EASTERN SHORE

SITE ADDRESS:
26129 SHOREMAN DRIVE
BLOXOM, VIRGINIA 23308

SITE INFORMATION

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<th>EASTERN SHORE</th>
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<th>26129 SHOREMAN DRIVE</th>
<th>SITE OWNER:</th>
<th>EASTERN SHORE BROADBAND AUTHORITY</th>
<th>4174 LANKFORD HIGHWAY</th>
<th>BLOXOM, VIRGINIA 23350</th>
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CODE COMPLIANCE

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES:

1. 2009 VIRGINIA UNIFORM STATEWIDE BUILDING CODE.
2. 2009 INTERNATIONAL BUILDING CODE.
3. 2009 INTERNATIONAL MECHANICAL CODE.
4. 2009 INTERNATIONAL ELECTRICAL CODE.
5. 2009 INTERNATIONAL RESIDENTIAL CODE.
6. 2009 INTERNATIONAL PLUMBING CODE.
7. 2009 INTERNATIONAL FUEL GAS CODE.
8. LOCAL BUILDING CODE(S).
9. CITY AND/OR COUNTY ORDINANCES.

PROJECT DIRECTORY

APPLICANT: EASTERN SHORE BROADBAND AUTHORITY
4174 LANKFORD HIGHWAY
EXMORE, VIRGINIA 23350

ENGINEER: A Z ENGINEERING
441 PALLETS ROAD
VIRGINIA BEACH, VIRGINIA 23454

NICHOLAS PASCARETTI, PROJECT MANAGER
(914) 388-1448

EASTERN SHORE\n26129 SHOREMAN DRIVE\nBLOXOM, VIRGINIA 23308

FLOOD ZONE DETERMINATION

FIRM MAP#: 5101016475F
EFFECTIVE DATE: MARCH 16, 2009
FIRM ZONE: "X"

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF THE INSTALLATION OF NEW EASTERN SHORE BROADBAND AUTHORITY TOWER, EQUIPMENT CABINET, ANTENNAS ON NEW TOWER, AND ALL ASSOCIATED INSTALLATIONS.

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GENERAL NOTES

1. The contractor shall give all notices and comply with all laws, ordinances, regulations, and lawful orders of any public authority, municipal and utility company, 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 has made every effort to set forth in the construction and contract documents the complete scope of work. The contractor conducting the work 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 the architect/engineer of any errors, omissions, or other changes. The contractor shall report all errors, omissions, or other changes to the architect/engineer in writing within 24 hours of discovery.

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 described herein.

5. The contractor shall perform all work in a professional manner, observable at the job site prior to the submission of bids or performing work to become familiar with the field conditions and to verify that the project can be constructed in accordance with the contract documents.

6. The contractor shall be responsible for the work performed on any item not clearly defined by the construction drawings/contract documents.

7. The contractor shall install all equipment and material according to the manufacturer/vendor's specifications unless otherwise noted on the drawings or specifications.

8. The contractor shall provide all detail information and specifications of all construction materials, equipment, and labor necessary to complete the work/project as described herein.

9. The contractor shall supervise and direct the work performed on the project as described herein. The contractor shall be solely responsible for all the construction means, methods, techniques, sequences, and procedures and for coordination of all portions of the work under single general supervision.

10. The contractor shall be responsible for obtaining all permits and instructions, 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, excavations, pavements, curbing, etc., during construction. Upon completion of the work, the contractor shall repair any damage that may have occurred due to construction or on or about the property.

12. The contractor shall maintain the general work area as clean and neat as possible. All debris and construction and dispose of all hazardous waste and remove equipment not specified as remaining on the property. The contractor shall leave in the condition and free from paint, spot, dust, or odors of any nature.

13. The contractor shall comply with all OSDA requirements as they apply to this project.

14. The contractor shall notify the Verizon Wireless representative where a conflict occurs on any of the contract documents. The contractor is not to order materiel or construct any portion of the work that is in conflict until the dispute is resolved by the Verizon Wireless representative.

