

**FA #:**  
**PACE ID:**  
**PTN:**  
**SITE ID:**  
**SITE NAME:**  
**SITE ADDRESS:**  
  
**SITE TYPE:**  
**PROJECT:**

**14652325**  
**MRNYJ013215**  
**2191A0YB3M**  
**NWL06274**  
**CHESTER II**  
**KINGS HWY**  
**WARWICK, NY 10990**  
**WATERTANK**  
**NSB - COLOCATION**



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**APPLICABLE BUILDING CODES AND STANDARDS**

2020 BUILDING CODE OF NEW YORK STATE - 2018 INTERNATIONAL BUILDING CODE  
 2020 NEW YORK ELECTRICAL CODE OF NEW YORK STATE - 2017 NATIONAL ELECTRICAL CODE (NFPA 70)  
 2020 MECHANICAL CODE OF NEW YORK STATE - 2018 INTERNATIONAL MECHANICAL CODE  
 ANSI/TIA-222-H STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES, ANTENNAS AND SMALL WIND TURBINE SUPPORT STRUCTURES  
 ANSI/TIA-607-B - GENERIC TELECOMMUNICATIONS BONDING AND GROUNDING (EARTHING) FOR CUSTOMER PREMISES  
 ACI 318-14, AMERICAN CONCRETE INSTITUTE -318 -14, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE  
 AISC WITH AISC STEEL CONSTRUCTION MANUAL, 15TH/ ED  
 IEEE C2: NATIONAL ELECTRICAL SAFETY CODE  
 FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

**DRIVING DIRECTIONS**

START AT: 1 AT&T WAY, BEDMINSTER, NJ 07921

HEAD NORTHEAST TOWARD AT&T WAY 0.1 MI  
 TURN RIGHT ONTO AT&T WAY 1.0 MI  
 CONTINUE STRAIGHT ONTO US-202 S/US-206 S 0.4 MI  
 TURN LEFT ONTO SCHLEY MOUNTAIN ROAD 0.5 MI  
 MERGE ONTO I-287 N 45.0 MI  
 USE THE LEFT 2 LANES TO MERGE ONTO I-87 N/NY-17 N TOWARD NEW YORK THRUWAY/ALBANY 14.3 MI  
 USE THE RIGHT 3 LANES TO TAKE EXIT 16 FOR NY-17 TOWARD US-6/HARRIMAN 1.4 MI  
 CONTINUE ONTO NY-17 W 1.1 MI  
 CONTINUE ONTO NY-17 W/US-6 W 6.4 MI  
 TAKE EXIT 127 TOWARD GREYCOURT ROAD/SUGAR LOAF/WARWICK 0.1 MI  
 TURN LEFT ONTO LEHIGH AVE 0.6 MI  
 MERGE ONTO BROOKSIDE AVE 220 FT  
 TURN LEFT ONTO CO ROAD 13/KINGS HWY 2.3 MI  
 TURN RIGHT ONTO KINGS HWY 1.6 MI  
 TURN RIGHT ONTO DARIN ROAD 466 FT  
 TURN RIGHT ONTO EVAN 0.2 MI

ARRIVE AT: 60 EVAN ROAD, WARWICK, NY 10990

**PROJECT CONTACTS**

TITLE	NAME	COMPANY	CONTACT NUMBER
SAQ	REBECCA RIVERA	AIROSMITH DEVELOPMENT	(518) 306-1711
A&E	ALEX WELLER	AIROSMITH ENGINEERING	(518) 306-1711

**OWNER'S NOTE**

THE OWNER HAS REVIEWED AND IS IN CONCURRENCE WITH THE FOLLOWING SITE PLANS.

OWNER SIGNATURE \_\_\_\_\_



**PROJECT SCOPE**

INSTALLATION OF AT&T GROUND AND ANTENNA EQUIPMENT AT AN EXISTING WATERTANK TELECOMMUNICATIONS FACILITY.

