjustments are usually not needed for the cool-season grasses, legumes, or wildflowers. All legume seeds must be inoculated before planting with the appropriate Rhizobium bacteria. When feasible, scarify hard-seeded legumes scarified to improve germination.
2. Soil Drainage Class (refer to the county soil survey for further information):
   E - Excessively Drained; W - Well Drained; MW - Moderately Well Drained; SP - Somewhat Poorly Drained; P - Poorly Drained.
3. Maintenance Level:
   A - Intensive mowing (every 2–4 days), fertilization, lime, insect and weed control, and watering (examples: high maintenance lawns and athletic fields).
   B - Frequent mowing (every 5–7 days), occasional fertilization and lime (examples: residential lawns, parks, institutional, school, and commercial lawns).
   C - Periodic mowing (every 7–14 days), occasional fertilization and lime (examples: residential lawns, parks).
   D - Infrequent or no mowing, fertilization, or lime after the first year of establishment (examples: wildlife areas, roadsides, steep banks).
4. TurfGrype cultivars of tall fescue and Kentucky bluegrass must be selected based on recommendations of the Maryland-Virginia TurfGrass Variety Recommendation Work Group.
   Kentucky Bluegrass – Individual varieties selected must make up not less than 35%, nor more than 35% of the total mixture on a weight basis. All varieties must be certified. Selections can be made from Category I alone or various combinations of Categories I and II. Kentucky bluegrasses listed as "Promising" (Category II below) can account for no more than 35% of the blend by weight).
   Category I – Recommended Kentucky Bluegrass Varieties (85% to 100% of blend by weight). Aries, Blue Bank, Blue Coat, Blue Note, Bolt, Full Back, Hampton, Legend, Midnight, Noble, Skye, and Sudden Impact.
   Category II – Promising Kentucky Bluegrasses (10% to 35% on a weight basis). Arsenitra, Barvette HGT, Endurance, Heidi, Keeneland, Mazama, Merlot, NuChicago, Oasis, Skye, and Wildhorse (Wildhorse is only for mixing with tall fescue).
   Tall Fescue – Both recommended and promising varieties can be used in the VCIA Sod Certification Program.
   Category I – Recommended Tall Fescue Varieties (90% to 100% on a weight basis). Annquilla, Avenger II, Black Tail, Bladerunner II*, Bullseye, Catalyst, Dakota*, Embrace, Falcon V, Firecracker SLS*, Guardian 41*, Guzzla II, Golicenda*, Gold Medallion, GTO, Hemi*, Inferno, Integrity, Justice, Leonardo*, Maestro, Medalangelo, Mustang 4, Penn HG4, Pennassion*, Raptor III, Rebel IV, Rebel Sentry, Rembrandt, Remington RX, Rockwell, Skillfis, Screnner LS, Speedway*, Spyder LS, SR 8650*, Sunset Gold, Supreomio, Technique, Tempia, Thor, Titanium 2LS, Titan Rs, Turbo, Turbo RZT, Xtender, and Zinger.
   Category II – Promising tall fescue varieties (may be 90% to 100% of the mixture on a weight basis): 4th Millennium, Amity, Bloodhound, Crossfire 4, Fantasia, Fayette, Femova, Firebird 2, Firewall, Freehorse, Grande 3, Hot Rod, Houndog 6, Hawat, Maestro, Nightcrawler, Paramount, Pennassion, Rebel V, Rebounder, Rhambler 2 SRP, Rhicing Moon, Rowdy, Swagger, Tarneo, Tornevo II SSP, Trinity, Turfway, Vallcyrie LS, and Wichita.
   Kentucky bluegrass varieties recommended for mixing with tall fescue sod to enhance sod strength (up to 10% of the seed mixture by weight): All cultivars in Categories I and II above. Note recommendation of hybrid bluegrasses as promising varieties for mixtures with turf-type tall fescues in the traditionally warmer climates of Virginia.
   Varieties marked with superscript asterisks denote the following:
   1. To be considered for removal in 2018 due to declining performance relative to other varieties.
   2. To be considered for removal in 2018 due to declining seed quality.
   3. To be considered for removal in 2018 due to the absence of recent testing of certified seed lots in MD and VA.
   4. To be considered for removal in 2018 due to lack of recent testing in MD and VA.

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ANTENNA INSTALLATION
3720 BROOKLEY AVENUE SW
WASHINGTON, DC 20032
(DISTRICT OF COLUMBIA)

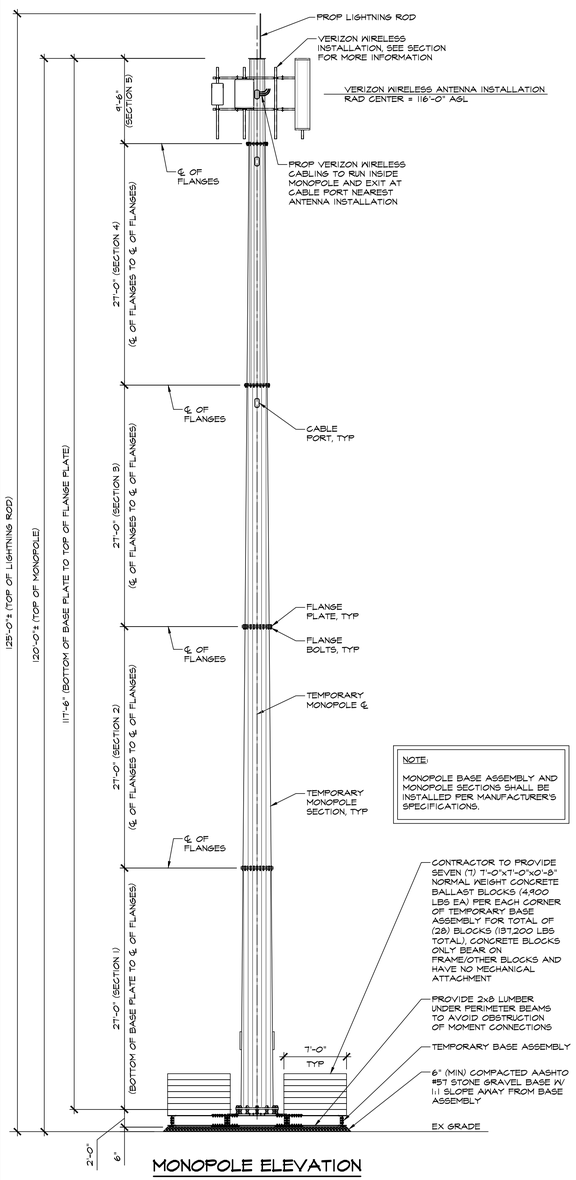
REVISIONS:		
NO.	DESCRIPTION	DATE

DESIGNED BY:	AJL
DRAWN BY:	DNT
REVIEWED BY:	AJL
PROJECT NO:	10427.3769
FUZE PROJECT ID:	17735342
DATE:	08/20/2026

TITLE:
Erosion & Sediment Control Plan II

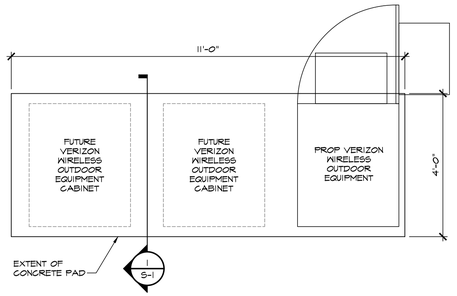
SHEET:
C-6
CIV006

811
Know what's **below.**
Call before you dig.
PROTECT YOURSELF, GIVE THREE WORKING DAYS NOTICE
THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APPURTENANT.

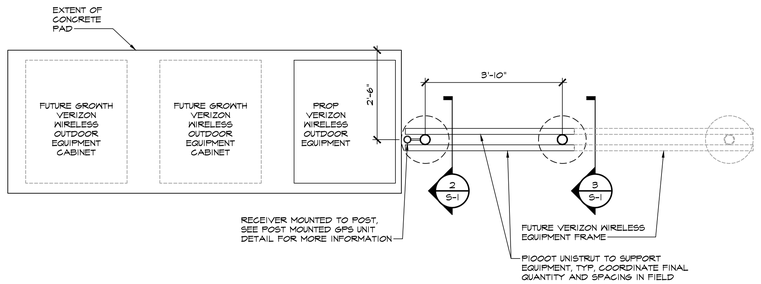


NOTE:
MONOPOLE BASE ASSEMBLY AND MONOPOLE SECTIONS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

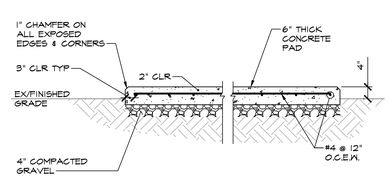
MONOPOLE ELEVATION
SCALE: 1/8" = 1'-0"



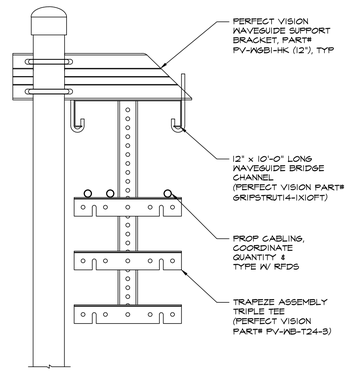
PAD-ON-GRADE PLAN
SCALE: 1/2" = 1'-0"



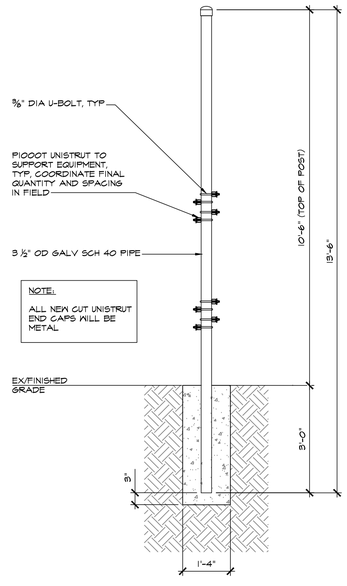
EQUIPMENT PAD & FRAME PLAN
SCALE: 1/2" = 1'-0"



1 S-1 CONCRETE EQUIPMENT PAD
SCALE: 1/2" = 1'-0"



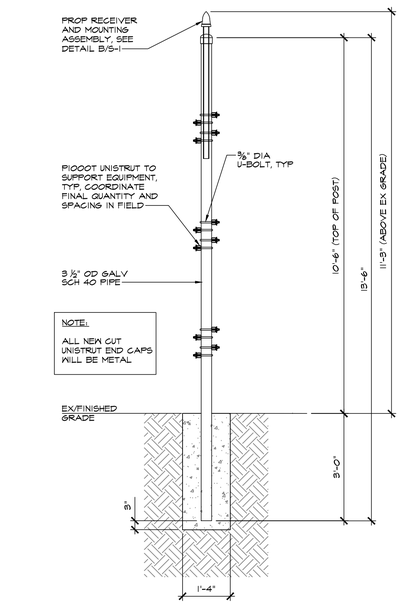
A TYP 12" WIDE CABLE BRIDGE DETAIL
SCALE: 1 1/2"=1'-0"



NOTE:
ALL NEW CUT UNISTRUT END CAPS WILL BE METAL

DIRECT BURIED

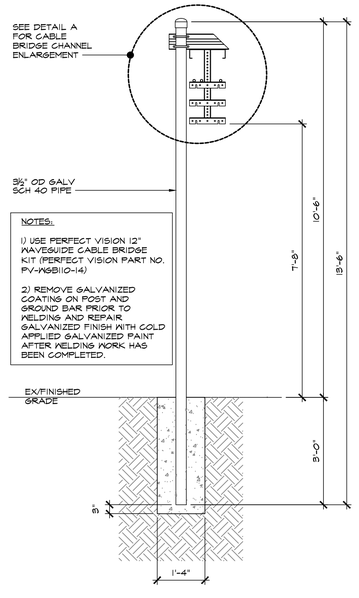
2 S-1 H-FRAME SUPPORT
SCALE: 1/2" = 1'-0"



NOTE:
ALL NEW CUT UNISTRUT END CAPS WILL BE METAL

DIRECT BURIED

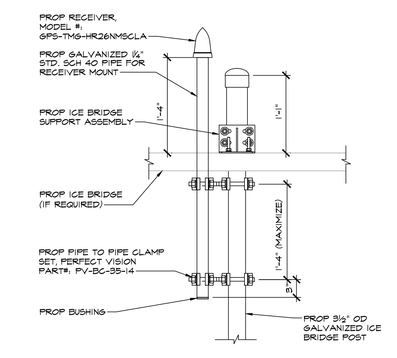
3 S-1 H-FRAME SUPPORT W/ GPS RECEIVER
SCALE: 1/2" = 1'-0"



NOTES:
1) USE PERFECT VISION 12" WAVEGUIDE CABLE BRIDGE KIT (PERFECT VISION PART NO. PV-WSBI0-14)

2) REMOVE GALVANIZED COATING ON POST AND GROUND BAR PRIOR TO WELDING AND REPAIR GALVANIZED FINISH WITH GOLD APPLIED GALVANIZED PAINT AFTER WELDING WORK HAS BEEN COMPLETED.

4 S-1 ICE BRIDGE DETAILS
SCALE: 1/2" = 1'-0"



NOTE:
VERIFY ACTUAL RECEIVER LOCATION AND MOUNTING HARDWARE WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO START OF CONSTRUCTION

B ICE BRIDGE MOUNTED RECEIVER UNIT
SCALE: NTS

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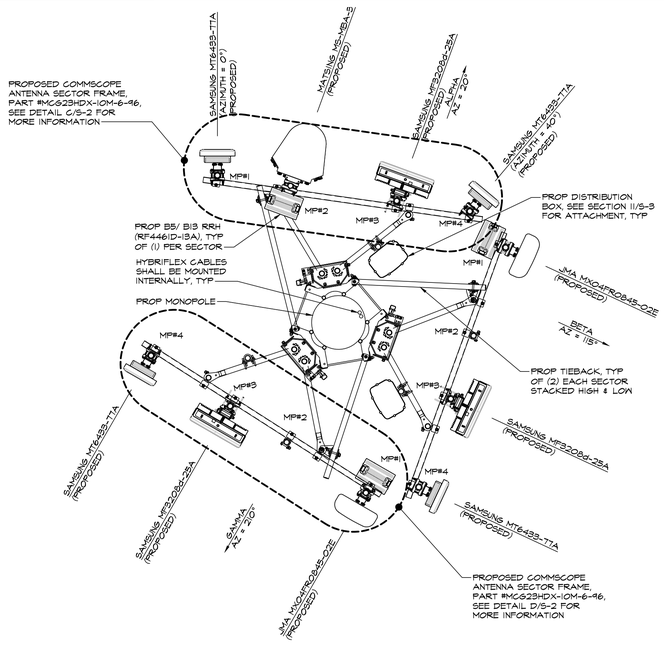
REVISIONS:

NO.	DESCRIPTION	DATE

DESIGNED BY:	AJL
DRAWN BY:	DNT
REVIEWED BY:	AJL
PROJECT NO:	10427.3769
FUZE PROJECT ID:	17735342
DATE:	08/20/2026

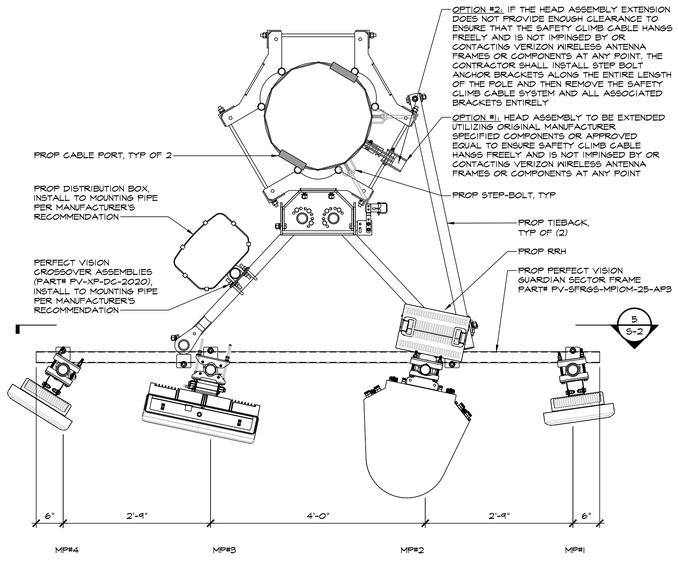
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Structural Details

SHEET:
S-1
S001



ANTENNA SECTOR PLAN

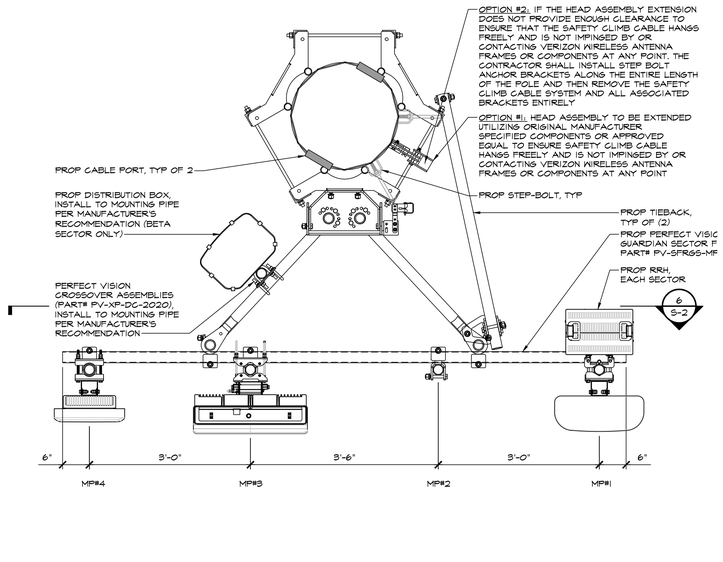
SCALE: 3/8" = 1'-0"



NOTE: CABLING SHOWN FOR ILLUSTRATION PURPOSES ONLY

C ALPHA SECTOR ANTENNA FRAME DETAIL

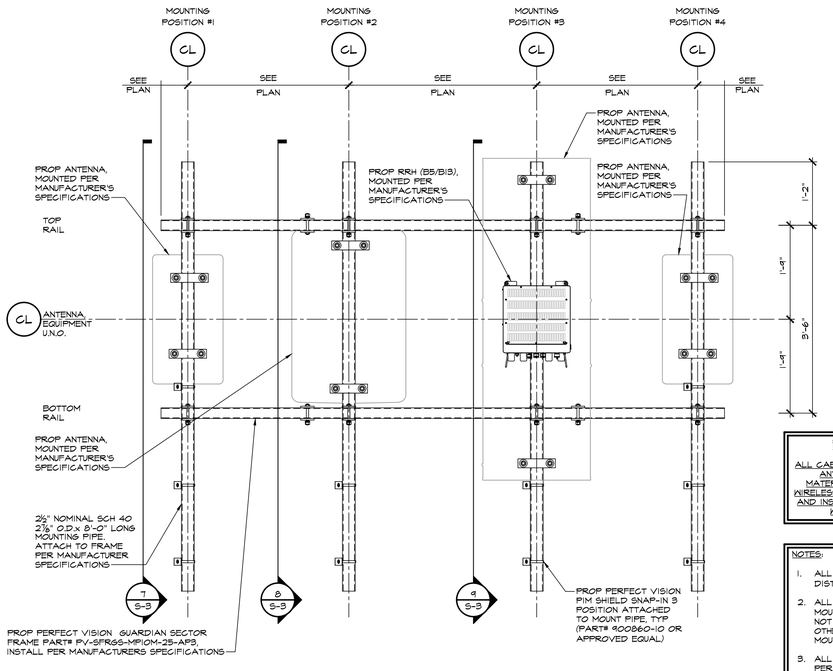
SCALE: 3/4" = 1'-0"



NOTE: CABLING SHOWN FOR ILLUSTRATION PURPOSES ONLY

D BETA & GAMMA SECTOR ANTENNA FRAME DETAIL

SCALE: 3/4" = 1'-0"



5 S-2 ALPHA SECTOR ANTENNA MOUNT REAR ELEVATION

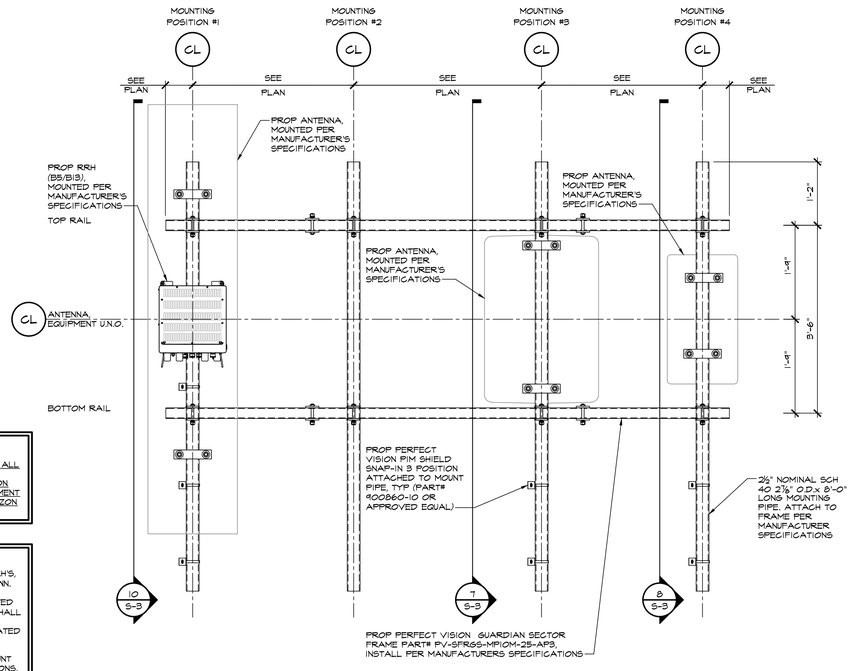
SCALE: 3/4" = 1'-0"

PIM-FRIENDLY MATERIALS NOTE:

ALL CABLE SUPPORT HARDWARE WITHIN A 10-FT RADIUS OF ALL ANTENNAS MUST BE CONSTRUCTED WITH PIM-FRIENDLY MATERIALS, WHICH ARE TO BE OBTAINED THROUGH VERIZON WIRELESS. CONTRACTOR SHALL COORDINATE ALL PROCUREMENT AND INSTALLATION OF PIM-FRIENDLY MATERIALS WITH VERIZON WIRELESS CONSTRUCTION MANAGER IN THE FIELD.

NOTES:

1. ALL PROPOSED ANTENNAS & ANCILLARY EQUIPMENT (RRH'S, DISTRIBUTION BOXES, ETC.) MUST BE INSTALLED AS SHOWN.
2. ALL APPURTENANCES MUST BE MOUNTED TO A DESIGNATED MOUNTING POSITION (MOUNTING PIPE). APPURTENANCES SHALL NOT BE DIRECTLY MOUNTED TO RAILS, STANDOFFS OR OTHER PORTIONS OF THE MOUNT UNLESS IT IS A DESIGNATED MOUNTING POSITION.
3. ALL APPURTENANCES SHALL BE ATTACHED TO PIPE MOUNT PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
4. ALL NEW STRUCTURAL STEEL, FASTENERS, AND EQUIPMENT MOUNTING HARDWARE TO RECEIVE A HOT-DIPPED GALVANIZED FINISH PRIOR TO INSTALLATION.



