# WALNUT CREEK PARK - TIER III - PERSONAL WIRELESS FACILITY (NORTH GARDEN)

**3750 WALNUT CREEK PARK ROAD**
**NORTH GARDEN, VIRGINIA 22959**

**E911 ADDRESS YES ☐ NO ☒**

PROJECT DESCRIPTION

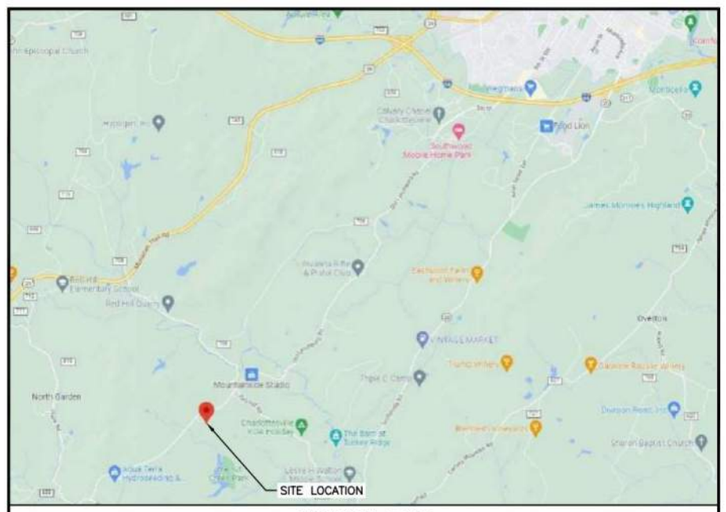
THE SITE WILL CONSIST OF OF A NEW 50'x50' LEASE AREA AND AN 40'X40' FENCED COMPOUND. LOCATED WITHIN THE FENCED COMPOUND WILL BE A NEW 195' MONOPOLE, EQUIPMENT, GENERATOR AND H-FRAME.

DIRECTIONS FROM GOODES BRIDGE SWITCH (2501 GOODES BRIDGE RD., RICHMOND, VA 23224):
HEAD NORTH ON GOODES BRIDGE RD TOWARD ELK RD; 0.4 MILES, TURN RIGHT ONTO US-360E; 0.2 MILES, MERGE ONTO VA-150N/CHIPPENHAM PKWY VIA THE RAMP TO I-95N/POWHITE PKWY; 0.2 MILES, MERGE ONTO VA-150N/CHIPPENHAM PKWY; 3.2 MILES, TAKE THE EXIT ONTO VA-76N/POWHITE PKWY (TOLL ROAD); 2.6 MILES, KEEP LEFT AT THE FORK TO CONTINUE ON VA-76N (TOLL ROAD); 0.9 MILES, CONTINUE ONTO I-195N; 2.2 MILES, TAKE THE I-64W EXIT ON THE LEFT TOWARD CHARLOTTESVILLE; 0.6 MILES, MERGE ONTO I-64; 68.0 MILES, TAKE EXIT 118A TO MERGE ONTO US-29S TOWARD LYNCHBURG; 0.5 MILES, MERGE ONTO US-29S; 5.2 MILES, TURN RIGHT ONTO MOORELAND LN; 174 FT, DESTINATION WILL BE ON THE LEFT.

DIRECTIONS




LOCAL MAP N.T.S.




VICINITY MAP N.T.S.

APPROX. TRUE NORTH

N

**UTILITIES INFO:**
POWER: DOMINION VA POWER
866.366.4357

TELEPHONE: VERIZON
757.631.0692

2 WORKING DAYS BEFORE YOU DIG
811
TOLL FREE
MISS UTILITY

**EMERGENCY INFO:**
JURISDICTION:
ALBEMARLE COUNTY
LOCAL FIRE AND RESCUE:
434.296.5833
LOCAL POLICE:
434.977.9041

**PROJECT TEAM**

| | |
|---|---|
| REAL ESTATE: NATE HOLLAND | PHONE NUMBER: 757.305.8420 |
| ZONING: NATE HOLLAND | PHONE NUMBER: 757.305.8420 |
| CONSTRUCTION: JON KIRBY | PHONE NUMBER: 540.280.9630 |
| UTILITIES: JON KIRBY | PHONE NUMBER: 540.280.9630 |
| ENVIRONMENTAL CONSULTANT: ANDREW HENDRICKS | PHONE NUMBER: 703.478.0055 |

| REV. NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 0 | FOR ZONING | LMW | 06/03/22 |

| REV. NO. | DESCRIPTION | BY | DATE |
|---|---|---|---|

## A & E CONSULTING TEAM

ARCHITECTURE AND ENGINEERING:
DEWBERRY ENGINEERS INC.
4805 LAKE BROOK DRIVE, SUITE 200
GLEN ALLEN, VA 23060

PHONE # 804.205.3348
CONTACT: HILLARY SIEGALL, P.E.

PHONE # 804.205.3353
CONTACT: BRAD ROSE, SENIOR PROJECT MANAGER

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE GOVERNING AUTHORITIES.
- 2018 INTERNATIONAL BUILDING CODE (IBC)
- 2017 NATIONAL ELECTRIC CODE (NEC)
- 2018 NFPA 101, LIFE SAFETY CODE
- MANUAL OF STEEL CONSTRUCTION, 14th EDITION
- AMERICAN CONCRETE INSTITUTE
- ANSI/TIA-222-H
- ANTENNA SUPPORTING STRUCTURES AND ANTENNAS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE IBC 2018 SECTION 1609 WIND LOADS, EXCEPTION #5 REFERENCING TIA-222
- LOCAL BUILDING CODE
- CITY/COUNTY ORDINANCES

## PROJECT SUMMARY

PROPERTY OWNER:
THE BOARD OF SUPERVISORS
OF ALBEMARLE COUNTY VIRGINIA
401 MCINTIRE ROAD
CHARLOTTESVILLE, VA 22959

TOWER OWNER:
VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222
PHONE: 910.617.9293
CONTACT: DANA PELLIZZARI

PROJECT INFO:
CANDIDATE NAME: NORTH GARDEN

APPLICANT INFO:
VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222
PHONE: 910.617.9293
CONTACT: DANA PELLIZZARI

PROJECT DATA:
ZONING: RURAL AREA
PARCEL ID: 10000-00-00-03500
TAX MAP: 100/35
ACREAGE: 106.65 ACRES
JURISDICTION: ALBEMARLE COUNTY
SITE TYPE: RAWLAND
TOWER TYPE: MONOPOLE
TOWER HEIGHT: 195'
OVERALL HEIGHT: 199'
LEASE AREA: 2500 SF
AREA OF DISTURBANCE: ±7,600 SF

CENTER OF PROPOSED TOWER*:
LATITUDE: 37° 56' 04.43" N
LONGITUDE: 78° 35' 37.34" W
ELEVATION: 666' AMSL
*PER FAA 2C SURVEY CERTIFICATION COMPLETED BY DEWBERRY ENGINEERS, INC. DATED 05/06/22

THIS DOCUMENT WAS DEVELOPED TO REFLECT A SPECIFIC SITE AND ITS SITE CONDITIONS AND IS NOT TO BE USED FOR ANOTHER SITE OR WHEN OTHER CONDITIONS PERTAIN. REUSE OF THIS DOCUMENT IS AT THE SOLE RISK OF THE USER.

A.D.A. COMPLIANCE:
FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.

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VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222


**WALNUT CREEK PARK - TIER III - PERSONAL WIRELESS FACILITY (NORTH GARDEN)**

ZONING DRAWINGS

| | | |
|---|---|---|
| 0 | 06/03/22 | FOR ZONING |


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COMMONWEALTH OF VIRGINIA
HILLARY G. SIEGALL
Lic No. 0402061023
06/03/22
PROFESSIONAL ENGINEER

| | |
|---|---|
| DRAWN BY: | LMW |
| REVIEWED BY: | BAR |
| CHECKED BY: | HGS |
| PROJECT NUMBER: | 50128319 |
| SITE ADDRESS: | |

3750 WALNUT CREEK PARK ROAD
NORTH GARDEN, VIRGINIA 22959

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1

## GENERAL CONSTRUCTION NOTES:

1. ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH VERIZON WIRELESS SPECIFICATIONS.
2. CONTRACTOR SHALL CONTACT "MISS UTILITY" (1-800-552-7001) FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
4. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
5. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
6. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
7. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
8. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
9. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
10. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO PROCEEDING.
11. EACH CONTRACTOR SHALL COOPERATE WITH THE OWNER'S REPRESENTATIVE, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
12. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE VERIZON WIRELESS CONSTRUCTION MANAGER.
13. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
14. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR WILL NOTIFY ENGINEER, VERIZON WIRELESS PROJECT CONSTRUCTION MANAGER, AND LANDLORD IMMEDIATELY.
15. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
16. ALL ROOF WORK SHALL BE DONE BY A QUALIFIED AND EXPERIENCED ROOFING CONTRACTOR IN COORDINATION WITH ANY CONTRACTOR WARRANTING THE ROOF TO ENSURE THAT THE WARRANTY IS MAINTAINED.
17. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
18. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH LANDLORD AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
19. CONTRACTOR SHALL FURNISH VERIZON WIRELESS WITH THREE AS-BUILT SETS OF DRAWINGS UPON COMPLETION OF WORK.
20. ANTENNAS AND CABLES ARE TYPICALLY PROVIDED BY VERIZON WIRELESS. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH VERIZON WIRELESS PROJECT MANAGER TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED BY VERIZON WIRELESS. ALL ITEMS NOT PROVIDED BY VERIZON WIRELESS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED BY VERIZON WIRELESS.
21. PRIOR TO SUBMISSION OF BID, CONTRACTOR WILL COORDINATE WITH VERIZON WIRELESS PROJECT MANAGER TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY VERIZON WIRELESS. ALL REQUIRED PERMITS NOT OBTAINED BY VERIZON WIRELESS MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
22. GENERAL CONTRACTOR SHALL HAVE A LICENSED HVAC CONTRACTOR START THE HVAC UNITS, SYNCHRONIZE THE THERMOSTATS, ADJUST ALL SETTINGS ON EACH UNIT ACCORDING TO VERIZON WIRELESS CONSTRUCTION MANAGER'S SPECIFICATIONS, AND THOROUGHLY TEST AND BALANCE EACH UNIT TO ENSURE PROPER OPERATION PRIOR TO TURNING THE SITE OVER TO OWNER.
23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH VERIZON WIRELESS SPECIFICATIONS AND REQUIREMENTS.
24. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
25. UNLESS OTHERWISE NOTED VERIZON WIRELESS SHALL PROVIDE ALL REQUIRED RF MATERIAL FOR CONTRACTOR TO INSTALL, INCLUDING ANTENNAS, TMA'S, BIAS-T'S, COMBINERS, PDU, DC BLOCKS, SURGE ARRESTORS, GPS ANTENNA, GPS SURGE ARRESTOR, COAXIAL CABLE.
26. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL VERIFY ALL EQUIPMENT TO BE PROVIDED BY VERIZON WIRELESS FOR INSTALLATION BY CONTRACTOR.
27. CONTRACTOR SHALL FURNISH AND INSTALL ANTENNA PLATFORM.
28. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO VERIZON WIRELESS SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
29. EQUIPMENT CABINET FRAME/SHELTER SHALL BE ANCHORED TO FOUNDATION PER MANUFACTURER'S SPECIFICATIONS AND IN ACCORDANCE WITH THE VIRGINIA STATE BUILDING CODE.
30. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER CONTRACT.
31. CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF 48 HOURS IN ADVANCE PRIOR TO CONSTRUCTION START, MORE SPECIFICALLY BEFORE; SEALING ANY FLOOR, WALL OR ROOF PENETRATION, FINAL UTILITY CONNECTIONS, POURING CONCRETE, BACKFILLING UTILITY TRENCHES AND STRUCTURAL POST OR MOUNTING CONNECTIONS, FOR ENGINEERING REVIEW AND INSPECTION.
32. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
33. DETECTION WIRE SHALL BE BURIED DIRECTLY ABOVE NON-METALLIC PIPING AT A DISTANCE NOT TO EXCEED TWELVE (12) INCHES ABOVE THE TOP OF PIPE. THE WIRE SHALL EXTEND CONTINUOUSLY AND UNBROKEN FROM POINT OF ACCESS TO POINT OF ACCESS. THE ENDS OF THE WIRE SHALL TERMINATE WITH A MINIMUM OF THREE (3) FEET OF WIRE, COILED, REMAINING ACCESSIBLE AT TERMINATION POINTS. DETECTION WIRE SHALL BE 12 GAUGE FOR A BURIED DEPTH OF LESS THAN 4 FEET AND 4 GAUGE FOR A BURIED DEPTH GREATER THAN OR EQUAL TO 4 FEET.

## STRUCTURAL NOTES:

1. AS REQUIRED UNDER THE STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNA, ANSI/TIA-222-H, VERIZON WIRELESS SHALL PROVIDE A STRUCTURAL ANALYSIS OF THE TOWER PREPARED BY A LICENSED STRUCTURAL ENGINEER (LICENSED IN THE PROJECT STATE) CERTIFYING THAT THE EXISTING TOWER AND ANY REQUIRED IMPROVEMENTS AND REINFORCEMENTS HAVE SUFFICIENT CAPACITY TO SUPPORT ALL EXISTING AND PROPOSED ANTENNAS, SUPPORTS AND APPURTENANCES AND COMPLIES WITH THE CURRENT STATE BUILDING CODE AND EIA/TIA CRITERIA. THE CONTRACTOR IS RESPONSIBLE TO CONFIRM THAT ANY IMPROVEMENTS AND REINFORCEMENTS REQUIRED BY THE STRUCTURAL ANALYSIS CERTIFICATION ARE PROPERLY INSTALLED PRIOR TO THE ADDITION OF ANTENNAS, SUPPORTS AND APPURTENANCES PROPOSED ON THESE DRAWINGS OR OTHERWISE NOTED IN THE STRUCTURAL ANALYSIS.
2. FOR STRUCTURAL MODIFICATIONS REQUIRING FIELD WELDING; THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND IMPLEMENTING ALL INDUSTRY STANDARDS FOR PROTECTION OF ALL EXISTING PROPERTY AND PERSONNEL FOR DAMAGE OR HARM. ALL PROPERTY DAMAGED DURING CONSTRUCTION OF THIS PROJECT SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION OF THE OWNER.

## FOUNDATION NOTES:

1. BEAR NEW FOUNDATION ON EXISTING SOIL. REMOVE ANY LOOSE FILL AND ORGANIC MATERIAL. PROOF COMPACT PREPARED FOOTING BOTTOM WITH MINIMUM OF 4 PASSES OF A VIBRATORY PLATE COMPACTOR. REMOVE ANY LOOSE OR SOFT AREAS AND REPLACE WITH STRUCTURAL FILL.
2. STRUCTURAL FILL MATERIAL BENEATH SLABS-ON-GRADE SHALL CONSIST OF WELL-GRADED GRANULAR SOIL WITH LESS THAN 15% NON-PLASTIC FINES AND A MAXIMUM PARTICLE SIZE OF 4-INCHES. FILL SHOULD BE PLACED IN MAXIMUM LIFT HEIGHTS OF 8-INCHES (LOOSE) AND COMPACTED TO 95% OF ITS MAXIMUM DRY DENSITY AT ±2% OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE STANDARD PROCTOR TEST.
3. FOUNDATION SHALL BE LOCATED ON SOIL WITH A MINIMUM BEARING CAPACITY OF 2000 PSF (e.g., UNITED SOIL CLASSIFICATION SYSTEM [ASTM DESIGNATION D-2487] GROUP SYMBOLS: GW, GP, GM, GC, SW, SP, SM, SC). ENGINEER SHALL BE NOTIFIED IF SOIL BEARING CAPACITY IS LESS THAN 2000 PSF.