- GROUND SCOPE OF WORK:
- INSTALL NEW WIC AND 30KW DIESEL GENERATOR WITH BELLY TANK ON PROPOSED CONCRETE PADS AT GRADE.
  - INSTALL NEW UNDERGROUND CONDUIT FROM WIC TO EXISTING WATER TANK.
  - INSTALL NEW 200A 120/240V UTILITY SERVICE FROM EXISTING METER BOARD TO NEW WIC.
  - INSTALL NEW CONDUIT FOR BACKHAUL SERVICE TO WIC FROM EXISTING TELCO DEMARC.
  - INSTALL (2) NEW FIBER MANAGEMENT BOXES.
  - INSTALL (3) DC 12 UNITS

- ANTENNA LEVEL SCOPE OF WORK:
- INSTALL (12) NEW PANEL ANTENNAS ON NEW ANTENNA MOUNTS ON EXISTING TOWER.
  - INSTALL (12) REMOTE RADIO UNITS (RRUs).
  - INSTALL (3) DC9 SURGE SUPPRESSOR UNITS.
  - INSTALL (3) FIBER AND (6) DC TRUNK CABLES FROM WIC TO ANTENNAS.
  - INSTALL (3) ANTENNA MOUNTING FRAMES.

**SITE INFORMATION**

PROPERTY OWNER: KINGS ESTATE LTD PARTNERSHIP  
 PREL PLAZA, SUITE 15  
 ORANGEBURG, NY 10962

MUNICIPALITY: TOWN OF CHESTER  
 COUNTY: ORANGE

TOWER OWNER: TOWN CHESTER

SITE ID: NWL06274

ZONING DISTRICT: SR-1 SUBURBAN RESIDENTIAL

AT&T FA NUMBER: 14652325

AT&T PACE ID: MRNYJ013215

AT&T PTN: 2191A0YB3M

AT&T SITE NAME: CHESTER II

APPLICANT: NEW CINGULAR WIRELESS PCS, LLC  
 1 AT&T WAY  
 BEDMINSTER, NJ 07921

SITE ADDRESS: KINGS HWY  
 WARWICK, NY 10990

PARCEL ID: 17-1-51

LOT AREA: 9.9 ACRES

LATITUDE: 41° 18' 05.74" N 41.3015944°

LONGITUDE: 74° 17' 38.93" W -74.2941472°

GROUND ELEVATION: 722± AMSL

POWER COMPANY: O & R (ORANGE & ROCKLAND)

TELCO COMPANY: LIGHT TOWER FIBER NETWORK

**GENERAL NOTES**

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

**RF DATA NOTE**

CONTRACTOR SHALL OBTAIN LATEST RF DATA SHEET AND CONFIRM SAME WITH AT&T CONSTRUCTION MANAGER PRIOR TO START OF CONSTRUCTION. THESE DRAWINGS ARE BASED ON

RFDS 2023 NEW SITE  
 RFDS VERSION: 1.00  
 DATED: 4/27/2022

**DO NOT SCALE DRAWINGS**

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME

**DRAWINGS ISSUED FOR:**

REV.	DATE	DRAWN	DESCRIPTION	QA/QC
0	08/22/22	SKB	ZD FOR PERMIT	AJD



**PROJECT INFORMATION:**

**SITE:**  
 14652325  
 CHESTER II  
 KINGS HWY  
 WARWICK, NY 10990  
 ORANGE COUNTY  
 WATER TANK

**SHEET TITLE:**  
 TITLE SHEET

**SHEET NUMBER:** T01 **REVISION:** 0



Know what's below.  
 Call before you dig.