15. The contractor shall verify all dimensions, elevations, property lines, etc., on the job.
SITE PLAN NOTES

1. Proposed 50.0' X 60.0' Lease Area. See C-3 for Site Layout.
2. Proposed 10.0' Wide Utility Easement.
3. Proposed 12.0' Wide Gravel Access Road.

TOPOGRAPHIC INFORMATION WAS TAKEN FROM A TOPOGRAPHIC SURVEY PERFORMED BY "SHORELINE SURVEYORS" DATED AUGUST 14, 2013.

THIS SITE PLAN WAS PREPARED WITHOUT THE BENEFIT OF A TITLE SEARCH REPORT AND MAY NOT SHOW ANY EASEMENTS AND RESTRICTIONS OF RECORD THAT MAY EFFECT THE SUBJECT PROPERTY.

PROPERTY IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD.

THIS SITE APPEARS TO BE LOCATED IN THE F.I.M. ZONE "X" AS SHOWN ON FEMA COMMUNITY PANEL NUMBER 51001C0475F EFFECTIVE DATE MARCH 16, 2009.

NO SUBSURFACE INVESTIGATION WAS PERFORMED BY A Z ENGINEERING.

THERE ARE NO JURISDICTIONAL WETLANDS ON THE SUBJECT PARCEL. NO WETLAND AREAS HAVE BEEN DELINEATED.

ALL PHYSICAL EVIDENCE OF UTILITIES SHOWN ON THIS SITE PLAN ARE FROM SURFACE EVIDENCE.

SITE PLAN NOTES

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ALL PHYSICAL EVIDENCE OF UTILITIES SHOWN ON THIS SITE PLAN ARE FROM SURFACE EVIDENCE.
SITE NOTES

1. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY OF LOCATING ANY UNDERGROUND UTILITIES (PUBLIC OR PRIVATE) THAT MAY EXIST AND CROSS THROUGH THE AREA OF CONSTRUCTION THAT ARE NOT SHOWN ON THESE PLANS. BEFORE YOU DIG, CALL "MISS UTILITY" AT 8-1-1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING, AT HIS EXPENSE, ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.

2. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AT THE FIRST PHASE OF CONSTRUCTION AND CHECKED PERIODICALLY TO ENSURE THEY ARE FUNCTIONING AS INDICATED.

3. THE STOCKPILING OF EXCESS MATERIAL ON SITE WILL NOT BE ALLOWED.

4. ANY VEGETATED AREA DISTURBED BY CONSTRUCTION SHALL BE TOPSOILED AND SEEDED TO RESTORE A PERMANENT VEGETATIVE COVER.

5. THE CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION. SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH OSHA REQUIREMENTS.

6. THE CONTRACTOR IS RESPONSIBLE FOR SITE LAYOUT AND CONSTRUCTION STAKING. LOCATION OF EXISTING STRUCTURES AND UTILITIES MUST BE CONFIRMED BY THE CONTRACTOR.

7. ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL CODES OR ORDINANCES.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WITH MATCHING MATERIALS ANY PAVEMENT, DRIVEWAYS, WALES, CURVES, ETC. THAT MAY BE CUT OR THAT ARE DAMAGED DURING CONSTRUCTION.

SITE PLAN NOTES

PROPOSED 92.0' X 60.0' LEASE AREA.

PROPOSED 10.0' WIDE UTILITY EASEMENT.

CONSTRUCTION NOTES

PROPOSED 44.0' X 54.0' FENCED AND GRAVELED COMPOUND AREA.

PROPOSED 105' MONOPOLE TOWER WITH 4' LIGHTING ROD; 105' TOTAL.

PROPOSED 12' X 10' EQUIPMENT CONCRETE PAD. SEE S-2 FOR DETAILS.

PROPOSED 12' WIDE UTILITY STAND.

PROPOSED ICE-BRIDGE. SEE E-4 FOR DETAILS.

PROPOSED METALLIC FENCE. SEE C-6 FOR DETAILS.