## CONCRETE AND REINFORCING STEEL NOTES:

1. DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF ALL APPLICABLE CODES INCLUDING: ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", AND ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
2. MIX DESIGN SHALL BE APPROVED BY OWNER'S REPRESENTATIVE AND SUBMITTED TO ENGINEER PRIOR TO PLACING CONCRETE.
3. CONCRETE SHALL BE NORMAL WEIGHT, 6% AIR ENTRAINED (+/- 1.5%) WITH A MAXIMUM 4" SLUMP AND HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI UNLESS OTHERWISE NOTED.
4. THE FOLLOWING MATERIALS SHALL BE USED:

| | |
|---|---|
| PORTLAND CEMENT: | ASTM C-150, TYPE 1 OR 2 |
| REINFORCEMENT: | ASTM A-185, PLAIN STEEL WELDED WIRE FABRIC |
| REINFORCEMENT BARS: | ASTM A615, GRADE 60, DEFORMED |
| NORMAL WEIGHT AGGREGATE: | ASTM C-33 |
| WATER | DRINKABLE |
| ADMIXTURES: | NON-CHLORIDE CONTAINING |

5. MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS (UNLESS OTHERWISE NOTED):
   a. CONCRETE CAST AGAINST EARTH: 3"
   b. ALL OTHER CONCRETE: 2"
6. A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE IN ACCORDANCE WITH ACI 301 SECTION 4.2.4, UNLESS NOTED OTHERWISE.
7. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL, OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE.
8. ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED IN ACI 301.
9. DO NOT WELD OR TACK WELD REINFORCING STEEL.
10. ALL DOWELS, ANCHOR BOLTS, EMBEDDED STEEL, ELECTRICAL CONDUITS, PIPE SLEEVES, GROUNDS AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE BEFORE START OF CONCRETE PLACEMENT.
11. REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED.
12. DO NOT PLACE CONCRETE IN WATER, ICE, OR ON FROZEN GROUND.
13. DO NOT ALLOW CONCRETE OR SUBBASE TO FREEZE DURING CONCRETE CURING AND SETTING PERIOD, OR FOR A MINIMUM OF 3 DAYS AFTER PLACEMENT.
14. FOR COLD-WEATHER AND HOT-WEATHER CONCRETE PLACEMENT, CONFORM TO APPLICABLE ACI CODES AND RECOMMENDATIONS. IN EITHER CASE, MATERIALS CONTAINING CHLORIDE, CALCIUM, SALTS, ETC. SHALL NOT BE USED. PROTECT FRESH CONCRETE FROM WEATHER FOR 7 DAYS, MINIMUM.
15. CONCRETE SHALL BE RUBBED TO A ROUGH GROUT FINISH. PADS SHALL BE SEALED BY STEEL TROWEL.
16. UNLESS OTHERWISE NOTED:
    a. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTMA615, GRADE 60.
    b. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
17. SPLICING OF REINFORCEMENT IS PERMITTED ONLY AT LOCATIONS SHOWN IN THE CONTRACT DRAWINGS OR AS ACCEPTED BY THE ENGINEER. UNLESS OTHERWISE SHOWN OR NOTED REINFORCING STEEL SHALL BE SPLICED TO DEVELOP ITS FULL TENSILE CAPACITY (CLASS A) IN ACCORDANCE WITH ACI 318.
18. REINFORCING BAR DEVELOPMENT LENGTHS, AS COMPUTED IN ACCORDANCE WITH ACI 318, FORM THE BASIS FOR BAR EMBEDMENT LENGTHS AND BAR SPLICED LENGTHS SHOWN IN THE DRAWINGS. APPLY APPROPRIATE MODIFICATION FACTORS FOR TOP STEEL, BAR SPACING, COVER AND THE LIKE.
19. DETAILING OF REINFORCING STEEL SHALL CONFORM TO "ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI 315).
20. ALL SLAB CONSTRUCTION SHALL BE CAST MONOLITHICALLY WITHOUT HORIZONTAL CONSTRUCTION JOINTS, UNLESS SHOWN IN THE CONTRACT DRAWINGS.
21. LOCATION OF ALL CONSTRUCTION JOINTS ARE SUBJECT TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, CONFORMANCE WITH ACI 318, AND ACCEPTANCE OF THE ENGINEER. DRAWINGS SHOWING LOCATION OF DETAILS OF THE PROPOSED CONSTRUCTION JOINTS SHALL BE SUBMITTED WITH REINFORCING STEEL PLACEMENT DRAWINGS
22. SPLICES OF WWF, AT ALL SPLICED EDGES, SHALL BE SUCH THAT THE OVERLAP MEASURED BETWEEN OUTERMOST CROSS WIRES OF EACH FABRIC SHEET IS NOT LESS THAN THE SPACING OF THE CROSS WIRE PLUS 2 INCHES, NOR LESS THAN 8".
23. BAR SUPPORTS SHALL BE ALL GALVANIZED METAL WITH PLASTIC TIPS.
24. ALL REINFORCEMENT SHALL BE SECURELY TIED IN PLACE TO PREVENT DISPLACEMENT BY CONSTRUCTION TRAFFIC OR CONCRETE. TIE WIRE SHALL BE 16 GAUGE CONFORMING TO ASTM A82.
25. SLAB ON GROUND
    a. COMPACT STRUCTURAL FILL TO 95% DENSITY AND THEN PLACE 6" (COMPACTED) GRAVEL BENEATH SLAB.
    b. PROVIDE VAPOR BARRIER BENEATH SLAB ON GROUND.

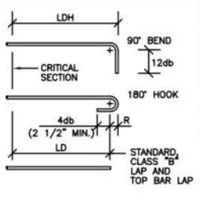
## REBAR SPLICE AND HOOK SCHEDULE

REBAR SPLICE AND HOOK DIMENSIONS IN REINF. CONCRETE
F'c = 3,000 PSI

| ASTM BAR SIZE | LD | CLASS B LAP | TOP BAR LAP | LDH |
|---|---|---|---|---|
| 3 | 12" | 13" | 17" | 8 1/2" |
| 4 | 14" | 18" | 23" | 11" |
| 5 | 17" | 22" | 28" | 14" |
| 6 | 20" | 26" | 34" | 16 1/2" |
| 7 | 29" | 38" | 49" | 19 1/2" |
| 8 | 33" | 43" | 56" | 22" |

REBAR SPLICE AND HOOK DIMENSIONS IN REINF. CONCRETE
F'c = 4,000 PSI

| ASTM BAR SIZE | LD | CLASS B LAP | TOP BAR LAP | LDH |
|---|---|---|---|---|
| 3 | 12" | 12" | 16" | 7 1/2" |
| 4 | 12" | 15" | 20" | 9 1/2" |
| 5 | 15" | 19" | 24" | 12" |
| 6 | 18" | 23" | 29" | 14 1/2" |
| 7 | 25" | 33" | 43" | 17" |
| 8 | 29" | 37" | 49" | 19" |




LD - STANDARD DEVELOPMENT LENGTH OF BAR

LDH - STANDARD DEVELOPMENT LENGTH OF HOOK

F'c - SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE

db - BAR DIAMETER PER ASTM

NOTES:

TOP BAR - DEFINED AS A BAR LOCATED SUCH THAT 12 IN. OR MORE OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE SPLICE.

MINIMUM OUTSIDE RADIUS OF BEND, R, SHALL BE 4db.

verizon

VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222

**WALNUT CREEK PARK - TIER III - PERSONAL WIRELESS FACILITY (NORTH GARDEN)**

ZONING DRAWINGS

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| | | |
| 0 | 06/03/22 | FOR ZONING |

Dewberry

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COMMONWEALTH OF VIRGINIA
HILLARY G. SIEGALL
Lic No. 0402061023
06/03/22
PROFESSIONAL ENGINEER

| | |
|---|---|
| DRAWN BY: | LMW |
| REVIEWED BY: | BAR |
| CHECKED BY: | HGS |
| PROJECT NUMBER: | 50128319 |
| SITE ADDRESS: | |

3750 WALNUT CREEK PARK ROAD
NORTH GARDEN, VIRGINIA 22959

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

G-1

# E&S NARRATIVE

PROJECT DESCRIPTION

THIS PROJECT INCLUDES THE INSTALLATION OF A NEW MONOPOLE. IN ADDITION TO THE NEW MONOPOLE A NEW EQUIPMENT PAD, GENERATOR, AND METER BANK WILL BE INSTALLED IN A NEW FENCED COMPOUND. THE COMPOUND WILL BE ACCESSIBLE BY A PROPOSED GRAVEL DRIVE WHICH WILL EXTEND FROM AN EXISTING COMPOUND ACCESS. DURING CONSTRUCTION, A TEMPORARY ACCESS PATH WILL BE UTILIZED. WOODEN LOGGING MATS WILL BE PLACED OVER AN EXISTING GRASS CLEARING IN ORDER TO MINIMIZE DISTURBANCE TO THE AREA. LOGGING MATS TO BE REMOVED IMMEDIATELY UPON COMPLETION OF SITE CONSTRUCTION.

STORMWATER RUNOFF CONSIDERATIONS

THE PARCEL ON WHICH THE PROJECT IS LOCATED IS 106.65 ACRES. THE LIMITS OF DISTURBANCE WILL BE 0.17 ACRES, OF WHICH, 0.09 ACRES WILL BE NEW IMPERVIOUS AREA. THE EXISTING DRAINAGE PATTERN WILL REMAIN UNCHANGED AND THE PROPOSED IMPROVEMENTS WILL BE CONSTRUCTED USING EXISTING GRADES.

EXISTING SITE CONDITIONS

THE SITE INCLUDES WOODLANDS AND VEGETATIVE COVER. THERE IS AN EXISTING FENCED COMPOUND FOR PARK FACILITIES. THE NEW CELL SITE WILL BE LOCATED NEXT TO THE EXISTING COMPOUND AND WILL UTILIZE THE EXISTING COMPOUND'S ACCESS.

SOILS
SEE THIS SHEET. SOILS LOCATED ON SITE ARE AS FOLLOWS:
13D – CATOCTIN SILT LOAM, 15 TO 25 PERCENT SLOPES, VERY STONY
29B – FAUQUIER SILT LOAM, 7 TO 15 PERCENT SLOPES
32C – ORENDA SILT LOAM, 7 TO 15 PERCENT SLOPES
33C – ORENDA SILT LOAM, 7 TO 15 PERCENT SLOPES, VERY STONY

ADJACENT PROPERTY

THE PROPOSED IMPROVEMENTS ARE LOCATED IN A VEGETATIVE AREA NEXT TO AN EXISTING FENCED COMPOUND BOUNDED BY PARCELS ZONED RURAL AREAS IN ALL DIRECTIONS.

CRITICAL AREAS

THERE ARE NO CRITICAL AREAS ONSITE. THE PLAN HAS BEEN DEVELOPED TO MINIMIZE LAND DISTURBANCE. WHERE GRADING IS NECESSARY, ADEQUATE PRECAUTIONS SHALL BE TAKEN TO MINIMIZE EROSION AND TO CONTAIN SILT THROUGH PROPER EROSION AND SEDIMENT CONTROL PRACTICES.

MANAGEMENT STRATEGIES

1. CONSTRUCTION WILL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE.
2. PERMANENT SEEDING WILL BEGIN IMMEDIATELY FOLLOWING GRADING OPERATIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.
4. AFTER ACHIEVING ADEQUATE STABILIZATION, THE TEMPORARY E&S CONTROLS WILL BE CLEANED UP AND REMOVED IMMEDIATELY.

EROSION AND SEDIMENT CONTROL MEASURES

THE INTENT OF THIS EROSION AND SEDIMENT CONTROL PLAN IS TO GUIDE THE CONTRACTOR IN IMPLEMENTING ACCEPTABLE MEASURES, INFRASTRUCTURE, AND MAINTENANCE PROGRAMS THAT WILL MINIMIZE THE AMOUNT OF EROSION AND RESULTING SEDIMENT THAT WILL TAKE PLACE DURING THE CONSTRUCTION OF THIS PROJECT. ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE VA EROSION & SEDIMENT CONTROL HANDBOOK.

STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES

SILT FENCE (VESCH STD. & SPEC. 3.05):
A TEMPORARY SEDIMENT BARRIER CONSISTING OF A FILTER FABRIC STRETCHED ACROSS AND ATTACHED TO SUPPORTING POSTS AND ENTRENCHED. SILT FENCE IS INSTALLED TO INTERCEPT AND DETAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED AREAS DURING CONSTRUCTION IN ORDER TO PREVENT SEDIMENT FROM LEAVING THE SITE AND TO DECREASE THE VELOCITY OF SHEET FLOWS AND LOW–TO–MODERATE CHANNEL FLOWS.

TREE PRESERVATION AND PROTECTION (VESCH STD. & SPEC. 3.38):
TREE PRESERVATION AND PROTECTION IS TO ENSURE THE SURVIVAL OF DESIRABLE TREES WHERE THEY WILL BE EFFECTIVE FOR EROSION AND SEDIMENT CONTROL, WATERSHED PROTECTION, LANDSCAPE BEAUTIFICATION, DUST AND POLLUTION CONTROL, NOISE REDUCTION, SHADE AND OTHER ENVIRONMENTAL BENEFITS WHILE THE LAND IS BEING CONVERTED FROM FOREST TO URBAN–TYPE USES.

TEMPORARY AND PERMANENT STABILIZATION

PERMANENT OR TEMPORARY SEEDING (STD. & SPEC. 3.31, 3.32):
TEMPORARY SEEDING SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE, BUT WILL REMAIN DORMANT FOR LONGER THAN 14 DAYS AND LESS THAN ONE YEAR. THIS INCLUDES, BUT IS NOT LIMITED TO, STOCKPILES. AREAS TO BE PERMANENTLY SEEDED ARE TO USE A CERTIFIED SEED. ALL SEEDED AREAS ARE TO BE STRAW MULCHED AT THE RATE OF TWO TONS PER ACRE.

SODDING SHALL BE APPLIED AND A PERENNIAL VEGETATIVE COVERING SHALL BE ESTABLISHED ON DISTURBED AREAS WITHIN SEVEN DAYS OF BEING BROUGHT TO FINAL GRADE ON AREAS NOT OTHERWISE PROTECTED. SELECTION OF THE SEED MIXTURE SHALL DEPEND ON THE TIME OF YEAR IT IS TO BE APPLIED.

MULCHING (STD. & SPEC. 3.35):
APPLICATION OF PLANT RESIDUES OR OTHER SUITABLE MATERIALS TO THE SOIL SURFACE. MULCHING PREVENTS EROSION BY PROTECTING THE SOIL SURFACE FROM RAINDROP IMPACT AND REDUCING THE VELOCITY OF OVERLAND FLOW. MULCHING FOSTERS THE GROWTH OF VEGETATION BY INCREASING AVAILABLE MOISTURE AND PROVIDING INSULATION AGAINST EXTREME HEAT AND COLD. FOR USE IN AREAS WHICH HAVE BEEN PERMANENTLY SEEDED. MULCHING SHOULD OCCUR IMMEDIATELY FOLLOWING SEEDING. AREAS THAT CANNOT BE SEEDED BECAUSE OF THE SEASON SHOULD BE MULCHED WITH AN ORGANIC MULCH.

SOIL STOCKPILES AND BORROW AREAS

NO STOCKPILES AND/OR BORROW AREAS ARE ANTICIPATED ON THE SITE. IF STOCKPILES AND/OR BORROW AREAS ARE NEEDED, THE CONTRACTOR SHALL IMPLEMENT THE REQUIRED EROSION CONTROL DEVICES PER THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND OBTAIN REQUIRED PERMITS.

EROSION AND SEDIMENT CONTROL MAINTENANCE

IN GENERAL, ALL THE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED WEEKLY AND AFTER EACH RUNOFF PRODUCING RAINFALL EVENT TO ENSURE THEY ARE IN WORKING ORDER. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:

1. SILT FENCE: SEDIMENT DEPOSITS SHALL BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE–HALF THE HEIGHT OF THE BARRIER. FABRIC SHALL BE REPLACED IF IT HAS DECOMPOSED OR BECOME INEFFECTIVE.

2. SEEDING: THE SEEDED AREAS SHALL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RESEEDED AS NEEDED.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AN EMPLOYEE WHO WILL BE IN CHARGE OF THE EROSION AND SEDIMENT CONTROL PLAN AND REQUIREMENTS FOR THE PROJECT THAT IS CERTIFIED BY THE VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION AS A RESPONSIBLE LAND DISTURBER (RLD). THE NAME OF THE CONTRACTOR'S RLD AND COPY OF HIS CURRENT CERTIFICATION SHALL BE PROVIDED TO THE OWNER, ENGINEER AND EROSION & SEDIMENT CONTROL PLAN APPROVING AUTHORITY PRIOR TO ISSUANCE OF THE NOTICE TO PROCEED FOR THE PROJECT.

# PLANT PROTECTION

TREES AND VEGETATION ADJACENT TO THE ACTUAL WORK AREA OR BORROW AREA ARE TO BE PROTECTED WITH TEMPORARY CONSTRUCTION SAFETY FENCE TO PRESERVE EXISTING ITEMS INDICATED TO REMAIN AND TO PREVENT DAMAGE TO PROPERTY PER VESCH SPEC 3.38.

UNDERGROUND UTILITIES SHALL BE LOCATED SO THAT CONSTRUCTION WILL NOT DAMAGE OR DESTROY THE PLANTS TO REMAIN. UTILITY TRENCHING SHALL NOT BE LOCATED CLOSER THAN 1'–0" FOR EACH 1" IN DIAMETER UP TO A MAXIMUM OF 20'–0" FOR TREES TO REMAIN. DAMAGED TREES AND PLANTS SHALL BE RESTORED TO THE SATISFACTION OF THE OWNER.

THE PARKING OF VEHICLES AND STORAGE OF ANY CONSTRUCTION EQUIPMENT OR MATERIALS SHALL NOT OCCUR UNDER THE DRIP LINE OF TREES TO BE PROTECTED.