6 S-2 BETA & GAMMA SECTOR ANTENNA MOUNT REAR ELEVATION

SCALE: 3/4" = 1'-0"

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3720 BROOKLEY AVENUE SW
WASHINGTON, DC 20032
(DISTRICT OF COLUMBIA)

REVISIONS:		
NO.	DESCRIPTION	DATE

DESIGNED BY:	AJL
DRAWN BY:	DNT
REVIEWED BY:	AJL
PROJECT NO:	10427.3769
FUZE PROJECT ID:	17735342
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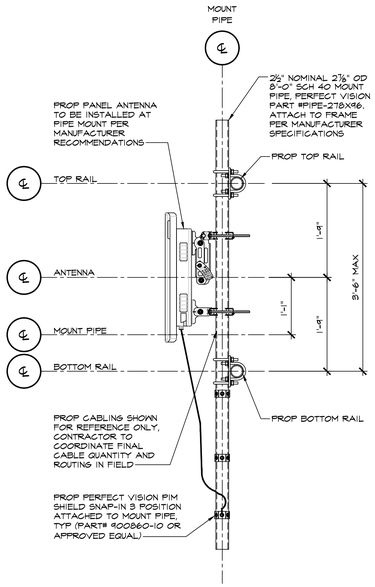
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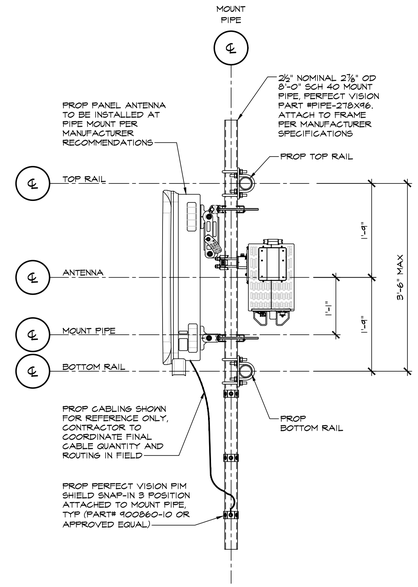
S-2

S002



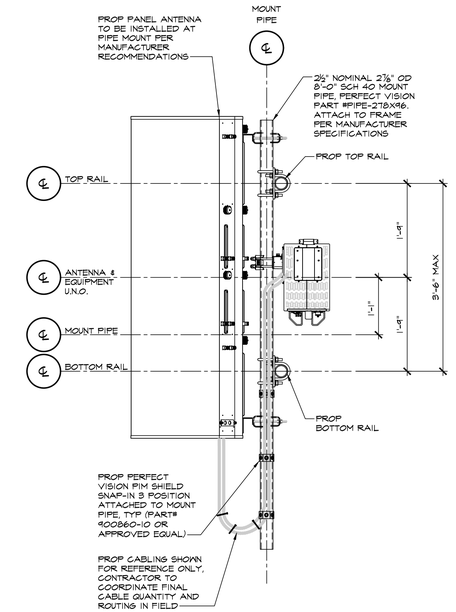
7 S-2 TYP C-BAND ANTENNA MOUNT SIDE ELEVATION

SCALE: 3/4" = 1'-0"



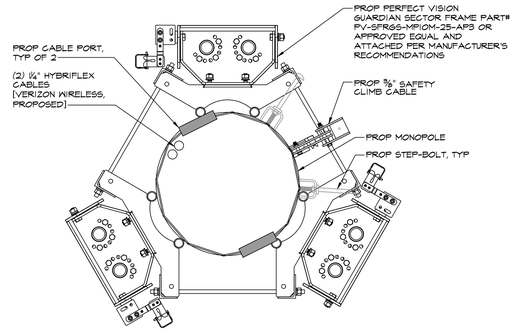
8 S-2 TYP SAMSUNG ANTENNA MOUNT SIDE ELEVATION

SCALE: 3/4" = 1'-0"



9 S-2 TYP MATSING ANTENNA MOUNT SIDE ELEVATION

SCALE: 3/4" = 1'-0"

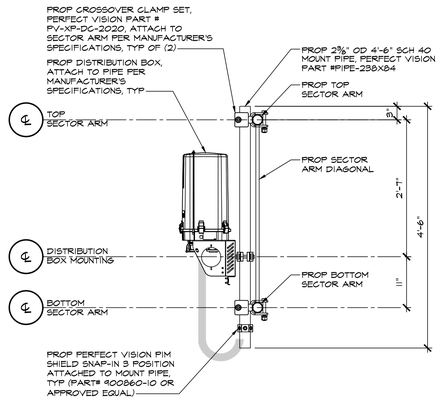


NOTE:

GENERAL CONTRACTOR TO CONFIRM SAFETY CABLE IS NOT OBSTRUCTED OR COMPROMISED/ RUBBING ON THE COLLAR

E CABLE MOUNTING PLAN

SCALE: 1" = 1'-0"



11 S-3 TYPICAL DISTRIBUTION BOX MOUNT SIDE ELEVATION

SCALE: 3/4" = 1'-0"

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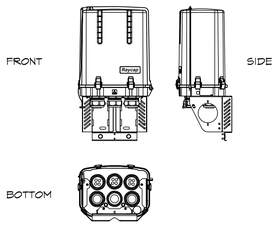
TITLE:

Structural Details

SHEET:

S-3

S003



MANUFACTURER: RAYCAP

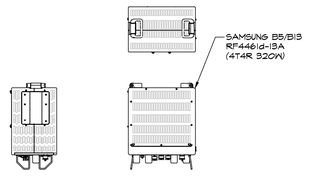
MODEL #: RVZDC-9928-PF-48 (9 OVP)

DIMENSIONS: 12.6"D X 16.5"W X 29.5"H

WEIGHT: 30.5 LBS (SYSTEM)

RAYCAP RVZDC-9928-PF-48 DISTRIBUTION BOX DETAIL

NOT TO SCALE



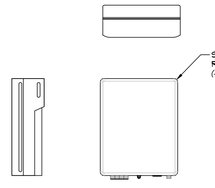
SAMSUNG RF4461d-13A (4T4R 320W) RRU	
MANUFACTURER:	SAMSUNG
ANTENNA TECH:	700 / 850 MHz
RADIO TECH:	LTE / NR 5 / 10MHz
DIMENSIONS: (W/O FINGER GUARD)	10.2"Dx15.0"Wx15.0"H
WEIGHT: (EXCLUDING BRACKET)	~79.10 LBS

NOTES:

1. INSTALL RRH PER MANUFACTURER'S RECOMMENDATIONS.
2. FIBER, DC POWER & GROUND CONNECTIONS NOT SHOWN.

SAMSUNG B5/B13 RF4461d-13A (4T4R 320W) RRU - DETAIL

NOT TO SCALE



SAMSUNG RF4801d-25A (4T4R 640W) RRU	
MANUFACTURER:	SAMSUNG
ANTENNA TECH:	1900 / 2100 MHz
RADIO TECH:	LTE / NR
DIMENSIONS:	7.2"Dx17.3"Wx21.7"H
WEIGHT: (EXCLUDING BRACKET)	~87.9 LBS

NOTES:

1. INSTALL RRH PER MANUFACTURER'S RECOMMENDATIONS.
2. FIBER, DC POWER & GROUND CONNECTIONS NOT SHOWN.

SAMSUNG B25/B66 RF4801d-25A (4T4R 640W) RRU - DETAIL

NOT TO SCALE

STRUCTURAL NOTES

BUILDING CODES

A. INTERNATIONAL BUILDING CODE (IBC-2015)

B. IN ADDITION, ALL CONSTRUCTION SHALL CONFORM WITH ANY GOVERNING LOCAL BUILDING CODES NOT INDICATED.

DESIGN LOAD

A. THE DESIGN DEAD LOADING FOR ALL FRAMING IS BASED ON THE CONSTRUCTION MATERIALS SHOWN ON THE DRAWINGS AND INDICATED IN THE SPECIFICATIONS.

B. THE MINIMUM DESIGN LOADING FOR ALL FRAMING IS AS FOLLOWS:

WIND LOAD:	BASIC WIND SPEED (ULTIMATE 3-SECOND GUST):	115 MPH
	BASIC WIND SPEED (WITH 1" RADIAL ICE):	30 MPH
	RISK CATEGORY:	II
	WIND EXPOSURE CATEGORY:	C

C. THE CONTRACTOR SHALL NOT STORE ANY CONSTRUCTION MATERIALS OR UNDERTAKE ANY CONSTRUCTION OPERATION WHICH WILL EXCEED THE DESIGN LIVE LOADINGS NOTED.

D. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN, INSTALLATION AND REMOVAL OF TEMPORARY BRACING AND CONSTRUCTION SUPPORTS FOR NEW AND EXISTING STRUCTURES, AS REQUIRED TO COMPLETE THE PROJECT. THE CONTRACTOR IS COMPLETELY RESPONSIBLE FOR THE METHOD OF CONSTRUCTION AND SHALL PROVIDE ALL TEMPORARY BRACING AND SHORING REQUIRED TO MAINTAIN THE STABILITY OF THE STRUCTURE AND TO SUPPORT CONSTRUCTION LOADS DURING CONSTRUCTION. CONTRACTOR SHALL RETAIN STRUCTURAL ENGINEER LICENSED IN THE STATE IN WHICH PROJECT IS LOCATED TO DESIGN TEMPORARY BRACING AND CONSTRUCTION SUPPORTS.

E. DO NOT PLACE ANY STRUCTURES (ELECTRICAL CONDUIT, TELECOMMUNICATIONS OR SIGNAL WIRE, OPERABLE DEVICES, FLUID LINES, ETC) WITHIN NINE (9) INCHES OF THE UNDERSIDE OF THE ROOF AS THESE MAY BE COMPROMISED BY ROOFING SCREWS AT SOME FUTURE DATE FROM ROOF REPLACEMENT. THE APPROVED METHOD OF SUSPENSION IS FROM BUILDING STRUCTURAL STEEL, INCLUDING THOSE MEMBERS SUPPORTING THE ROOF.

MISCELLANEOUS

A. THE CONTRACTOR SHALL REVIEW THE CIVIL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR LOCATION AND DIMENSION OF CHASES, INSERTS, OPENINGS, SLEEVES, DEPRESSIONS AND OTHER PROJECT REQUIREMENTS WHICH IMPACT THE STRUCTURAL COMPONENTS. THE STRUCTURAL CONSTRUCTION DRAWINGS DO NOT SHOW ALL OPENINGS REQUIRED. ADDITIONAL OPENINGS, BLOCKOUTS AND SLEEVES MAY BE REQUIRED BY OTHER DISCIPLINES AND SHALL BE CONSTRUCTED USING THE TYPICAL DETAILS AND/OR CRITERIA INDICATED THE STRUCTURAL DRAWINGS. OPENINGS REQUIRED BUT NOT SHOWN ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER.

B. IN CASES OF CONFLICT BETWEEN THE DRAWINGS AND/OR SPECIFICATIONS AND OTHER DISCIPLINES OR EXISTING CONDITIONS, CONTRACTOR SHALL NOTIFY THE DESIGN PROFESSIONALS AND OBTAIN CLARIFICATION PRIOR TO BIDDING AND PROCEEDING WITH WORK.

C. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS SHOWN ON THE CONTRACT DRAWINGS BEFORE PROCEEDING WITH CONSTRUCTION. ALL DISCREPANCIES AND OMISSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.

D. THE CONTRACTOR SHALL NOT SUBMIT REPRODUCTIONS OF THE STRUCTURAL CONTRACT DOCUMENTS AS SHOP DRAWINGS.

E. SCALES SHOWN ON THE STRUCTURAL CONTRACT DRAWINGS ARE FOR GENERAL INFORMATION ONLY. DIMENSIONAL INFORMATION SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS.

F. APPLY DETAILS, SECTIONS AND NOTES ON THE DRAWINGS WHERE CONDITIONS ARE SIMILAR TO THOSE INDICATED BY DETAIL, DETAIL TITLE OR NOTE.

G. ASSUME EQUAL SPACING BETWEEN ESTABLISHED DIMENSIONS, IF NOT INDICATED ON DRAWINGS.

H. CENTERLINES OF COLUMNS COINCIDE WITH GRID LINE INTERSECTIONS, UNLESS NOTED OTHERWISE.

I. CENTERLINES OF FRAMING MEMBERS COINCIDE WITH COLUMN CENTERLINES, UNLESS OTHERWISE NOTED.

J. THE CONTRACTOR SHALL VERIFY THAT CONSTRUCTION LOADS DO NOT EXCEED THE CAPACITY OF THE STRUCTURE AT THE TIME THE LOAD IS APPLIED.

K. PROVIDE SHORING AND PROTECTION FOR EXCAVATION BANKS AS NECESSARY TO PREVENT CAVING AND COMPLY WITH ALL APPLICABLE OSHA RULES AND REGULATIONS.

L. SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS MUST BE SUBMITTED BY THE CONTRACTOR OR OWNER FOR REVIEW BY THE ENGINEER. IF THE CONTRACTOR OR OWNER FAILS TO SUBMIT THE SHOP DRAWINGS, THE ENGINEER WILL NOT BE RESPONSIBLE FOR STRUCTURAL CERTIFICATION AND DESIGN OF THE PROJECT. THE SHOP DRAWINGS SHALL INDICATE ANY DEVIATIONS OR OMISSIONS FROM THE CONTRACT DOCUMENTS. THE GENERAL CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMISSION AND MAKE ALL CORRECTIONS DEEMED NECESSARY.

STRUCTURAL AND MISCELLANEOUS STEEL

A. ALL STEEL CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE AISC STEEL CONSTRUCTION MANUAL "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" (ANSI/AISC 360) AND THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".

B. ALL STRUCTURAL STEEL WIDE FLANGE SHAPES, AND SHAPES CUT THEREOF, SHALL CONFORM TO ASTM A992 (F_y = 50 KSI).

C. ALL MISCELLANEOUS STEEL (PLATES) SHALL CONFORM TO ASTM A36 (F_y = 36 KSI).

D. ALL PIPE SHALL CONFORM TO ASTM A53, GRADE B (F_y = 35 KSI).

E. WHERE NO CAMBER IS INDICATED, FABRICATE BEAMS SO THAT ANY NATURAL CAMBER IS UPWARD AFTER ERECTION.

F. ALL BEAM CONNECTIONS SHALL BE DESIGNED FOR THE MAXIMUM OF 50% OF THE UNIFORM LOAD CAPACITY OF THE MEMBER (LATERALLY SUPPORTED) OR THE SHEAR CAPACITY OF THE WEB, WITH DUE CONSIDERATION OF CONCENTRATED LOADS. BOLTED CONNECTIONS SHALL USE NO LESS THAN TWO ¾" DIA ASTM A325 OR A490 HIGH STRENGTH BOLTS, CONFORM TO AISC SPECIFICATION "STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS".

G. UNLESS NOTED OTHERWISE, DETAILS INDICATED ON THE DRAWINGS INDICATE GENERAL CRITERIA FOR DESIGN AND DETAILING OF THE CONNECTIONS. DETAILS INDICATED ON DRAWINGS ARE NOT INTENDED TO CONVEY COMPLETE CONNECTOR SIZES, PLATE SIZES, WELD SIZES, NUMBER OF BOLTS OR ANY OTHER SPECIFIC INFORMATION THAT IS OBTAINED THROUGH DESIGNING OF AN INDIVIDUAL CONNECTION FOR A GIVEN SET OF LOADS. THESE DETAILS DO NOT SHOW ERECTION AIDS. PROVIDE ERECTION AIDS AS REQUIRED AND REMOVE THEM AFTER WORK IS COMPLETE.

H. ALL WELDED CONNECTIONS SHALL USE E70XX ELECTRODES.

I. ALL NUTS SHALL CONFORM TO ASTM A563. ALL WASHERS SHALL CONFORM TO ASTM F436.

J. ALL CONNECTIONS, UNLESS OTHERWISE NOTED, SHALL BE DOUBLE ANGLE OR SINGLE PLATE SHEAR CONNECTIONS DESIGNED AND DETAILED IN ACCORDANCE WITH THE AISC MANUAL OF STEEL CONSTRUCTION WITH A MINIMUM EDGE DISTANCE OF ½ INCHES AND BOLT SPACING OF 3 INCHES.

K. ALL SHOP AND FIELD WELDS SHALL BE PERFORMED BY CERTIFIED WELDERS AND CONFORM TO THE AMERICAN WELDING SOCIETY CODE FOR BUILDINGS AWS D1.1. WELDS SHALL DEVELOP THE FULL STRENGTH OF MATERIALS BEING WELDED UNLESS OTHERWISE INDICATED.

L. ALL CONNECTIONS TO EXISTING STEEL FRAMING SHALL BE FIELD BOLTED UNLESS OTHERWISE INDICATED. THE CONTRACTOR MAY SUBSTITUTE WELDED CONNECTIONS PROVIDED THE EXISTING STEEL IS TESTED TO DETERMINE STRENGTH AND CHEMICAL PROPERTIES. TEST METHODS AND RESULTS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO ANY FIELD WELDING TO EXISTING STEEL.

M. THE CONTRACTOR SHALL NOT SPLICE OR CUT OPENINGS IN STEEL MEMBERS NOT SHOWN ON CONTRACT DRAWINGS WITHOUT THE PERMISSION OF THE STRUCTURAL ENGINEER.

N. AN INDEPENDENT INSPECTION AGENCY SHALL INSPECT ALL STRUCTURAL STEEL AND VERIFY THAT IT CONFORMS TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. FIELD INSPECTION REPORTS SHALL BE SUBMITTED TO THE ENGINEER WITHIN 5 DAYS OF THE INSPECTION. THE CONTRACTOR SHALL NOTIFY THE INSPECTION AGENCY OF ALL PHASES OF STEEL CONSTRUCTION AND WELDING.

O. STEEL MEMBERS, FABRICATIONS AND ASSEMBLIES EXPOSED TO WEATHER OR INDICATED TO BE GALVANIZED SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123 AFTER FABRICATION. ALL BOLTS, SCREWS, WASHERS, AND NUTS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM F2329.

P. PROVIDE HOLES IN STEEL AS REQUIRED TO PREVENT ANY ACCUMULATION OF WATER. ALL PENETRATIONS THROUGH MAIN MEMBERS SHALL NOT EXCEED ⅛" DIA AND SHALL BE GROUND SMOOTH. THESE DRAINS MUST BE KEPT CLEAN AND OPEN.

Q. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS INDICATING THE SIZES, EXTENT, AND LOCATION OF ALL STRUCTURAL AND MISCELLANEOUS STEEL FRAMING INCLUDING ALL CONNECTIONS, FASTENERS, AND BEARINGS.

R. SHOW ALL COPES, HOLES, OPENINGS AND MODIFICATIONS REQUIRED IN STRUCTURAL STEEL MEMBERS FOR ERECTION OR THE WORK OF OTHER TRADES ON THE SHOP DRAWINGS FOR APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER.

CAST IN PLACE CONCRETE

A. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301)"; AND TO THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318)".

B. IN ADDITION TO THE ABOVE, ALL CONCRETE WORK SHALL CONFORM TO THE FOLLOWING:

RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETING (ACI 305).
RECOMMENDED PRACTICE FOR COLD WEATHER CONCRETING (ACI 306).
RECOMMENDED PRACTICE FOR CONCRETE FORMWORK (ACI 347).
STANDARD SPECIFICATION FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS (ACI 117).
CHEMICAL ADMIXTURES FOR CONCRETE (ACI 212.3).
STANDARD SPECIFICATION FOR CURING CONCRETE (ACI 308.1).

C. ALL CONCRETE EXPOSED TO PUBLIC VIEW SHALL CONFORM TO THE REQUIREMENTS FOR ARCHITECTURAL CONCRETE CONTAINED IN ACI 301.

D. ALL CONCRETE, UNLESS NOTED OTHERWISE, SHALL BE STONE AGGREGATE CONCRETE HAVING A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,500 PSI. ALL CONCRETE EXPOSED TO WEATHER SHALL HAVE AN AIR ENTRAINMENT OF 6% +/- 1%. NO ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL BE PERMITTED. MAXIMUM AGGREGATE SIZE SHALL BE 1", AND MAXIMUM SLUMP SHALL BE 4". ALL CONCRETE, EXCEPT FOOTINGS, SHALL CONTAIN A WATER REDUCING ADMIXTURE. PORTLAND CEMENT SHALL CONFORM TO ASTM C150 AND NORMAL WEIGHT AGGREGATES SHALL CONFORM TO ASTM C33.

E. ALL CONCRETE MIX DESIGNS, INCLUDING CEMENT CONTENT, WATER CEMENT RATIO, FINE AND COARSE AGGREGATE CONTENT AND ALL ADMIXTURES, SHALL BE REVIEWED BY ENGINEER PRIOR TO PLACING FIRST CONCRETE.

F. ALL CONCRETE SHALL BE SAMPLED AND TESTED BY THE TESTING AGENCY. THE CONTRACTOR SHALL NOTIFY THE TESTING AGENCY 48 HOURS PRIOR TO THE PLACING OF ANY CONCRETE. TESTING SHALL BE IN ACCORDANCE WITH ASTM C172.

G. THE CONCRETE STRUCTURE SHALL NOT SUPPORT THE DESIGN LIVE LOAD FOR A MINIMUM OF 28 DAYS AND ALL SHORING AND RE-SHORING REQUIRED TO SUPPORT THE CONCRETE STRUCTURE DURING CONSTRUCTION SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR. SHOP DRAWINGS, SIGNED AND SEALED BY A REGISTERED ENGINEER IN THE STATE OF MARYLAND, SHALL BE SUBMITTED FOR REVIEW. SHOP DRAWINGS SHALL INDICATE THE TYPE, EXTENT, SIZE, AND LOCATION OF ALL SHORING AND RE-SHORING AS WELL AS THE SEQUENCE OF CONSTRUCTION.

H. GROUND BLAST FURNACE SLAG MAY BE USED TO REPLACE UP TO 50 PERCENT OF THE PORTLAND CEMENT IN A CONCRETE MIX, AND FLY ASH OR POZZOLAN MAY BE USED TO REPLACE UP TO 25 PERCENT OF PORTLAND CEMENT, SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER AND SHALL CONFORM TO ASTM C989.

I. ALL REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A615 GRADE 60 (F_y = 60 KSI).

J. LAP ALL REINFORCING BARS A MINIMUM OF 48 BAR DIAMETERS, UNLESS OTHERWISE INDICATED.

K. ALL REINFORCING SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH THE CRSI "MANUAL OF STANDARD PRACTICE", ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT", ACI SP 66 "DETAILING MANUAL".

L. MINIMUM COVER FOR ALL REINFORCING SHALL BE AS FOLLOWS UNLESS OTHERWISE INDICATED:

SLAB-ON-GRADE	3 INCHES (TOP, BOTTOM, & SIDES)

M. ALL CAST-IN-PLACE CONCRETE WILL EXPERIENCE DIFFERING VARIATIONS OF CRACKING. ANY ELEMENT EXPOSED TO DIRECT WEATHER AND/OR TEMPERATURE VARIATIONS DURING CONSTRUCTION OR IN THE FINAL CONDITION IS TO BE TREATED AND REGULARLY MAINTAINED TO PREVENT PROPAGATION OF CRACKS AND WATER INFILTRATION. THE CONTRACTOR SHALL DEVELOP A REGULAR MAINTENANCE PROGRAM AND SUBMIT IT TO THE OWNER.