**GENERAL CONSTRUCTION NOTES:**

- FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:  
GENERAL CONTRACTOR  
SUBCONTRACTOR - CONTRACTOR (CONSTRUCTION)  
OWNER - AT&T
- ALL SITE WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS AND AT&T PROJECT SPECIFICATIONS.
- GENERAL CONTRACTOR AND SUBCONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS. GENERAL CONTRACTOR AND SUBCONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS, DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. GENERAL CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF WORK.
- ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES, AND APPLICABLE REGULATIONS.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS THE MINIMUM REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND PREPARED BY THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH WORK.
- THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE SPACE FOR APPROVAL BY THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORK AREA, ADJACENT AREAS AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFORM TO ALL OSHA REQUIREMENTS AND THE LOCAL JURISDICTION.
- GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINE.
- ERECTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMEN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE. ALL MEMBERS SHALL BE LAID PLUMB AND TRUE AS INDICATED ON THE DRAWINGS.
- SEAL PENETRATIONS THROUGH FIRE RATED AREAS WITH UL LISTED MATERIALS APPROVED BY LOCAL JURISDICTION. SUBCONTRACTOR SHALL KEEP AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DEBRIS.
- WORK PREVIOUSLY COMPLETED IS REPRESENTED BY LIGHT SHADED LINES AND NOTES. THE SCOPE OF WORK FOR THIS PROJECT IS REPRESENTED BY DARK SHADED LINES AND NOTES. SUBCONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR OF ANY EXISTING CONDITIONS THAT DEVIATE FROM THE DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.
- SUBCONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
- THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND SUBCONTRACTORS TO THE SITE AND/OR BUILDING.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION.
- THE GENERAL CONTRACTOR SHALL MAINTAIN IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES.

- THE GENERAL CONTRACTOR AND SUBCONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS WITH A RATING OF NOT LESS THAN 2-A OT 2-A:10-B:C AND SHALL BE WITHIN 25 FEET OF TRAVEL DISTANCE TO ALL PORTIONS OF WHERE THE WORK IS BEING COMPLETED DURING CONSTRUCTION.
- ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE ARCHITECT/ENGINEER. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS SHALL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION, B) CONFINED SPACE, C) ELECTRICAL SAFETY, D) TRENCHING & EXCAVATION.
- ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED, CAPPED, PLUGGED OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ARCHITECT/ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
- THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.
- SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION AND SEDIMENT CONTROL.
- NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUNDING. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
- THE SUBGRADE SHALL BE BROUGHT TO A SMOOTH UNIFORM GRADE AND COMPACTED TO 95 PERCENT STANDARD PROCTOR DENSITY UNDER PAVEMENT AND STRUCTURES AND 80 PERCENT STANDARD PROCTOR DENSITY IN OPEN SPACE. ALL TRENCHES IN PUBLIC RIGHT OF WAY SHALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL PRE-APPROVED BY THE LOCAL JURISDICTION.
- ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER.
- ALL BROCHURES, OPERATING AND MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS, AND OTHER DOCUMENTS SHALL BE TURNED OVER TO THE GENERAL CONTRACTOR AT COMPLETION OF CONSTRUCTION AND PRIOR TO PAYMENT.
- SUBCONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS-BUILT REDLINES TO THE GENERAL CONTRACTOR UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.
- SUBCONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION.
- THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE, AND IS NOT FOR HUMAN HABITAT (NO HANDICAP ACCESS REQUIRED).
- OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH, BY AT&T TECHNICIANS.
- NO OUTDOOR STORAGE OR SOLID WASTE CONTAINERS ARE PROPOSED.
- ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST REVISION OF AT&T MOBILITY GROUNDING STANDARD "TECHNICAL SPECIFICATION FOR CONSTRUCTION OF GSM/GPRS WIRELESS SITES" AND "TECHNICAL SPECIFICATION FOR FACILITY GROUNDING." IN CASE OF A CONFLICT BETWEEN THE CONSTRUCTION SPECIFICATION AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN.
- SUBCONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION. IF SUBCONTRACTOR CANNOT OBTAIN A PERMIT, THEY MUST NOTIFY THE GENERAL CONTRACTOR IMMEDIATELY.
- SUBCONTRACTOR SHALL REMOVED ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
- INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTORS SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- NO WHITE STROBE LIGHTS ARE PERMITTED. ANY REQUIRED LIGHTING MUST MEET FAA STANDARDS AND REQUIREMENTS.
- ALL COAXIAL CABLE INSTALLATIONS TO FOLLOW MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.
- NO SIGNIFICANT NOISE, SMOKE, DUST OR VIBRATIONS WILL RESULT FROM THIS FACILITY. (DISREGARD THIS NOTE IF THIS SITE HAS A GENERATOR)
- NO ADDITIONAL PARKING TO BE PROPOSED. EXISTING ACCESS AND PARKING TO REMAIN, UNLESS NOTED OTHERWISE.
- NO LANDSCAPING IS PROPOSED AT THIS SITE, UNLESS NOTED OTHERWISE.