# SEQUENCE OF CONSTRUCTION

1. A PRECONSTRUCTION MEETING SHALL BE SCHEDULED BY THE CONTRACTOR WITH AN INSPECTOR FROM THE COUNTY AT LEAST 48 HOURS PRIOR TO ANY VEGETATION OR LAND DISTURBANCE ACTIVITIES.
2. CONSTRUCTION SHALL BE SEQUENCED SUCH THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE.
3. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.
4. THE CONTRACTOR IS TO INSTALL THE EROSION AND SEDIMENT CONTROL MEASURES INCLUDING: CONSTRUCTION ENTRANCE, SILT FENCE, AND INLET PROTECTION.
5. LAND DISTURBANCE OUTSIDE THE PRELIMINARY LIMITS OF DISTURBANCE MAY NOT OCCUR UNTIL THE INITIAL ESC MEASURES INSTALLATION HAS BEEN APPROVED BY THE ENVIRONMENTAL INSPECTOR.
6. PHASE I:
   - INSTALL EROSION AND SEDIMENT CONTROL DEVICES.
   - INSTALL PROPOSED UTILITIES.
   - TEMPORARY SEED AND MULCH DISTURBED AREAS.

   PHASE II:
   - PERMANENTLY SEED TO STABILIZE SITE
7. UPON APPROVAL BY THE COUNTY INSPECTOR, THE CONTRACTOR IS TO REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES ONCE ALL AREAS ARE STABILIZED.

# EROSION AND SEDIMENT CONTROL NOTES

1. NO MORE THAN 200 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME. AT THE END OF EACH WORK DAY, ALL EXCAVATION SHALL BE FILLED OR PLATTED.
2. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES. CONTRACTOR SHALL PROVIDE APPROPRIATE PROTECTION TO CONTROL SEDIMENT WASHING INTO THE TRENCH.
3. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTING TO A DISPOSAL AREA.
4. ALL EROSION CONTROL DEVICES SHALL BE IN PLACE AND FUNCTIONAL AT ALL TIMES AND IF REMOVED FOR CONSTRUCTION PROGRESS, SHALL BE REPLACED BY THE CLOSE OF EACH WORKDAY.
5. FINAL REMOVAL OF EROSION CONTROL DEVICES SHALL NOT OCCUR UNTIL THE OWNER OR HIS DESIGNATED AGENT DEEMS THE SITE STABILIZED.
6. SOD IS TO BE IN ACCORDANCE WITH THE SODDING SCHEDULE PROVIDED IN THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SATISFYING ANY AND ALL EROSION CONTROL (EC) AND STORMWATER MANAGEMENT (SWM) REQUIREMENTS FOR ANY LAND DISTURBING ACTIVITIES, INCLUDING BUT NOT LIMITED TO ON–SITE OR OFF–SITE BORROW, ON–SITE OR OFF–SITE STOCKPILING OR DISPOSAL OF WASTE MATERIALS. BEFORE UNDERTAKING ANY LAND EROSION CONTROL AND STORMWATER MANAGEMENT, THE CONTRACTOR SHALL CONTACT THE COUNTY ENVIRONMENTAL ENGINEERING DEPARTMENT TO DETERMINE WHAT EC AND SWM MEASURES ARE NECESSARY. ALL EC AND SWM MEASURES MUST BE APPROVED BY THE COUNTY INSPECTOR AND THE OWNER BEFORE IMPLEMENTATION. THE CONTRACTOR SHALL COMPLETELY SATISFY ALL REQUIREMENTS OF THE COUNTY ENVIRONMENTAL ENGINEERING DEPARTMENT BEFORE CONTINUING WITH THE CONCERNED ACTIVITY. THE TEMPORARY EROSION AND SEDIMENT CONTROL ITEMS SHOWN ON THE E&S CONTROL PLANS ARE INTENDED TO PROVIDE A GENERAL PLAN FOR CONTROLLING EROSION AND SILTATION WITHIN THE PROJECT LIMITS.

# GENERAL NOTES

1. THE INFORMATION AND DATA SHOWN OR INDICATED WITH RESPECT TO EXISTING UNDERGROUND FACILITIES AT OR CONTIGUOUS TO THE SITE IS BASED ON INFORMATION AND DATA FURNISHED TO THE ENGINEER BY THE OWNER. THE OWNER AND ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY SUCH INFORMATION OR DATA. THE CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA, FOR LOCATING ALL UNDERGROUND FACILITIES SHOWN OR INDICATED PRIOR TO CONSTRUCTION, FOR COORDINATION OF THE WORK WITH THE OWNERS OF SUCH UNDERGROUND FACILITIES DURING CONSTRUCTION, FOR THE SAFETY AND PROTECTION THEREOF RESULTING FROM THE WORK, ALL OF WHICH WILL BE AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL CONTACT "MISS UTILITY" OF VIRGINIA AT 1–800–552–7001 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
2. WHEN WORKING ADJACENT TO EXISTING STRUCTURES, POLES, ETC., CONTRACTOR SHALL USE WHATEVER METHODS THAT ARE NECESSARY TO PROTECT STRUCTURES FROM DAMAGE. CONTRACTOR SHALL HAND EXCAVATE WITHIN 5' OF ALL BUILDINGS, WALLS AND STRUCTURES. REPLACEMENT OF DAMAGED STRUCTURES SHALL BE AT THE CONTRACTOR'S EXPENSE.
3. CONTRACTOR SHALL IMMEDIATELY REPORT ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND CONTRACT DOCUMENTS TO THE ENGINEER.
4. THE LOCATION OF ALL EXISTING UTILITIES ACROSS THE LINES OF THE PROPOSED WORK ARE NOT NECESSARILY SHOWN ON THE PLANS, AND WHERE SHOWN ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY PRIOR TO CONSTRUCTION.
5. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE CONSTRUCTION DOCUMENTS.
6. DATUM FOR ALL ELEVATIONS IS BASED ON NAVD 88 PER COMMERCIAL SITE DESIGN SURVEY.
7. CERTIFICATION THAT 95% COMPACTION IS OBTAINED SHALL BE PROVIDED FOR ALL FILL AREAS, INCLUDING UNDER UTILITIES AND APPURTENANCES. THE CERTIFICATION SHALL STATE THE EXACT AREA THAT THE CERTIFICATION APPLIES TO. COMPACTION SHALL BE ACHIEVED IN ACCORDANCE WITH ASTM–D698, STANDARD PROCTOR DENSITY FOR COMPACTION.
8. ANY ALTERATIONS AND CONNECTIONS TO ANY UTILITY MUST BE COORDINATED WITH THE OWNER.
9. CONTRACTOR WORK DAYS AND HOURS SHALL BE MONDAY THROUGH FRIDAY 7 AM TO 6 PM. ANY DEVIATION FROM THIS SCHEDULE SHALL BE APPROVED BY THE OWNER. SHUTDOWNS WILL BE PERFORMED AT NIGHT AND WEEKENDS WITH 10 DAYS WRITTEN NOTICE AND WRITTEN APPROVAL OF THE COUNTY UTILITIES DEPARTMENT.
10. TOPOGRAPHIC SURVEY, COORDINATES, AND ELEVATIONS PROVIDED BY AMERICAN NATIONAL.
11. CONTRACTOR SHALL VERIFY DEPTHS OF ALL UTILITY CROSSINGS PRIOR TO CONSTRUCTION.
12. CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION SIGNS.
13. THE CONTRACTOR SHALL VERIFY ELEVATIONS OF ALL POINTS OF CONNECTION OF PROPOSED WORK TO EXISTING STORM DRAIN PRIOR TO CONSTRUCTION.

# MINIMUM STANDARDS (9VAC25–840–40)

A VESCP MUST BE CONSISTENT WITH THE FOLLOWING CRITERIA, TECHNIQUES AND METHODS:

1. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 14 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
2. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCK PILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
3. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.
4. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND–DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
5. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
6. SEDIMENT TRAPS AND SEDIMENT BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN.

a. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT TRAP SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA AND THE TRAP SHALL ONLY CONTROL DRAINAGE AREAS LESS THAN THREE ACRES.

b. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT BASIN SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA. THE OUTFALL SYSTEM SHALL, AT A MINIMUM, MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING A 25–YEAR STORM OF 24–HOUR DURATION. RUNOFF COEFFICIENTS USED IN RUNOFF CALCULATIONS SHALL CORRESPOND TO A BARE EARTH CONDITION OR THOSE CONDITIONS EXPECTED TO EXIST WHILE THE SEDIMENT BASIN IS UTILIZED.

7. CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED.
8. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
9. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
10. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT–LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
11. BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.
12. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.
13. WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX–MONTH PERIOD, A TEMPORARY VEHICULAR STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.
14. ALL APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.
15. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.
16. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:

a. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
b. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
c. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF–SITE PROPERTY.
d. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
e. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THIS CHAPTER.
f. APPLICABLE SAFETY REQUIREMENTS SHALL BE COMPLIED WITH.

17. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED OR PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL DEVELOPMENT LOTS AS WELL AS TO LARGER LAND–DISTURBING ACTIVITIES.
18. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE VESCP AUTHORITY. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
19. PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24–HOUR DURATION IN ACCORDANCE WITH THE FOLLOWING STANDARDS AND CRITERIA. STREAM RESTORATION AND RELOCATION PROJECTS THAT INCORPORATE NATURAL CHANNEL DESIGN CONCEPTS ARE NOT MAN–MADE CHANNELS AND SHALL BE EXEMPT FROM ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN–MADE CHANNELS:

a. CONCENTRATED STORMWATER RUNOFF LEAVING A DEVELOPMENT SITE SHALL BE DISCHARGED DIRECTLY INTO AN ADEQUATE NATURAL OR MAN–MADE RECEIVING CHANNEL, PIPE OR STORM SEWER SYSTEM. FOR THOSE SITES WHERE RUNOFF IS DISCHARGED INTO A PIPE OR PIPE SYSTEM, DOWNSTREAM STABILITY ANALYSES AT THE OUTFALL OF THE PIPE OR PIPE SYSTEM SHALL BE PERFORMED.

b. ADEQUACY OF ALL CHANNELS AND PIPES SHALL BE VERIFIED IN THE FOLLOWING MANNER:

(1) THE APPLICANT SHALL DEMONSTRATE THAT THE TOTAL DRAINAGE AREA TO THE POINT OF ANALYSIS WITHIN THE CHANNEL IS ONE HUNDRED TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE PROJECT IN QUESTION; OR

(2A) NATURAL CHANNELS SHALL BE ANALYZED BY THE USE OF A TWO–YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP CHANNEL BANKS NOR CAUSE EROSION OF CHANNEL BED OR BANKS.

(2B) ALL PREVIOUSLY CONSTRUCTED MAN–MADE CHANNELS SHALL BE ANALYZED BY THE USE OF A 10–YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP ITS BANKS AND BY THE USE OF A TWO–YEAR STORM TO DEMONSTRATE THAT STORMWATER WILL NOT CAUSE EROSION OF CHANNEL BED OR BANKS; AND

(2C) PIPES AND STORM SEWER SYSTEMS SHALL BE ANALYZED BY THE USE OF A 10–YEAR STORM TO VERIFY THAT STORMWATER WILL BE CONTAINED WITHIN THE PIPE OR SYSTEM.

c. IF EXISTING NATURAL RECEIVING CHANNELS OR PREVIOUSLY CONSTRUCTED MAN–MADE CHANNELS OR PIPES ARE NOT ADEQUATE, THE APPLICANT SHALL:

(1) IMPROVE THE CHANNELS TO A CONDITION WHERE A 10–YEAR STORM WILL NOT OVERTOP THE BANKS AND A TWO–YEAR STORM WILL NOT CAUSE EROSION TO THE CHANNEL, THE BED, OR THE BANKS; OR

(2) IMPROVE THE PIPE OR PIPE SYSTEM TO A CONDITION WHERE THE 10–YEAR STORM IS CONTAINED WITHIN THE APPURTENANCES;

(3) DEVELOP A SITE DESIGN THAT WILL NOT CAUSE THE PRE–DEVELOPMENT PEAK RUNOFF RATE FROM A TWO–YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A NATURAL CHANNEL OR WILL NOT CAUSE THE PRE–DEVELOPMENT PEAK RUNOFF RATE FROM A 10–YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A MAN–MADE CHANNEL; OR

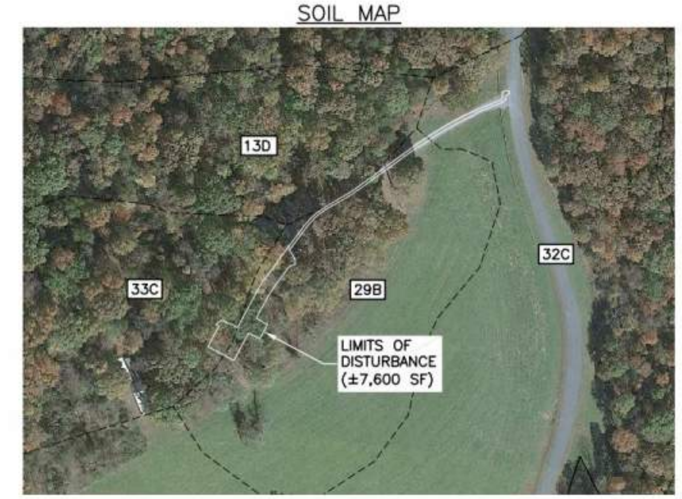
(4) PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, STORMWATER DETENTION OR OTHER MEASURES WHICH IS SATISFACTORY TO THE VESCP AUTHORITY TO PREVENT DOWNSTREAM EROSION.

d. THE APPLICANT SHALL PROVIDE EVIDENCE OF PERMISSION TO MAKE THE IMPROVEMENTS.
e. ALL HYDROLOGIC ANALYSES SHALL BE BASED ON THE EXISTING WATERSHED CHARACTERISTICS AND THE ULTIMATE DEVELOPMENT CONDITION OF THE SUBJECT PROJECT.
f. IF THE APPLICANT CHOOSES AN OPTION THAT INCLUDES STORMWATER DETENTION, HE SHALL OBTAIN APPROVAL FROM THE VESCP OF A PLAN FOR MAINTENANCE OF THE DETENTION FACILITIES. THE PLAN SHALL SET FORTH THE MAINTENANCE REQUIREMENTS OF THE FACILITY AND THE PERSON RESPONSIBLE FOR PERFORMING THE MAINTENANCE.
g. OUTFALL FROM A DETENTION FACILITY SHALL BE DISCHARGED TO A RECEIVING CHANNEL, AND ENERGY DISSIPATORS SHALL BE PLACED AT THE OUTFALL OF ALL DETENTION FACILITIES AS NECESSARY TO PROVIDE A STABILIZED TRANSITION FROM THE FACILITY TO THE RECEIVING CHANNEL.
h. ALL ON–SITE CHANNELS MUST BE VERIFIED TO BE ADEQUATE.
i. INCREASED VOLUMES OF SHEET FLOWS THAT MAY CAUSE EROSION OR SEDIMENTATION ON ADJACENT PROPERTY SHALL BE DIVERTED TO A STABLE OUTLET, ADEQUATE CHANNEL, PIPE OR PIPE SYSTEM, OR TO A DETENTION FACILITY.
j. IN APPLYING THESE STORMWATER MANAGEMENT CRITERIA, INDIVIDUAL LOTS OR PARCELS IN A RESIDENTIAL, COMMERCIAL OR INDUSTRIAL DEVELOPMENT SHALL NOT BE CONSIDERED TO BE SEPARATE DEVELOPMENT PROJECTS. INSTEAD, THE DEVELOPMENT, AS A WHOLE, SHALL BE CONSIDERED TO BE A SINGLE DEVELOPMENT PROJECT. HYDROLOGIC PARAMETERS THAT REFLECT THE ULTIMATE DEVELOPMENT CONDITION SHALL BE USED IN ALL ENGINEERING CALCULATIONS.
k. ALL MEASURES USED TO PROTECT PROPERTIES AND WATERWAYS SHALL BE EMPLOYED IN A MANNER WHICH MINIMIZES IMPACTS ON THE PHYSICAL, CHEMICAL AND BIOLOGICAL INTEGRITY OF RIVERS, STREAMS AND OTHER WATERS OF THE STATE.
l. ANY PLAN APPROVED PRIOR TO JULY 1, 2014, THAT PROVIDES FOR STORMWATER MANAGEMENT THAT ADDRESSES ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN–MADE CHANNELS SHALL SATISFY THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN–MADE CHANNELS IF THE PRACTICES ARE DESIGNED TO (I) DETAIN THE WATER QUALITY VOLUME AND TO RELEASE IT OVER 48 HOURS; (II) DETAIN AND RELEASE OVER A 24–HOUR PERIOD THE EXPECTED RAINFALL RESULTING FROM THE ONE YEAR, 24–HOUR STORM; AND (III) REDUCE THE ALLOWABLE PEAK FLOW RATE RESULTING FROM THE 1.5, 2, AND 10–YEAR, 24–HOUR STORMS TO A LEVEL THAT IS LESS THAN OR EQUAL TO THE PEAK FLOW RATE FROM THE SITE ASSUMING IT WAS IN A GOOD FORESTED CONDITION, ACHIEVED THROUGH MULTIPLICATION OF THE FORESTED PEAK FLOW RATE BY A REDUCTION FACTOR THAT IS EQUAL TO THE RUNOFF VOLUME FROM THE SITE WHEN IT WAS IN A GOOD FORESTED CONDITION DIVIDED BY THE RUNOFF VOLUME FROM THE SITE IN ITS PROPOSED CONDITION, AND SHALL BE EXEMPT FROM ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN–MADE CHANNELS AS DEFINED IN ANY REGULATIONS PROMULGATED PURSUANT TO § 62.1–44.15:54 OR 62.1–44.15:65 OF THE ACT.
m. FOR PLANS APPROVED ON AND AFTER JULY 1, 2014, THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS OF § 62.1–44.15:52 A OF THE ACT AND THIS SUBSECTION SHALL BE SATISFIED BY COMPLIANCE WITH WATER QUANTITY REQUIREMENTS IN THE STORMWATER MANAGEMENT ACT (§ 62.1–44.15:24 ET SEQ. OF THE CODE OF VIRGINIA) AND ATTENDANT REGULATIONS, UNLESS SUCH LAND–DISTURBING ACTIVITIES ARE IN ACCORDANCE WITH 9VAC25–870–48 OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP) REGULATION OR ARE EXEMPT PURSUANT TO SUBDIVISION C 7 OF § 62.1–44.15:34 OF THE ACT.
n. COMPLIANCE WITH THE WATER QUANTITY MINIMUM STANDARDS SET OUT IN 9VAC25–870–66 OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP) REGULATION SHALL BE DEEMED TO SATISFY THE REQUIREMENTS OF THIS SUBDIVISION 19.