N. ALL CONCRETE CONSTRUCTION SHALL BE INSPECTED IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE.

POST-INSTALLATION INSPECTION NOTES

A. A POST-INSTALLATION INSPECTION REPORT IS REQUIRED AND SHALL BE INCLUDED IN THE CONTRACTOR'S BID. A POST-INSTALLATION INSPECTION IS A VISUAL INSPECTION OF THE APPURTENANCE CONFIGURATION AND A REVIEW OF MATERIAL SUBMITTALS. OTHER REPORTS TO ENSURE THE INSTALLATION WAS CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, NAMELY THE CONSTRUCTION DRAWINGS.

B. THE POST-INSTALLATION INSPECTION REPORT SHALL BE COMPLETED BY A PROFESSIONAL ENGINEER LICENSED IN THE JURISDICTION IN WHICH THE PROJECT IS LOCATED.

C. THE INTENT OF THE POST-INSTALLATION INSPECTION REPORT IS TO CONFIRM INSTALLATION AND CONFIGURATION AND WORKMANSHIP ONLY AND IS NOT A REVIEW OF THE CONSTRUCTION DESIGN ITSELF.

D. TO ENSURE THAT THE REQUIREMENTS OF THE POST-MODIFICATION INSPECTION REPORT ARE MET, IT IS VITAL THAT THE CONTRACTOR AND POST-MODIFICATION INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS SOON AS A P.O. IS RECEIVED.

MORRIS & RITCHIE ASSOCIATES, INC.
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REVISIONS:

NO.	DESCRIPTION	DATE

DESIGNED BY:	AJL
DRAWN BY:	DNT
REVIEWED BY:	AJL
PROJECT NO:	10427.3769
FUZE PROJECT ID:	17735342
DATE:	08/20/2026

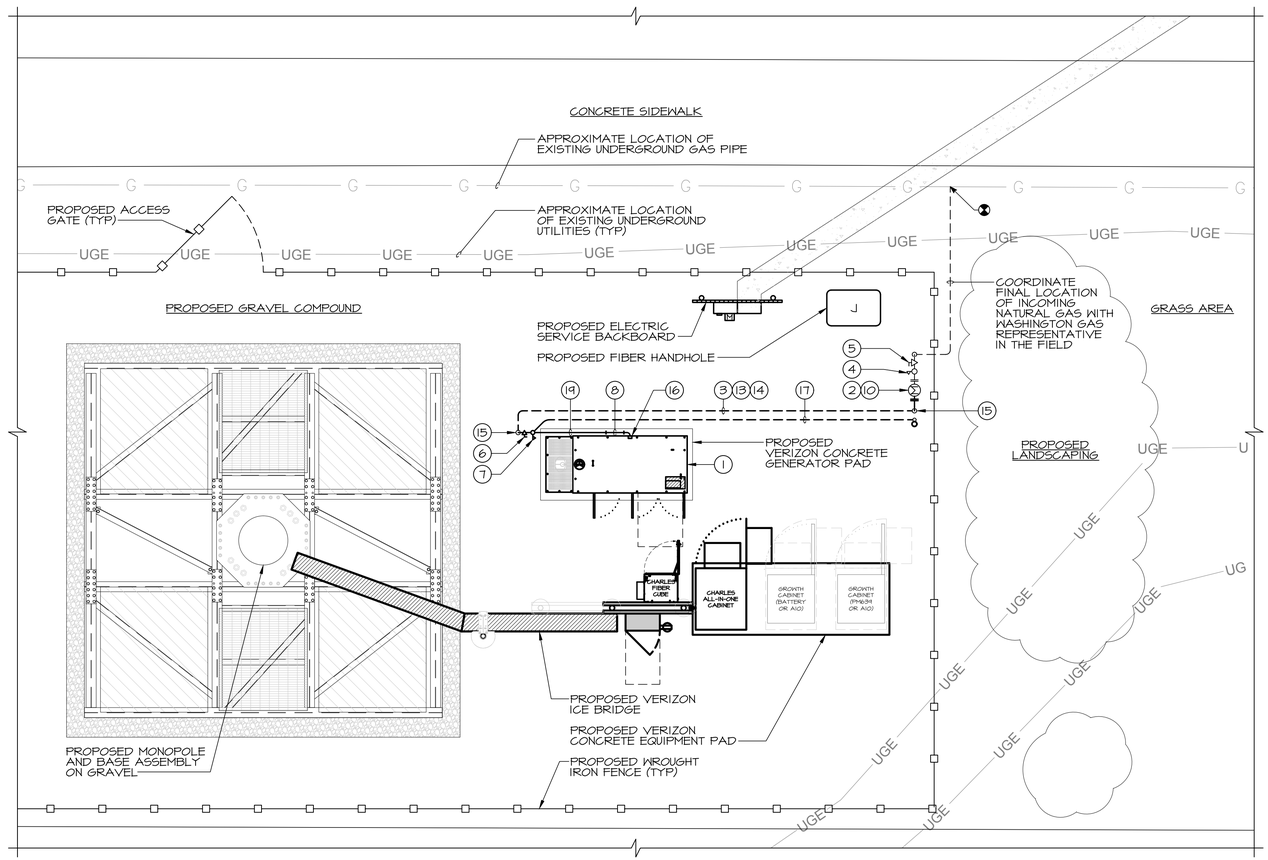
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Structural Details & Notes

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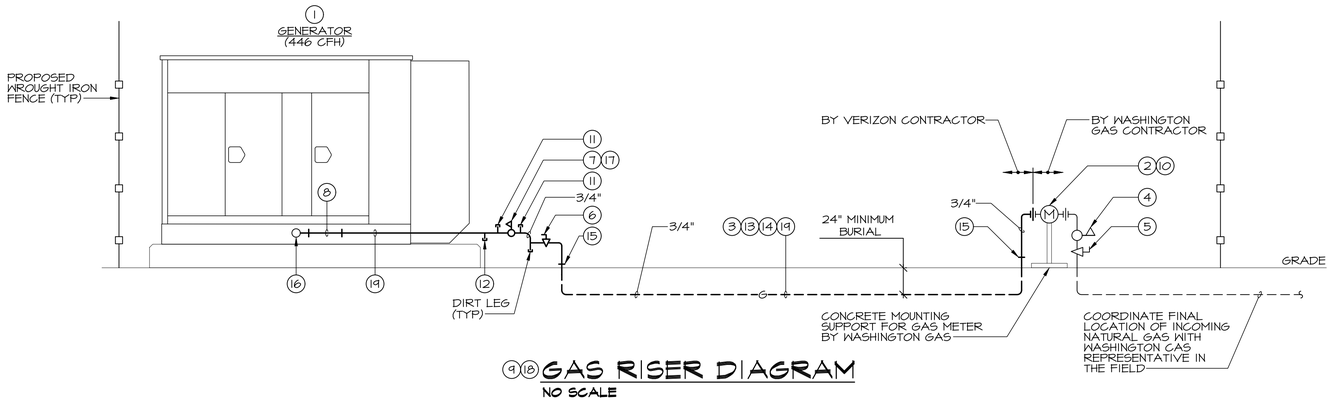
S-4

S004



9,18 GAS PIPING PLAN

SCALE: 1/4" = 1'-0"



9,18 GAS RISER DIAGRAM

NO SCALE

1. TOTAL DEVELOPED LENGTH = 60 L.F. INCLUDING 50% FOR FITTINGS.
2. INITIAL INCOMING UNREGULATED PRESSURE TO BE COORDINATED WITH WASHINGTON GAS AND SHALL BE REGULATED DOWN TO 2.0 PSI FOR VERIZONS USE.
3. ALL GAS PIPING AND ACCESSORIES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH IFGC 2015 AND LOCAL CODES.
4. ALL GAS PIPING SIZED IN ACCORDANCE WITH IFGC 2015, CHAPTER 4, ASSUMING A 2 PSI INLET PRESSURE AND 1.0 PSI PRESSURE DROP OVER ENTIRE LENGTH OF PIPING. USING TABLE 402.4(5) FOR METALLIC PIPING AND TABLE 402.4(18) FOR CSST TUBING.
5. GAS PIPING SIZES LISTED ARE BASED ON THE ENGINEER'S UNDERSTANDING OF THE PROPOSED ROUTING FROM THE GAS METER TO GENERATOR. CONTRACTOR SHALL BEAR SOLE RESPONSIBILITY FOR RECALCULATING GAS PIPE SIZE BASED ON ACTUAL ROUTING. UNDER NO CIRCUMSTANCES SHALL CONTRACTOR ASSUME THAT SIZES LISTED REFLECT EXACT PIPE LENGTHS AND NUMBER OF BENDS.
6. EHD OF CSST PIPING IS 25.

SYMBOLS LIST & ABBREVIATIONS

	CONNECT TO EXISTING SYMBOL
	UNION
	GAS COCK
	PRESSURE REDUCING VALVE
	NATURAL GAS PIPE (G)

MBH	1000 BRITISH THERMAL UNITS/HOUR
PSIG	POUNDS PER SQUARE INCH GAUGE
CFH	CUBIC FEET PER HOUR
GPR	GROUND PENETRATING RADAR
M	GAS METER
IFGC	INTERNATIONAL FUEL GAS CODE

GENERAL NOTES

1. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH LOCAL CODES AND LANDLORD'S LEASING SPECIFICATION AND DRAWINGS.
2. MECHANICAL CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS.
3. EXISTING CONDITIONS CLARIFICATION: ALL EXISTING COMPOUND CONDITIONS SHOWN ON THE CONTRACT DOCUMENTS INDICATE EXISTING CONDITIONS AS KNOWN. THE EXISTING CONDITIONS ARE NOT INTENDED TO BE "AS BUILT" AND MAY DIFFER FROM THOSE SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY ALL EXISTING CONDITIONS, PARTICULARLY WHERE THEY MAY IMPACT THE PROPOSED WORK, PRIOR TO STARTING CONSTRUCTION. MINOR VARIATIONS CAN BE EXPECTED. ANY REQUIRED DEVIATION FROM THE CONTRACT DOCUMENTS AS A RESULT OF DIFFERING SITE CONDITIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
4. COORDINATE ALL NEW INSTALLATIONS WITH EXISTING PIPING, EQUIPMENT, CONDUIT, ETC. ADJUST NEW WORK AS REQUIRED.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING EXISTING CONDITIONS. EXISTING CONDITIONS HAVE BEEN OBTAINED FROM RECENT FIELD SURVEY.
6. CLARIFICATION: IF THE CONTRACT DOCUMENTS ARE FOUND TO BE UNCLEAR, AMBIGUOUS, OR CONTRADICTORY, THE CONTRACTOR MUST REQUEST CLARIFICATION FROM THE ENGINEER BEFORE PROCEEDING WITH THAT PART OF THE WORK.
7. THE ENGINEER HAS MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT IN ACCORDANCE WITH THE INTENT OF THESE DRAWINGS.
8. ALL EXTERIOR GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL ABOVE GRADE AND SHALL BE SUPPORTED AS REQUIRED BY LOCAL CODES UNLESS OTHERWISE NOTED.
9. ALL FERROUS GAS PIPING EXPOSED TO THE ATMOSPHERE OR OTHERWISE SUSCEPTIBLE TO CORROSION SHALL BE PROTECTED WITH A CORROSION RESISTANT YELLOW COATING WITH "NATURAL GAS" IDENTIFICATION EVERY 25 FEET.
10. ALL COSTS ASSOCIATED WITH GAS UTILITY COMPANY INSTALLING THE NEW GAS PIPING FROM THE CONNECTION TO EXISTING GAS SERVICE TEE THROUGH NEW GAS METER SHALL BE PAID BY VERIZON.
11. **THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION COORDINATION AND METER INSTALLATION WITH THE WASHINGTON GAS REPRESENTATIVE. AVAILABLE GUARANTEED GAS PRESSURE SHALL BE CONFIRMED PRIOR TO ORDERING OF ALL GAS MATERIALS (IE. PIPING, FITTINGS, ETC). THE CONTRACTOR SHALL BEAR THE SOLE RESPONSIBILITY FOR REPLACEMENT AND CONSTRUCTION COST OVERAGES DUE TO A LACK OF COORDINATION.**

DRAWING NOTES

1. VERIZON PROVIDED, CONTRACTOR INSTALLED 35 KW NATURAL GAS POWERED GENERATOR MOUNTED ON CONCRETE PAD ON GRADE. REFER TO DETAIL, SHEET E-5.
2. COORDINATE LOCATION OF NEW GAS METER WITH WASHINGTON GAS. CONTRACTOR SHALL PROVIDE ALL PIPING AND FITTINGS FROM CUSTOMER SIDE OF METER TO NEW GENERATOR.
3. COORDINATE FINAL GAS PIPE ROUTING ABOVE/ BELOW GRADE TO GENERATOR WITH FINAL METER LOCATION/CONFIGURATION.
4. PROPOSED GAS PRESSURE REGULATOR (SET AT 2.0 PSI BY OTHERS).
5. GAS COCK SHUT-OFF VALVE PROVIDED BY UTILITY COMPANY. PROVIDE SIGNAGE READING "VERIZON GENERATOR SHUT-OFF."
6. PROVIDE GAS COCK SHUT-OFF VALVE PRIOR TO CONNECTION TO GENERATOR.
7. PROVIDE PRESSURE REGULATOR SET PER MANUFACTURERS RECOMMENDATIONS.
8. CONTRACTOR SHALL USE FLEX CONNECTION SHIPPED WITH GENERATOR FOR FINAL CONNECTION TO ENGINE.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR COMMUNICATING EXACT NATURAL GAS PIPE LENGTH TO ENGINEER ONCE THE NATURAL GAS METER HAS BEEN DEFINED. GAS PIPING SIZED ON A DISTANCE OF 60' INCLUDING 50% FOR FITTINGS.
10. CONTRACTOR SHALL PROVIDE AND INSTALL PHENOLIC NAMEPLATE ON GAS METER READING, "VERIZON NATURAL GAS GENERATOR".
11. PROVIDE CAPPED OR PLUGGED TEE FOR CONNECTION OF PRESSURE MEASURING DEVICE.
12. PROVIDE CAPPED OR PLUGGED TEE TO SERVICE AS A SEDIMENT TRAP.
13. CONTRACTOR SHALL INSTALL TRACER WIRE AND TAPE OVER BURIED GAS PIPING FOR FUTURE LOCATING PURPOSES. PIPING THAT EXTENDS ABOVE GRADE SHALL BE SCHEDULE 40 THREADED BLACK STEEL PIPE.
14. ALL GAS PIPING BELOW GRADE FROM GAS METER TO NEW GENERATOR SHALL BE POLYETHYLENE-SLEEVED FLEXIBLE GAS PIPING (TRACPIPE PS-11) AS MANUFACTURED BY OMEGAFLEX OR APPROVED EQUAL.
15. PROVIDE TRANSITION FITTING ABOVE GRADE FOR METALLIC TO CSST PIPING BELOW GRADE. FITTING SHALL BE STANDARD MANUFACTURER'S TRANSITION FITTING.
16. GENERAL CONTRACTOR PROVIDED MECHANICAL CONTRACTOR INSTALLED, AND ELECTRICAL CONTRACTOR WIRED ASENTRIA SITEBOSS 340 GAS PRESSURE SWITCH FOR MONITORING OF FUEL PRESSURE TO NATURAL GAS GENERATOR.
17. CONTRACTOR SHALL EXTEND SCHEDULE 40 PVC REGULATOR VENT PIPE FROM NATURAL GAS REGULATOR AT GENERATOR AND TURN UP AT PRE-GALVANIZED STEEL POST 5'-0" FROM GENERATOR EXHAUST OUTLET ALONG FENCELINE. CONTRACTOR SHALL TERMINATE VENT PIPE 36" ABOVE GRADE AND PROVIDE GOOSE NECK FITTING WITH VENT SCREEN ON END OF PIPE. FINAL PIPE SIZE SHALL MATCH SIZE OF THREADED FITTING ON REGULATOR.
18. GROUNDING OF CSST BY ELECTRICAL CONTRACTOR. REFER TO SHEET E-4 FOR ADDITIONAL INFORMATION.
19. CONTRACTOR SHALL PERMANENTLY AFFIX ALL GAS PIPING AND ASSOCIATED REGULATOR/ SHUT OFF VALVE ABOVE GRADE TO GENERATOR CONCRETE SLAB. FINAL METHOD SHALL NOT IMPEDE ON GENERATOR ACCESS DOORS.

DESIGN IS BASED ON A DELIVERY PRESSURE OF 2.0 PSI BY LOCAL GAS SUPPLIER. IF CONTRACTOR DISCOVERS FIELD CONDITIONS ARE DIFFERENT, HE SHALL CONTACT THE ENGINEER.

01 2 3 4 8 12

SCALE: 1/4"=1'-0"

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REVISIONS:		
NO.	DESCRIPTION	DATE

LAST REV.:	
PROJECT NO:	26011IN
DATE:	
SCALE:	AS NOTED

TITLE:
GAS PIPING PLAN, GAS RISER, AND NOTES

SHEET:
P-1

REVIEW SET 08/20/26

TEI# 26011IN

ELECTRICAL SPECIFICATION

1. SECTION 16010 - BASIC ELECTRICAL REQUIREMENTS

   A. THE WORK INCLUDES FURNISHING AND INSTALLING THE MATERIAL, EQUIPMENT AND SYSTEMS COMPLETE AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS. THE ELECTRICAL INSTALLATIONS, WHEN FINISHED, SHALL BE COMPLETE AND COORDINATED AND READY FOR SATISFACTORY SERVICE.

   B. ALL WORK UNDER THIS CONTRACT SHALL BE DONE IN STRICT ACCORDANCE WITH ALL APPLICABLE MUNICIPAL, STATE, BOCA, AND LOCAL ELECTRICAL CODES THAT GOVERN EACH PARTICULAR TRADE AND THE 2014 NATIONAL ELECTRICAL CODE.

   C. THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL EQUIPMENT INSTALLATION WITH ALL TRADES.

   D. THE CONTRACTOR SHALL MAKE APPLICATION AND PAY ALL CHARGES FOR ALL NECESSARY PERMITS, LICENSES, AND INSPECTIONS AS REQUIRED UNDER THE ABOVE CODES. UPON COMPLETION OF THE WORK, THE CUSTOMARY CERTIFICATIONS OF APPROVAL SHALL BE FURNISHED.

   E. NO MATERIALS OR EQUIPMENT SHALL BE USED IN THE WORK UNTIL APPROVED. ALL MATERIALS SHALL BE U.L. LISTED.

   F. THE CONTRACTOR SHALL EXAMINE ALL DRAWINGS AND SHALL INSPECT THE EXISTING CONDITIONS OF THE SITE. FAILURE TO COMPLY WITH THIS REQUIREMENT WILL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR COMPLYING WITH THE CONTRACT DOCUMENTS.

   G. THE DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF THE ELECTRICAL INSTALLATIONS. DETAILS OF PROPOSED DEPARTURES DUE TO ACTUAL FIELD CONDITIONS OR OTHER CAUSES SHALL BE SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION. REWORK OF COMPLETED ITEMS DUE TO IMPROPER FIELD COORDINATION SHALL BE AT THE CONTRACTOR'S EXPENSE.

   H. PROVIDE SUFFICIENT ACCESS AND CLEARANCE FOR ALL ITEMS OF EQUIPMENT REQUIRING SERVICING AND MAINTENANCE.

   I. THE CONTRACTOR SHALL PERFORM ALL NECESSARY CUTTING AND PATCHING AS REQUIRED TO COMPLETE THE INSTALLATIONS. PATCHING OF WALLS, FLOORS, CEILINGS, ETC. SHALL MATCH THE ADJACENT SURFACES.

   J. THE CONTRACTOR SHALL PREPARE THREE (3) COPIES OF A RECORD AND INFORMATION BOOKLET. THE BOOKLET SHALL BE BOUND IN A THREE RING LOOSE-LEAF BINDER AND INCLUDE ALL ITEMS OF ELECTRICAL EQUIPMENT.

   K. UPON COMPLETION OF THE ELECTRICAL INSTALLATION, THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF PRINTS OF THE ELECTRICAL CONTRACT DRAWINGS WHICH SHALL BE LEGIBLY MARKED IN RED TO SHOW ALL CHANGES AND DEPARTURES OF THE INSTALLATIONS COMPARED WITH THE ORIGINAL DESIGN. THEY SHALL BE SUITABLE FOR USE IN PREPARATION OF RECORD DRAWINGS.

   L. GUARANTEE: ALL NEW ELECTRICAL INSTALLATIONS SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR BEGINNING THE DAY OF THE FINAL ACCEPTANCE OF THE WORK OR BENEFICIAL OCCUPANCY OF THE OWNER, WHICHEVER OCCURS FIRST. THE ABOVE SHALL NOT IN ANY WAY VOID OR ABBROGATE EQUIPMENT MANUFACTURER'S GUARANTEE OR WARRANTY. CERTIFICATES OF GUARANTEE SHALL BE DELIVERED TO THE OWNER. UPON RECEIPT OF NOTICE FROM THE OWNER OF FAILURE OF ANY PART OF THE ELECTRICAL INSTALLATION DURING THE GUARANTEE PERIOD, NEW REPLACEMENT PARTS SHALL BE FURNISHED AND INSTALLED PROMPTLY AND AT NO COST TO VERIZON.

   M. ANY ELECTRICAL WORK WHICH WILL INTERFERE WITH THE NORMAL USE OF THE BUILDING IN ANY MANNER SHALL BE DONE AT SUCH TIME OR TIMES AS SHALL BE MUTUALLY AGREED UPON BETWEEN THE CONTRACTOR AND THE VERIZON REPRESENTATIVE.

   N. SUPPORTS, HANGERS, AND FOUNDATIONS: PROVIDE ALL SUPPORTS, HANGERS, BRACES, ATTACHMENTS, AND FOUNDATIONS REQUIRED FOR THE WORK. SUPPORT AND SET THE WORK IN A THOROUGHLY SUBSTANTIAL AND WORKMANLIKE MANNER WITHOUT PLACING STRAINS ON THE MATERIALS, EQUIPMENT, OR THE BUILDING STRUCTURE. SUPPORTS, HANGERS, BRACES AND ATTACHMENTS SHALL BE STANDARD MANUFACTURED ITEMS OR FABRICATED STRUCTURAL STEEL SHAPES.

   O. THERE SHALL BE NO INTERRUPTION OF POWER TO EXISTING ELECTRICAL SYSTEMS WITHOUT PRIOR CONSENT FROM VERIZON. SUCH INTERRUPTIONS SHALL BE KEPT TO A MINIMUM AND SHALL BE SCHEDULED WITH THE OWNER AT LEAST THREE BUSINESS DAYS IN ADVANCE OF THE OUTAGE. ANY COST FOR WORK THAT MUST BE DONE ON AN OVERTIME BASIS SHALL BE INCLUDED IN THE BID.