**ELECTRICAL NOTES:**

- ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ANY/ALL ELECTRICAL WORK INDICATED. ANY/ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH DRAWINGS AND ANY/ALL APPLICABLE SPECIFICATIONS. IF ANY PROBLEMS ARE ENCOUNTERED BY COMPLYING WITH THESE REQUIREMENTS, CONTRACTOR SHALL NOTIFY 'CONSTRUCTION MANAGER' AS SOON AS POSSIBLE, AFTER THE DISCOVERY OF THE PROBLEMS, AND SHALL NOT PROCEED WITH THAT PORTION OF WORK, UNTIL THE 'CONSTRUCTION MANAGER' HAS DIRECTED THE CORRECTIVE ACTIONS TO BE TAKEN.
- ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE HIMSELF WITH ANY/ALL CONDITIONS AFFECTING ELECTRICAL AND COMMUNICATION INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF. ALL EXISTING CONDITIONS OF ELECTRICAL EQUIP., LIGHT FIXTURES, ETC., THAT ARE PART OF THE FINAL SYSTEM, SHALL BE VERIFIED BY THE CONTRACTOR, PRIOR TO THE SUBMITTING OF HIS BID. FAILURE TO COMPLY WITH THIS PARAGRAPH WILL IN NO WAY RELIEVE CONTRACTOR OF PERFORMING ALL WORK NECESSARY FOR A COMPLETE AND WORKING SYSTEM.