# GENERAL EROSION AND SEDIMENT CONTROL NOTES

ES–1: UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS (9VAC25–840).
ES–2: THE PLAN–APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE–CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION. THE NAME OF THE RESPONSIBLE LAND DISTURBER MUST BE PROVIDED TO THE PLAN–APPROVING AUTHORITY PRIOR TO ACTUAL ENGAGEMENT IN THE LAND–DISTURBING ACTIVITY SHOWN ON THE APPROVED PLAN. IF THE NAME IS NOT PROVIDED PRIOR TO ENGAGING IN THE LAND–DISTURBING ACTIVITY, THE PLAN'S APPROVAL WILL BE REVOKED.
ES–3: ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
ES–4: A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
ES–5: PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF–SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN–APPROVING AUTHORITY.
ES–6: THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN–APPROVING AUTHORITY.
ES–7: ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED, AFTER WHICH, UPON APPROVAL OF THE PLAN–APPROVING AUTHORITY, THE CONTROLS SHALL BE REMOVED. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
ES–8: DURING DEWATERING OPERATIONS, WATER SHALL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
ES–9: THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES AT LEAST EVERY 2 WEEKS AND IMMEDIATELY AFTER EACH RUNOFF–PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.
ES–10: THE CONTRACTOR IS RESPONSIBLE FOR THE DAILY REMOVAL OF SEDIMENT THAT HAS BEEN TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE.
ES–11: SEEDING OPERATIONS SHALL BE INITIATED WITHIN 7 DAYS AFTER REACHING FINAL GRADE OR UPON SUSPENSION OF GRADING OPERATIONS FOR ANTICIPATED DURATION OF GREATER THAN 14 DAYS OR UPON COMPLETION OF GRADING OPERATIONS FOR A SPECIFIC AREA.
ES–12: THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOILS WHICH MAY PRESENT HEALTH HAZARDS, TRAFFIC SAFETY PROBLEMS, OR HARM ANIMAL OR PLANT LIFE.
ES–13: A VIRGINIA STORMWATER MANAGEMENT PROGRAM PERMIT (VSMPP) FOR THE DISCHARGE OF STORMWATER FROM CONSTRUCTION ACTIVITIES IS REQUIRED FOR PROJECTS AS LISTED IN VIRGINIA STATE CODE (9VAC25–870) OR PER LOCAL VSMP AUTHORITY.

# SOIL MAP




verizon


VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222


**WALNUT CREEK PARK - TIER III - PERSONAL WIRELESS FACILITY (NORTH GARDEN)**

ZONING DRAWINGS

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| DRAWN BY: | LMW |
| REVIEWED BY: | BAR |
| CHECKED BY: | HGS |
| PROJECT NUMBER: | 50128319 |
| SITE ADDRESS: | |

3750 WALNUT CREEK PARK ROAD
NORTH GARDEN, VIRGINIA 22959

SHEET TITLE

EROSION CONTROL NOTES

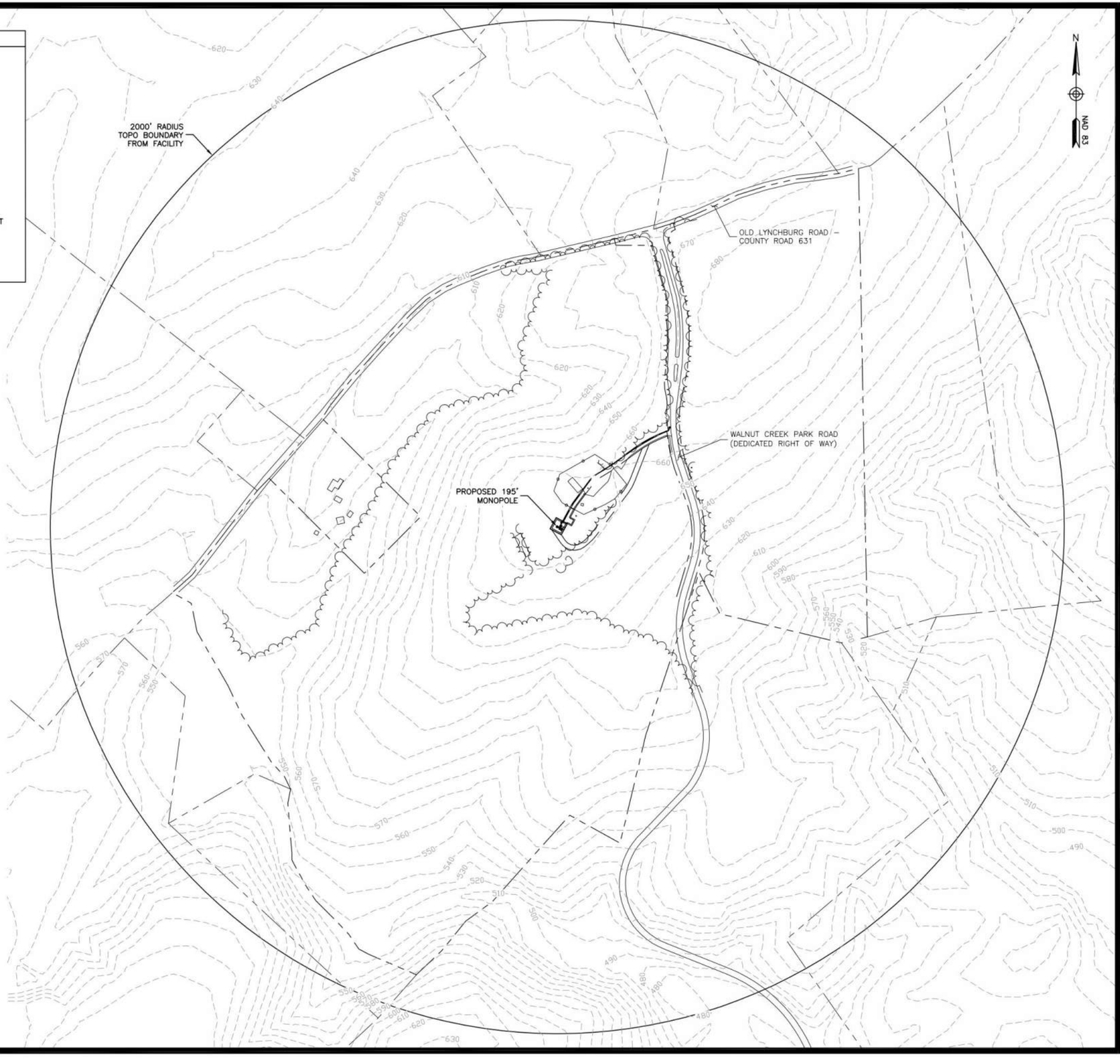
SHEET NUMBER

G–2

| LEGEND | |
|---|---|
| ——— – – ——— | Existing Property Line |
| ——————— | Existing Roadway/Feature |
| ~~~~~~~~~~~ | Existing Tree Line |
| -o-o-o-o-o- | Existing Fence |
| ——— – – ——— | LOCUS PROPERTY LINE |
| ——————— | PROPOSED ROAD |
| ———⊟——— | PROPOSED WOOD FENCE |
| ——— – ——— | PROPOSED ACCESS/UTILITY EASEMENT |
| – – – – – – – – – – | PROPOSED LEASE AREA |
| — — — — — — | PROPOSED UNDERGROUND CONDUIT |

NOTES:

1. SOME EXISTING AND PROPOSED INFORMATION NOT SHOWN FOR CLARITY.
2. PROPOSED TOWER LOCATION AND ACCESS ARE APPROXIMATE PENDING LAND OWNER APPROVAL.
3. TOWER AND FOUNDATION DESIGN BY OTHERS.
4. THIS PLAN IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
5. NO SIGNIFICANT NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY.
6. THE FACILITY IS UNMANNED AND NOT INTENDED FOR HUMAN HABITATION. THERE IS NO HANDICAP ACCESS REQUIRED.
7. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
8. ADJACENT PARCEL BOUNDARIES AND 10' TOPOGRAPHY OBTAINED FROM ALBEMARLE COUNTY GIS.




**2000' TOPO BOUNDARY** (1)

SCALE: 1"=400' FOR 11x17
1"=200' FOR 22x34

0' 200' 400'

verizon

VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222

# WALNUT CREEK PARK - TIER III - PERSONAL WIRELESS FACILITY (NORTH GARDEN)

ZONING DRAWINGS

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Lic No. 0402061023
06/03/22
PROFESSIONAL ENGINEER

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| PROJECT NUMBER: | 50128319 |
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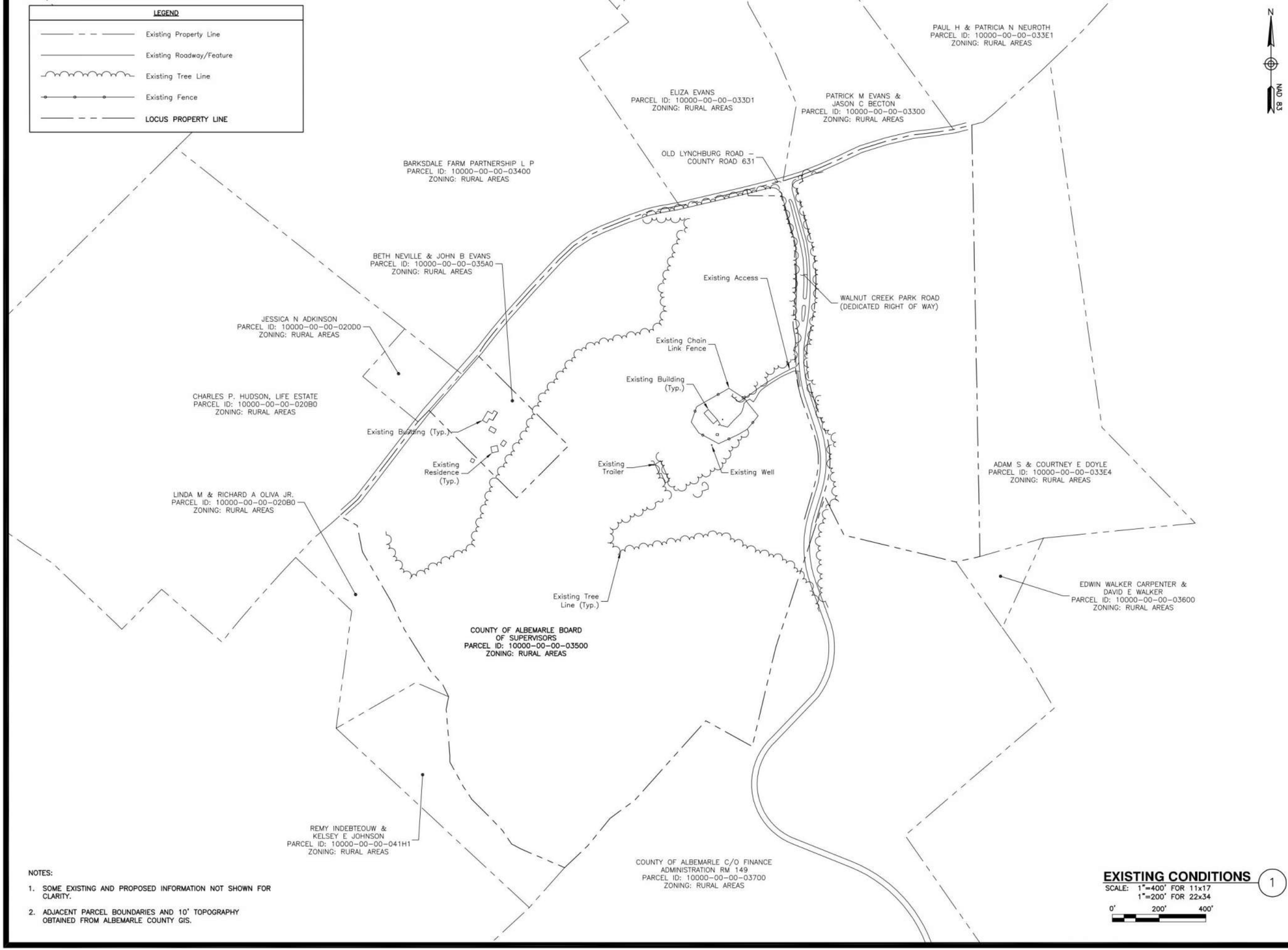
3750 WALNUT CREEK PARK ROAD
NORTH GARDEN, VIRGINIA 22959

SHEET TITLE

2000' TOPO BOUNDARY

SHEET NUMBER

Z-0




NOTES:

1. SOME EXISTING AND PROPOSED INFORMATION NOT SHOWN FOR CLARITY.
2. ADJACENT PARCEL BOUNDARIES AND 10' TOPOGRAPHY OBTAINED FROM ALBEMARLE COUNTY GIS.

**EXISTING CONDITIONS** 1

SCALE: 1"=400' FOR 11x17
1"=200' FOR 22x34

0' 200' 400'

verizon

VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222

# WALNUT CREEK PARK - TIER III - PERSONAL WIRELESS FACILITY (NORTH GARDEN)

ZONING DRAWINGS

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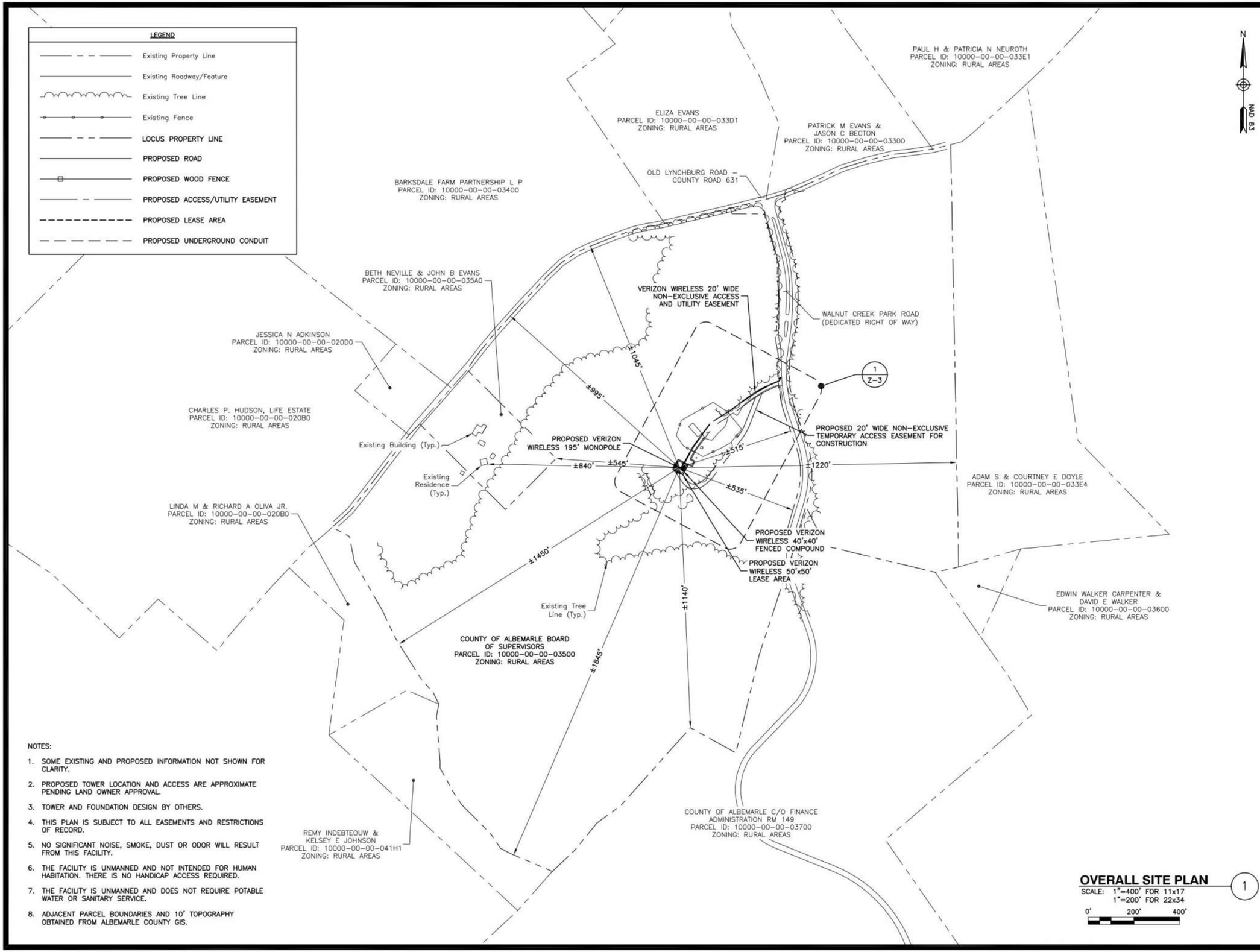
3750 WALNUT CREEK PARK ROAD
NORTH GARDEN, VIRGINIA 22959

SHEET TITLE

EXISTING CONDITIONS

SHEET NUMBER

Z-1




NOTES:

1. SOME EXISTING AND PROPOSED INFORMATION NOT SHOWN FOR CLARITY.
2. PROPOSED TOWER LOCATION AND ACCESS ARE APPROXIMATE PENDING LAND OWNER APPROVAL.
3. TOWER AND FOUNDATION DESIGN BY OTHERS.
4. THIS PLAN IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
5. NO SIGNIFICANT NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY.
6. THE FACILITY IS UNMANNED AND NOT INTENDED FOR HUMAN HABITATION. THERE IS NO HANDICAP ACCESS REQUIRED.
7. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
8. ADJACENT PARCEL BOUNDARIES AND 10' TOPOGRAPHY OBTAINED FROM ALBEMARLE COUNTY GIS.