   P. MOUNTING AND SUPPORTING OF ALL EQUIPMENT PROVIDED BY THIS CONTRACTOR SHALL BE COORDINATED WITH VERIZON IN THE FIELD.

   Q. PROVIDE ALL CUTTING AND PATCHING NECESSARY FOR THE INSTALLATION OF THE ELECTRICAL WORK. ANY DAMAGE DONE TO THE WORK ALREADY IN PLACE BY REASON OF THIS WORK SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE BY A QUALIFIED MECHANIC EXPERIENCED IN SUCH WORK. PATCHING SHALL BE UNIFORM IN APPEARANCE AND SHALL MATCH THE SURROUNDING SURFACE. ALL PENETRATIONS THROUGH WALLS OF NEW ROOM SHALL BE SEALED WEATHERTIGHT.

2. SECTION 16050 - BASIC ELECTRICAL MATERIALS & METHODS

   A. CONDUIT & BOXES:

      1. 1. ALL CONDUIT BELOW GRADE SHALL BE SCHEDULE 40 PVC. ALL CONDUIT ABOVE GRADE AND EXPOSED TO WEATHER SHALL BE SCHEDULE 40 PVC.

      2. JUNCTION AND PULL BOXES SHALL BE FURNISHED AND INSTALLED AS SHOWN OR WHERE REQUIRED TO FACILITATE PULLING OF WIRES OR CABLES. SUCH BOXES SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS. GASKETED COVER PLATES SHALL BE FURNISHED FOR OUTDOOR INSTALLATIONS.

      3. ALL BOXES, WHETHER OUTLET, JUNCTION, PULL, OR EQUIPMENT SHALL BE FURNISHED WITH APPROPRIATE COVERS.

      4. NO SECTIONALIZED BOXES SHALL BE USED.

      5. ALL EMT CONDUIT FITTINGS SHALL BE COMPRESSION TYPE.

      6. ALL FIELD CUTS OF GALVANIZED ITEMS SHALL BE BRUSHED WITH MARINE GRADE GALVANIZING.

      7. ALL METALLIC OBJECTS EXPOSED TO WEATHER SHALL BE GALVANIZED STEEL.

   B. WIRES & CABLE:

      1. BUILDING WIRE, UNLESS OTHERWISE INDICATED, SHALL BE 600 VOLT, TYPE THWN INSULATION FOR INTERIOR AND EXTERIOR USE. CONDUCTORS SHALL BE SOFT DRAWN COPPER OF NOT LESS THAN 98% CONDUCTIVITY. NO ROMEX OR AC (BX) CABLE WILL BE ALLOWED ON THE PROJECT.
      2. NO WIRE SMALLER THAN NO. TWELVE (12) AWG SHALL BE USED UNLESS OTHERWISE INDICATED. CONDUCTORS SHALL BE CONTINUOUS FROM OUTLET TO OUTLET AND FROM TERMINAL BOARD TO POINT OF FINAL CONNECTION, AND NO SPLICE SHALL BE MADE EXCEPT WITHIN OUTLET OR JUNCTION BOXES. ALL CONDUCTORS SHALL BE OF THE SIZES AS INDICATED. ALL WIRES NO. EIGHT (8) AWG AND LARGER SHALL BE STRANDED. THE CONTRACTOR SHALL MAKE WIRING CONNECTIONS OF ALL ELECTRICAL EQUIPMENT REQUIRING ELECTRICAL SERVICE. WIRES AND CABLES SHALL BE AS MANUFACTURED BY PIRELLI, ROYAL, AND TRIANGLE OR EQUIVALENT.

      3. ALL WIRING SHALL BE COLOR CODED. MATCH EXISTING SYSTEM COLOR CODING WHERE APPLICABLE.

   C. DISCONNECTS:

      1. FURNISH AND INSTALL SAFETY SWITCHES WHERE INDICATED AND AS REQUIRED FOR MOTOR OUTLETS OR OTHER EQUIPMENT. SWITCHES SHALL BE OF SIZE, NUMBER OF POLES AND FUSED OR NON-FUSED, AS REQUIRED FOR JOB CONDITIONS AND THE NATIONAL ELECTRICAL CODE.

   D. PANELBOARDS:

      1. THE CONTRACTOR SHALL BALANCE THE LOADS ON ALL PANELBOARDS AS CLOSELY AS POSSIBLE AND TO THE SATISFACTION OF THE ENGINEER.

      2. FURNISH AND INSTALL, WHERE INDICATED ON THE DRAWINGS, AUTOMATIC CIRCUIT BREAKER PANELBOARDS COMPLETE WITH ENCLOSING CABINETS. ENCLOSURES SHALL BE NEMA 3R WHERE EXPOSED TO WEATHER AS INDICATED. PANELBOARDS AND ENCLOSING CABINETS SHALL CONFORM TO STANDARDS ESTABLISHED BY UNDERWRITERS' LABORATORIES, INC. AND REQUIREMENTS OF THE NATIONAL ELECTRIC CODE.

      3. ALL PANELBOARD INTERIORS SHALL BE FACTORY ASSEMBLED, COMPLETE WITH CIRCUIT BREAKERS AS SCHEDULED ON THE DRAWINGS. INTERIORS SHALL BE DESIGNED AND ASSEMBLED SO THAT ANY INDIVIDUAL BREAKER CAN BE REPLACED WITHOUT DISTURBING ADJACENT UNITS, WITHOUT REMOVING MAIN BUS, AND SHALL EMPLOY SEQUENCE BUSSING. MAIN BUSSES AND BACK PANS OF DISTRIBUTION AND POWER PANELBOARDS SHALL BE OF SUCH DESIGN THAT BRANCH CIRCUITS MAY BE CHANGED WITHOUT ADDITIONAL DRILLING, MACHINING, OR TAPPING. ALL CIRCUIT BREAKERS SHALL BE QUICK-MAKE AND SHALL BE TRIP INDICATING.

      4. PANELBOARDS SHALL EMPLOY PLUG-IN BREAKERS OF NOT LESS THAN 22,000 SYMMETRICAL A.I.C. AT 120 VOLTS OR 240 VOLTS AS REQUIRED. PANELBOARDS SHALL BE EQUIPPED WITH COPPER BUS BARS, FURNISH SQUARE D, GENERAL ELECTRIC, OR WESTINGHOUSE AS INDICATED ON THE PANELBOARD SCHEDULE AND AS FOLLOWS:

MANUFACTURER	DESIGNATION	TYPE
RAYCAP	"PPI"	RVZAC-2622-P-240-05

         (THREE SOURCE INTEGRATED LOAD CENTER PANEL WITH INTEGRAL AUTOMATIC TRANSFER SWITCH, SURGE SUPPRESSION, GENERATOR CAM-LOCK RECEPTACLE CONNECTORS, AND 15 AMP GFCI RECEPTACLE. INTEGRATED LOAD CENTER PANEL EQUIPPED WITH 200 AMP NORMAL POWER MAIN CIRCUIT BREAKER, 200 AMP PERMANENT GENERATOR POWER CIRCUIT BREAKER, AND 200 AMP PORTABLE GENERATOR POWER CIRCUIT BREAKER. MECHANICAL INTERLOCK INSTALLED ON GENERATOR CIRCUIT BREAKERS TO ONLY ALLOW ONE GENERATOR BREAKER TO BE CLOSED AT A TIME)

      5. PANELBOARDS SHALL BE EQUIPPED WITH A TYPEWRITTEN DIRECTORY, INDICATING PLAINLY WHAT EACH CIRCUIT OF THE PANEL CONTROLS.

      6. PANELBOARD SHALL BE EQUIPPED WITH A COVER THAT HAS A CLASP THAT ALLOWS FOR THE INSTALLATION OF A PAD LOCK. PANELBOARD SHALL NOT BE EQUIPPED WITH KEY LOCK COVER.

      7. PANELBOARDS SHALL EMPLOY PLUG-IN CIRCUIT BREAKERS ONLY, BOLT-ON CIRCUIT BREAKERS SHALL NOT BE USED.

   E. GROUNDING:

      1. PROVIDE GROUND FOR ALL RACEWAYS, DEVICES, AND UTILIZATION EQUIPMENT PERMANENTLY AND EFFECTIVELY IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, AS HERINAFTER SPECIFIED. ALL GROUNDING AND BONDING CONNECTIONS SHALL BE SOLDERLESS.

      2. PROVIDE INSULATED GROUNDING CONDUCTORS FOR FEEDER AND BRANCH CIRCUIT WIRING AS CALLED FOR ON THE PLANS. PROVIDE GROUNDING BLOCKS, TERMINALS, ETC., FOR CONNECTION OF GROUND WIRE IN ALL DISTRIBUTION EQUIPMENT.

3. SECTION 16400 - SERVICE & DISTRIBUTION

   A. ELECTRICAL SERVICE:

      1. ELECTRICAL POWER TO THE NEW EQUIPMENT PAD SHALL BE EXTENDED FROM THE PROPOSED METERSTACK MOUNTED ON NEW ELECTRIC SERVICE BACKBOARD. LABEL METER AND CIRCUIT BREAKER WITH PHENOLIC NAMEPLATES READING "VERIZON".

   B. COMMUNICATIONS SERVICE:

      1. TELEPHONE SERVICE SHALL BE EXTENDED BY THE TELEPHONE COMPANY. PROVIDE SERVICE CONDUITS, BACKBOARDS, SLEEVES, AND OTHER EQUIPMENT SHOWN ON THE DRAWINGS FOR USE BY THE TELEPHONE COMPANY. ALL CHARGES BY THE UTILITY COMPANY SHALL BE PAID BY THE OWNER.

      2. ALL ELBOWS IN CONDUIT RUNS SHALL BE WIDE SWEEP FIELD BENDS. INSTALL PULL BOXES AS REQUIRED AND WHERE DIRECTED BY THE TELEPHONE COMPANY AND/OR AS REQUIRED BY THE NATIONAL ELECTRICAL CODE.

      3. PROVIDE 1/4" POLYPROPYLENE PULL ROPE IN ALL CONDUITS LEFT EMPTY. ALL CONDUITS SHALL BE TERMINATED WITH NYLON INSULATING BUSHINGS.

      4. PROVIDE ONE (1) CONDUIT AS SHOWN ON DRAWINGS BETWEEN TELEPHONE COMPANY DEMARC AND DEMARC LOCATED ON EQUIPMENT BACKBOARD.

      5. FIBER SPLICES, IF NECESSARY, SHALL BE FUSION SPLICES. MECHANICAL CONNECTIONS ARE NOT PERMITTED.

   C. STAND-BY GENERATOR:

      1. THE CONTRACTOR SHALL INSTALL THE OWNER FURNISHED GENERAC STAND-BY GENERATOR. VERIZON HAS PRE-PURCHASED THE FOLLOWING EQUIPMENT:

         GENERATOR: 120/240 VOLT, 1Φ, 3 WIRE, 35 KW NATURAL GAS POWERED GENERATOR WITH A SOUND ATTENUATED, WEATHERPROOF ENCLOSURE. GENERATOR SHALL BE FURNISHED WITH A 2P175A MAIN LINE CIRCUIT BREAKER.

      2. COORDINATE ALL INSTALLATION REQUIREMENTS WITH VERIZON AND THE EQUIPMENT MANUFACTURER.

      3. PROVIDE ALL MATERIALS FOR STARTUP AND TESTING; TURN OVER A COMPLETE, FUNCTIONAL SYSTEM TO VERIZON.

      4. GENERATOR SHALL BE SUPPLIED WITH WEATHERPROOF HOUSING, SILENCER MOUNTING KIT FOR HOUSING AND CRITICAL EXHAUST SILENCER.

ELECTRICAL SYMBOLS LIST

NOTE: ALL MOUNTING HEIGHTS ARE TO CENTER LINE OF THE OUTLET BOX UNLESS OTHERWISE INDICATED.

- ENCLOSED CIRCUIT BREAKER
- F — DISCONNECT SWITCH - FUSED/NON FUSED
- 120/208V, 1Φ, RAYCAP PANEL
- EQUIPMENT MOUNTING BACKBOARD
- (5) — DRAWING NOTE
- —E— — BURIED ELECTRIC FEEDERS
- —T— — BURIED TELEPHONE SERVICE
- — — BURIED BRANCH CIRCUIT
- M — METER
- GROUND CONDUCTOR BELOW GRADE
- ●R — BURIED GROUND ROD
- ▼ — DESIGNATES FRONT
- T — DRY TYPE TRANSFORMER

(NEMA 3R) **PANEL PPI**

120/208 VOLTS 1Φ 3 WIRE 200 AMP MAIN C.B.

DESCRIPTION	BKR	CKT	CKT	BKR	DESCRIPTION
• CHARLES CABINET RECTIFIER 1	30	41	42	30	CHARLES CABINET RECTIFIER 7 •
		39	40		
• CHARLES CABINET RECTIFIER 2	30	37	38	30	CHARLES CABINET RECTIFIER 8 •
		35	36		
• CHARLES CABINET RECTIFIER 3	30	33	34	30	CHARLES CABINET RECTIFIER 9 •
		31	32		
• CHARLES CABINET RECTIFIER 4	30	29	30	-	SPACE
		27	28	-	SPACE
• CHARLES CABINET RECTIFIER 5	30	25	26	-	SPACE
		23	24	-	SPACE
• CHARLES CABINET RECTIFIER 6	30	21	22	-	SPACE
		19	20	-	SPACE
SPACE	-	17	18	-	SPACE
SPACE	-	15	16	-	SPACE
SPACE	-	13	14	-	SPACE
SPACE	-	11	12	-	SPACE
SPACE	-	9	10	-	SPACE
SPACE	-	7	8	-	SPACE
SPACE	-	5	6	-	SPACE
BATTERY CHARGER	20	3	4	20	CHARLES CABINET RECPT.
BLOCK HEATER	20	1	2	15	RAYCAP PANEL GFCI RECPT.

RECEPTACLE LOAD:	0.36 KVA
MISC. LOAD:	1.69 KVA
CHARLES CABINET LOAD:	19.00 KVA
TOTAL LOAD:	21.05 KVA = 101.20 A @ 120/208V, 1Φ, 3W

• CONTRACTOR SHALL FIELD COORDINATE OVERCURRENT PROTECTION WITH MANUFACTURER'S RECOMMENDATIONS.

•• PANEL SCHEDULE SHALL NOT BE HAND-WRITTEN.

PROPOSED ELECTRIC SERVICE SERVING SITE WILL BE 120/208V, 1Φ, 3W. CONTRACTOR SHALL ADJUST THE RAYCAP ILG PANELS NOMINAL VOLTAGE SETTING THROUGH THE FRONT PANEL MOUNTED CONTROLLER FROM 240 VOLT TO 208 VOLT.

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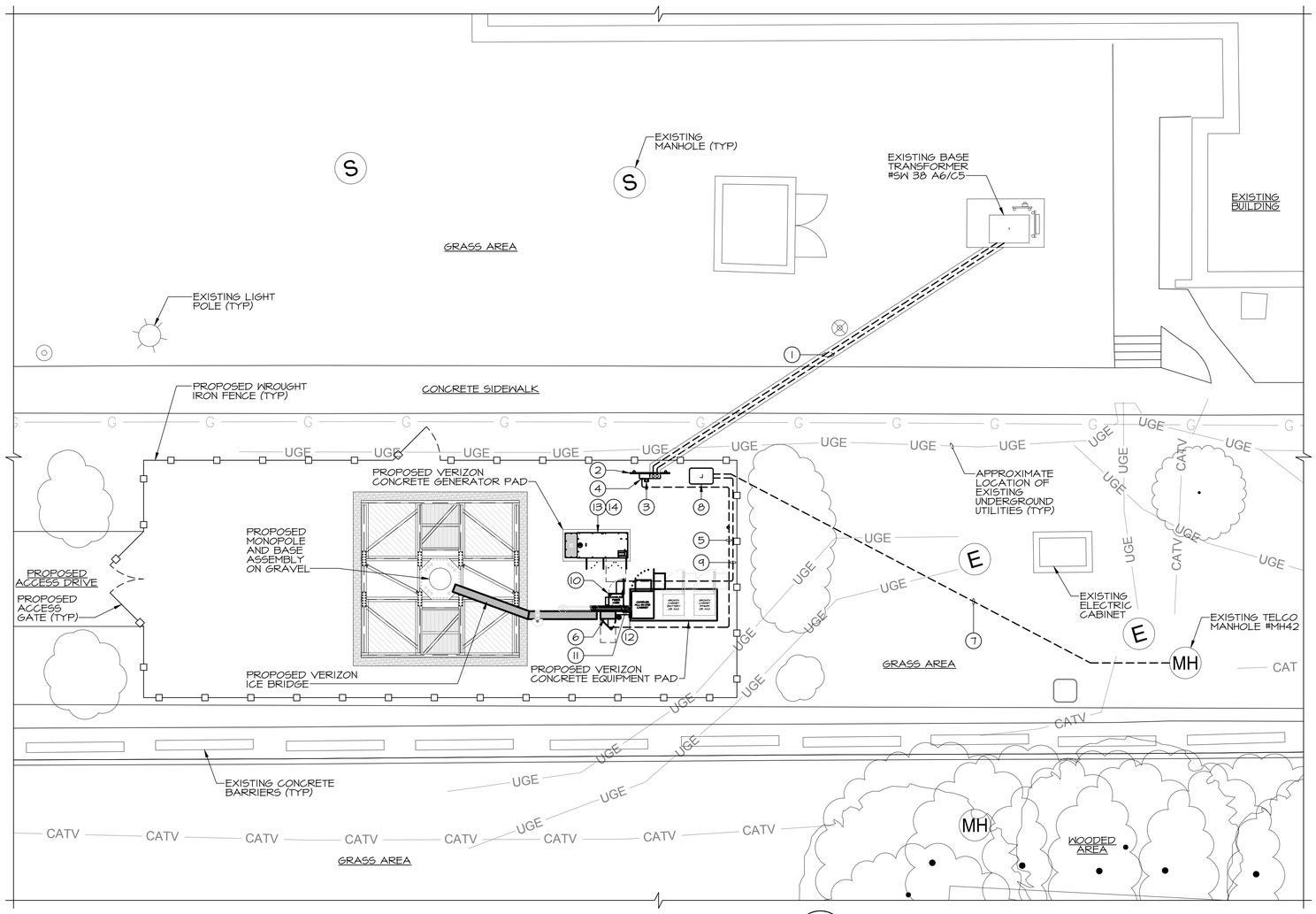
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SCALE: AS NOTED

TITLE:
ELECTRICAL SPECIFICATIONS, SYMBOLS LIST, AND SCHEDULE

SHEET:
E-1

REVIEW SET 08/20/26

TEI# 26011N



⑮⑯⑰⑱⑲ POWER SITE PLAN

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

NOTE:
THE SITE PLAN IS SHOWN FOR INFORMATIONAL PURPOSES ONLY, AND THE EXACT LOCATION OF THE VERIZON EQUIPMENT CONCRETE PADS SHALL BE COORDINATED WITH FINAL CIVIL DRAWINGS PRIOR TO START OF WORK.