PROPOSED 12' GRAVEL ACCESS ROAD.

PROPOSED LIMITS OF WOODED AREA CLEARING.
EROSION AND SEDIMENT CONTROL NOTES


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 LAND-DISTURBING ACTIVITY SHOWN ON THE APPROVED SITE PLAN. IF THE NAME IS NOT PROVIDED PRIOR TO ENGAGING IN THE LAND-DISTURBING ACTIVITY THE PLANS 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 DRAW TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT (WS) 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: SEEDED OPERATIONS SHALL BE PATIATED WITHIN 7 DAYS AFTER REACHING FINAL GRADE OR UPON SUSPENSION OF GRADING OPERATIONS FOR AN ANTICIPATED DURATION OF GREATER THAN 30 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.

EROSION CONTROL NARRATIVE

This project consists of the construction of concrete foundation for new equipment shelter and power generator, installation of equipment shelter, power generator, cable’s shielding and associated materials on existing tower. An existing entrance on Shoremain Drive will be utilized to access this site. Existing drainage patterns will be maintained throughout the construction process.

The compound is graded at slope 2:1, and stabilized with 6 inches of gravel placed on a weed inhibiting geotextile. There are no areas that have the potential for serious erosion problems.

Erosion control measures are to be in place prior site clearing and grading activities. All ungraded areas are to be seeded. The plan is to be completed. Perimeter fence will be installed. The primary erosion and sediment control devices during the entire construction process.

LEGEND

- 0.25’ AFG
- 0.75’ BBE
- 0.5’ BBE
- SILT FENCE
- AFG
- BBE
- ME
- MATCH EXISTING ELEVATION OF THE EXISTING PAD
- DIRECTION OF RUNNING WATERS

GRADING & EROSION CONTROL

Scale: 1:20

EASTERN SHORE BROADBAND AUTHORITY

DESIGNED BY:
A Z ENGINEERING
441 PALLETS ROAD
VIRGINIA BEACH, VIRGINIA 23454
PHONE: 757-672-2339
EMAIL: azoto@cox.net

PROJECT NUMBER:                    14-301
DESIGN:                               ARIAN ZOTO  P.E.

PROJECT:                              EASTERN SHORE BROADBAND AUTHORITY
SITE INFO.:

EASTERN SHORE
2023 SHOREMAN DRIVE
BLOXOM, VIRGINIA 23350

PROJECT NUMBER:                    14-301
SUBMITTALS
A-Z ENGINEERING
E-MAIL: azoto@cox.net
PHONE: 757-672-2339

DRAWN: ARIAN ZOTO  P. E.

C-4
**EARTH WORK SUBGRADE COMPACTION & SELECT GRANULAR FILL**

1. Contractor shall be responsible for clearing & grubbing the construction site and roadway areas. The contractor shall comply with the recommendations contained within the geotechnical report when necessary prepared for this site for site work preparation & foundation work. As a minimum the top 3" of grade shall be removed. The exposed subgrade compacted to 2000 PSF and geotextile fabric be used as noted on drawings.

2. All select granular fill shall be compacted to a 95% compaction at a maximum dry density as determined by ASTM D-1557 or within plus or minus 3% of optimum moisture content.

**TYPICAL ACCESS ROAD CROSS SECTION**

- Set the stakes.
- Excavate a 4"x4" trench 1.5' deep along the line of stakes.
- Backfill and compact the excavated soil.
- Sheet flow installation (perspective view).
- Points A should be higher than Point B.