**OVERALL SITE PLAN** (1)

SCALE: 1"=400' FOR 11x17
1"=200' FOR 22x34

0' 200' 400'

verizon

VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222

# WALNUT CREEK PARK - TIER III - PERSONAL WIRELESS FACILITY (NORTH GARDEN)

ZONING DRAWINGS

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| SITE ADDRESS: | |

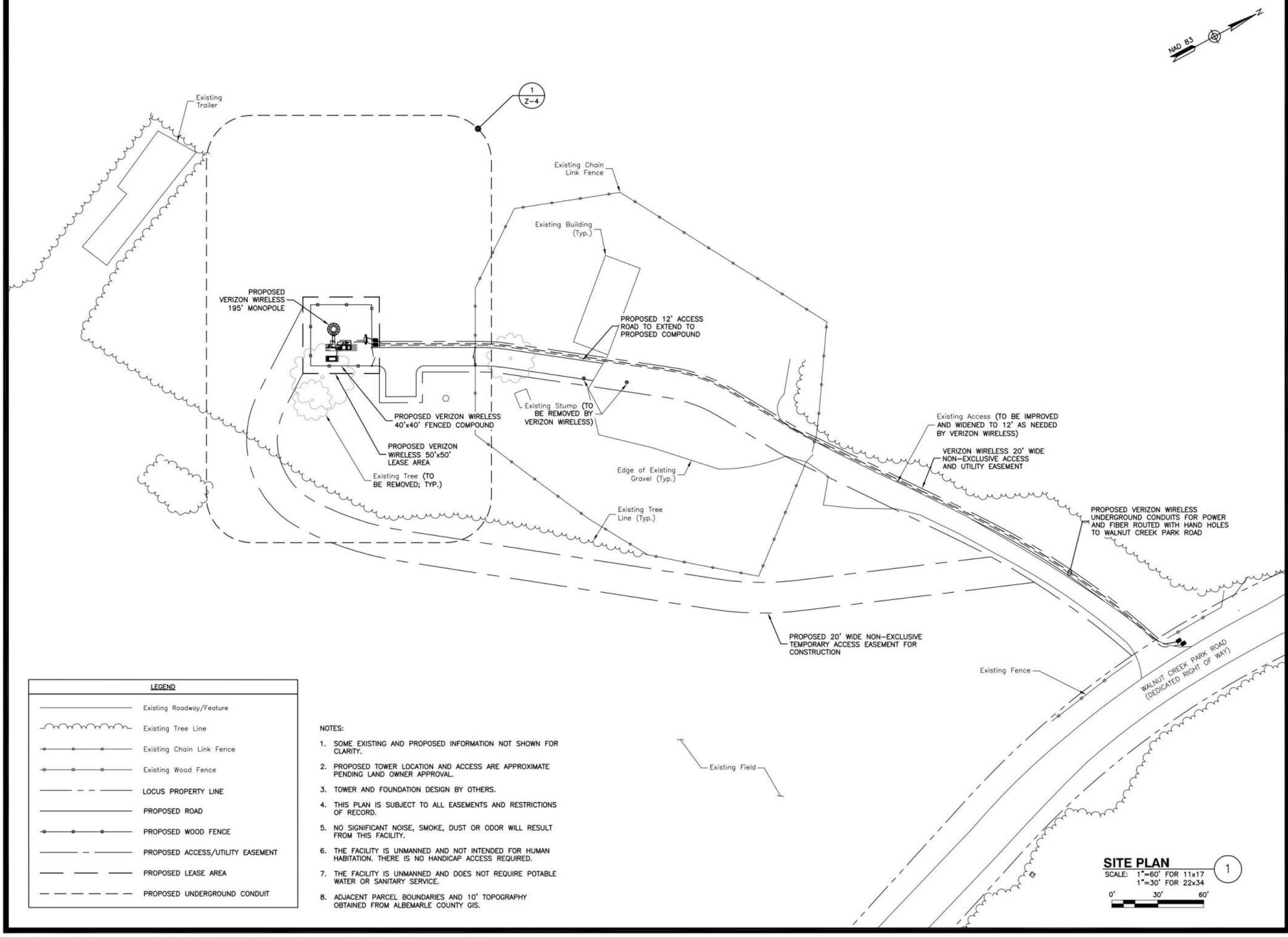
3750 WALNUT CREEK PARK ROAD
NORTH GARDEN, VIRGINIA 22959

SHEET TITLE

OVERALL
SITE PLAN

SHEET NUMBER

Z-2




**SITE PLAN** (1)
SCALE: 1"=60' FOR 11x17
1"=30' FOR 22x34
0' 30' 60'

**LEGEND**

- Existing Roadway/Feature
- Existing Tree Line
- Existing Chain Link Fence
- Existing Wood Fence
- LOCUS PROPERTY LINE
- PROPOSED ROAD
- PROPOSED WOOD FENCE
- PROPOSED ACCESS/UTILITY EASEMENT
- PROPOSED LEASE AREA
- PROPOSED UNDERGROUND CONDUIT

NOTES:

1. SOME EXISTING AND PROPOSED INFORMATION NOT SHOWN FOR CLARITY.
2. PROPOSED TOWER LOCATION AND ACCESS ARE APPROXIMATE PENDING LAND OWNER APPROVAL.
3. TOWER AND FOUNDATION DESIGN BY OTHERS.
4. THIS PLAN IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
5. NO SIGNIFICANT NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY.
6. THE FACILITY IS UNMANNED AND NOT INTENDED FOR HUMAN HABITATION. THERE IS NO HANDICAP ACCESS REQUIRED.
7. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
8. ADJACENT PARCEL BOUNDARIES AND 10' TOPOGRAPHY OBTAINED FROM ALBEMARLE COUNTY GIS.

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VERIZON WIRELESS
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# WALNUT CREEK PARK - TIER III - PERSONAL WIRELESS FACILITY (NORTH GARDEN)

ZONING DRAWINGS

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| REVIEWED BY: | BAR |
| CHECKED BY: | HGS |
| PROJECT NUMBER: | 50128319 |
| SITE ADDRESS: | |

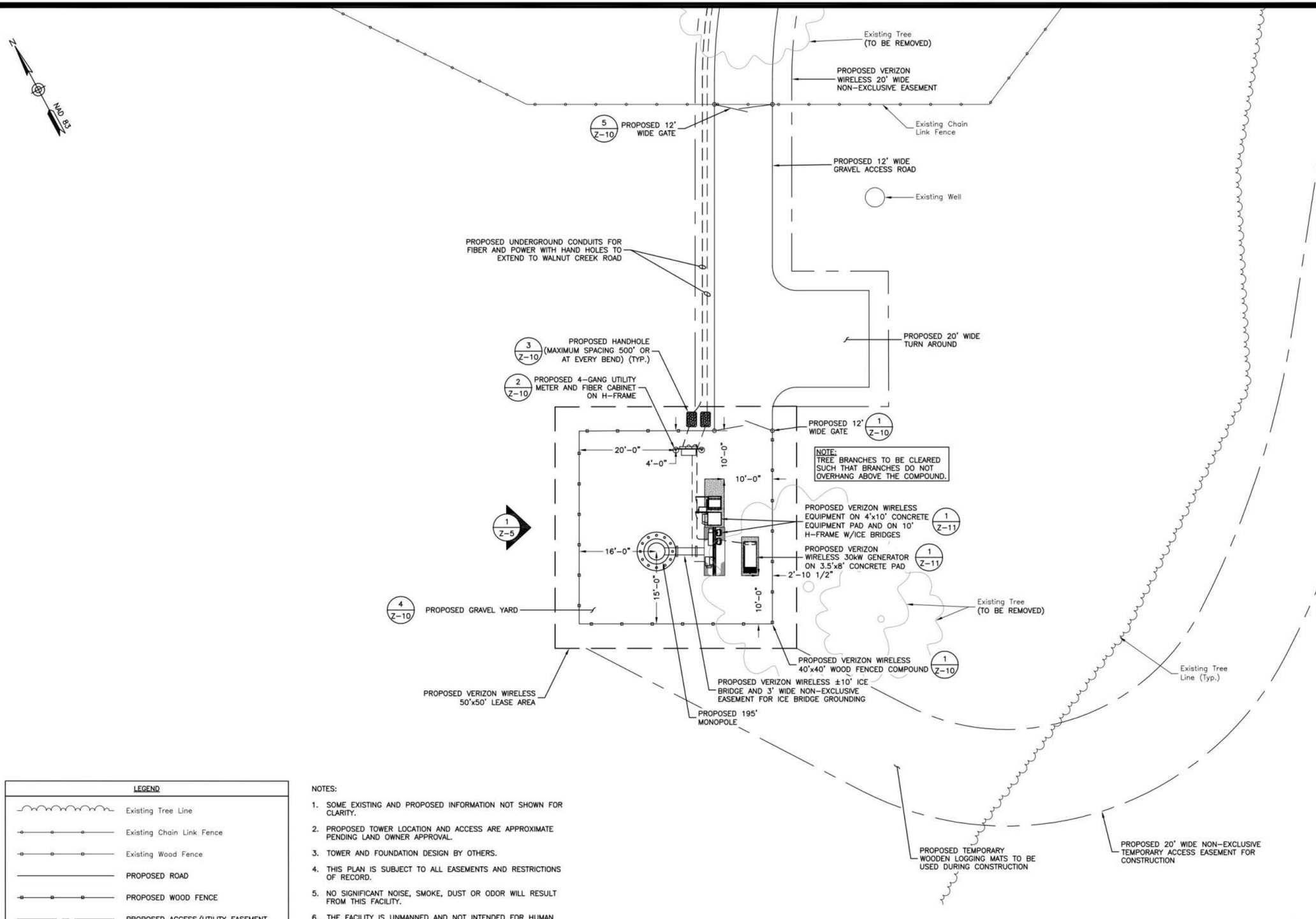
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NORTH GARDEN, VIRGINIA 22959

SHEET TITLE

SITE PLAN

SHEET NUMBER

Z-3




**ENLARGED SITE PLAN** (1)

SCALE: 1"=20' FOR 11x17
1"=10' FOR 22x34

0' 10' 20'

| LEGEND | |
|---|---|
| ~~~~~ | Existing Tree Line |
| -o-o-o- | Existing Chain Link Fence |
| -o-o-o- | Existing Wood Fence |
| ——— | PROPOSED ROAD |
| -o-o-o- | PROPOSED WOOD FENCE |
| ——— – ——— | PROPOSED ACCESS/UTILITY EASEMENT |
| - - - - - - | PROPOSED LEASE AREA |
| — — — — — | PROPOSED UNDERGROUND CONDUIT |

NOTES:

1. SOME EXISTING AND PROPOSED INFORMATION NOT SHOWN FOR CLARITY.
2. PROPOSED TOWER LOCATION AND ACCESS ARE APPROXIMATE PENDING LAND OWNER APPROVAL.
3. TOWER AND FOUNDATION DESIGN BY OTHERS.
4. THIS PLAN IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
5. NO SIGNIFICANT NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY.
6. THE FACILITY IS UNMANNED AND NOT INTENDED FOR HUMAN HABITATION. THERE IS NO HANDICAP ACCESS REQUIRED.
7. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
8. ADJACENT PARCEL BOUNDARIES AND 10' TOPOGRAPHY OBTAINED FROM ALBEMARLE COUNTY GIS.

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RICHMOND, VA 23222

# WALNUT CREEK PARK - TIER III - PERSONAL WIRELESS FACILITY (NORTH GARDEN)

ZONING DRAWINGS

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| CHECKED BY: | HGS |
| PROJECT NUMBER: | 50128319 |
| SITE ADDRESS: | |