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NEC AND ALL CODES AND LOCAL ORDINANCES OF THE LOCAL POWER & TELEPHONE COMPANIES HAVING JURISDICTION AND SHALL INCLUDE BUT NOT BE LIMITED TO:  
C - NATIONAL FIRE CODES  
A. UL - UNDERWRITERS LABORATORIES  
B. NEC - NATIONAL ELECTRICAL CODE  
C. NEMA - NATIONAL ELECTRICAL MANUFACTURERS ASSOC.  
D. OSHA - OCCUPATIONAL SAFETY AND HEALTH ACT  
E. SBC - STANDARD BUILDING CODE
- DO NOT SCALE ELECTRICAL DRAWINGS; REFER TO SITE PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT, AND CONFIRM WITH CONSTRUCTION MANAGER' ANY SIZES AND LOCATIONS WHEN NEEDED.
- EXISTING SERVICES: CONTRACTOR SHALL NOT INTERRUPT EXISTING SERVICES WITHOUT WRITTEN PERMISSION OF THE OWNER.
- CONTRACTOR SHALL PAY FOR ANY/ALL PERMITS, FEES, INSPECTIONS, AND TESTING. CONTRACTOR IS TO OBTAIN PERMITS AND APPROVED SUBMITTALS PRIOR TO THE WORK BEGINNING OR ORDERING EQUIPMENT.
- THE TERM "PROVIDE" USED IN CONSTRUCTION DOCUMENTS AND SPECIFICATIONS, INDICATES THAT THE CONTRACTOR SHALL FURNISH AND INSTALL.
- CONTRACTOR SHALL CONFIRM WITH LOCAL UTILITY COMPANY ANY/ALL REQUIREMENTS, SUCH AS THE: LUG SIZE RESTRICTIONS, CONDUIT ENTRY, SIZE OF TRANSFORMERS, SCHEDULED DOWNTIME FOR THE OWNERS' CONFIRMATION, ETC... ANY/ALL CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER, PRIOR TO BEGINNING ANY WORK.
- MINIMUM WIRE SIZE SHALL BE #12 AWG, NOT INCLUDING CONTROL WIRING, UNLESS NOTED OTHERWISE. ALL CONDUCTORS SHALL BE COPPER WITH THWN INSULATION.
- OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET/DAMP LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
- IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF THE CONSTRUCTION. CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS FOR THE EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
- ELECTRICAL SYSTEM SHALL BE AS COMPLETELY AND EFFECTIVELY GROUNDED, AS REQUIRED BY SPECIFICATIONS, SET FORTY BY AT&T.
- ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS, WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND SUBJECT TO REGULATORY INSPECTION & APPROVAL BY CONSTRUCTION MANAGER.
- ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
- CONTRACTOR SHALL GUARANTEE ANY/ALL MATERIALS AND WORK FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM DATE OF ACCEPTANCE.
- THE CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ANY ADDITIONAL CHARGE AND SHALL INCLUDE THE REPLACEMENT OR THE REPAIR OF ANY OTHER PHASE OF THE INSTALLATION, WHICH MAY HAVE BEEN DAMAGED THEREIN.
- ADEQUATE AND REQUIRED LIABILITY INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LOSS AND ANY/ALL PROPERTY DAMAGE FOR THE DURATION OF WORK.
- PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES AND DEVICES FOR ALL OUTLETS AS INDICATED.
- DITCHING AND BACK FILL: CONTRACTOR SHALL PROVIDE FOR ALL UNDERGROUND INSTALLED CONDUIT AND/OR CABLES INCLUDING EXCAVATION, BACKFILLING AND COMPACTION. REFER TO 'FOUNDATION, EXCAVATION, AND BACKFILLING NOTES.'
- MATERIALS, PRODUCTS AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND SHALL APPEAR ON THE LIST OF U.L. APPROVED ITEMS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF THE NEC, NEMA, AND IEC.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR MANUFACTURERS CATALOG INFORMATION OF ANY/ALL LIGHTING FIXTURES, SWITCHES, AND ALL OTHER ELECTRICAL ITEMS FOR APPROVAL BY THE CONSTRUCTION MANAGER PRIOR TO INSTALLATION.
- ANY CUTTING OR PATCHING DEEMED NECESSARY FOR ELECTRICAL WORK IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY AND SHALL BE INCLUDED IN THE COST FOR WORK AND PERFORMED TO THE SATISFACTION OF THE 'CONSTRUCTION MANAGER' UPON FINAL ACCEPTANCE.
- THE ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS WITH ONLY TYPEWRITTEN DIRECTORIES. ALL ELECTRICAL WIRING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- DISCONNECT SWITCHES SHALL BE H.P. RATED HEAVY-DUTY, QUICK-MADE AND QUICK-BREAK ENCLOSURES, AS REQUIRED BY EXPOSURE TYPE.
- ALL CONNECTIONS SHALL BE MADE WITH A PROTECTIVE COATING OF AN ANTI-OXIDE COMPOUND SUCH AS "NO-OXIDE A" BY DEARBORNE CHEMICAL CO. COAT ALL WIRE SURFACES BEFORE CONNECTING. EXPOSED COPPER SURFACES, INCLUDING GROUND BARS, SHALL BE TREATED - NO SUBSTITUTIONS.
- RACEWAYS: CONDUIT SHALL BE SCHEDULE 40 PVC MEETING OR EXCEEDING NEMA TC2 - 1990. CONTRACTOR SHALL PLUG AND CAP EACH END OF SPARE AND EMPTY CONDUITS AND PROVIDE TWO SEPARATE PULL STRINGS - 200 LBS TEST POLYETHYLENE CORD. ALL CONDUIT BENDS SHALL BE A MINIMUM OF 2 FT. RADIUS. RGS CONDUITS WHEN SPECIFIED, SHALL MEET UL-6 FOR GALVANIZED STEEL. ALL FITTINGS SHALL BE SUITABLE FOR USE WITH THREADING RIGID CONDUIT. COAT ALL THREADS WITH 'BRITZ ZINC' OR 'GOLD CALV.'
- SUPPORT OF ALL ELECTRICAL WORK SHALL BE AS REQUIRED BY NEC.
- CONDUCTORS: CONTRACTOR SHALL USE 98% CONDUCTIVITY COPPER WITH TYPE THWN INSULATION, 800 VOLT, COLOR CODED. USE SOLID CONDUCTORS FOR WIRE UP TO AND INCLUDING NO. 8 AWG. USE STRANDED CONDUCTORS FOR WIRE ABOVE NO. 8 AWG.