**TYPICAL GRAVEL COMPOUND CROSS SECTION**

- New fence
- Finite Grade
- Top of proposed tower
- Top of proposed tower
- Bottom of proposed tower
- Top of lighting rods/apertures (overall height)
- Height = 100' AGL
- Propane 2 panel antennas (type to be determined)
- Height = 98' AGL @ RAD

**NOTE:**

This elevation shows the intended location of the proposed equipment. It does not infer that a structural analysis has been conducted to verify that the tower can support the proposed loads. A separate structural letter or report will determine the tower ability to support the proposed loads.
**COMPUND FENCE DETAIL**

**NOT TO SCALE**

**REFERENCE NOTES:**

1. CORNER END (OR PULL POST): 2" NOMINAL (MINIMUM 1 1/4"") ROUND STEEL PIPE.
2. LINE POST: 2 1/2" SCHEDULE 40 PIPE, PER ASTM-F1083.
3. TOP RAIL & BRACE RAIL: 1 1/2" PIPE, PER ASTM-F1083.
4. FABRIC: 3-3/4" GA GALVANIZED STEEL, CONFORMING TO ASTM-A392.
5. TIE WIRE: MINIMUM 11 GA GALVANIZED STEEL AT POSTS AND RAILS. A SINGLE WRAP OF FABRIC TIE AND AT TENSION WIRE BY HOG RINGS SPACED MAX. 24" INTERVALS.
6. STRETCHER BAR: 3/8" DIAGONAL ROD (OR DIAGONAL THREAD ROD).  
7. FENCE CORNER POST BRACE: 1 1/2" VA EACH CORNER EACH WAY.  
8. 1 1/2" MAXIMUM CLEARANCE FROM GRADE.
9. FINISH GRADE SHALL BE UNIFORM AND LEVEL.
10. GATE POST: CONCRETE FOUNDATION (2000 PSI)  
11. CORNER POST: CONCRETE FOUNDATION (2000 PSI)  
12. INSTALL FENCING PER ASTM F-567
13. INSTALL SWING GATES PER ASTM F-900
14. GATE LOCKING DEVICE (OFCI)
15. ALL SIGNS MUST BE MOUNTED ON INSIDE OF FENCE FABRIC.  
16. USE GALVANIZED HOG-RING WIRE TO MOUNT ALL SIGNS.
17. ALL SIGNS MUST BE MOUNTED ON INSIDE OF FENCE FABRIC.

**GENERAL NOTES:**

1. INSTALL FENCING PER ASTM F-567
2. INSTALL SWING GATES PER ASTM F-900
3. LOCAL ORDINANCE OF BRASS WIRE PERMIT REQUIREMENT SHALL BE COMPLIANT IF REQUIRED.
4. POST & GATE PIPE SIZES ARE INDUSTRY STANDARDS. ALL SIGNS TO BE 1 1/2" GAUGE. (HOT DIP, ASTM-A36 STEEL) ALL GATE HANDLES SHALL BE SECURED TO GATE FRAME WITH (3) COATS OF COLD GALV. (ORGINAL)
5. ALL OPEN POSTS SHALL HAVE END CAPS.
6. USE GALVANIZED HOE-RING WIRE TO MOUNT ALL SIGNS.
7. ALL SIGNS MUST BE MOUNTED ON INSIDE OF FENCE FABRIC.
GENERAL NOTES

1. USE STRUCTURAL DRAWINGS IN CONJUNCTION WITH ALL OTHER DRAWINGS. COORDINATE THE WORK OF OTHER CONTRACTORS, INCLUDING BUT NOT LIMITED TO, THE REQUIREMENTS FOR SUFFICIENT INSERTS, HOLES, AND ANCHORS.

2. REPORT DISCREPANCIES IN DIMENSIONS BETWEEN DIFFERENT DRAWINGS TO THE ENGINEER PRIOR TO BEGINNING WORK IN AREAS THAT WILL BE AFFECTED.

3. DETAILS APPLY NOT ONLY WHERE SPECIFICALLY INDICATED OR REFERENCED, BUT ALSO IN ALL OTHER CASES WHERE THE NATURE OF THE CONSTRUCTION REQUIRES THEIR USE. DETERMINE APPLICABILITY FROM DESCRIPTION TITLE OR FROM THE SIMILARITY OF A CONSTRUCTION DETAILS TO THE CONDITION WHERE THE DETAILS IS SPECIFICALLY INDICATED OR REFERENCED.