3750 WALNUT CREEK PARK ROAD
NORTH GARDEN, VIRGINIA 22959

SHEET TITLE

ENLARGED
SITE PLAN

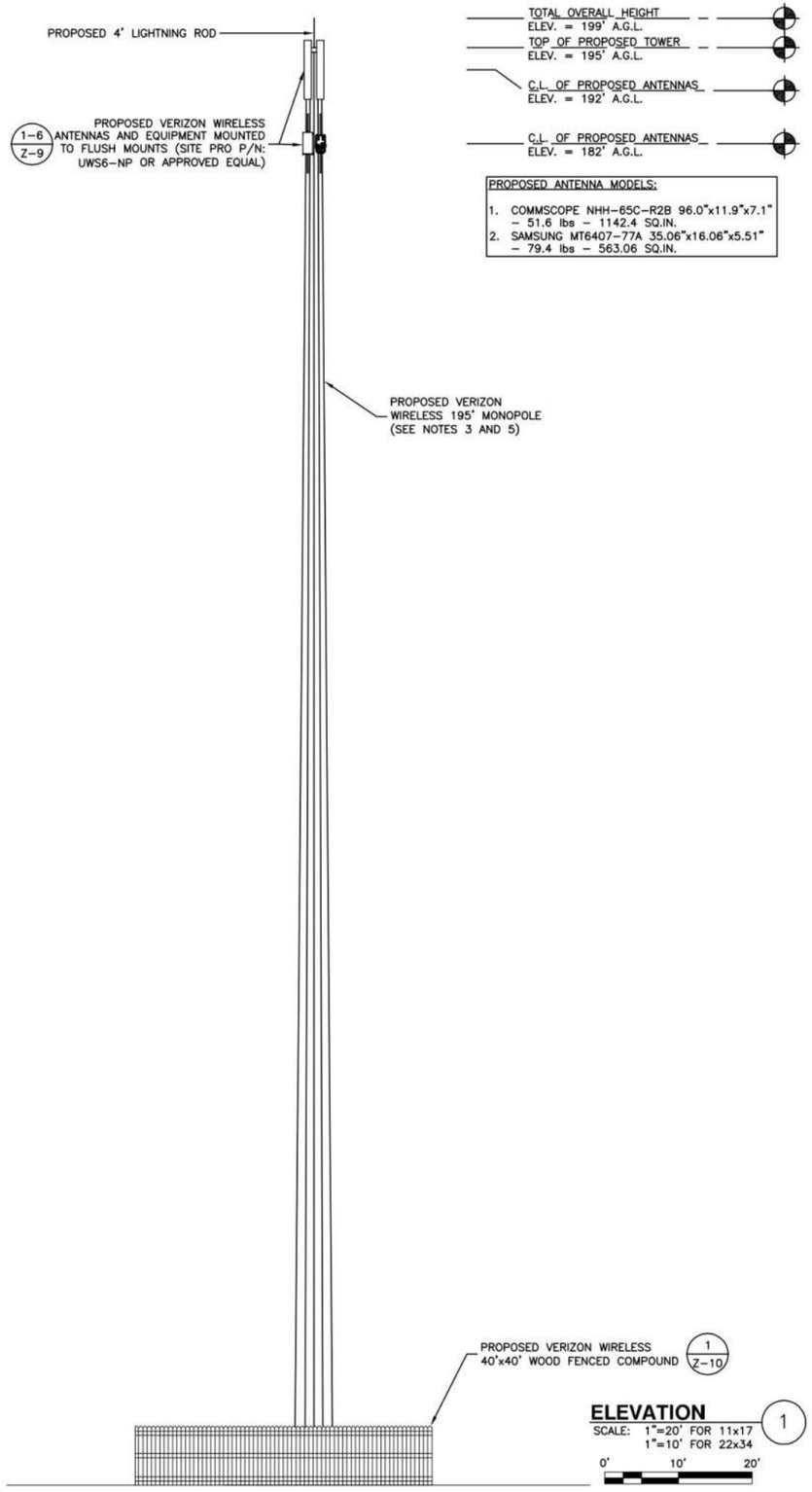
SHEET NUMBER

Z-4

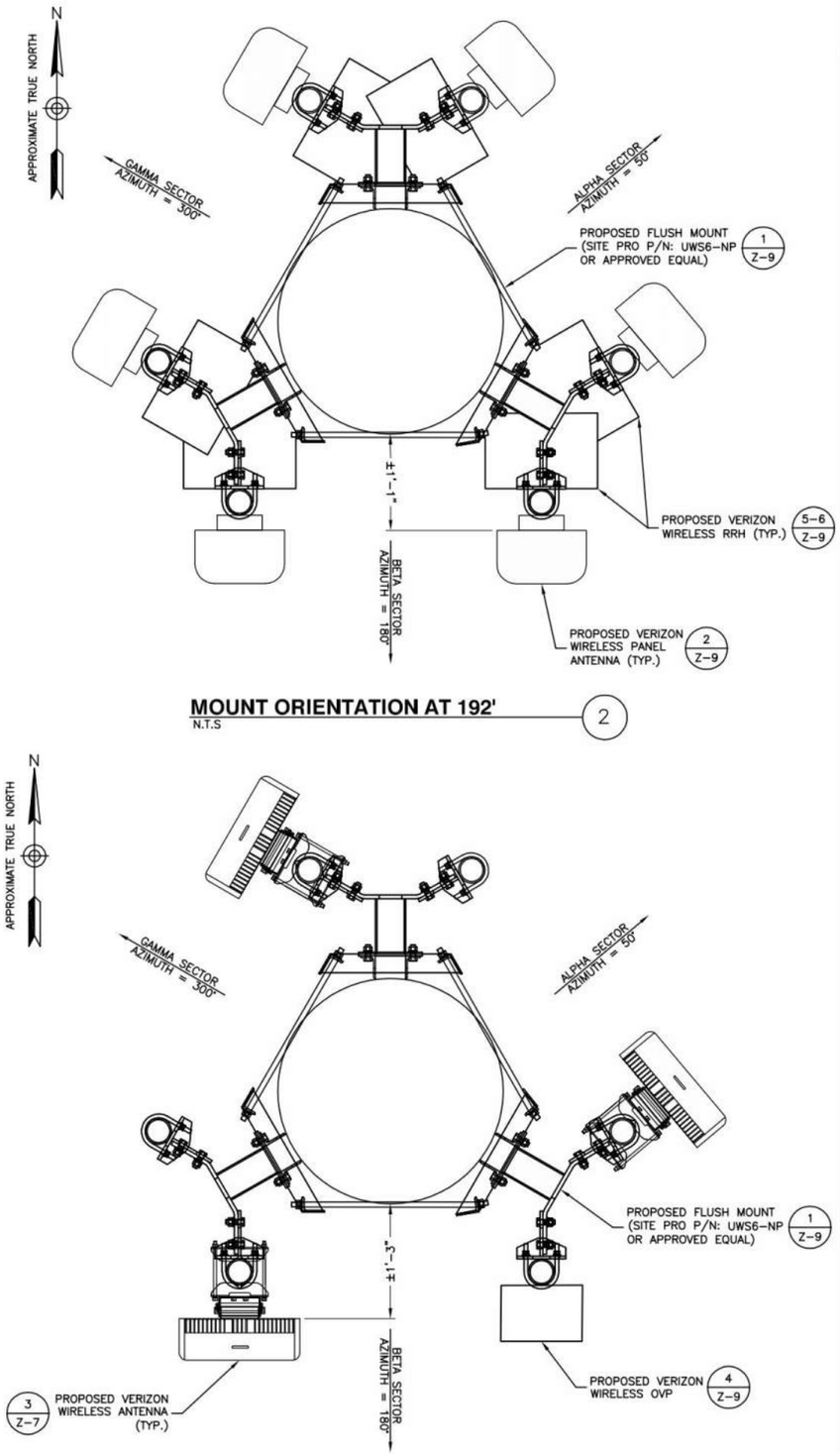
| LEGEND | | |
|---|---|---|
| A.G.L. | – | ABOVE GROUND LEVEL |
| C.L. | – | CENTER LINE |

NOTES:

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2. PROPOSED TOWER LOCATION AND ACCESS ARE APPROXIMATE PENDING LAND OWNER APPROVAL.
3. TOWER AND FOUNDATION DESIGN BY OTHERS.
4. THIS PLAN IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
5. NO SIGNIFICANT NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY.
6. THE FACILITY IS UNMANNED AND NOT INTENDED FOR HUMAN HABITATION. THERE IS NO HANDICAP ACCESS REQUIRED.
7. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
8. ADJACENT PARCEL BOUNDARIES AND 10' TOPOGRAPHY OBTAINED FROM ALBEMARLE COUNTY GIS.
9. THE PROPOSED ANTENNAS, REMOTE RADIO HEADS, AND TOWER TO BE PAINTED SHERWIN WILLIAMS JAVA BROWN #6090 OR AS DIRECTED BY THE COUNTY.
10. NEW ANTENNAS WILL BE INSTALLED USING A FLUSH-DESIGN WITH LOW-PROFILE MOUNTING BRACKETS SO THAT NO POINT ON THE BACK OF THE ANTENNAS SHALL BE MORE THAN 18 INCHES FROM THE FACE OF THE MONOPOLE.
11. ANTENNAS WILL BE CONNECTED TO EXISTING CABLES THAT RUN VERTICALLY INSIDE THE MONOPOLE STRUCTURE.
12. THE MAXIMUM BASE DIAMETER OF THE MONOPOLE SHALL NOT EXCEED 30" AND THE MAXIMUM DIAMETER AT THE TOP SHALL NOT EXCEED 18".
13. AZIMUTHS ARE SHOWN PER THE RF DESIGN AT THE TIME OF SITE PLANS. EQUIPMENT LAYOUT SHOWN IS GENERIC. CONTRACTOR TO CONFIRM EQUIPMENT AND AZIMUTHS WITH THE LATEST RFDS PRIOR TO INSTALLATION.
14. INSTALL EQUIPMENT PER MANUFACTURERS RECOMMENDATIONS OR AS SHOWN ABOVE.
15. ANTENNAS TO BE INSTALLED SUCH THAT THEY ARE CENTERED VERTICALLY ON THE MOUNT.
16. RRH(s) & OVP(s) TO BE INSTALLED BEHIND PROPOSED ANTENNAS OR ON MOUNT AS SHOWN.
17. ALL EQUIPMENT SHALL BE GROUNDED PER VERIZON WIRELESS STANDARDS AND MANUFACTURERS RECOMMENDATIONS.




**ELEVATION** 1
SCALE: 1"=20' FOR 11x17, 1"=10' FOR 22x34
0' 10' 20'




**MOUNT ORIENTATION AT 192'** 2
N.T.S




**MOUNT ORIENTATION AT 182'** 3
N.T.S

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# WALNUT CREEK PARK - TIER III - PERSONAL WIRELESS FACILITY (NORTH GARDEN)

ZONING DRAWINGS

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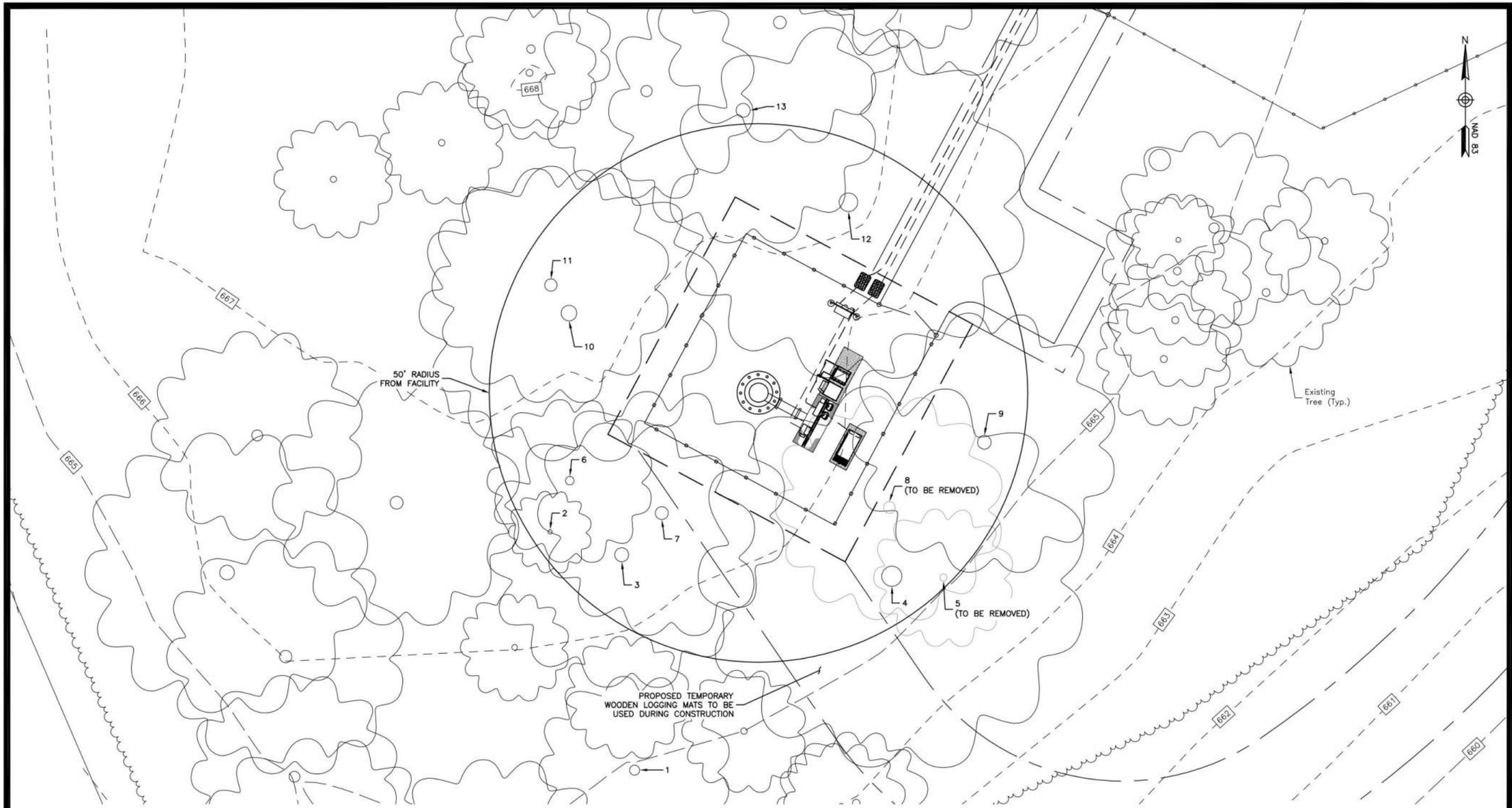
3750 WALNUT CREEK PARK ROAD
NORTH GARDEN, VIRGINIA 22959

SHEET TITLE

ELEVATION

SHEET NUMBER

Z–5




| TREE DATA | | | | | |
|---|---|---|---|---|---|
| NUMBER | TREE TYPE | DIAMETER | CANOPY | TOP OF TREE ELEVATION | TREE HEIGHT |
| 1 | OAK | 37" | 24' | ±742.3' AMSL | ±77' |
| 3 | OAK | 14" | 16' | ±749.5' AMSL | ±84.5' |
| 4 | OAK | 28" | 52' | ±752.5' AMSL | ±86' |
| 5 | OAK | 31" | 75' | ±752.5' AMSL | ±86' |
| 6 | HICKORY | 10" | 27' | ±752.5' AMSL | ±87' |
| 7 | OAK | 17" | 32' | ±749.9' AMSL | ±85' |
| 8 | OAK | 26" | 48' | ±749.5' AMSL | ±83' |
| 9 | POPLAR | 29" | 44' | ±752.5' AMSL | ±87' |
| 10 | OAK (TWIN) | 27" | 51' | ±749.5' AMSL | ±84' |
| 11 | OAK | 27" | 58' | ±754.4' AMSL | ±87' |
| 12 | OAK | 13" | 46' | ±754.4' AMSL | ±87' |
| 13 | OAK | 28" | 69' | ±754.5' AMSL | ±87' |
| 14 | HICKORY | 52" | 32' | ±754.5' AMSL | ±87' |

**LEGEND**

- Existing Tree Line
- Existing Chain Link Fence
- Existing Minor Contors
- 665 Existing Major Contors
- PROPOSED ROAD
- PROPOSED WOOD FENCE
- PROPOSED ACCESS/UTILITY EASEMENT
- PROPOSED LEASE AREA
- PROPOSED UNDERGROUND CONDUIT

NOTE:
TREE BRANCHES TO BE CLEARED SUCH THAT BRANCHES DO NOT OVERHANG ABOVE THE COMPOUND.

NOTES:

1. SOME EXISTING AND PROPOSED INFORMATION NOT SHOWN FOR CLARITY.
2. PROPOSED TOWER LOCATION AND ACCESS ARE APPROXIMATE PENDING LAND OWNER APPROVAL.
3. TOWER AND FOUNDATION DESIGN BY OTHERS.
4. THIS PLAN IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
5. NO SIGNIFICANT NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY.
6. THE FACILITY IS UNMANNED AND NOT INTENDED FOR HUMAN HABITATION. THERE IS NO HANDICAP ACCESS REQUIRED.
7. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SANITARY SERVICE.
8. ADJACENT PARCEL BOUNDARIES AND 10' TOPOGRAPHY OBTAINED FROM ALBEMARLE COUNTY GIS.

**TREE SURVEY** 1
SCALE: 1"=20' FOR 11x17
1"=10' FOR 22x34
0' 10' 20'

verizon

VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222

# WALNUT CREEK PARK - TIER III - PERSONAL WIRELESS FACILITY (NORTH GARDEN)

ZONING DRAWINGS

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| 0 | 06/03/22 | FOR ZONING |

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HILLARY G. SIEGALL
Lic No. 0402061023
06/03/22
PROFESSIONAL ENGINEER

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| DRAWN BY: | LMW |
| REVIEWED BY: | BAR |
| CHECKED BY: | HGS |
| PROJECT NUMBER: | 50128319 |
| SITE ADDRESS: | |

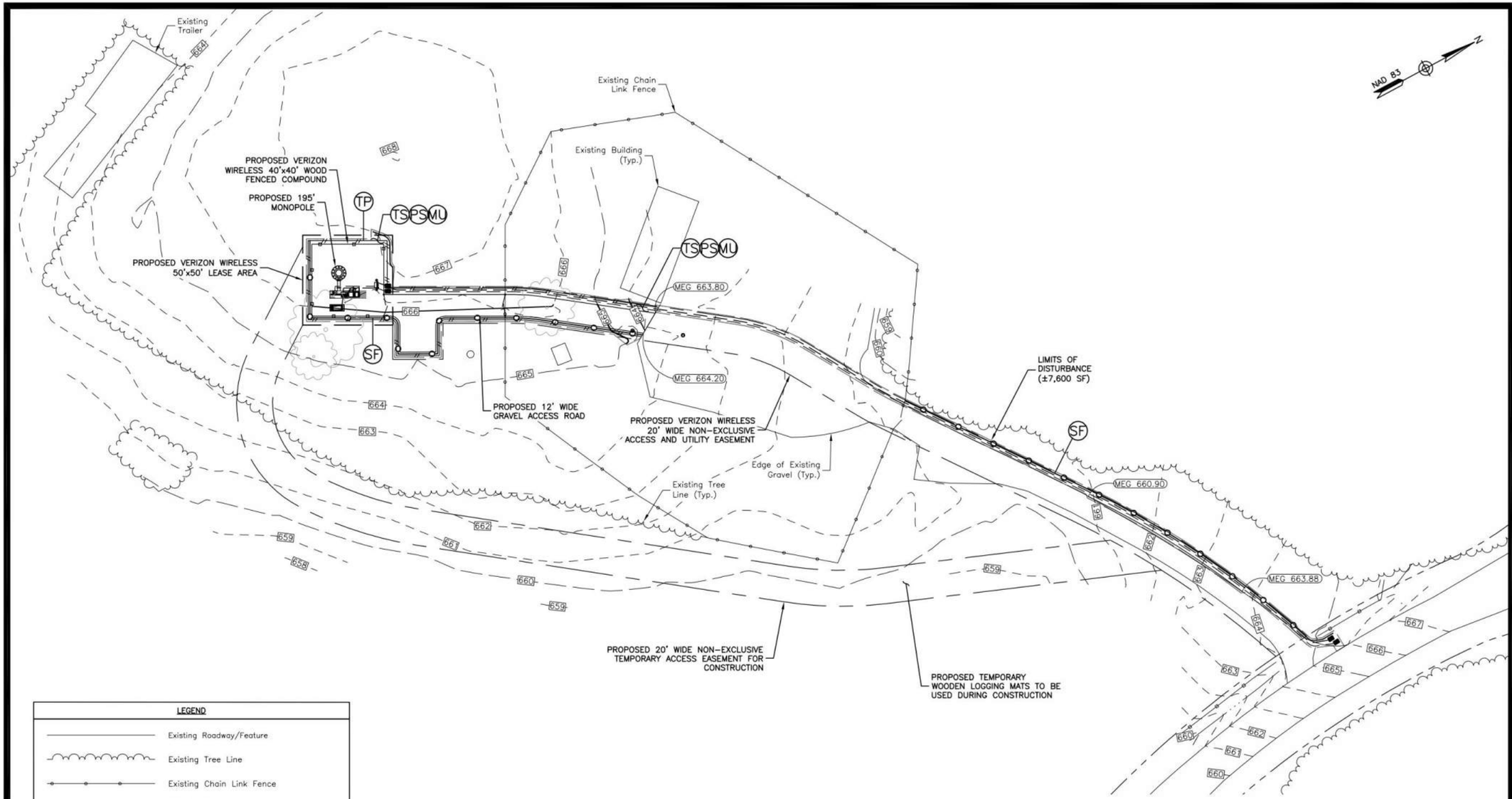
3750 WALNUT CREEK PARK ROAD
NORTH GARDEN, VIRGINIA 22959