DRAWING NOTES

1. EXTEND TWO (2) SETS OF 3#350KCMIL IN CONCRETE ENCASED 3" SCHEDULE 40 PVC CONDUIT (2-WAY, 24) BELOW GRADE FROM EXISTING BASE TRANSFORMER #SW 38 A6/C5 TO PROPOSED LOCATION OF ELECTRIC SERVICE BACKBOARD (APPROXIMATELY 75 L.F.). COORDINATE EXACT ROUTING AND TERMINATION POINT WITH BASE REPRESENTATIVE IN THE FIELD PRIOR TO START OF WORK. PROVIDE NYLON PULL ROPE AND ENDCAPS. REFER TO SHEET E-5 FOR CONCRETE ENCASED CONDUIT SECTION FOR ADDITIONAL INFORMATION.
2. PROPOSED 4'-0" LONG ELECTRIC SERVICE BACKBOARD. BACKBOARD SHALL COMPLY WITH BASE STANDARDS. REFER TO DETAILS ON SHEET E-6 FOR ADDITIONAL INFORMATION.
3. CONTRACTOR PROVIDED AND INSTALLED 120/208V, 1Φ, 3W, 600A M.C.B., THREE (3) POSITION METER STACK WITH PROVISIONS FOR THREE-(3) 2P 200A BREAKERS. PROVIDE PHENOLIC NAMEPLATE READING "VERIZON" BELOW POSITION OF METER. COORDINATE FINAL SUB-METERING REQUIREMENTS AND BILLING REQUIREMENTS WITH BASE PRIOR TO START OF WORK. METER STACK SHALL BE APPROVED BY BASE PRIOR TO ORDERING. COORDINATE A.I.C. RATING WITH BASE REPRESNTATIVE.
4. PROVIDE AND INSTALL ONE (1), 208 VOLT SERVICE ENTRANCE RATED, 2P 200A CIRCUIT BREAKER IN POSITION CONNECTED TO NEW VERIZON METER. PROVIDE PHENOLIC NAMEPLATE BELOW CIRCUIT BREAKER READING "VERIZON". COORDINATE A.I.C. RATING WITH BASE PRIOR TO ORDERING. PROVIDE CAUTION TWO SOURCES OF SUPPLY STICKER ON CIRCUIT BREAKER. BACKGROUND SHALL BE YELLOW WITH BLACK BLOCK STYLE LETTERING. REFER TO DETAIL, SHEET E-3.
5. EXTEND 3#3/0 + #6 GRD - 2" CONDUIT BELOW GRADE. COORDINATE EXACT ROUTING WITH VERIZON REPRESENTATIVE IN THE FIELD.
6. VERIZON PROVIDED, CONTRACTOR INSTALLED WEATHERPROOF 120/208 VOLT, 1Φ, 3W, 200 AMP MCB THREE (3) POWER SOURCE INTEGRATED LOAD CENTER PANEL WITH INTEGRATED AUTOMATIC TRANSFER SWITCH, SURGE PROTECTION, GENERATOR CAM-LOCK RECEPTACLE CONNECTORS, AND 15 AMP GFCI RECEPTACLE. MOUNT PANEL ON PROPOSED VERIZON EQUIPMENT BACKBOARD. REFER TO PANEL SCHEDULE AND SPECIFICATIONS, SHEET E-1 FOR ADDITIONAL INFORMATION. COORDINATE ALL REQUIREMENTS WITH VERIZON REPRESENTATIVE PRIOR TO ORDERING. ALL CONDUITS FROM RAYCAP PANEL MUST ENTER/EXIT THROUGH SIDE, REAR OR BOTTOM. CONDUIT INSTALLATION MUST UTILIZE MYERS HUBS AND INCLUDE ALL NECESSARY FITTINGS, SEALANTS, ETC. TO MAINTAIN NEMA RATING OF ENCLOSURE. WHEN DRILLING INTO RAYCAP PANEL, ATS MUST BE COVERED TO AVOID METALLIC SHAVINGS DROPPING INTO ATS CONTACTS. CONTRACTOR SHALL PROVIDE AND INSTALL VERIZON COMBINATION PADLOCK ON RAYCAP PANEL CLASP. PADLOCK SHALL BE 2 1/4" SESAMEE K47 COMBINATION PADLOCK, OR 1" SESAMEE KGRO436 CHROME PLATED COMBINATION PAD LOCK IN AREAS SUBJECT TO HIGH CORROSION.
7. EXTEND ONE (1) - 4" SCHEDULE 40 PVC CONDUIT FROM PROPOSED FIBER HANDHOLE TO EXISTING TELCO HANDHOLE #MH42 (APPROXIMATELY 75 L.F.). COORDINATE EXACT ROUTING AND TERMINATION POINT WITH BASE REPRESENTATIVE IN THE FIELD PRIOR TO START OF WORK. PROVIDE NYLON PULL ROPE AND ENDCAPS. COORDINATE UTILITY SOURCE TO BE USED FOR EXTENSION OF PROPOSED INCOMING TELCO SERVICE WITH BASE PRIOR TO START OF WORK.
8. PROVIDE 24"X36"X30" DEEP PULLBOX FOR EXTENSION OF TELEPHONE SERVICE CABLES. JUNCTION BOX SHALL BE COMPOSOLITE QUAZITE CAT. #PG2436BB OR AN APPROVED EQUAL. PROVIDE 6" OF PEA GRAVEL IN BASE OF BOX. COORDINATE PULLBOX REQUIREMENTS/LOCATION WITH BASE REPRESENTATIVE IN THE FIELD. REFER TO DETAIL, SHEET E-6 FOR ADDITIONAL INFORMATION.
9. EXTEND ONE (1) - 2" CONDUIT BELOW GRADE FROM PROPOSED FIBER HANDHOLE LOCATED WITHIN COMPOUND TO PROPOSED CHARLES FIBER CUBE MOUNTED ON VERIZON EQUIPMENT BACKBOARD FOR EXTENSION OF FIBER. REFER TO DETAIL, SHEET E-6. IN THE EVENT A CHARLES FIBER CUBE IS NOT REQUIRED, THIS CONDUIT SHALL TURN UP AT THE PROPOSED VERIZON EQUIPMENT BACKBOARD AND EXTEND THROUGH SIDE OF THE CHARLES AIO CABINET.
10. IN THE EVENT AN E-LINE FIBER CIRCUIT IS DELIVERED, CONTRACTOR SHALL PROVIDE AND INSTALL CHARLES CUBE MOUNTED ON EQUIPMENT BACKBOARD. PROVIDE PHENOLIC NAMEPLATE ON FRONT OF CHARLES CUBE LABELED, "VERIZON FIBER". CONTRACTOR SHALL PROVIDE AND INSTALL VERIZON COMBINATION PADLOCK ON CHARLES CUBE CLASP. PADLOCK SHALL BE 2 1/4" SESAMEE K47 COMBINATION PADLOCK, OR 1" SESAMEE KGRO436 CHROME PLATED COMBINATION PAD LOCK IN AREAS SUBJECT TO HIGH CORROSION. IN THE EVENT FIBER CIRCUIT IS DARK FIBER AND CHARLES CUBE IS NOT REQUIRED, CONTRACTOR SHALL OMIT THE CHARLES CUBE CABINET AND EXTEND THE INCOMING DARK FIBER CIRCUIT/CONDUIT DIRECTLY TO THE CHARLES CABINET. A SEPARATE FIBER HOFFMAN BOX IS NOT REQUIRED FOR DARK FIBER CIRCUITS.
11. EXTEND ONE (1) - 2" SCHEDULE 40 PVC CONDUIT FROM BOTTOM OF CHARLES CUBE TO REAR SIDE OF CHARLES CABINET FOR EXTENSION OF OF 24-PAIR (48-STRAND) FLEX CABLE WITH LC CONNECTORS. **NO SEALTIGHT OR RIGID GALVANIZED STEEL CONDUIT SHALL BE PERMITTED. THIS CONDUIT SHALL BE OMITTED IN THE EVENT A CHARLES CUBE IS NOT INSTALLED.**
12. CONTRACTOR PROVIDED AND INSTALLED RECEIVER ANTENNA (MODEL #GPS-TMG-HR26NCM) MOUNTED HIGH ON CENTER SUPPORT POST. REFER TO STRUCTURAL FOR MOUNTING DETAILS.
13. VERIZON PROVIDED, CONTRACTOR INSTALLED 35 KW NATURAL GAS GENERATOR MOUNTED ON CONCRETE PAD. REFER TO SPECIFICATIONS, SHEET E-1 AND DETAILS, SHEET E-5 FOR ADDITIONAL INFORMATION.
14. GENERAL CONTRACTOR PROVIDED, MECHANICAL CONTRACTOR INSTALLED, AND ELECTRICAL CONTRACTOR WIRED ASENTRIA SITEBOSS S340 GAS PRESSURE SWITCH FOR MONITORING OF FUEL PRESSURE TO NATURAL GAS GENERATOR. REFER TO POWER RISER, SHEET E-3, AND DETAIL SHEET E-5 FOR ADDITIONAL INFORMATION.
15. ALL UNISTRUT SHALL BE PRE-GALVANIZED STEEL. ALL OTHER METALLIC ITEMS (POSTS, HARDWARE, ETC.) SHALL BE GALVANIZED STEEL. CADDY SLICK NUTS SHALL BE UTILIZED FOR FASTENING ALL ITEMS TO UNISTRUT, SPRING NUTS SHALL NOT BE USED.
16. ALL CONDUITS BELOW GRADE SHALL BE SCHEDULE 40 PVC. ALL CONDUITS EXTENDING BELOW AREAS SUBJECT TO VEHICULAR TRAFFIC SHALL BE SCHEDULE 80 PVC. ALL CONDUITS ABOVE GRADE AND/OR EXPOSED TO WEATHER SHALL BE SCHEDULE 40 PVC AND SHALL INCLUDE PVC EXPANSION FITTINGS FOR TRANSITIONING FROM BELOW GRADE TO ABOVE GRADE AS REQUIRED BY N.E.C. TO COMPENSATE FOR EARTH SETTLING OR MOVEMENT. **NO SEALTIGHT OR RIGID GALVANIZED STEEL CONDUIT ABOVE GRADE SHALL BE PERMITTED. ALL CONDUITS ENTERING CABINETS, EQUIPMENT, AND GENERATOR SHALL BE PLUGGED WITH FIRESTOP PUTTY (MINIMUM OF 1" INTO CONDUIT). PROVIDE AND INSTALL RODENT BLOCKER (XCLUDER OR APPROVED EQUAL) WITHIN ALL FIBER CONDUIT ENTRIES FOR RODENT AND PEST DETERRENT (SHALL NOT BE USED IN ELECTRICAL CONDUITS).**
17. CONDUIT ROUTING IS DIAGRAMMATIC, EXACT CONDUIT ROUTE SHALL BE COORDINATED WITH VERIZON REPRESENTATIVE IN THE FIELD.
18. REFER TO DRAWING PREPARED BY MRA FOR SITE PLAN.
19. **THE SPECIFIED OPTIONAL STAND-BY GENERATOR IS NOT A SEPARATELY DERIVED SYSTEM. THE CONTRACTOR SHALL VERIFY THAT THE AUTOMATIC TRANSFER SWITCH DOES NOT SWITCH THE NEUTRAL CONDUCTOR. IF THE MANUFACTURER INSTALLED A MAIN BONDING JUMPER IN THE GENERATOR, THE CONTRACTOR SHALL DISCONNECT AND REMOVE THE JUMPER TO PREVENT VIOLATING NEC ARTICLE 250.6, OBJECTIONABLE CURRENT OVER GROUNDING CONDUCTORS.**

PROPOSED ELECTRIC SERVICE SERVING SITE WILL BE 120/208V, 1Φ, 3W. CONTRACTOR SHALL ADJUST THE RAYCAP ILC PANELS NOMINAL VOLTAGE SETTING THROUGH THE FRONT PANEL MOUNTED CONTROLLER FROM 240 VOLT TO 208 VOLT.

0 4 8 16 24

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

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(DISTRICT OF COLUMBIA)

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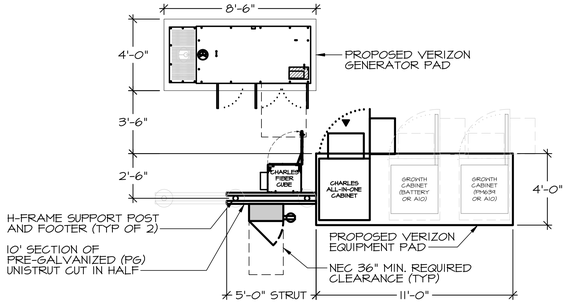
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SCALE: AS NOTED

TITLE:
POWER SITE PLAN AND NOTES

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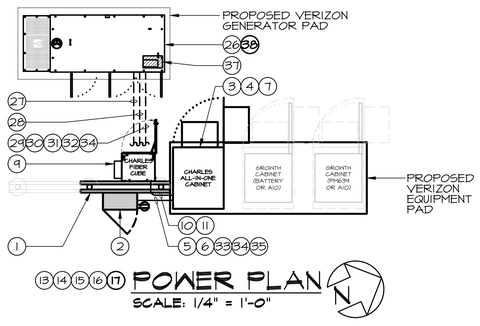
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TEI# 26011IN



DIMENSIONAL PLAN

SCALE: 1/4" = 1'-0"



(13)(14)(15)(16)(17) POWER PLAN

SCALE: 1/4" = 1'-0"

DRAWING NOTES (EQUIPMENT AND UTILITY)

(1) PROVIDE 5'-0" UNISTRUT BACKBOARD FOR MOUNTING OF VERIZON EQUIPMENT. BACKBOARD SHALL UTILIZE 10'-0" LONG CONTINUOUS SECTIONS OF PRE-GALVANIZED UNISTRUT THAT ARE CUT IN HALF (5'-0" SECTIONS) INSTALLED ON FRONT AND BACK OF BACKBOARD. REFER TO STRUCTURAL DRAWINGS FOR DETAILS. ELECTRICAL CONTRACTOR SHALL LEAVE BACKBOARD POSTS 24" ABOVE TOP OF CABINET TO BE UTILIZED FOR HYBRID CABLE SUPPORT INTO SIDE OF CHARLES AIO CABINET.

(2) CONTRACTOR PROVIDED AND INSTALLED WEATHERPROOF 120/208 VOLT, 1Ø, 3W, 200 AMP MCB THREE (3) POWER SOURCE INTEGRATED LOAD CENTER PANEL WITH INTEGRATED AUTOMATIC TRANSFER SWITCH, SURGE PROTECTION, GENERATOR CAM-LOCK RECEPTACLE CONNECTORS, AND 15 AMP GFCI RECEPTACLE. MOUNT PANEL ON PROPOSED VERIZON EQUIPMENT BACKBOARD. REFER TO PANEL SCHEDULE AND SPECIFICATIONS, SHEET E-1 FOR ADDITIONAL INFORMATION. COORDINATE ALL REQUIREMENTS WITH VERIZON REPRESENTATIVE PRIOR TO ORDERING. ALL CONDUITS FROM RAYCAP PANEL MUST ENTER/EXIT THROUGH SIDE, REAR OR BOTTOM. CONDUIT INSTALLATION MUST UTILIZE PVC CONDUIT FITTINGS AND INCLUDE ALL NECESSARY SEALANTS, ETC. TO MAINTAIN NEMA RATING OF THE PANEL ENCLOSURE. WHEN DRILLING INTO RAYCAP PANEL, ATS MUST BE COVERED TO AVOID METALLIC SHAVINGS DROPPING INTO ATS CONTACTS. CONTRACTOR SHALL PROVIDE AND INSTALL VERIZON COMBINATION PADLOCK ON RAYCAP PANEL CLASP. PADLOCK SHALL BE 2 1/4" SESAMEE K47 COMBINATION PADLOCK, OR 1" SESAMEE KCR0436 CHROME PLATED COMBINATION PAD LOCK IN AREAS SUBJECT TO HIGH CORROSION.

(3) CHARLES ALL-IN-ONE (AIO) CABINET SHALL BE INSTALLED TO ALLOW FOR A MINIMUM 36" DOOR SWING CLEARANCE AT FRONT OF CABINET. GENERAL CONTRACTOR SHALL ENSURE THAT THE ISOLATION PAD THAT COMES WITH THE CABINET IS INSTALLED BENEATH THE CABINET. ALL P-TOUCH LABELS WITHIN THE AIO CABINET SHALL BE PRINTED ON MINIMUM 1/2" PAPER USING AERIAL BOLD FONT.

(4) CONTRACTOR SHALL TERMINATE ALARMS WIRING ON ALARMS TERMINAL BLOCK PROVIDED WITH CHARLES CABINET.

(5) EXTEND 6 PAIR, 16 GAUGE, THHN COPPER CONDUCTORS IN 1" SCHEDULE 40 PVC CONDUIT FROM ALARM LEADS IN INTEGRATED LOAD CENTER (RAYCAP PANEL) AND TERMINATE AT ALARMS PUNCHDOWN BLOCK INSIDE OF CHARLES CABINET. CABLE PAIRS SHALL BE USED FOR ATS ALARMING (COMMERCIAL POWER FAIL/PHASE LOSS, POWER SURGE). **NO SEALTIGHT OR RIGID GALVANIZED STEEL CONDUIT SHALL BE PERMITTED.**

(6) CONTRACTOR SHALL EXTEND ONE (1) 2" SCHEDULE 40 PVC CONDUIT FROM VERIZON PANEL "PPI" TO THE REAR SIDE OF THE CHARLES AIO CABINET FOR EXTENSION OF THE CHARLES CABINET RECEPTACLE CIRCUIT (2#12AWG + #12 GRD) AND ALL PROPOSED/FUTURE RECTIFIER CIRCUITS. EACH RECTIFIER REQUIRES 2#10AWG + #10GRD. CONDUIT NIPPLE BETWEEN VERIZON PANEL AND CHARLES AIO CABINET SHALL NOT EXCEED 24" IN LENGTH. CONDUCTOR AMPACITIES AND CONDUIT SIZE ARE PER DE-RATING ADJUSTMENT FACTOR EXCEPTIONS IN THE NEC FOR RACEWAY LENGTHS LESS THAN 24". RACEWAY LENGTHS EXCEEDING 24" SHALL REQUIRE RE-EVALUATION OF CONDUCTOR AMPACITY ADJUSTMENT FACTORS AND CONDUIT SIZE/QUANTITY. **NO SEALTIGHT OR RIGID GALVANIZED STEEL CONDUIT SHALL BE PERMITTED.**

(7) RACK-MOUNTED RAYCAPS WILL BE PROVIDED AND INSTALLED WITHIN CHARLES ALL-IN-ONE CABINET. CONTRACTOR SHALL UTILIZE P-TOUCH LABELS PRINTED ON MINIMUM 1/2" PAPER USING AERIAL BOLD FONT WHEN LABELING OVPS.

(8) CONTRACTOR SHALL UTILIZE HYBRIFLEX CABLE GLANDS SUPPLIED WITH THE CABLES FOR EXTENSION OF 3X6 HYBRIFLEX CABLES THROUGH SIDE OF CHARLES AIO CABINET. CONTRACTOR SHALL UTILIZE AIO CABINET FACTORY KNOCK-OUTS FIRST, BEFORE DRILLING NEW KNOCKOUTS. HYBRID CABLE SHALL MAINTAIN A MINIMUM 12" BEND RADIUS WITH A DISTANCE OF 17" FROM POINT TO POINT OF EACH CABLE BEND.

(9) IN THE EVENT AN E-LINE FIBER CIRCUIT IS DELIVERED, CONTRACTOR SHALL PROVIDE AND INSTALL CHARLES CUBE MOUNTED ON EQUIPMENT BACKBOARD. PROVIDE PHENOLIC NAMEPLATE ON FRONT OF CHARLES CUBE LABELED, "VERIZON FIBER". CONTRACTOR SHALL INSTALL VERIZON PADLOCK ON ISHALEL'S CUBE CLASP. PADLOCK SHALL BE 2 1/4" SESAMEE K47 COMBINATION PADLOCK, OR 1" SESAMEE KCR0436 CHROME PLATED COMBINATION PAD LOCK IN AREAS SUBJECT TO HIGH CORROSION. IN THE EVENT FIBER CIRCUIT IS DARK FIBER AND CHARLES CUBE IS NOT REQUIRED, CONTRACTOR SHALL ONTER THE CHARLES CUBE CABINET AND EXTEND THE INCOMING DARK FIBER CIRCUIT/CONDUIT DIRECTLY TO THE CHARLES CABINET. A SEPARATE FIBER HOFFMAN BOX IS NOT REQUIRED FOR DARK FIBER CIRCUITS.

(10) EXTEND ONE (1) - 2" SCHEDULE 40 PVC CONDUIT FROM BOTTOM OF CHARLES CUBE TO REAR SIDE OF CHARLES CABINET FOR EXTENSION OF OF 24-PAIR (48-STRAND) FLEX CABLE WITH LC CONNECTORS. **NO SEALTIGHT OR RIGID GALVANIZED STEEL CONDUIT SHALL BE PERMITTED. THIS CONDUIT SHALL BE OMITTED IN THE EVENT A CHARLES CUBE IS NOT INSTALLED.**

(11) EXTEND 2#6 AWG DC WIRING IN 1" SCHEDULE 40 PVC CONDUIT FROM PROPOSED CHARLES CUBE FUSE BLOCK TO NEW 50A DC BREAKER IN RECTIFIER PLANT MOUNTED INSIDE CHARLES CABINET. LABEL DC BREAKER "CHARLES FIBER CUBE". **NO SEALTIGHT OR RIGID GALVANIZED STEEL CONDUIT SHALL BE PERMITTED. IN THE EVENT CHARLES CUBE IS NOT REQUIRED, DC WIRING/CONDUIT AND CIRCUIT BREAKER MAY BE OMITTED. COORDINATE FIBER SERVICE TO SITE WITH VERIZON REPRESENTATIVE.**

(12) CONTRACTOR PROVIDED AND INSTALLED RECEIVER ANTENNA (MODEL #GPS-TMG-HR26NCM) MOUNTED HIGH ON CENTER SUPPORT POST. REFER TO STRUCTURAL FOR MOUNTING DETAILS.

(13) ALL UNISTRUT SHALL BE PRE-GALVANIZED STEEL. ALL OTHER METALLIC ITEMS (POSTS, HARDWARE, ETC.) SHALL BE GALVANIZED STEEL. CADDY SLICK NUTS SHALL BE UTILIZED FOR FASTENING ALL ITEMS TO UNISTRUT, SPRING NUTS SHALL NOT BE USED.

(14) ALL CONDUITS BELOW GRADE SHALL BE SCHEDULE 40 PVC. ALL CONDUITS EXTENDING BELOW AREAS SUBJECT TO VEHICULAR TRAFFIC SHALL BE SCHEDULE 80 PVC. ALL CONDUITS ABOVE GRADE AND/OR EXPOSED TO WEATHER SHALL BE SCHEDULE 40 PVC AND SHALL INCLUDE PVC EXPANSION FITTINGS FOR ALL TRANSITIONING FROM BELOW GRADE TO ABOVE GRADE AS REQUIRED BY N.E.C. TO COMPENSATE FOR EARTH SETTLING OR MOVEMENT. **NO SEALTIGHT OR RIGID GALVANIZED STEEL CONDUIT ABOVE GRADE SHALL BE PERMITTED. ALL CONDUITS ENTERING CABINETS, EQUIPMENT, AND GENERATOR SHALL BE PLUGGED WITH FIRESTOP PUTTY (MINIMUM OF 1" INTO CONDUIT). PROVIDE AND INSTALL RODENT BLOCKER (XCLUDER OR APPROVED EQUAL) WITHIN ALL FIBER CONDUIT ENTRIES FOR RODENT AND PEST DETERRENT (SHALL NOT BE USED IN ELECTRICAL CONDUITS).**

(15) FIBER SPLICES, IF NECESSARY, SHALL BE FUSION SPLICES. MECHANICAL CONNECTIONS ARE NOT PERMITTED.

(16) THE PROPOSED VERIZON EQUIPMENT BACKBOARD SHALL BE INSTALLED SO THAT THE RAYCAP ILC PANEL SIDE KNOCKOUTS ARE ALIGNED WITH THE FACTORY KNOCKOUTS ALONG THE SIDE REAR OF THE CHARLES ALL-IN-ONE CABINET.

(17) **CONTRACTOR SHALL UTILIZE PVC CONDUIT FITTINGS FOR ALL CONDUIT PENETRATIONS INTO CHARLES CABINET, RAYCAP PANEL, AND CHARLES FIBER CUBE. PVC CONDUIT FITTINGS SHALL BE NEMA 3R RATED AND FURNISHED WITH FLAT SEALING WASHERS. ALL PVC CONDUIT FITTINGS SHALL BE TIGHTENED AND SEALED WEATHERTIGHT UPON COMPLETION OF ALL WORK.**

(18) EXTEND TWO (2) SETS OF 3#350KCMIL IN CONDUIT ENCASED 3" SCHEDULE 40 PVC CONDUIT (2-WAY, 2H) BELOW GRADE FROM EXISTING BASE TRANSFORMER #SW 38 A6/C5 TO PROPOSED LOCATION OF ELECTRIC SERVICE BACKBOARD (APPROXIMATELY 75 L.F.). COORDINATE EXACT ROUTING AND TERMINATION POINT WITH BASE REPRESENTATIVE IN THE FIELD PRIOR TO START OF WORK. PROVIDE NYLON PULL ROPE AND ENDCAPS. REFER TO SHEET E-5 FOR CONCRETE ENCASED CONDUIT SECTION FOR ADDITIONAL INFORMATION.

(19) PROPOSED 4'-0" LONG ELECTRIC SERVICE BACKBOARD. BACKBOARD SHALL COMPLY WITH BASE STANDARDS. REFER TO DETAILS ON SHEET E-6 FOR ADDITIONAL INFORMATION.

(20) CONTRACTOR PROVIDED AND INSTALLED 120/208V, 1Ø, 3W, 600A M.C.B., THREE (3) POSITION METER STACK WITH PROVISIONS FOR THREE-(3) 2P 200A BREAKERS. PROVIDE PHENOLIC NAMEPLATE READING "VERIZON" BELOW POSITION OF METER. COORDINATE FINAL SUB-METERING REQUIREMENTS AND BILLING REQUIREMENTS WITH BASE PRIOR TO START OF WORK. METER STACK SHALL BE APPROVED BY BASE PRIOR TO ORDERING. COORDINATE A.I.C. RATING WITH BASE.

(21) PROVIDE AND INSTALL ONE (1), 208 VOLT SERVICE ENTRANCE RATED, 2P 200A CIRCUIT BREAKER IN POSITION CONNECTED TO NEW VERIZON METER. PROVIDE PHENOLIC NAMEPLATE BELOW CIRCUIT BREAKER READING "VERIZON". COORDINATE A.I.C. RATING WITH BASE PRIOR TO ORDERING.

(22) EXTEND 3#3/0 + #6 GRD - 2" CONDUIT BELOW GRADE. COORDINATE EXACT ROUTING WITH VERIZON REPRESENTATIVE IN THE FIELD.

(23) EXTEND ONE (1) - 4" SCHEDULE 40 PVC CONDUIT FROM PROPOSED FIBER HANDHOLE TO EXISTING TELCO HANDHOLE #MH42 (APPROXIMATELY 75 L.F.). COORDINATE EXACT ROUTING AND TERMINATION POINT WITH BASE REPRESENTATIVE IN THE FIELD PRIOR TO START OF WORK. PROVIDE NYLON PULL ROPE AND ENDCAPS. COORDINATE UTILITY SOURCE TO BE USED FOR EXTENSION OF PROPOSED INCOMING TELCO SERVICE WITH BASE PRIOR TO START OF WORK.