4. PROVIDE TEMPORARY BRACING AND SIZING OF THE STRUCTURE AND COMPONENTS UNLESS ALL COMPONENTS ARE ERECTED AND ALL CONNECTIONS ARE FULLY MADE, AS NECESSARY, TO ENSURE STABILITY DURING CONSTRUCTION.

5. VERIFY AND COORDINATE ALL ELEVATIONS, ETC., NECESSARY FOR THE PROPER CONSTRUCTION AND ALIGNMENT OF THE NEW PORTIONS OF THE STRUCTURE TO THE EXISTING STRUCTURE. TAKE ALL MEASUREMENTS NECESSARY FOR PROPER FABRICATION AND ERECTION OF STRUCTURAL MEMBERS.

6. BEFORE PROCEEDING WITH ANY WORK WITHIN THE EXISTING STRUCTURE, BECOME FAMILIAR WITH THE STRUCTURAL CONDITIONS OF THE EXISTING STRUCTURE. PROVIDE ALL NECESSARY SUPPORT TO THE EXISTING STRUCTURE DURING THE PROCESS OF CONSTRUCTION AND TO PROTECT FROM DAMAGE THOSE PORTIONS OF THE EXISTING STRUCTURE THAT ARE TO REMAIN.

7. WHERE EXISTING CONSTRUCTION THAT IS TO REMAIN IN PLACE, BE RE-USED, OR REMAIN THE PROPERTY OF THE OWNER IS DAMAGED AS A RESULT OF THE CONTRACTOR’S OPERATION, REPLACE WITH NEW OR REPAIR TO ITS ORIGINAL CONDITION IN CONFORMANCE WITH THE CONTRACT DOCUMENTS OR AS DIRECTED BY THE ENGINEER. ADDITIONAL COSTS SHALL BE BORNE BY THE CONTRACTOR.

8. REPRODUCTION OF THE CONTRACT DRAWINGS SHALL NOT BE USED AS SHOP DRAWINGS UNDER ANY CIRCUMSTANCE.

9. ALL ITEMS SHOWN IN THESE DRAWINGS ARE NEW CONSTRUCTION UNLESS SPECIFICALLY NOTED AS EXISTING.

10. DIMENSIONS GIVEN FOR THE EXISTING STRUCTURE AND COMPONENTS THEREOF ARE AS MEASURED AND ARE PROVIDED FOR ESTIMATING PURPOSES ONLY. DETAIL WORK SHALL BE BASED ON THE CONTRACTOR’S FIELD MEASUREMENTS.

CONCRETE NOTES

1. CONCRETE, CONSTRUCTION SHALL COMPLY WITH PROVISIONS OF THE FOLLOWING CODES, SPECIFICATIONS, AND STANDARDS: AMERICAN CONCRETE INSTITUTE (ACI) 214-11E SPECIFICATIONS FOR STRUCTURAL CONCRETE, ACI 318-11E, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.

2. CONCRETE SHALL BE NORMAL, WET OR AIR ENTRAINMENT AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI. SUBMIT MIX DESIGN FOR APPROVAL.

3. CONCRETE MATERIALS SHALL BE IN ACCORDANCE WITH THE FOLLOWING: PORTLAND CEMENT ASTM C 150, TYPE I FLY ASH ASTM C 618, TYPE F (NOT TO EXCEED 15% OF CEMENT BY WEIGHT)

NORMAL WATER CEMENT RATIO ASTM C 940

AIR-ENTRAINING ADmixTURE ASTM C 860, 861, 876, 884, 887, 1480

WATER REDUCING ADmixTURES ASTM C 494 TYPE A

HIGH PERFORMANCE RETARDING ADmixTURES ASTM C 494 TYPE A

HIGH-RANGE WATER-REDUCING admixTURES ASTM C 494 TYPE A

HIGH-RANGE-WATER-REDUCING admixTURES ASTM C 494 TYPE F

AND RETARDING admixTURES ACCELERATING admixTURES

ASTM C 494, TYPE F

4. REINFORCING STEEL SHALL BE DESIGNATED AS ASTM A-615 AND A-996 GRADE 60. REINFORCING MARKS CONTINUOUS SHALL BE LAPPED IN ACCORDANCE WITH ACI 318-02.