- CONNECTORS FOR POWER CONDUCTORS: CONTRACTOR SHALL USE PRESSURE TYPE INSULATED TWIST-ON CONNECTORS FOR NO. 10 AWG AND SMALLER. USE SOLDERLESS MECHANICAL TERMINAL LUGS FOR NO. 8 AWG AND LARGER.
- SERVICES: 240/120V, SINGLE PHASE, 3 WIRE CONNECTION AVAILABLE FROM UTILITY COMPANY. OWNER OR OWNERS AGENT WILL APPLY FOR POWER.
- TELEPHONE SERVICE: CONTRACTOR SHALL PROVIDE EMPTY CONDUITS WITH PULL STRINGS AS INDICATED ON DRAWINGS.
- ELECTRICAL AND TELCO RACEWAYS TO BE BURIED A MINIMUM OF 2' DEPTH.
- CONTRACTOR SHALL PLACE TWO LENGTHS OF WARNING TAPE AT A DEPTH OF 12" BELOW GROUND AND DIRECTLY ABOVE ELECTRICAL AND TELCO SERVICE CONDUITS. CAUTION TAPE TO READ "CAUTION BURIED ELECTRIC" OR "BURIED TELECOMM."
- ALL BOLTS SHALL BE STAINLESS STEEL

**GROUNDING NOTES:**

- COMPRESSION CONNECTIONS (2), 2 AWG BARE TINNED SOLID COPPER CONDUCTORS TO GROUNDING BAR. ROUTE CONDUCTORS TO BURIED GROUNDING RING AND PROVIDE PARALLEL EXOTHERMIC WELD.
- EC SHALL USE PERMANENT MARKER TO DRAW THE LINES BETWEEN EACH SECTION AND LABEL EACH SECTION ("P," "A," "N," "I") WITH 1" LETTERS.
- ALL HARDWARE 18-8 STAINLESS STEEL, INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING. ALL HARDWARE SHALL BE STAINLESS STEEL 3/8 INCH DIAMETER OR LARGER.
- FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
- NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUNDING BAR AND BOLTED ON THE BACK SIDE.
- NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATION, AND CONNECTION ORIENTATION. PROVIDE AS REQUIRED.
- WHEN THE SCOPE OF WORK REQUIRES THE ADDITION OF A GROUNDING BAR TO AN EXISTING TOWER, THE SUBCONTRACTOR SHALL OBTAIN APPROVAL FROM THE TOWER OWNER PRIOR TO MOUNTING THE GROUNDING BAR TO THE TOWER.
- ALL ELECTRICAL AND GROUNDING AT THE CELL SITE SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 780 (LATEST EDITION), AND MANUFACTURER.