(24) PROVIDE 24"X36"X30" DEEP PULLBOX FOR EXTENSION OF TELEPHONE SERVICE CABLES. JUNCTION BOX SHALL BE COMPOSOLITE QUAZITE CAT. #PG2436BB OR AN APPROVED EQUAL. PROVIDE 6" OF PEA GRAVEL IN BASE OF BOX. COORDINATE PULLBOX REQUIREMENTS/LOCATION WITH BASE REPRESENTATIVE IN THE FIELD. REFER TO DETAIL, SHEET E-6 FOR ADDITIONAL INFORMATION.

(25) EXTEND ONE (1) - 2" CONDUIT BELOW GRADE FROM PROPOSED FIBER HANDHOLE LOCATED WITHIN COMPOUND TO PROPOSED CHARLES FIBER CUBE MOUNTED ON VERIZON EQUIPMENT BACKBOARD FOR EXTENSION OF FIBER. REFER TO DETAIL, SHEET E-6. IN THE EVENT A CHARLES FIBER CUBE IS NOT REQUIRED, THIS CONDUIT SHALL TURN UP AT THE PROPOSED VERIZON EQUIPMENT BACKBOARD AND EXTEND THROUGH SIDE OF THE CHARLES AIO CABINET.

DRAWING NOTES (GENERATOR)

(26) VERIZON PROVIDED, CONTRACTOR INSTALLED 35 KW NATURAL GAS GENERATOR MOUNTED ON CONCRETE PAD. REFER TO SPECIFICATIONS, SHEET E-1 AND DETAIL, SHEET E-5 FOR ADDITIONAL INFORMATION.

(27) EXTEND 3#2/0 AWG + #6 GRD IN 2" CONDUIT (EMERGENCY).

(28) EXTEND 2#12 AWG + #12 GRD (BATTERY CHARGER) AND 2#12 AWG + #12 GRD (BLOCK HEATER) IN 3/4" CONDUIT BELOW GRADE TO TWO (2), 1 POLE, 20 AMP BREAKERS IN PANEL "PPI". CONTRACTOR SHALL LABEL RECEPTACLE INSIDE OF GENERATOR, "BATTERY CHARGER" AND "BLOCK HEATER" RESPECTIVELY.

(29) EXTEND SINGLE PAIR, #16 GAUGE, THHN COPPER CONDUCTORS IN 1" CONDUIT BELOW GRADE FROM GENERATOR TO INTEGRATED ATS INSIDE OF RAYCAP PANEL (GENERATOR START/STOP CIRCUIT).

(30) EXTEND 24 GAUGE TWISTED PAIR CAT 5 CABLE WITH 4 PAIRS AND A DRAIN LEAD IN 1" CONDUIT WITH PULL ROPE BELOW GRADE FROM GENERATOR TO RAYCAP PANEL MOUNTED ON BACKBOARD. FINAL CABLE TERMINATION SHALL BE ON ALARMS PUNCHDOWN BLOCK INSIDE OF CHARLES CABINET. CABLE PAIRS SHALL BE USED FOR GENERATOR CONTROL/ALARM WIRING (GENERATOR RUN/FAIL). CAT 5 CABLE SHALL BE TAGGED AND LABELED "GENERATOR ALARMS" ON EACH END.

(31) EXTEND ADDITIONAL 24 GAUGE TWISTED PAIR CAT 5 CABLE WITH 4 PAIRS AND A DRAIN LEAD IN 1" CONDUIT WITH PULL ROPE BELOW GRADE FROM GENERATOR TO RAYCAP PANEL MOUNTED ON BACKBOARD. FINAL CABLE TERMINATION SHALL BE INSIDE OF CHARLES CABINET. CAT 5 CABLE SHALL BE TAGGED AND LABELED "SPARE" ON EACH END.

(32) EXTEND SINGLE PAIR, 16 GAUGE BELDEN SHIELDED CABLE IN 1" CONDUIT BELOW GRADE FROM GENERATOR TO RAYCAP PANEL. FINAL CABLE TERMINATION SHALL BE AT SITE BOSS LOCATED INSIDE OF CHARLES CABINET. CABLE SHALL BE USED FOR GENERATOR MONITORING. CONTRACTOR SHALL COIL CABLE INSIDE GENERATOR CONTROL PANEL FOR FINAL TERMINATION AND PROGRAMMING AT STARTUP BY GENERATOR TECH.

(33) EXTEND SINGLE PAIR, #20-#22AWG COPPER CONDUCTOR IN 1" SCHEDULE 40 PVC CONDUIT FROM CONTACTS IN INTEGRATED LOAD CENTER (RAYCAP PANEL) AND TERMINATE ON SITE BOSS RELAYS INSIDE OF CHARLES CABINET FOR ATS/GENERATOR EXERCISING. **NO SEALTIGHT OR RIGID GALVANIZED STEEL CONDUIT SHALL BE PERMITTED.**

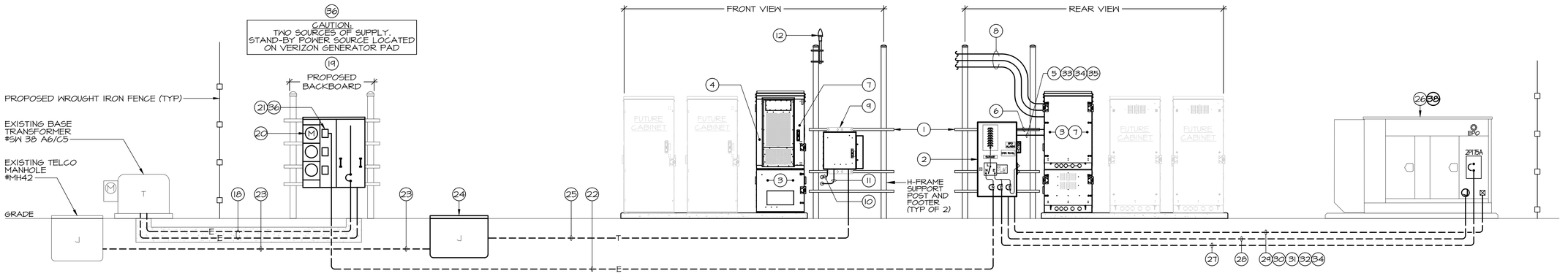
(34) EXTEND SINGLE PAIR, 22 GAUGE GRAY INSULATED CONDUCTORS IN 1" CONDUIT BELOW GRADE FROM GENERATOR TO RAYCAP PANEL. FINAL CABLE TERMINATION SHALL BE AT ALARM TERMINAL BLOCK LOCATED INSIDE OF CHARLES CABINET. CABLES SHALL BE USED FOR LOW GAS PRESSURE ALARM. CONTRACTOR SHALL LEAVE 3'-0" SERVICE LOOP INSIDE OF GENERATOR AND TAG BOTH ENDS OF CONDUCTORS "LOW GAS PRESSURE". REFER TO DETAIL, SHEET E-6 FOR ADDITIONAL INFORMATION.

(35) CONTRACTOR SHALL UTILIZE 1" SCHEDULE 40 PVC CONDUIT FROM RAYCAP PANEL TO CHARLES CABINET FOR EXTENSION OF GENERATOR CAT 5 ALARM CABLE (TO PUNCHDOWN BLOCK), SPARE CAT 5 CABLE GENERATOR MONITORING BELDEN SHIELDED CABLE (TO SITE BOSS) AND GENERATOR LOW GAS PRESSURE ALARM WIRING. **NO SEALTIGHT OR RIGID GALVANIZED STEEL CONDUIT SHALL BE PERMITTED.**

(36) PROVIDE CAUTION TWO SOURCES OF SUPPLY STICKER ON SERVICE CIRCUIT BREAKER. BACKGROUND SHALL BE YELLOW WITH BLACK BLOCK STYLE LETTERING. REFER TO DETAIL, THIS SHEET.

(37) CONTRACTOR SHALL BOX OUT PORTION OF CONCRETE SLAB BELOW GENERATOR STUB UP AREA FOR EXTENSION OF CONDUITS UP THROUGH BOTTOM OF GENERATOR. ALL CONDUIT STUB-UP LOCATIONS SHALL BE WITHIN DESIGNATED CONDUIT STUB-UP AREA AND TURN UP THROUGH BOX OUT IN SLAB. COORDINATE FINAL CONDUIT BOX OUT LOCATION IN THE FIELD WITH SITE CONDITIONS (GENERATOR FUEL TYPE, BOLT PATTERN, ETC.). BACKFILL FINISHED CONDUIT STUB-UP/BOX OUT AREA WITH STONE/GROUT.

(38) **THE SPECIFIED STAND-BY USE GENERATOR IS NOT A SEPARATELY DERIVED SYSTEM. THE CONTRACTOR SHALL VERIFY THAT THE AUTOMATIC TRANSFER SWITCH DOES NOT SWITCH THE NEUTRAL CONDUCTOR. IF THE MANUFACTURER INSTALLED A MAIN BONDING JUMPER IN THE GENERATOR, THE CONTRACTOR SHALL DISCONNECT AND REMOVE THE JUMPER TO PREVENT VIOLATING NEC ARTICLE 250.6, OBJECTIONABLE CURRENT OVER GROUNDING CONDUCTORS.**



(13)(14)(15)(16)(17) POWER RISER

NO SCALE

SCALE:1/4"=1'-0"

TEI
TELEGENT ENGINEERING INC.
2216 Commerce Road, Suite 1
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www.tel-eng.com

I AM RESPONSIBLE FOR DETERMINING THAT THE ENGINEERING DESIGNS INCLUDED IN THIS APPLICATION ARE IN COMPLIANCE WITH ALL LAWS AND REGULATIONS OF THE DISTRICT OF COLUMBIA. I HAVE PERSONALLY PREPARED, OR DIRECTLY SUPERVISED THE DEVELOPMENT OF THE ENGINEERING DESIGNS INCLUDED IN THIS APPLICATION.

verizon

BOLLING TD POLE
ANTENNA INSTALLATION
3720 BROOKLEY AVENUE SW
WASHINGTON, DC 20032
(DISTRICT OF COLUMBIA)

REVISIONS:		
NO.	DESCRIPTION	DATE

LAST REV.:	
PROJECT NO:	26011N
DATE:	
SCALE:	AS NOTED

TITLE: PART PLANS, POWER RISER, AND NOTES

SHEET: E-3

REVIEW SET 08/20/26

TEI# 26011N

GROUNDING GENERAL NOTES

1. ALL GROUND CONNECTIONS BELOW GRADE SHALL BE EXOTHERMIC (CADWELD) TO NEAREST GROUND ROD USING ERICO CADWELD "ONE-SHOT" CONNECTIONS.
2. ALL EXTERIOR GROUND CONDUCTORS SHALL BE #2 AWG BARE, TINNED SOLID COPPER, UNLESS NOTED OTHERWISE.
3. ALL GROUND CONNECTIONS ABOVE GRADE SHALL BE TWO-HOLE COPPER COMPRESSION TYPE WITH STANDARD LENGTH BARREL (BURNDY # YA2CL- 2TC14E1). SINGLE HOLE LUGS ARE NOT ACCEPTABLE.
4. ALL MOUNTING HARDWARE FOR EXTERIOR LOCATIONS SHALL BE HOT-DIPPED GALVANIZED STEEL INCLUDING NUTS, BOLTS, FLAT AND LOCK WASHERS.
5. ALL EXTERIOR MECHANICAL CONNECTIONS SHALL BE MADE USING OXIDE-INHIBITING JOINT COMPOUND. THE COMPOUND SHALL BE APPLIED TO ALL SURFACES OF BOLTS, WASHERS, NUTS AND CONNECTING SURFACES OF GROUND BAR PLATES. ALL BARE COPPER SURFACES OF CONDUCTORS SHALL BE COATED PRIOR TO LUGGING. JOINT COMPOUND SHALL BE NO-OX. KOPR-SHIELD SHALL NOT BE PERMITTED.
6. ALL EXOTHERMIC WELD CONNECTIONS AND FIELD CUTS OF METALLIC OBJECTS EXPOSED TO WEATHER SHALL BE FIRST SPRAYED WITH COLD GALVANIZING (AFTER COOL DOWN) THEN BE TOPPED WITH BRUSH ON MARINE GRADE GALVANIZING.
7. ALL CONDUIT USED AS SLEEVES FOR GROUNDING OR BONDING CONDUCTORS SHALL BE PVC.
8. ALL GROUND RODS SHALL BE DRIVEN VERTICALLY USING A GROUND ROD SHIELD TO PREVENT THE ENDS FROM "MUSHROOMING".
9. THE MAXIMUM RESISTANCE OF THE COMPLETED GROUND SYSTEM SHALL NOT EXCEED 5 OHMS ON ANY PART OF THE SYSTEM. IF DUE TO SOIL CONDITIONS OR OTHER PARAMETERS, THIS MAXIMUM IS EXCEEDED, CONTACT LYNCOLE FOR XIT GROUNDING DESIGN.
10. PROVIDE ANDREW 36" GROUNDING CABLE REQUIRING FIELD ATTACHABLE CRIMP-ON LUG. DO NOT USE THE LUGS PROVIDED WITH THE GROUNDING KIT; PROVIDE TWO HOLE LUGS. GROUNDING CABLE SHALL BE CUT TO SHORTEST LENGTH POSSIBLE. ALL BONDING CONNECTIONS TO THE EXTERIOR GROUND BAR PLATE SHALL BE MADE USING STAINLESS STEEL NUTS AND BOLTS. CORROSION INHIBITOR SHALL BE APPLIED BETWEEN NUTS AND BOLTS AND GROUND BAR PLATE.
11. **CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING A CLAMP ON RESISTANCE TEST TO DETERMINE THE OHMS RESISTANCE RATING OF FINAL GROUNDING SYSTEM. RESULTS OF TEST SHALL BE COMMUNICATED TO VERIZON CONSTRUCTION MANAGER INCLUDED IN CLOSEOUT PACKAGE.**
12. **ALL EXTERIOR GROUND BARS SHALL BE GALVANIZED STEEL, SIZE AS NOTED ON PLANS, AND MANUFACTURED BY ELECTRIC MOTIONS COMPANY, INC. (WWW.ELECTRICMOTIONSCOMPANY.COM).**
13. ALL JOINT COMPOUND USED FOR GROUNDING SHALL BE NO-OX. KOPR-SHIELD SHALL NOT BE PERMITTED.

DRAWING NOTES

(1) PROVIDE 8'-0" (MINIMUM) X 5/8" COPPER CLAD STEEL GROUND ROD. TOP OF GROUND ROD SHALL BE AT THE SAME DEPTH AS THE GROUND RING.

(2) BURIED GROUND RING SHALL BE #2 AWG, BARE, TINNED, SOLID COPPER.

(3) BURIED GROUND RING SHALL BE WITHIN 24" TO 36" OFF THE CONCRETE PAD (WHERE FEASIBLE). THE GROUND RING SHALL BE AT A DEPTH OF AT LEAST 30" BELOW FINISHED GRADE.

(4) EXTEND (#2 AWG BARE, TINNED, SOLID, COPPER GROUND CONDUCTOR FROM ICE BRIDGE SUPPORT POST AND CONNECT TO NEAREST BURIED GROUND ROD. GROUND CONNECTION TO EACH POST SHALL BE MADE BELOW GRADE. REFER TO DETAIL, SHEET E-6.

(5) PROVIDE LONG BARREL 2 HOLE LUG FOR TERMINATION OF HYBRIFLEX CABLE GROUND. CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) SELF-TAPPING SCREWS AND CONNECT TO VERTICAL POST. REFER TO DETAIL, SHEET E-6.

(6) EXTEND (#2 AWG, BARE, TINNED, SOLID, COPPER GROUND CONDUCTOR FROM PROPOSED VERIZON GROUND RING AND CADWELD TO PROPOSED COMPOUND GROUND RING. COORDINATE CONNECTION TO EXISTING GROUND RING WITH FINAL LOCATION OF GROUND RING BELOW GRADE.

(7) PROVIDE AND INSTALL THREE (3) 12" WIDE X 4" HIGH X 1/4" THICK, GALVANIZED STEEL GROUND BARS (ONE PER SECTOR) MOUNTED ON TOWER AT ELEVATION OF VERIZON ANTENNAS. GROUND BAR(S) SHALL BE MOUNTED WITH BEAM CLAMPS. DO NOT USE INSULATED STANDOFFS. EXTEND (#6 AWG, GREEN, INSULATED, STRANDED COPPER GROUND CONDUCTOR FROM EACH REMOTE RADIO HEAD (RRH)/ DISTRIBUTION BOX AND BOND TO EACH SECTOR GROUND BAR (TYP OF 3).

(8) EXTEND (#2 AWG, BARE, TINNED, SOLID COPPER GROUND CONDUCTOR FROM NEAREST GROUND ROD AND BOND TO EQUIPMENT BACKBOARD SUPPORT POST. CONNECTION TO POST SHALL BE MADE BELOW GRADE.

(9) EXTEND (#2 AWG, BARE, TINNED, SOLID COPPER GROUNDING ELECTRODE CONDUCTOR FROM GROUND BAR IN PANEL PP1 AND CADWELD TO NEAREST BURIED GROUND ROD. THE GROUNDED CONDUCTOR SHALL BE ELECTRICALLY ISOLATED FROM THE GROUND BAR/GROUNDING CONDUCTOR PER NEC 250-32(B).

(10) EXTEND 2#2 AWG, BARE, TINNED, SOLID COPPER GROUND CONDUCTOR FROM NEAREST BURIED GROUND ROD, TURN UP TIGHT TO EDGE OF SLAB IN SEALTIGHT CONDUIT, AND BOND TO GROUND LUG AT BOTTOM REAR OF CHARLES ALL-IN-ONE CABINET (TYP OF 2 LOCATIONS).

(11) EXTEND (#2 AWG, GREEN, INSULATED, STRANDED, COPPER GROUND CONDUCTOR FROM GROUND LUG ON SIDE OF CHARLES FIBER CUBE AND BOND TO NEAREST EQUIPMENT BACKBOARD SUPPORT POST.

(12) VERIZON PROVIDED AND CONTRACTOR INSTALLED RECEIVER ANTENNA (MODEL #GPS-TMG-HR26NCM). CONTRACTOR SHALL PROVIDE AND INSTALL 1/2" GROUND KIT ON SUPPORT POST AT LOCATION OF RECEIVER ANTENNA AND ON SUPPORT POST BEFORE ENTERING CHARLES CABINET FOR BONDING OF RECEIVER ANTENNA/COAX. REFER TO STRUCTURAL FOR MOUNTING DETAILS.

(13) EXTEND (#2 AWG, BARE, TINNED, SOLID COPPER GROUND CONDUCTOR FROM NEAREST BURIED GROUND ROD AND BOND TO NEW METALLIC FENCE POST. CONNECTION TO FENCE POST SHALL BE BELOW GRADE.

(14) PROVIDE FLEXIBLE GROUND STRAP (T & B SERIES) CONNECTING METALLIC GATE FRAME TO ADJACENT METALLIC FENCE POST. REFER TO DETAIL, SHEET E-6.

(15) EXTEND (#6 AWG GREEN, INSULATED, STRANDED COPPER BONDING JUMPER BETWEEN EACH SECTION OF ICE BRIDGE USING 2-HOLE LUG WITH STAINLESS STEEL HARDWARE. EACH SECTION OF ICE BRIDGE SHALL BE BONDED TO ICE BRIDGE SUPPORT POST VIA EXOTHERMIC WELD.

(16) EXTEND (#2/0 AWG, BARE, TINNED, SOLID COPPER GROUND CONDUCTOR FROM GROUND LUG IN METER STACK AND CADWELD TO NEAREST BURIED GROUND ROD.

(17) EXTEND (#2 AWG, BARE, TINNED, SOLID COPPER GROUND CONDUCTOR FROM ELECTRIC SERVICE BACKBOARD SUPPORT POST AND CADWELD TO NEAREST BURIED GROUND ROD. CONNECTION TO POST SHALL BE MADE BELOW GRADE.

(18) CONTRACTOR SHALL ENCIRCLE BALLASTED TOWER FOUNDATION WITH #2 AWG, BARE, TINNED, SOLID COPPER CONDUCTOR BELOW GRADE. GROUND RING SHALL BE AT LEAST 30" BELOW GRADE AND SHALL BE 24" AWAY FROM TOWER FOUNDATION.

(19) CONTRACTOR SHALL BOND TOWER TO BURIED GROUND RING USING #2 AWG, BARE, TINNED, SOLID COPPER CONDUCTOR IN TWO (2) LOCATIONS, 180° APART. PROVIDE CADWELD CONNECTIONS.

(20) EXTEND (#2 AWG, BARE, TINNED, SOLID COPPER GROUND CONDUCTOR FROM BURIED GROUND RING, TURN UP THROUGH CONDUIT STUB-UP AREA, AND BOND TO INTERIOR FRAME OF GENERATOR PER MANUFACTURER'S RECOMMENDATIONS.

(21) EXTEND (#2 AWG, GREEN, INSULATED, STRANDED COPPER GROUND CONDUCTOR FROM GAS VENT PIPE SUPPORT POST AND BOND TO NEAREST GROUND ROD. CONNECTION TO SUPPORT POST SHALL BE MADE BELOW GRADE.

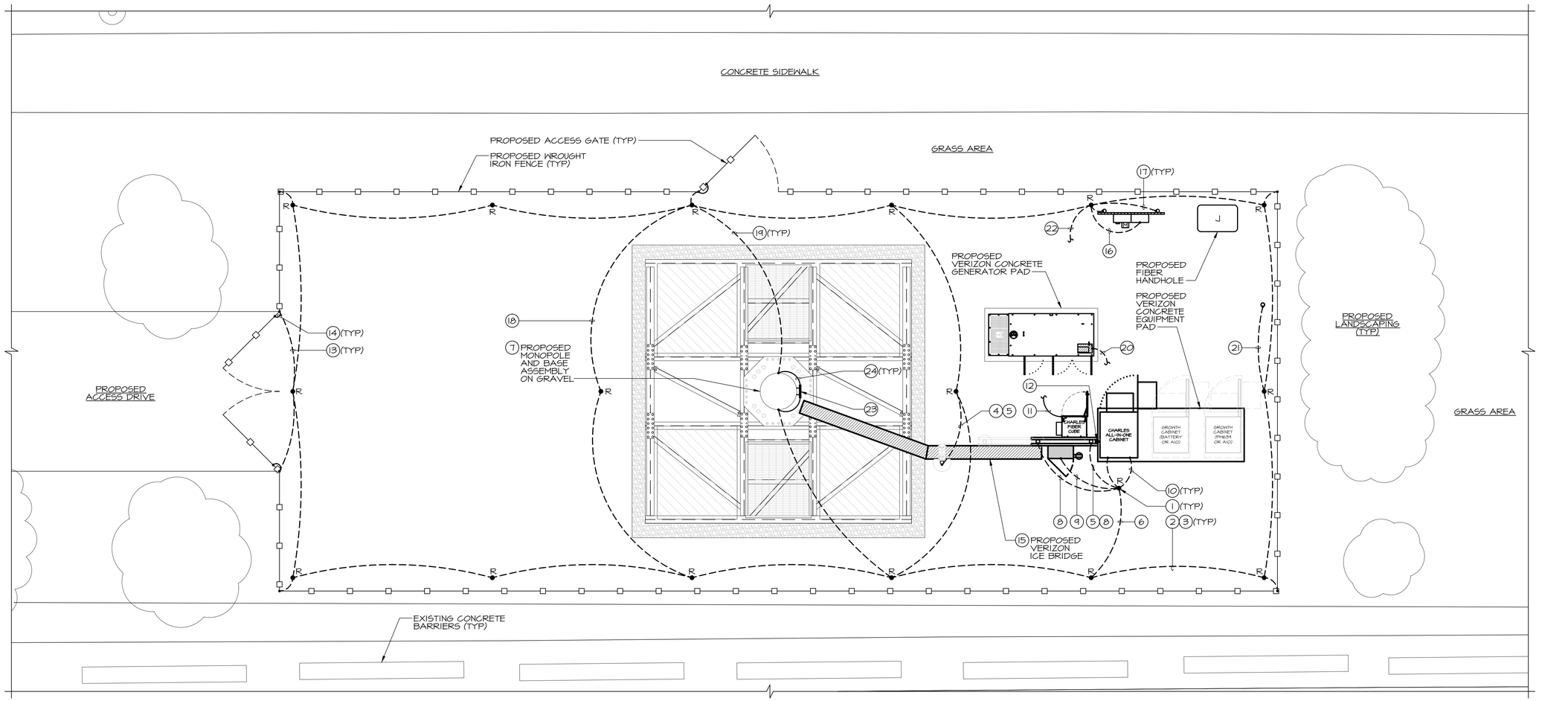
(22) CORRUGATED STAINLESS STEEL TUBING (CSST) GAS PIPING SYSTEM SHALL BE BONDED TO THE BURIED GROUND CONDUCTOR AT POINT CLOSEST TO WHERE BURIED PIPE EXTENDS ABOVE GRADE AT GENERATOR.