5. WIRED WIRE FABRIC SHALL CONFORM TO ASTM A-46 AND A-122. LAP ONE FULL WIRE SPACING AND THE HEAT SHIELD SIGNATURE ON BARS.

6. WIRED WIRE FABRIC AND WIRED WIRE FABRIC, METALLIC CHAINS OR CHAINS.

7. MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ACI 318-02 UNLESS OTHERWISE INDICATED.

8. ALL COLD WEATHER CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 308, "COLD WEATHER CONCRETING."

9. ALL HOT WEATHER CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 306R, "HOT WEATHER CONCRETING.

10. CURING COMPOUND SHALL COMPLY WITH ASTM C 309, TYPE I, CLASS B.

11. CONTRACTOR MAY SUBSTITUTE COLLATED FABRICATED POLYVINYL RUBBER OR FIBERS, REFERRED TO AS FIBER MESH IN PLACE OF WELDED WIRE FABRIC.

EXCAVATION NOTES

1. ADMIXTURES AND ADMIXTURE CLASSIFICATION GROUPS SW, SP, GM, SWP, SP, AND SM OR A COMBINATION OF THESE GROUPS EMBRACE FREE OF VAPOR, FROZEN MATERIALS, AND VEGETATION, WITH LESS THAN 5 PERCENT BY WEIGHT RUBBLE. RUBBLE SHALL NOT BE LARGER THAN 4 INCHES IN ANY DIRECTION.

2. PIER SHALL NOT BE PLACED IN FROZEN GROUND.

3. DESIGN ALLOWABLE SOIL BEARING PRESSURE IS 2000 PSI ON SUITABLE RESIDUAL, SOL, OR PROPERLY COMPACTED STRUCTURAL FILM. STRUCTURAL FILM SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE STANDARD PROCTOR MAXIMUM DENSITY ASTM D 698.

4. AFTER EXCAVATIONS ARE MADE, THE BOTTOMS SHALL BE INSPECTED TO VERIFY THAT THE SUPPORTING SOILS ARE SUITABLE FOR BEARING AND ARE CAPABLE OF SUPPORTING THE DESIGN ALLOWABLE PRESSURE OF 2000 PSI.
A-A

FINISHED GRADE
SLOPE 1/8" PER FT.
BROOM FINISH
1" CHAMFER (TYP)
1'-0" 3" CLEAR @ ALL SIDES (TYP)
COMPACT SUBGRADE TO 2000 PSF

CONCRETE PAD PLAN & DETAILS

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

A - A

CONCRETE PAD PLAN & DETAILS

SLOPE 1/8" PER FT.
BROOM FINISH
1" CHAMFER (TYP)
1'-0" 3" CLEAR @ ALL SIDES (TYP)
COMPACT SUBGRADE TO 2000 PSF

FINISHED GRADE

PROPOSED CONCRETE PAD PLAN & DETAILS

SLOPE 1/8" PER FT.
BROOM FINISH
1" CHAMFER (TYP)
1'-0" 3" CLEAR @ ALL SIDES (TYP)
COMPACT SUBGRADE TO 2000 PSF

GEOTEXTILE FABRIC
PROVIDE FREE DRAINING CRUSHED STONE NR. 57

A-Z ENGINEERING
A PROFESSIONAL COMPANY

DESIGNED BY:
A Z ENGINEERING
A PROFESSIONAL COMPANY

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VIRGINIA BEACH, VIRGINIA 23454
PHONE: 757-672-2339
EMAIL: azoto@cox.net

PROJECT NUMBER: 14-301
09/20/2014
FINAL CONSTRUCTION DWGS.

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PHONE: 757-672-2339
EMAIL: azoto@cox.net

PROJECT NUMBER: 14-301
09/20/2014
FINAL CONSTRUCTION DWGS.
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.