SHEET TITLE

TREE SURVEY

SHEET NUMBER

Z-6




**GRADING AND EROSION CONTROL PLAN** (1)

SCALE: 1"=60' FOR 11x17
1"=30' FOR 22x34

0' 30' 60'

LEGEND

- Existing Roadway/Feature
- Existing Tree Line
- Existing Chain Link Fence
- Existing Wood Fence
- Existing Minor Contors
- 665 Existing Major Contors
- LOCUS PROPERTY LINE
- PROPOSED ROAD
- PROPOSED WOOD FENCE
- PROPOSED ACCESS/UTILITY EASEMENT
- PROPOSED LEASE AREA
- PROPOSED UNDERGROUND CONDUIT
- SP 50.00 PROPOSED SPOT ELEVATION
- MEG – MATCH EXISTING GRADE
- 1250 PROPOSED MAJOR CONTOUR

VIRGINIA UNIFORM CODING SYSTEM
FOR EROSION AND SEDIMENT CONTROL PRACTICES

| | | |
|---|---|---|
| 3.05 | SILT FENCE | SF |
| 3.31 | TEMPORARY SEEDING | TS |
| 3.32 | PERMANENT SEEDING | PS |
| 3.35 | MULCHING | MU |
| 3.38 | TREE PROTECTION | TP |

NOTES:

1. SOME EXISTING AND PROPOSED INFORMATION NOT SHOWN FOR CLARITY.
2. PROPOSED TOWER LOCATION AND ACCESS ARE APPROXIMATE PENDING LAND OWNER APPROVAL.
3. TOWER AND FOUNDATION DESIGN BY OTHERS.
4. THIS PLAN IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.
5. NO SIGNIFICANT NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS FACILITY.
6. THE FACILITY IS UNMANNED AND NOT INTENDED FOR HUMAN HABITATION. THERE IS NO HANDICAP ACCESS REQUIRED.
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8. ADJACENT PARCEL BOUNDARIES AND 10' TOPOGRAPHY OBTAINED FROM ALBEMARLE COUNTY GIS.

verizon

VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222

# WALNUT CREEK PARK - TIER III - PERSONAL WIRELESS FACILITY (NORTH GARDEN)

ZONING DRAWINGS

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SITE ADDRESS:

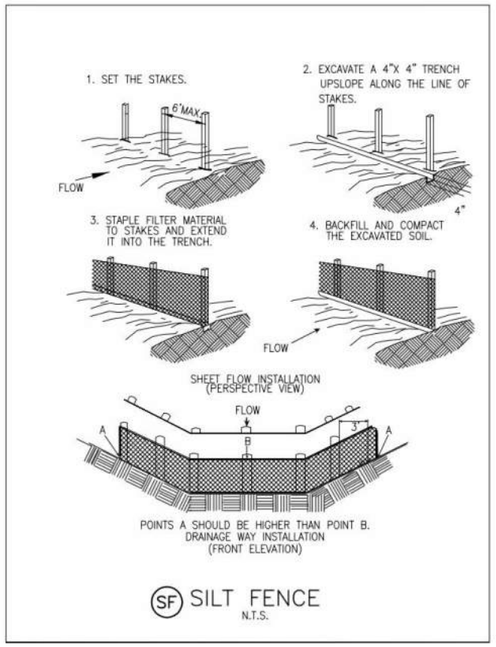
3750 WALNUT CREEK PARK ROAD
NORTH GARDEN, VIRGINIA 22959

SHEET TITLE

GRADING & EROSION CONTROL PLAN

SHEET NUMBER

Z–7




(SF) SILT FENCE
N.T.S.

(PS) TABLE 3.32-D
(Revised June 2003)
PERMANENT SEEDING SPECIFICATIONS FOR PIEDMONT AREA

| SEED[1] | | |
|---|---|---|
| LAND USE | SPECIES | APPLICATION PER ACRE |
| Minimum Care Lawn (Commercial or Residential) | Tall Fescue[1]<br>Perennial Ryegrass<br>Kentucky Bluegrass[1] | 95-100%<br>0-5%<br>0-5%<br>TOTAL: 175-200 lbs. |
| High-Maintenance Lawn | Tall Fescue[1] | TOTAL: 200-250 lbs. |
| General Slope (3:1 or less) | Tall Fescue[1]<br>Red Top Grass or Creeping Red Fescue<br>Seasonal Nurse Crop[2] | 128 lbs.<br>2 lbs.<br>20 lbs.<br>TOTAL: 150 lbs. |
| Low-Maintenance Slope (Steeper than 3:1) | Tall Fescue[1]<br>Red Top Grass or Creeping Red Fescue<br>Seasonal Nurse Crop[2]<br>Crownvetch[3] | 108 lbs.<br>2 lbs.<br>20 lbs.<br>20 lbs.<br>TOTAL: 150 lbs. |

1 - When selecting varieties of turfgrass, use the Virginia Crop Improvement Association (VCIA) recommended turfgrass variety list. Quality seed will bear a label indicating that they are approved by VCIA. A current turfgrass variety list is available at the local County Extension office or through VCIA at 804-746-4664 or at http://pubs.ces.vt.edu/html/Turf/turfpublications/publications2.html

2 - Use seasonal nurse crop in accordance with seeding dates as stated below:

| | |
|---|---|
| February 16th - April | Annual Rye |
| May 1st - August 15th | Foxtail Millet |
| August 16th - October | Annual Rye |
| November - February 15th | Winter Rye |

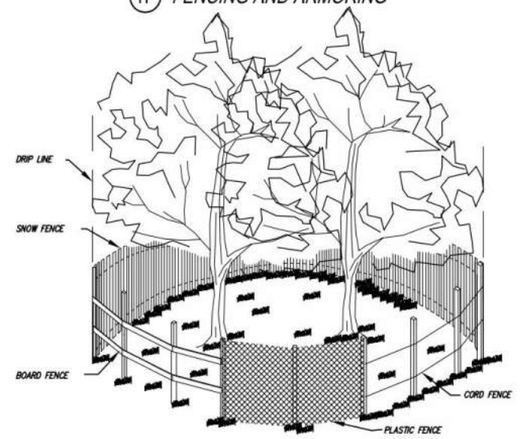
3 - Substitute Sericea lespedeza for Crownvetch east of Farmville, VA (May through September use hulled seed, all other periods, use unhulled Sericea). If Flatpea is used, increase rate to 30 lbs./acre. If Weeping Lovegrass is used, include in any slope or low maintenance mixture during warmer seeding periods, increase to 30 -40

**FERTILIZER & LIME**

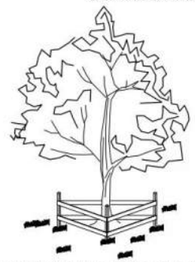
- Apply 10-20-10 **fertilizer** at a rate of 500 lbs. / acre (or 12 lbs. / 1,000 sq. ft.)
- Apply **Pulverized Agricultural Limestone** at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

**NOTE:**
- A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.
- Incorporate the lime and fertilizer into the top 4 – 6 inches of the soil by disking or by other means.
- When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin # 4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/e&s.htm#pubs

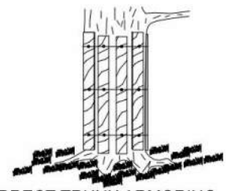
(TP) FENCING AND ARMORING




CORRECT METHODS OF TREE FENCING



TRIANGULAR BOARD FENCE



CORRECT TRUNK ARMORING

(TS) TABLE 3.31-B
(Revised June 2003)
TEMPORARY SEEDING SPECIFICATIONS
QUICK REFERENCE FOR ALL REGIONS

| SEED | | |
|---|---|---|
| APPLICATION DATES | SPECIES | APPLICATION RATES |
| Sept. 1 - Feb. 15 | 50/50 Mix of Annual Ryegrass (lolium multi-florum) & Cereal (Winter) Rye (Secale cereale) | 50 -100 (lbs/acre) |
| Feb. 16 - Apr. 30 | Annual Ryegrass (lolium multi-florum) | 80 - 100 (lbs/acre) |
| May 1 - Aug. 31 | German Millet | 50 (lbs/acre) |

**FERTILIZER & LIME**

- Apply 10-10-10 **fertilizer** at a rate of 450 lbs. / acre (or 10 lbs. / 1,000 sq. ft.)
- Apply **Pulverized Agricultural Limestone** at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

**NOTE:**
1 - A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.
2 - Incorporate the lime and fertilizer into the top 4 – 6 inches of the soil by disking or by other means.
3 - When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin # 4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/e&s.htm#pubs

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VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222

**WALNUT CREEK PARK - TIER III - PERSONAL WIRELESS FACILITY (NORTH GARDEN)**

ZONING DRAWINGS

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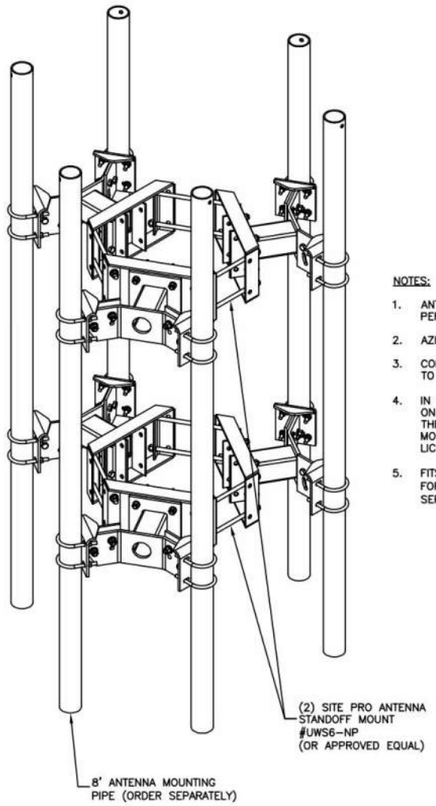
3750 WALNUT CREEK PARK ROAD
NORTH GARDEN, VIRGINIA 22959

SHEET TITLE

GRADING & EROSION CONTROL DETAILS

SHEET NUMBER

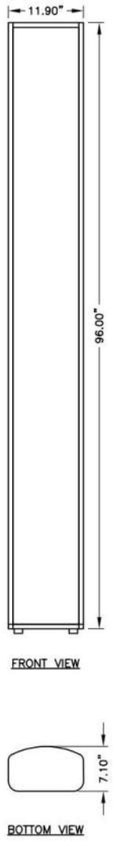
Z-8




NOTES:

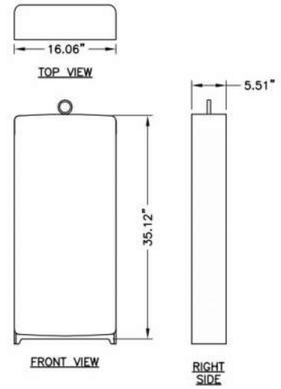
1. ANTENNA MOUNTING FRAME TO BE INSTALLED PER TOWER DESIGN & STRUCTURAL ANALYSIS.
2. AZIMUTHS BASED ON TRUE NORTH.
3. CONTRACTOR TO VERIFY FINAL AZIMUTHS PRIOR TO ANTENNA INSTALLATION.
4. IN THE EVENT THE RRH'S ARE TO BE MOUNTED ON THE ANTENNA PIPE MOUNT WITH ANTENNA, THE CONTRACTOR SHALL ENSURE THE ANTENNA MOUNT IS REINFORCED AND APPROVED BY A LICENSED STRUCTURAL ENGINEER.
5. FITS 10 3/4" TO 28" DIAMETER MONOPOLES. FOR POLE SIZES 28" TO 42" DIAMETER ORDER SEPARATELY PART # LP-42

**ANTENNA STANDOFF MOUNTING DETAIL** (1)
SCALE: N.T.S.



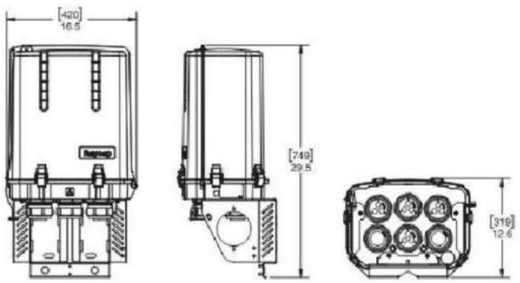

WEIGHT: 51.6 LBS
VOLUME: 4.69 CU. FT.

**COMMSCOPE NHH-65C-R2B (PANEL ANTENNA)** (2)
SCALE: N.T.S.

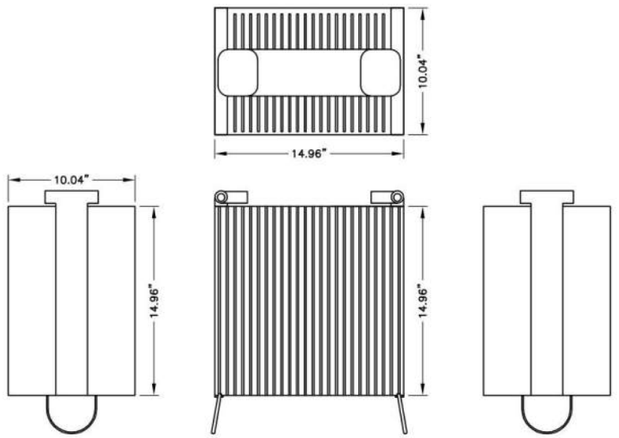



WEIGHT: 87.1 LBS
VOLUME: 1.80 CU. FT.

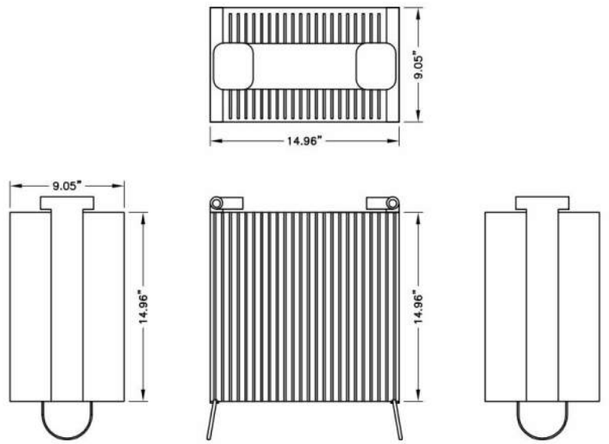
**MT6407-77A W/INTEGRATED RRH** (3)
SCALE: N.T.S.




**RCMDC-6627-PF-48 OVP-12 BY RAYCAP** (4)
SCALE: N.T.S.




**SAMSUNG B2/B66A RRH ORAN (RF4439d-25A)** (5)
SCALE: N.T.S.




**SAMSUNG B5/B13 RRH ORAN (RF4440d-13A)** (6)
SCALE: N.T.S.

verizon

VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222

# WALNUT CREEK PARK - TIER III - PERSONAL WIRELESS FACILITY (NORTH GARDEN)

ZONING DRAWINGS

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| PROJECT NUMBER: | 50128319 |
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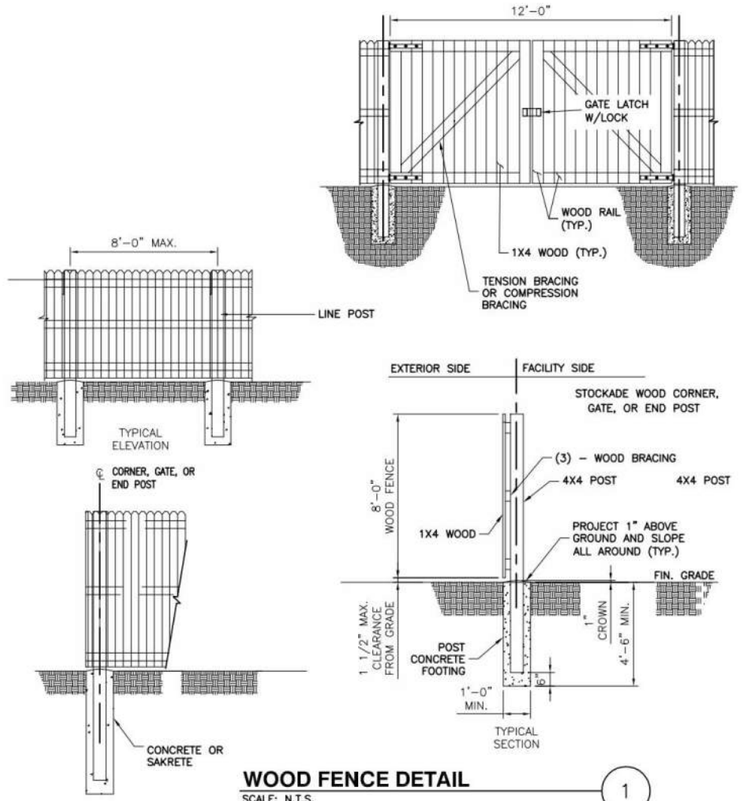
3750 WALNUT CREEK PARK ROAD
NORTH GARDEN, VIRGINIA 22959

SHEET TITLE

CONSTRUCTION DETAILS

SHEET NUMBER

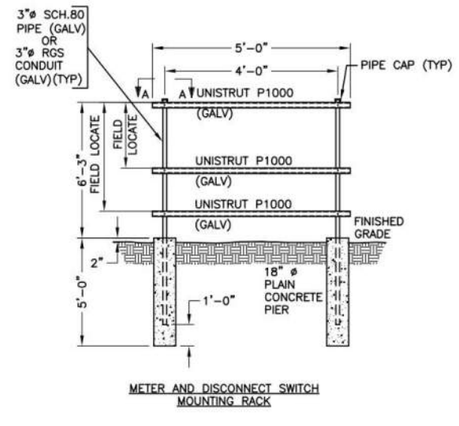
Z-9




## WOOD FENCE DETAIL

SCALE: N.T.S.