(23) IN THE EVENT AN EXTERIOR GROUND BAR IS NOT EXISTING AT BASE OF MONOPOLE TOWER, PROVIDE AND INSTALL 12" WIDE X 4" HIGH X 1/4" THICK, GALVANIZED STEEL EXTERIOR GROUND BAR MOUNTED AT BASE OF TOWER. COORDINATE EXACT LOCATION IN FIELD.

(24) CONTRACTOR SHALL BOND TOWER TO GROUND BAR AT BASE OF TOWER USING #2 AWG, BARE, TINNED, SOLID COPPER CONDUCTOR IN TWO (2) LOCATIONS, 180° APART.

(25) ALL GROUNDING CONNECTIONS SHALL BE MADE BELOW GRADE TO MINIMIZE THE AMOUNT OF EXPOSED GROUND CONDUCTORS.

(26) **ALL EQUIPMENT GROUND LEADS TO BACKBOARD SUPPORT POSTS AND ASSOCIATED EQUIPMENT/HYBRIFLEX CABLES SHALL BE IN A DIRECT, DOWNWARD DIRECTION. AVOID UPWARD SWEEPS AT ALL POSSIBLE.**



(25)(26) GROUNDING SITE PLAN
SCALE: 1/4" = 1'-0"

0 1 2 3 4 8 12
SCALE:1/4"=1'-0"

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TELEGENT ENGINEERING INC.
2216 Commerce Road, Suite 1
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verizon

BOLLING TD POLE #1

ANTENNA INSTALLATION

3720 BROOKLEY AVENUE SW
WASHINGTON, DC 20032
(DISTRICT OF COLUMBIA)

REVISIONS:

NO.	DESCRIPTION	DATE

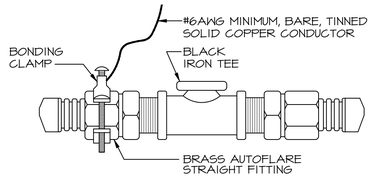
LAST REV.:
PROJECT NO: 26011IN
DATE:
SCALE: AS NOTED

TITLE:
GROUNDING SITE PLAN AND NOTES

SHEET:
E-4

REVIEW SET 08/20/26

TEI# 26011IN



BRASS BONDING CLAMPS

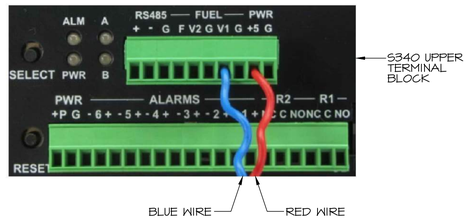
AUTOFLARE FITTING SIZE RANGE	BONDING CLAMP SIZE	PART NO. OR EQUAL (MCMASTER CARR)
⅜" & ½" & ¾"	½" & ¾"	7599K71
1"	1¼"	7588K75
1¼"	2"	7599K76
1½"	2½"	7599K77
2"	3"	7599K78

NOTES:

1. THE PIPING SYSTEM IS NOT TO BE USED AS A GROUNDING CONDUCTOR OR ELECTRODE FOR AN ELECTRICAL SYSTEM. IN ACCORDANCE WITH THE NATIONAL FUEL GAS CODE NFPA 54/ANSI Z223, "EACH ABOVE GROUND PORTION OF A GAS PIPING SYSTEM UPSTREAM FROM THE EQUIPMENT SHUTOFF VALVE SHALL BE ELECTRICALLY CONTINUOUS AND BONDED TO ANY GROUNDING ELECTRODE, AS DEFINED BY THE NATIONAL ELECTRICAL CODE, ANSI/NFPA 70.

DETAIL - PIPE BONDING CLAMP

NO SCALE



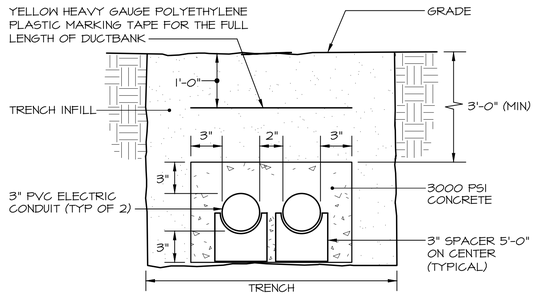
S340 UPPER TERMINAL BLOCK ANALOG VOLTAGE INPUT WIRING

NOTES:

- USING 18AWG TWO CONDUCTOR CABLE, RUN A PAIR OF WIRES FROM THE S340 TO THE PRESSURE SWITCH AND CONNECT WIRES TO THE TERMINALS OF THE SWITCH USING FEMALE QUICK CONNECT WIRE ENDS.
- CONNECT THE OTHER END OF THE WIRE PAIR TO V1 AND +5 ON THE S340. THEY ARE NOT POLARITY SENSITIVE.

DETAIL - NATURAL GAS LOW GAS PRESSURE ALARM WIRING

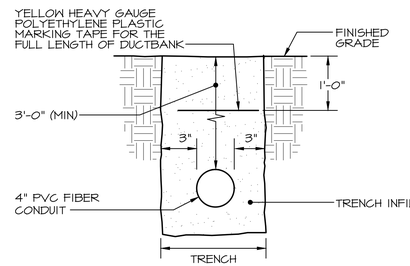
NO SCALE



DUCTBANK SHALL COMPLY WITH ALL BASE REQUIREMENTS.

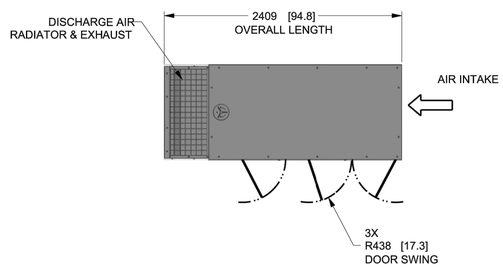
DETAIL - UTILITY DUCTBANK SECTION

NO SCALE (INCOMING ELECTRIC SERVICE FROM EXISTING TRANSFORMER)

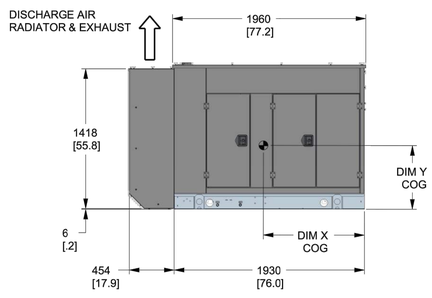


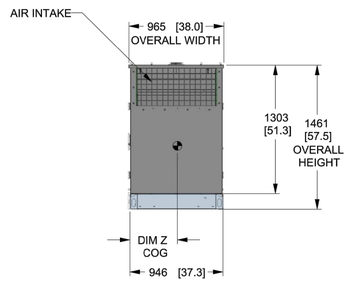
DETAIL - UTILITY CONDUIT SECTION

NO SCALE (INCOMING FIBER FROM EXISTING TELCO MANHOLE #MH42)



FOR ALL STUB-UP, WEIGHT AND COG DETAILS, SEE CORRESPONDING OPEN SET DRAWING PER UNIT CONFIGURATION.





DETAIL - GENERAC 35KW NATURAL GAS/LP GENERATOR

NO SCALE

TELEGENT ENGINEERING INC.
2216 Commerce Road, Suite 1
Forest Hill, MD 21050
410-692-5816
www.tel-eng.com

I AM RESPONSIBLE FOR DETERMINING THAT THE ENGINEERING DESIGNS INCLUDED IN THIS APPLICATION ARE IN COMPLIANCE WITH ALL LAWS AND REGULATIONS OF THE DISTRICT OF COLUMBIA. I HAVE PERSONALLY PREPARED, OR DIRECTLY SUPERVISED THE DEVELOPMENT OF THE ENGINEERING DESIGNS INCLUDED IN THIS APPLICATION.

verizon

BOLLING TDP POLE #3

ANTENNA INSTALLATION

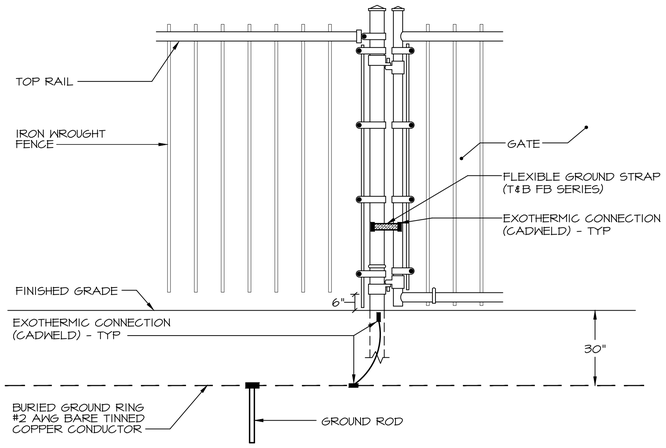
3720 BROOKLEY AVENUE SW
WASHINGTON, DC 20032
(DISTRICT OF COLUMBIA)

REVISIONS:		
NO.	DESCRIPTION	DATE

LAST REV.:	
PROJECT NO:	26011N
DATE:	
SCALE:	AS NOTED

TITLE: DETAILS

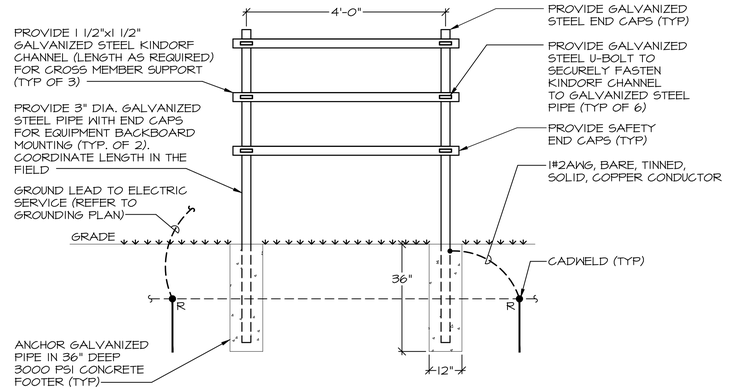
SHEET: E-5



DETAIL - GATE GROUNDING

NO SCALE

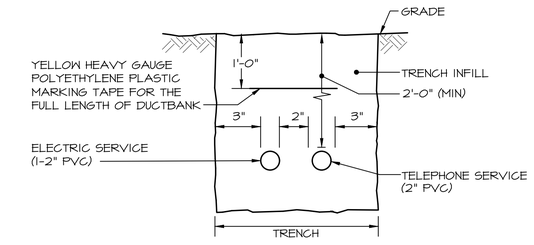
NOTE: CONTRACTOR SHALL SEAL ALL OPEN ENDS ON FENCE/GATE POST TO AVOID BEES NESTING.



ALL METALLIC ITEMS (POSTS, HARDWARE, UNISTRUT, ETC.) SHALL BE GALVANIZED STEEL. ALL FIELD CUTS ON METALLIC ITEMS SHALL BE BRUSH PAINTED WITH MARINE GRADE GALVANIZING.

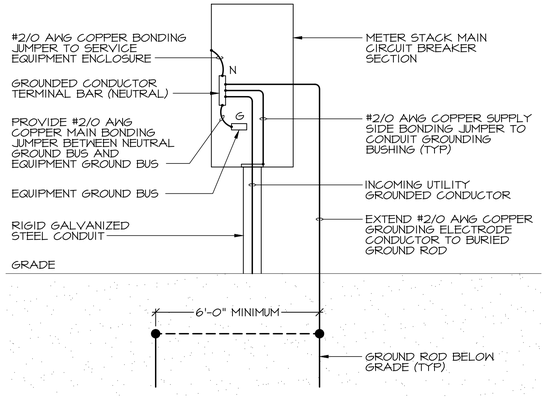
DETAIL - ELECTRIC SERVICE BACKBOARD

NO SCALE



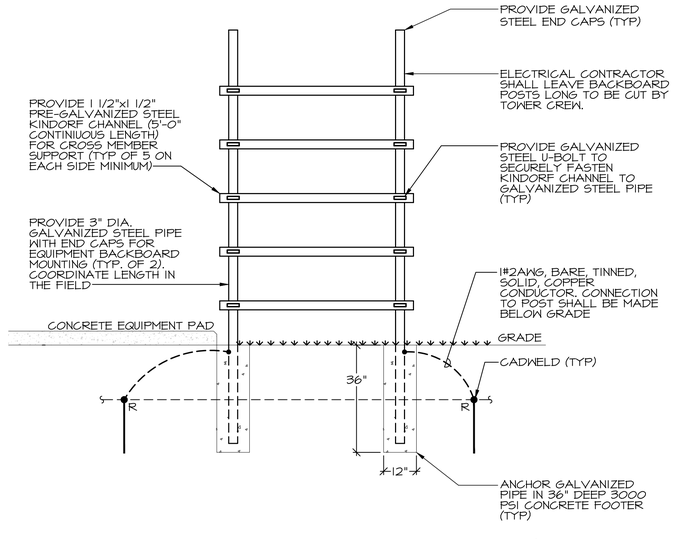
DETAIL - UTILITY CONDUIT SECTION

NO SCALE (WITHIN COMPOUND)



DETAIL - METER STACK SERVICE GROUNDING ELECTRODE

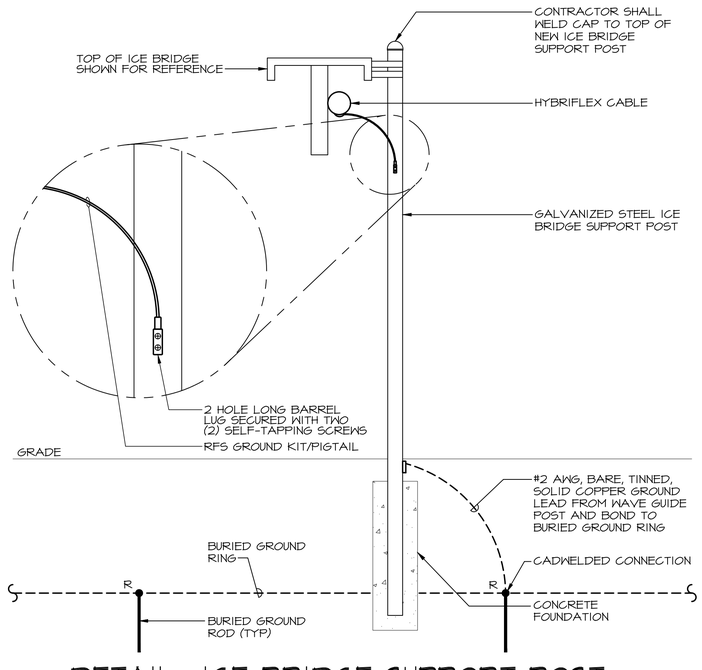
NO SCALE



ALL UNISTRUT SHALL BE PRE-GALVANIZED STEEL. ALL OTHER METALLIC ITEMS (POSTS, HARDWARE, ETC.) SHALL BE GALVANIZED STEEL. ALL FIELD CUTS ON METALLIC ITEMS SHALL BE BRUSH PAINTED WITH MARINE GRADE GALVANIZING.

DETAIL - EQUIPMENT/ICE BRIDGE SUPPORT

NO SCALE



DETAIL- ICE BRIDGE SUPPORT POST

NO SCALE

TEI
TELEGENT ENGINEERING INC.
2216 Commerce Road, Suite 1
Forest Hill, MD 21050
410-692-5816
www.tel-eng.com

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verizon

BOLLING TD POLE

ANTENNA INSTALLATION

3720 BROOKLEY AVENUE SW
WASHINGTON, DC 20032
(DISTRICT OF COLUMBIA)

REVISIONS:		
NO.	DESCRIPTION	DATE

LAST REV.:	
PROJECT NO:	26011N
DATE:	
SCALE:	AS NOTED
TITLE:	DETAILS
SHEET:	E-6

REVIEW SET 08/20/26

TEI# 26011N

September 23, 2026

To: BOLLING RELO
RE: Proof of RF Compliance for Verizon Wireless Facility Located at 1310 McChord St SW, Washington, DC, 20032

To Whom It May Concern,

We write to inform you that at Verizon's request, Circet USA**,** performed a routine RF emissions compliance evaluation for this Site and prepared the attached report. Based on the results of the evaluation, this Site complies with the Federal Communication Commission's limits for Maximum Permissible Exposure (MPE) to radiofrequency electromagnetic fields from wireless facilities (MPE Limits).

The FCC MPE Limits rules are codified at 47 C.F.R § 1.1310 and were developed in consultation with numerous other federal agencies, including the Environmental Protection Agency, the Food and Drug Administration, and the Occupational Safety and Health Administration.

The FCC provides guidance on how to ensure compliance with its rules in the FCC Office of Engineering and Technology Bulletin 65 (available at https://transition.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet65/oet65.pdf.

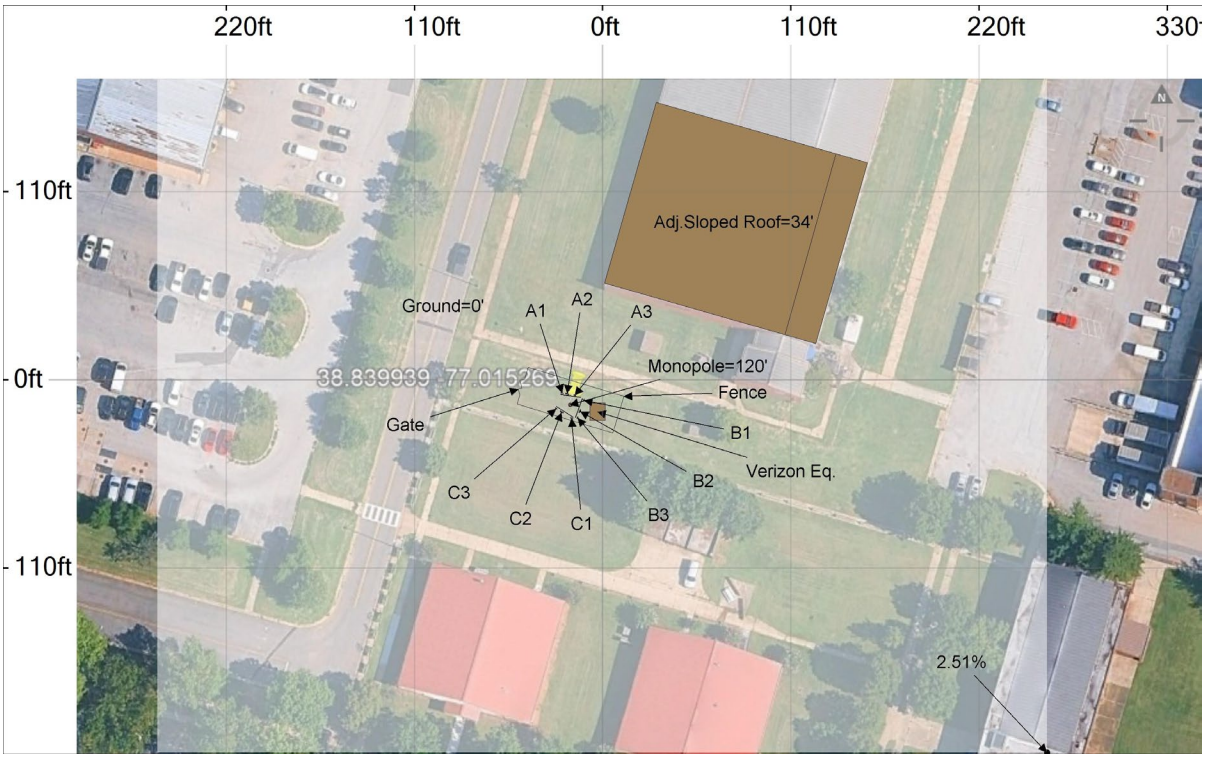
The FCC also provides information about the safety of radio frequency (RF) emissions from cell towers on its website at: https://www.fcc.gov/engineering technology/electromagnetic-compatibility-division/radio-frequency-safety/faq/rf-safety.

Questions related to compliance with federal regulations should be directed toVZWRFCompliance@verizonwireless.com.

Predictive Modeling: Verizon Antennas Only

Is the area being modeled completely INACCESSIBLE to members of the general population (including untrained maintenance workers)?	**☐ YES ☒ NO**

Reference Plane: Ground=0'



Conclusion

Description of MPE-Limit Exceeding Areas:

Summary	Predictive max. General Population MPE (%)
Ground	2.51

Ground Level Assessment:

- Below General Population limit.