1. No materials or equipment shall be used in the work until approved. All materials shall be UL listed. All equipment shall be rated minimum 22KAIC.

2. 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.

3. 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.

4. The contractor shall coordinate the electrical equipment installation with all trades and owner's equipment.

5. 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 certificates of approval shall be furnished.

6. All work under this contract shall be done in strict accordance with all applicable municipal, state and local electrical codes that govern each particular trade and the National Electrical Code.

7. The contractor shall make all necessary applications and pay all charges for the electrical equipment installation with all trades and owners' equipment.

8. The contract shall be in accordance with the electrical equipment installation with all trades and owners' equipment.

9. The contractor shall furnish and install all necessary permits, licenses, and inspections as required under the above codes. Upon completion of the work, the customary certificates of approval shall be furnished.

10. No materials or equipment shall be used in the work until approved. All materials shall be UL listed. All equipment shall be rated minimum 22KAIC.

11. 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.

12. 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.

13. The contractor shall coordinate the electrical equipment installation with all trades and owner's equipment.

14. 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 certificates of approval shall be furnished.

15. No materials or equipment shall be used in the work until approved. All materials shall be UL listed. All equipment shall be rated minimum 22KAIC.

16. 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.

17. 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.

18. The contractor shall coordinate the electrical equipment installation with all trades and owner's equipment.

19. 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 certificates of approval shall be furnished.
GENERAL GROUNDING NOTES

1. ALL #2 TINNED COPPER GROUND WIRE ABOVE THE GRADE SHALL BE SHEATHED IN 3/4" GRAY PVC CONDUIT, SEAL TOP WITH GRAY 20 YEAR SILICON CALK. INSTALL CONDUIT TO CADWELD CONNECTION AT GROUND RING.
2. INDICATED DRAWING LOCATIONS ARE FOR SCHEMATIC PURPOSE ONLY. EXACT LOCATION SHOULD BE VERIFIED BY CONTRACTOR.
3. GROUND RING TO BE PLACED A MINIMUM DISTANCE OF 2' FROM ANY CONCRETE FOUNDATION.
4. FENCE TO BE CONNECTED TO GROUND RING AT ALL CORNERS WITH CADWELD AT FENCE POST AND GROUND ROD.
5. TOWER LEGS TO BE CONNECTED TO GROUND ROD IN TOWER RING. CADWELD TO TOWER LEGS 2' ABOVE BASE PLATE.
6. GATE LEAF TO BE CADWELDED TO GATE POST WITH 2/0 WELDING CABLE.
7. CADWELD A #6 LEAD FROM GATE POST TO GATE POST.
8. ALL GROUND LEADS TO GROUND RING CONNECTIONS SHALL BE AT A GROUND ROD.

REFERENCE NOTES

1. #5 TINNED SOLID COPPER TOWER GROUND RING, TYP.
2. INSPECTION WELL. SEE DETAIL THIS SHEET.
3. GROUND ROD (TYP). SEE DETAIL THIS SHEET.
4. #2 TINNED SOLID COPPER GROUND WIRE FROM GROUND RING TO FENCE.
5. 1" x 4" x 12" TOWER BOTTOM GROUND BAR. MOUNT AT TOWER CROSSBAR.
6. #2 TINNED COPPER GROUND WIRE FROM GROUND RING TO TOWER GROUND BAR (TYP OF 2).
7. #2 TINNED COPPER FROM GATE POST TO GATE POST.
8. #2 COPPER SERVICE GROUND.
9. GATE GROUNDING. SEE DETAIL THIS SHEET.
10. FENCE TO BE CONNECTED TO GROUND RING AT ALL CORNERS WITH CADWELD AT FENCE POST AND GROUND ROD. SEE DETAIL THIS SHEET.
11. CONNECT SERVICE GROUND TO GROUND RING.
12. #2 TINNED COPPER GROUND WIRE FROM TOWER BOTTOM GROUND BAR TO ICE BRIDGE POST.
13. 1/4" x 4" x 12" TOWER TOP GROUND BAR. MOUNT AT TOWER CROSSBAR.