1

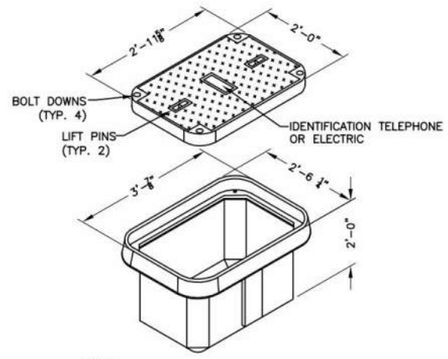



METER AND DISCONNECT SWITCH MOUNTING RACK

## UTILITY SERVICE STAND

SCALE: N.T.S.

2



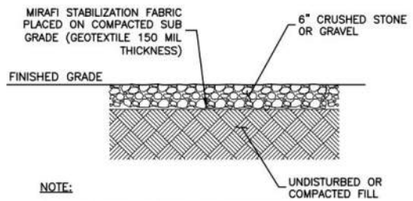

NOTE:

1. ALL STUB-UP CONDUITS INSIDE PULL BOXES WILL BE 6" FROM TOP OF BOX AND HAVE PULL STRING AND CAPS.

## HAND HOLE/ PULL BOX DETAIL

SCALE: N.T.S.

3



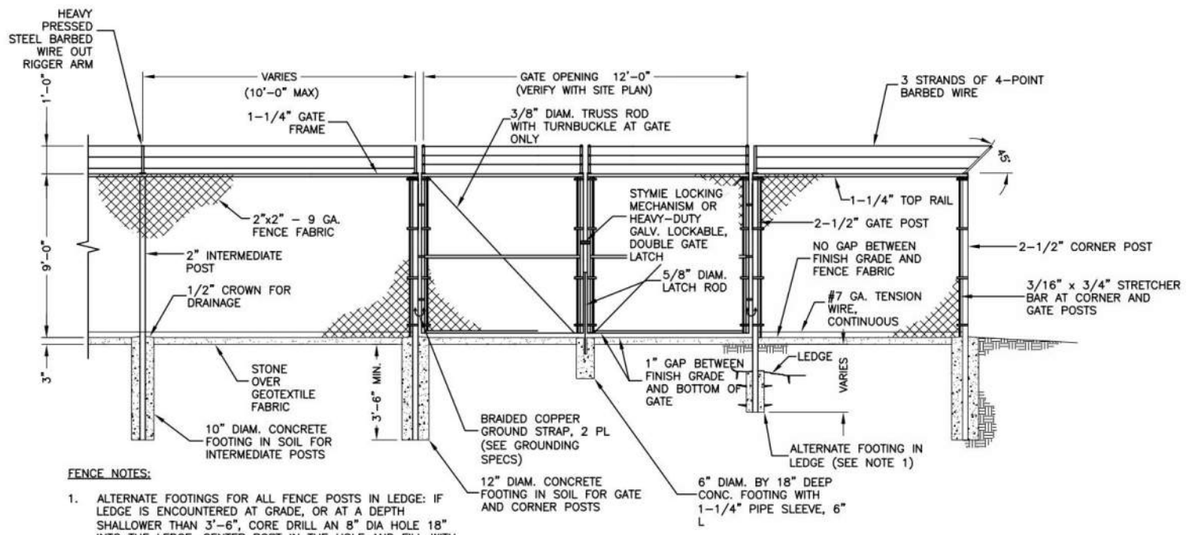

NOTE:

1. FILL SHALL CONSIST OF CLEAN SOIL. NO DELETERIOUS MATERIALS OR ORGANICS TO BE USED.

## GRAVEL YARD DETAIL

SCALE: N.T.S.

4




FENCE NOTES:

1. ALTERNATE FOOTINGS FOR ALL FENCE POSTS IN LEDGE: IF LEDGE IS ENCOUNTERED AT GRADE, OR AT A DEPTH SHALLOWER THAN 3'-6", CORE DRILL AN 8" DIA HOLE 18" INTO THE LEDGE. CENTER POST IN THE HOLE AND FILL WITH CONCRETE OR GROUT. IF LEDGE IS BELOW FINISH GRADE, COAT BACKFILLED SECTION OF POST WITH COAL TAR, AND BACKFILL WITH WELL-DRAINING GRAVEL.
2. ATTACH EACH GATE WITH 1-1/2 PAIR OF NON-LIFT-OFF TYPE, MALLEABLE IRON OR FORGING, PIN-TYPE HINGES. ASSEMBLIES SHALL ALLOW FOR 180° OF GATE TRAVEL.

## FENCE AND ACCESS GATE

SCALE: N.T.S.

5

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VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222

# WALNUT CREEK PARK - TIER III - PERSONAL WIRELESS FACILITY (NORTH GARDEN)

| ZONING DRAWINGS | | |
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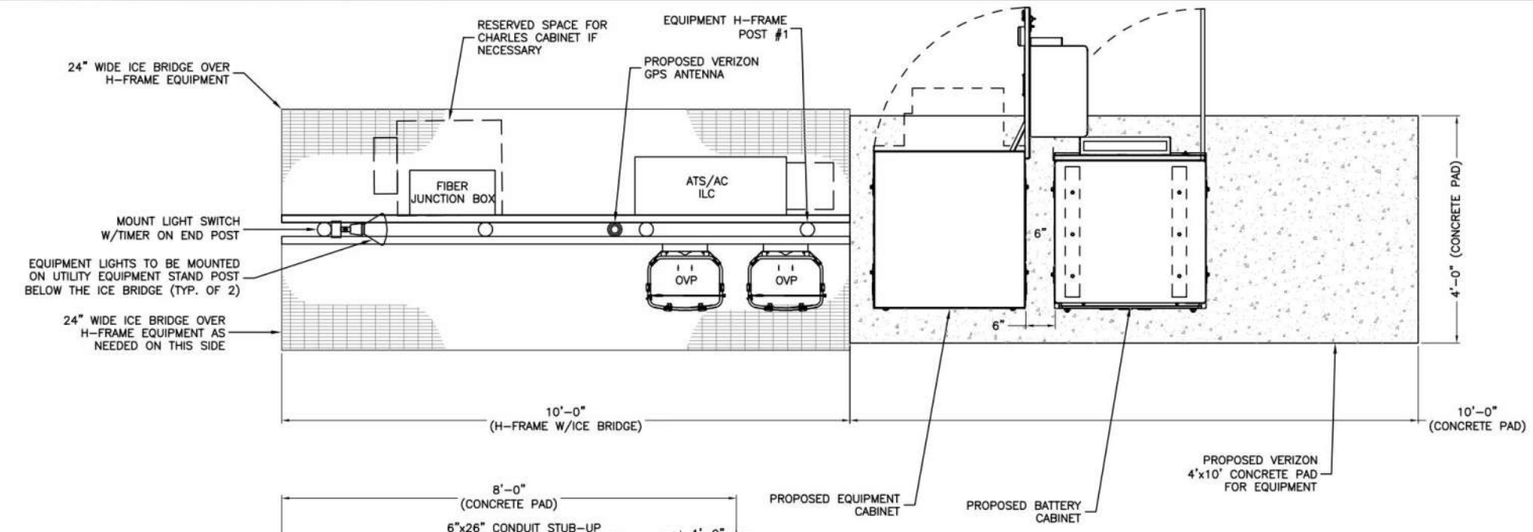
3750 WALNUT CREEK PARK ROAD
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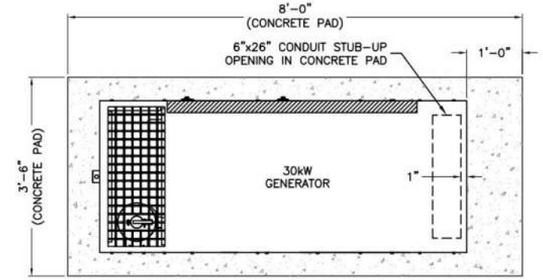
SHEET TITLE

CONSTRUCTION DETAILS

SHEET NUMBER

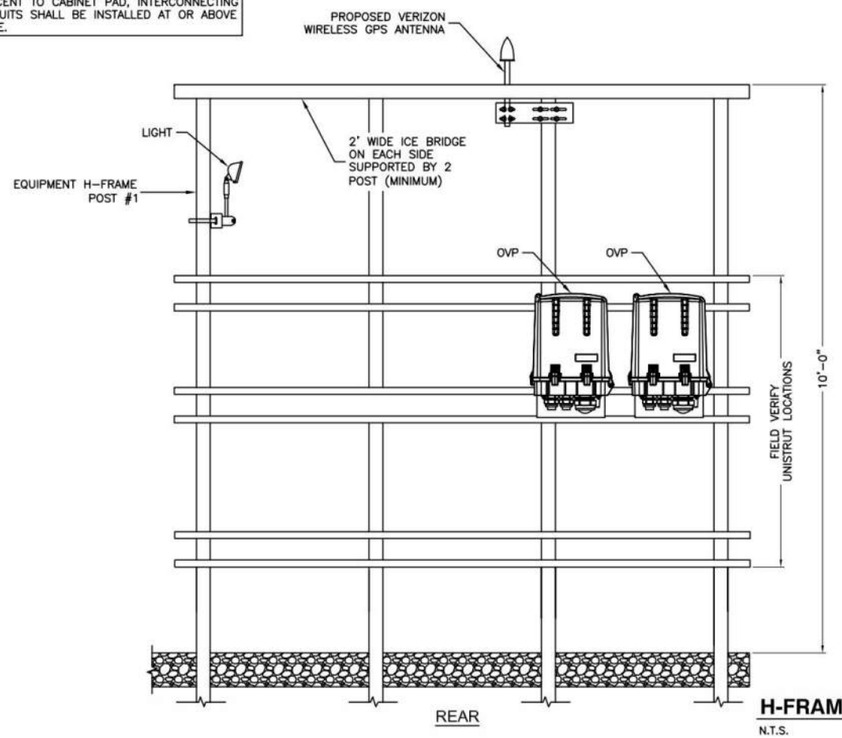
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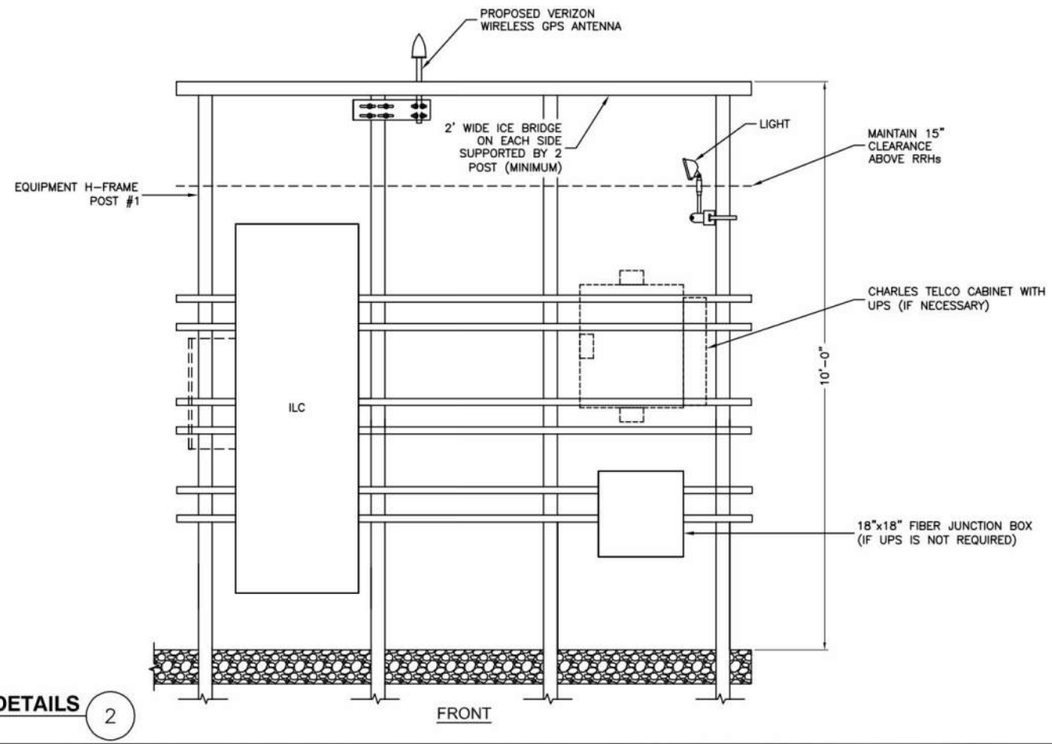



**EQUIPMENT LAYOUT PLAN** 1
N.T.S.

NOTE: WHEN EQUIPMENT FRAME IS INSTALLED ADJACENT TO CABINET PAD, INTERCONNECTING CONDUITS SHALL BE INSTALLED AT OR ABOVE GRADE.




**H-FRAME RISER DETAILS** 2
N.T.S.

VERIZON WIRELESS EQUIPMENT:

1. CHARLES INDUSTRIES CUBE-SS4B231PX2 EQUIPMENT CABINET WITH BATTERY INCLUDED.
2. CHARLES INDUSTRIES CUBE-BB48E2HNA BATTERY CABINET INCLUDED.
3. RAYCAP OVP

CONTRACTOR PROVIDED EQUIPMENT*:

1. 18"x18" FIBER JUNCTION BOX, NEMA 3R, CABINET ENCLOSURE WITH WOODEN BACKBOARD, PADLOCK LATCH, AND COMBINATION LOCK (USE FOR DARK FIBER SITES).
2. 26" WIDE x 78" TALL x 12" DEEP ASCO D300L SERIES POWER TRANSFER LOAD CENTER MODEL AA300G-1PH-N-3R INTEGRATED LOAD CENTER "ILC" WITH COMBINATION PADLOCK
3. 22" WIDE x 26" TALL x 20" DEEP CHARLES INDUSTRIES CUBE-RL1003C-A WITH HEAT EXCHANGER (120V) AND WITH TRIPP-LITE UPS PART #SM1500RMXL2UTAA INSIDE (ONLY REQUIRED WHEN VzT PROVIDES LIT FIBER. UTILITY COORDINATOR MUST VERIFY IF THIS IS NEEDED)
4. COORDINATE ADDITIONAL ENTRY GATE LOCK(S) WITH CONSTRUCTION MANAGER

*THIS IS NOT A COMPREHENSIVE LIST. IT SHOULD BE ASSUMED BY THE CONTRACTOR THAT ALL OTHER ITEMS DETAILED IN THIS SET OF DRAWINGS SHALL BE PROVIDED BY THE CONTRACTOR.*

NOTES:

1. SEE CABLE/CONDUIT ROUTING SHEET.
2. BOTTOM OF OVPs SHALL NOT EXCEED 36" ABOVE FINISHED GRADE

verizon

VERIZON WIRELESS
1831 RADY COURT
RICHMOND, VA 23222

# WALNUT CREEK PARK - TIER III - PERSONAL WIRELESS FACILITY (NORTH GARDEN)

ZONING DRAWINGS

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Dewberry

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COMMONWEALTH OF VIRGINIA
HILLARY G. SIEGALL
Lic No. 0402061023
06/03/22
PROFESSIONAL ENGINEER

| | |
|---|---|
| DRAWN BY: | LMW |
| REVIEWED BY: | BAR |
| CHECKED BY: | HGS |
| PROJECT NUMBER: | 50128319 |
| SITE ADDRESS: | |

3750 WALNUT CREEK PARK ROAD
NORTH GARDEN, VIRGINIA 22959

SHEET TITLE

EQUIPMENT MOUNTING DETAILS

SHEET NUMBER

Z-11