Horizontal/Vertical Safety Distances:

General Population MPE Safety Distance (feet)	
Horizontal:	161.93
Vertical:	28.18

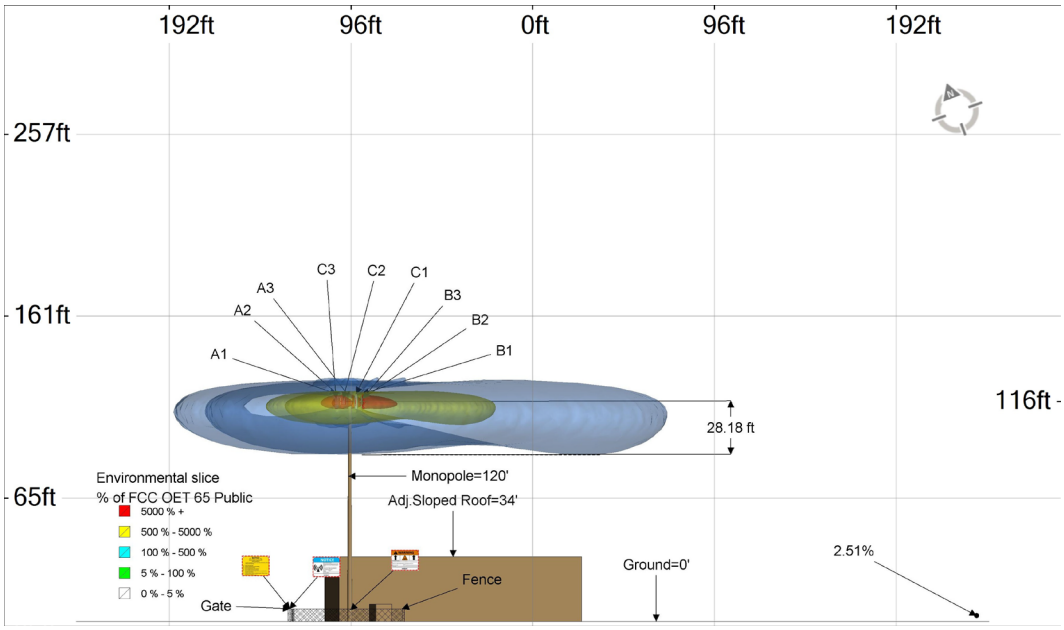
Occupational MPE Safety Distance (feet)	
Horizontal:	71.76
Vertical:	12.38

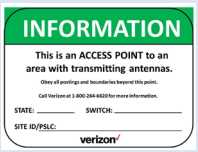
Horizontal Safety Distance – How far the emissions are predicted to exceed limits from the face of the antennas.

Vertical Safety Distance – How far the emissions are predicted to exceed limits from the bottom of the antennas. The vertical safety distance is measured from the bottom of the antenna down the monopole.

verizon

Signage/Barrier Diagram

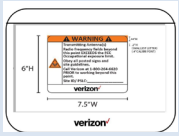


Final Compliant Configuration	 Safety Guidelines	 Notice	 Caution	 Warning	 Information	 Barriers/Markers	
	GUIDELINES	**NOTICE**	**CAUTION**	**WARNING**	**NOC INFO**	**BARRIER/MARKER**	
Access Point(s)	☒ [1]	☒ [1]	☐ [#]	☒ [1]	☐ [#]	☐	dimensions
Alpha	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐	dimensions
Beta	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐	dimensions
Gamma	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐	dimensions

NOTE: The table above represents EVERY RFE Mitigation requirement that MUST be implemented at this location (except the RF Safety plan letter, if required).

verizon

Signage/Barrier Installation Detail

Mitigation Actions Required/Taken												
	GUIDELINES		**NOTICE**		**CAUTION**		**WARNING**		**NOC INFO**		**BARRIER/MARKER**	
Access Point(s)	☒ [1]	☐ [#]	☒ [1]	☐ [#]	☐ [#]	☐ [#]	☒ [1]	☐ [#]	☐ [#]	☐ [#]	☐	dimensions
Alpha	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐	dimensions
Beta	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐	dimensions
Gamma	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐ [#]	☐	dimensions
	ADD	**REM**	**ADD**	**REM**	**ADD**	**REM**	**ADD**	**REM**	**ADD**	**REM**	**ADD ONLY**	

NOTE: The above table describes the signage/barriers that were installed or removed by the consultant/vendor. If NOT installed by the consultant/vendor what actions are required.

SPECIAL MITIGATION INSTRUCTIONS	
Items to be Installed	**Site Access:** • Install (1) Guideline and (1) Notice sign at access gate. • Install (1) Warning UP arrow sign, 6ft above from monopole base facing front to the access gate.

Sincerely,

Bismark Clottey

Bismark Clottey
Manager-RF System Design
Verizon Wireless

MORRIS & RITCHIE ASSOCIATES, INC.

ENGINEERS, ARCHITECTS, PLANNERS, SURVEYORS,
AND LANDSCAPE ARCHITECTS

FAA 1-A SURVEY CERTIFICATION

Applicant: Verizon Wireless
Attn: Carl James
10170 Junction Drive, Suite 300
Annapolis Junction, MD 20701

Site Name: VZW – Bolling TD Pole
Site Address: 3720 Brookley Ave SW
Washington, DC 20032

Horizontal Datum Source *(select all that apply)*:
☒ Ground survey ☒ GPS survey ☒ NAD 83 ☐ NAD 27

Vertical Datum Source (*select all that apply*):
☒ Ground survey ☒ GPS survey ☒ NAVD 88 ☐ NGVD 29

Structure Type (*select one*):
☒ New Tower ☐ Existing Tower ☐ Roof Top ☐ Water Tank ☐ Smokestack
☐ Other (describe): _____

Latitude: **38° 50' 23.78" North**
Longitude: **77° 00' 54.97" West**
Ground Elevation: **17 feet AMSL**

CERTIFICATION: I certify that the latitude of **38° 50' 23.78" North** and the longitude of **77° 00' 54.97" West** are accurate to within +/- 20 feet horizontally, and that the site elevation of **17 feet AMSL** is accurate to within +/- 3 feet vertically. The horizontal datum (coordinates) are based on the North American Datum of 1983 (NAD 83) and are expressed in degrees, minutes and seconds to the nearest hundredth of a second. The vertical datum (heights) are based on the North American Vertical Datum of 1988 (NAVD 88) and are determined to the nearest foot.

Signature/Seal: _____ **(SEAL)**
Printed Name: Alexander J. Leadore
Professional License #: DC Registered Professional No. PE40003289
Company: Morris & Ritchie Associates, Inc.
Phone: (410) 821-1690
Date: August 20, 2026



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2025-AEA-7590-OE

Issued Date: 08/06/2025

BOLDYN US - MILITARY
REGULATORY COMPLIANCE
121 Innovation Dr
Ste 200
Irvine, CA 92617

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Tower B1310
County, State: District of Columbia, District of Columbia

Collected Point(s):

Label	Latitude	Longitude	SE	DET AGL	AMSL
pt-1	38-50-23.87N	77-0-55.31W	17 Ft	125 Ft	142 Ft

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.
To coordinate frequency activation and verify that no interference is caused to FAA facilities, prior to beginning any transmission from the site you must contact FAA REAGAN NATIONAL SSC at the following phone number: 703-413-0355 .

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M Change 1.

This determination expires on 02/06/2027 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.

(b) extended, revised, or terminated by the issuing office.

(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at 1-817-222-5915, or Rodney.H-CTR.Love@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2025-AEA-7590-OE.

Signature Control No: 662738587-672673748 (DNE)
rodney.h-ctr.love@faa.gov
Technician

Attachment(s)
Additional Information
Frequency Data
Map(s)

cc: FCC

FAA facilities, DCA RTR, critical to aviation safety are located 0.75 NM from your proposed transmitter site. There is no objection provided the proponent contacts the FAA REAGAN NATIONAL SSC at the following phone number: 703-413-0355 and performs an on/off test, prior to the transmission of their frequencies, in order to verify that no FAA facilities have been adversely impacted. Frequency management does not anticipate any adverse effects; however, if some issues occur, the proponent must mitigate them. During the mitigation process, depending on its impact on FAA services, the offending equipment must be shut down until verification has been made that any adverse effects have been resolved.

Frequency Data for ASN 2025-AEA-7590-OE

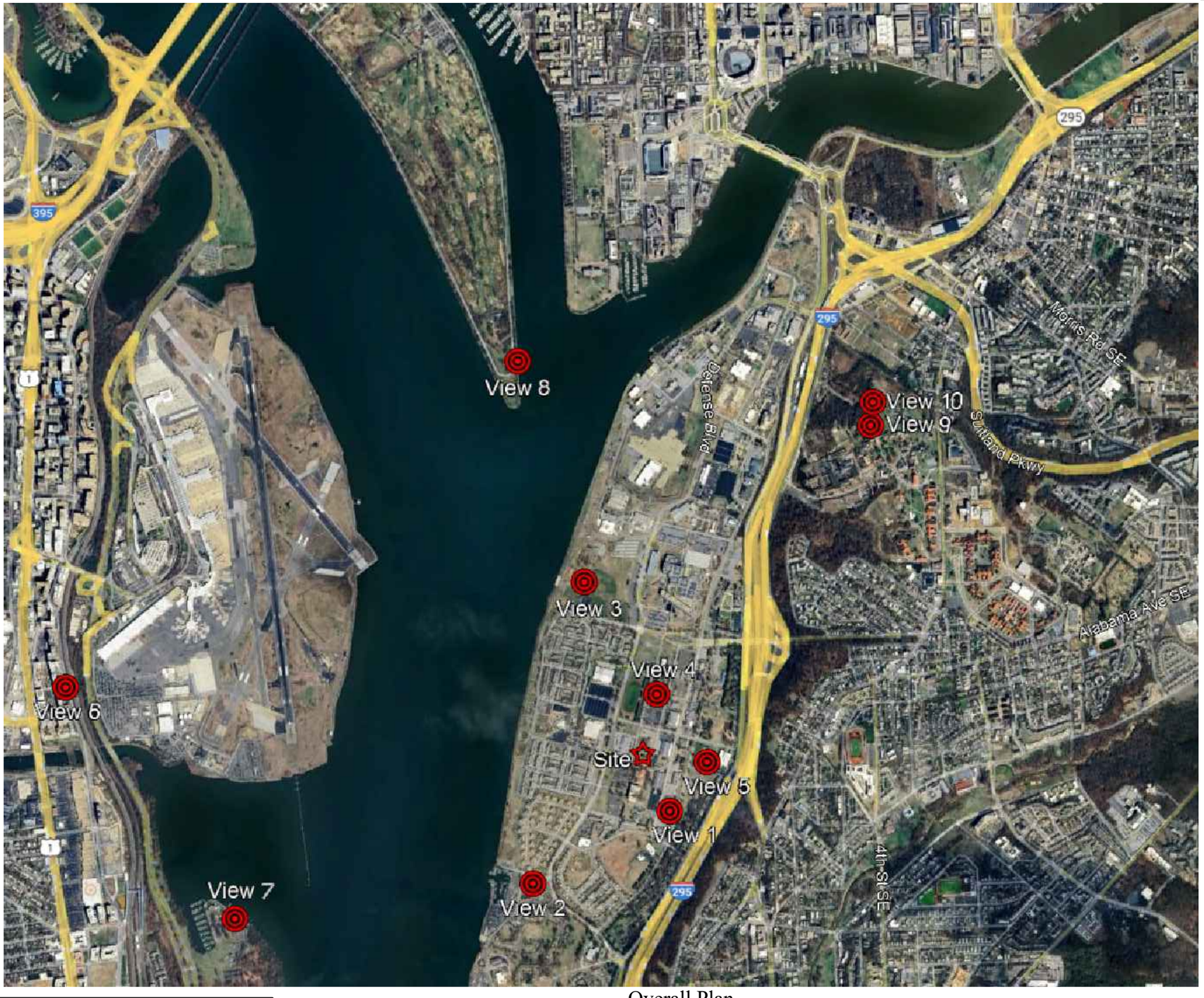
LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
21.2	23.6	GHz	42	dBW
21.2	23.6	GHz	55	dBW
614	698	MHz	1000	W
614	698	MHz	2000	W
698	806	MHz	1000	W
806	824	MHz	500	W
806	901	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	W
896	901	MHz	500	W
901	902	MHz	7	W
929	932	MHz	3500	W
930	931	MHz	3500	W
931	932	MHz	3500	W
932	932.5	MHz	17	dBW
935	940	MHz	1000	W
940	941	MHz	3500	W
1670	1675	MHz	500	W
1710	1755	MHz	500	W
1850	1910	MHz	1640	W
1850	1990	MHz	1640	W
1930	1990	MHz	1640	W
1990	2025	MHz	500	W
2110	2200	MHz	500	W
2305	2360	MHz	2000	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W
2496	2690	MHz	500	W

Verified Map for ASN 2025-AEA-7590-OE



Photosim Key Plan

View 1	View from Brookley Avenue SW (0.17 Miles)
View 2	View from field South of Arnold Avenue SW (0.57 Miles)
View 3	View from baseball field path North of MacDill Boulevard SE (0.58 Miles)
View 4	View from parking lot adjacent to Luke Avenue SW (0.21 Miles)
View 5	View from parking lot adjacent to Theisen Street (0.26 Miles)
View 6	View from Potomac Avenue adjacent to train tracks (1.88 Miles)
View 7	View from Daingerfield Marina along GW Parkway (1.43 Miles)
View 8	View from Haines Point (1.29 Miles)
View 9	View from Central building of DHS campus (1.34Miles)
View 10	View from the point of DHS campus (1.35 Miles)



Overall Plan

MORRIS & RITCHIE ASSOCIATES, INC.
Civil / Structural Engineers
1220-B East Joppa Rd, Suite 400K
Towson, Maryland 21286
410-821-1690
410-821-1748 Fax

Bolling TD Pole

120' Monopole

21 August 2026

verizon



Existing View 1



Proposed View 1

View 1

View from Brookley Avenue SW (0.17 Miles)

This view represents the closest viewpoint to the monopole. From this view, the monopole will be the most visible. The proposed monopole will show up just over the AbilityOne base supply center.



Key Map

MORRIS & RITCHIE ASSOCIATES, INC.
Civil / Structural Engineers
1220-B East Joppa Rd, Suite 400K
Towson, Maryland 21286
410-821-1690
410-821-1748 Fax

Bolling TD Pole

120' Monopole

21 August 2026

verizon



Existing View 2



Proposed View 2

View 2

View from field South of Arnold Avenue SW (0.57 Miles)

This view represents the area near the Capitol Cove Marina. The field shows a house between the monopole and viewpoint. The monopole is not visible from this area.

NOTE:

PROPOSED MONOPOLE, ANTENNAS AND EQUIPMENT NOT VISIBLE FROM THIS VIEW



Key Map

MORRIS & RITCHIE ASSOCIATES, INC.
Civil / Structural Engineers
1220-B Rest Joppa Rd, Suite 400E
Towson, Maryland 21286
410-821-1690
410-821-1748 Fax

Bolling TD Pole

120' Monopole

21 August 2026

verizon



Existing View 3



Proposed View 3

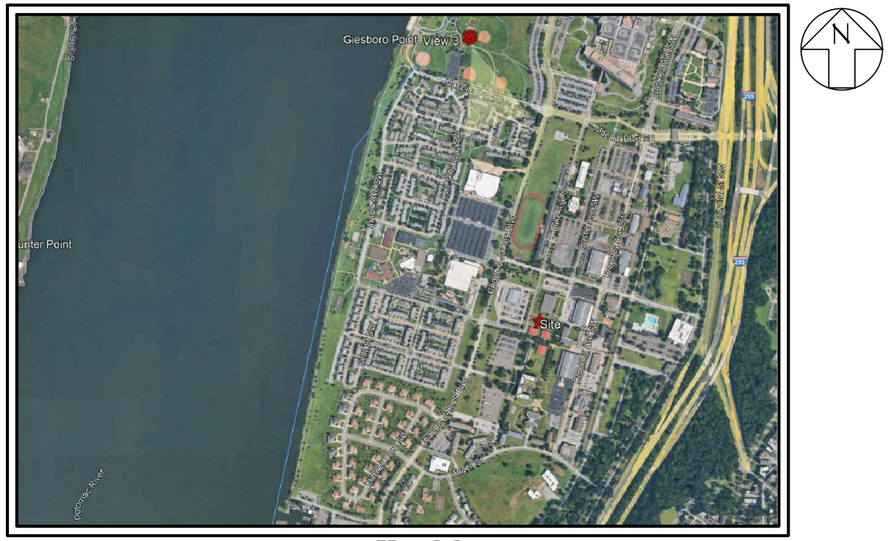
View 3

View from baseball field path North of MacDill Boulevard SE (0.57 Miles)

This view is looking at the monopole from a baseball field in Giesboro Park. From this view the monopole is not visible being blocked by tree cover surrounding the nearby houses.

NOTE:

PROPOSED MONOPOLE, ANTENNAS AND EQUIPMENT NOT VISIBLE FROM THIS VIEW



Key Map

MORRIS & RITCHIE ASSOCIATES, INC.
Civil / Structural Engineers
1220-B East Joppa Rd, Suite 400E
Towson, Maryland 21286
410-821-1690
410-821-1748 Fax

Bolling TD Pole

120' Monopole

21 August 2026



Existing View 4



Proposed View 4

View 4

View from parking lot adjacent to Luke Avenue SW (0.21 Miles)

This view is looking at the monopole from the parking lot south of the Charles Carpenter building. From here the monopole is very visible and sits to the right of Blanchard Hall.



Key Map

MORRIS & RITCHIE ASSOCIATES, INC.
Civil / Structural Engineers
1220-B East Joppa Rd, Suite 400K
Towson, Maryland 21286
410-821-1690
410-821-1748 Fax

Bolling TD Pole

120' Monopole

21 August 2026

verizon



Existing View 5



Proposed View 5

View 5

View from parking lot adjacent to Theisen Street (0.27 Miles)

This view looks at the monopole from the parking lot of the Bolling Club. The monopole is visible but mostly obscured by tree cover and building 52.



Key Map

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Civil / Structural Engineers
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Towson, Maryland 21286
410-821-1690
410-821-1748 Fax

Bolling TD Pole

120' Monopole

21 August 2026

verizon



Existing View 6



Proposed View 6

View 6

View from Potomac Avenue adjacent to train tracks (1.88 Miles)

This view is the furthest away from the monopole and looks at it from Potomac ave overlooking the train tracks and past Reagan National Airport. The monopole is barely visible due to the distance and how it blends with the trees and high grade behind it. The monopole will show up to the right of the barracks building.



Key Map

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120' Monopole

21 August 2026



Existing View 7



Proposed View 7

View 7

View from Daingerfield Marina along GW Parkway (2.63 Miles)

This view represents the monopole looking from the Washington Sailing Marina on the Virginia side of the Potomac River. From this view, the monopole will be just barely visible by the unaided eye. The proposed pole will show up just above the treeline to the left of the existing shed in the foreground.



Key Map

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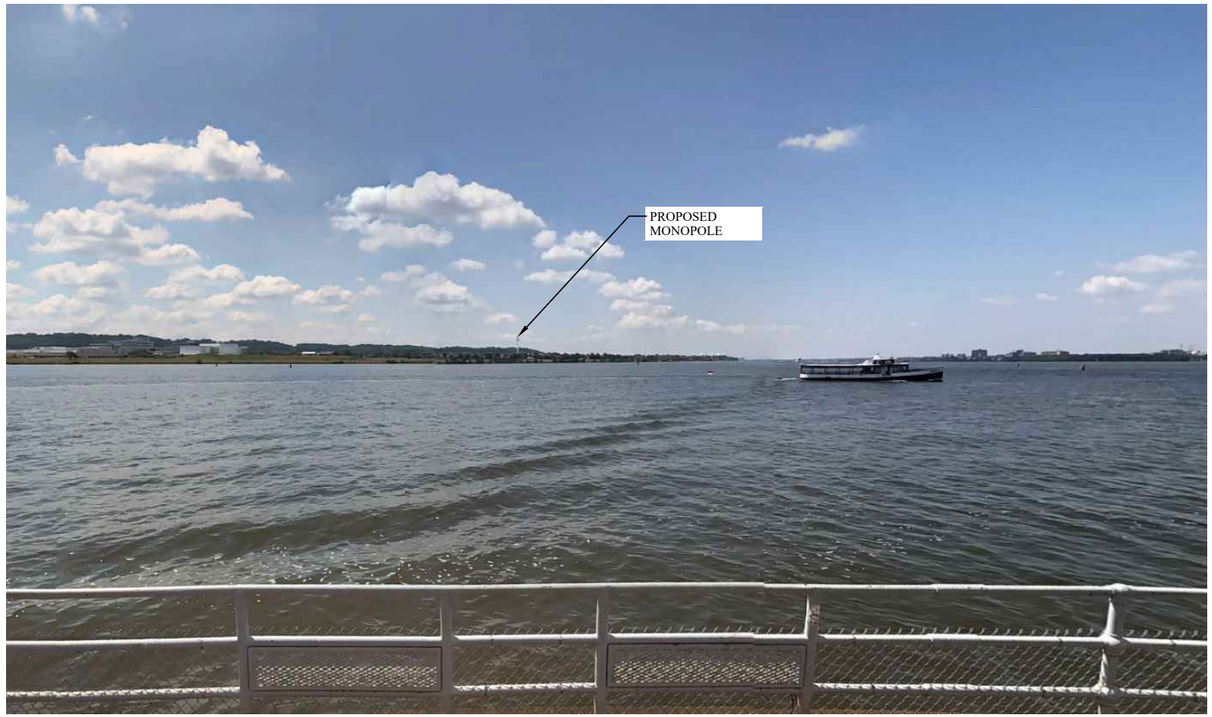
120' Monopole

21 August 2026

verizon



Existing View 8

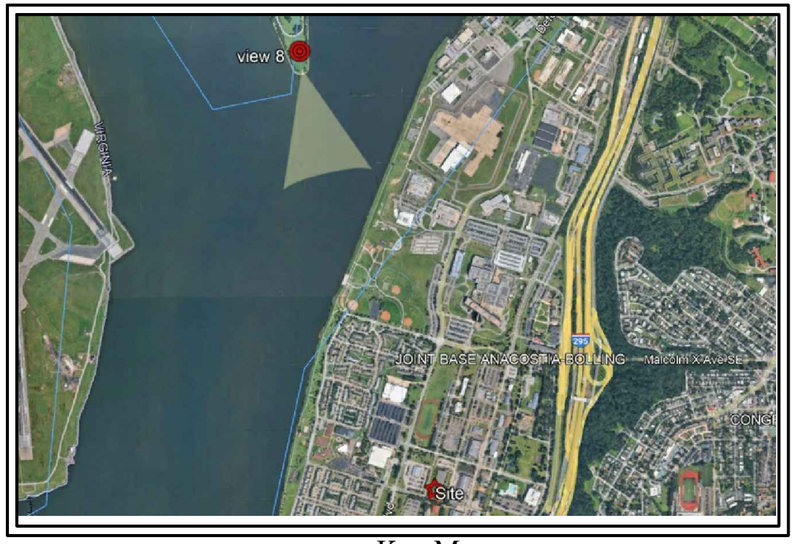


Proposed View 8

View 8

View from Hains Point (1.36 Miles)

This view represents the monopole looking from the very tip of Hains Point. From this view, the monopole will be just barely visible by the unaided eye. The proposed pole will show up just above the treeline but to the right of where the treeline starts to taper down.



Key Map

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Bolling TD Pole

120' Monopole

21 August 2026

verizon



Existing View 9



Proposed View 9

View 9

View from Central building of DHS campus (1.34Miles)

This view looks in the direction of the monopole from close to the St Elizabeth Psychiatric Hospital. The monopole is not visible from this view.

NOTE:

PROPOSED MONOPOLE, ANTENNAS AND EQUIPMENT NOT VISIBLE FROM THIS VIEW



Key Map

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120' Monopole

21 August 2026

verizon



Existing View 10



Proposed View 10

View 10

View from the point of DHS campus (1.35 Miles)

This view looks in the direction of the monopole from further back and up the path of the St Elizabeth Psychiatric Hospital. The monopole is not visible from this view.

NOTE:

PROPOSED MONOPOLE, ANTENNAS AND EQUIPMENT NOT VISIBLE FROM THIS VIEW



Key Map

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