NOTE:

- PROVIDE ADDITIONAL GROUND RODS AS REQUIRED TO ACHIEVE MAXIMUM 5 OHMS RESISTANCE.
- ALL GROUND LEADS TO GROUND RING CONNECTIONS SHALL BE AT A GROUND ROD.

GROUND ROD DETAIL

1. #2 TINNED COPPER TOWER GROUND RING, TYP.
2. CADWELD A #2 LEAD FROM GATE POST TO GATE POST.
3. GATE LEAF TO BE CADWELDED TO GATE POST WITH 2/0 WELDING CABLE.
4. TOWER LEG, 3' ABOVE BASE PLATE.
5. CADWELD TO GROUND RING.
6. FENCE POST AND GROUND ROD.
7. FENCE TO BE CONNECTED TO GROUND RING AT ALL CORNERS WITH CADWELD AT FENCE POST AND GROUND ROD. SEE DETAIL THIS SHEET.
8. CONNECT SERVICE GROUND TO GROUND RING.
9. #2 TINNED COPPER GROUND WIRE FROM GROUND RING TO FENCE..
10. 1/4" x 4" x 12" TOWER BOTTOM GROUND BAR. MOUNT AT TOWER CROSSBAR.

NOTE:

- PROVIDE ADDITIONAL GROUND RODS AS REQUIRED TO ACHIEVE MAXIMUM 5 OHMS RESISTANCE.
- ALL GROUND LEADS TO GROUND RING CONNECTIONS SHALL BE AT A GROUND ROD.

GATE GROUNDING DETAIL

1. #2 TINNED COPPER FROM GATE POST TO GATE POST.
2. #2 COPPER SERVICE GROUND.
3. GATE GROUNDING. SEE DETAIL THIS SHEET.
4. FENCE TO BE CONNECTED TO GROUND RING AT ALL CORNERS WITH CADWELD AT FENCE POST AND GROUND ROD. SEE DETAIL THIS SHEET.
5. CONNECT SERVICE GROUND TO GROUND RING.
6. #2 TINNED COPPER GROUND WIRE FROM TOWER BOTTOM GROUND BAR TO ICE BRIDGE POST.
7. #2 TINNED COPPER GROUND WIRE FROM GROUND RING TO TOWER GROUND BAR (TYP OF 2).
8. #2 TINNED COPPER FROM GATE POST TO GATE POST.

NOTE:

- PROVIDE ADDITIONAL GROUND RODS AS REQUIRED TO ACHIEVE MAXIMUM 5 OHMS RESISTANCE.
- ALL GROUND LEADS TO GROUND RING CONNECTIONS SHALL BE AT A GROUND ROD.

FENCE GROUNDING DETAIL

1. #2 TINNED COPPER TOWER GROUND RING, TYP.
2. CADWELD A #2 LEAD FROM GATE POST TO GATE POST.
3. GATE LEAF TO BE CADWELDED TO GATE POST WITH 2/0 WELDING CABLE.
4. TOWER LEG, 3' ABOVE BASE PLATE.
5. CADWELD TO GROUND RING.
6. FENCE POST AND GROUND ROD.
7. FENCE TO BE CONNECTED TO GROUND RING AT ALL CORNERS WITH CADWELD AT FENCE POST AND GROUND ROD. SEE DETAIL THIS SHEET.
8. CONNECT SERVICE GROUND TO GROUND RING.
9. #2 TINNED COPPER GROUND WIRE FROM GROUND RING TO FENCE..
10. 1/4" x 4" x 12" TOWER BOTTOM GROUND BAR. MOUNT AT TOWER CROSSBAR.

NOTE:

- PROVIDE ADDITIONAL GROUND RODS AS REQUIRED TO ACHIEVE MAXIMUM 5 OHMS RESISTANCE.
- ALL GROUND LEADS TO GROUND RING CONNECTIONS SHALL BE AT A GROUND ROD.