**FOUNDATION, EXCAVATION, & BACKFILL NOTES:**

- ALL FINAL GRADED SLOPES SHALL BE A MAXIMUM OF 3 HORIZONTAL TO 1 VERTICAL.
- ALL EXCAVATIONS PREPARED FOR PLACEMENT OF CONCRETE SHALL BE OF UNDISTURBED SOILS, SUBSTANTIALLY HORIZONTAL, AND FREE FROM ANY LOOSE, UNSUITABLE MATERIAL OR FROZEN SOILS, AND WITHOUT THE PRESENCE OF POUNDING WATER. DEWATERING FOR EXCESS GROUND WATER SHALL BE PROVIDED WHEN REQUIRED. COMPACTION OF SOILS UNDER CONCRETE PAD FOUNDATIONS SHALL NOT BE LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY FOR THE SOIL IN ACCORDANCE WITH ASTM D1557.
- CONCRETE FOUNDATIONS SHALL NOT BE PLACED ON ORGANIC OR UNSUITABLE MATERIAL. IF INADEQUATE BEARING CAPACITY IS REACHED AT THE DESIGNED EXCAVATION DEPTH, THE UNSATISFACTORY SOIL SHALL BE EXCAVATED TO ITS FULL DEPTH AND EITHER BE REPLACED WITH MECHANICALLY COMPACTED GRANULAR MATERIAL OR THE EXCAVATION SHALL BE FILLED WITH CONCRETE OF THE SAME TYPE SPECIFIED FOR THE FOUNDATION. CRUSHED STONE MAY BE USED TO STABILIZE THE BOTTOM OF THE EXCAVATION. ANY STONE SUB BASE MATERIAL, IF USED, SHALL NOT SUBSTITUTE FOR REQUIRED THICKNESS OF CONCRETE.
- ALL EXCAVATIONS SHALL BE CLEAN OF UNSUITABLE MATERIAL SUCH AS VEGETATION, TRASH, DEBRIS, AND SO FORTH PRIOR TO BACK FILLING. BACK FILL SHALL CONSIST OF APPROVED MATERIALS SUCH AS EARTH, LOAM, SANDY CLAY, SAND AND GRAVEL, OR SOFT SHALE, FREE FROM CLODS OR LARGE STONES OVER 2 1/2 MAX DIMENSIONS. ALL BACK FILL SHALL BE PLACED IN COMPACTED LAYERS.
- ALL FILL MATERIALS AND FOUNDATION BACK FILL SHALL BE PLACED IN MAXIMUM 6" THICK LIFTS BEFORE COMPACTION. EACH LIFT SHALL BE WETTED IF REQUIRED AND COMPACTED TO NOT LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY FOR SOIL IN ACCORDANCE WITH ASTM D1557
- NEWLY PLACED CONCRETE FOUNDATIONS SHALL CURE A MINIMUM OF 72 HOURS PRIOR TO BACK FILLING.
- FINISHED GRADING SHALL BE SLOPED TO PROVIDE POSITIVE DRAINAGE AND PREVENT STANDING WATER. THE FINAL (FINISH) ELEVATION OF SLAB FOUNDATIONS SHALL SLOPE AWAY IN ALL DIRECTIONS FROM THE CENTER. FINISH GRADE OF CONCRETE PADS SHALL BE A MAXIMUM OF 4 INCHES ABOVE FINAL FINISH GRADE ELEVATIONS. PROVIDE SURFACE FILL GRAVEL TO ESTABLISH SPECIFIED ELEVATIONS WHERE REQUIRED.
- NEWLY GRADED SURFACE AREAS TO RECEIVE GRAVEL SHALL BE COVERED WITH GEOTEXTILE FABRIC TYPE: TYPAR-3401 AS MANUFACTURED BY "CONSTRUCTION MATERIAL 1-800-239-3841" OR AN APPROVED EQUIVALENT, SHOWN ON PLANS. THE GEOTEXTILE FABRIC SHALL BE BLACK IN COLOR TO CONTROL THE RECURRENCE OF VEGETATIVE GROWTH AND EXTEND TO WITHIN 1 FOOT OUTSIDE THE SITE FENCING OR ELECTRICAL GROUNDING SYSTEM PERIMETER WHICHEVER IS GREATER. ALL FABRIC SHALL BE COVERED WITH A MINIMUM OF 4" DEEP COMPACTED STONE OR GRAVEL AS SPECIFIED. I.E. FDOT TYPE NO.57 FOR FENCED COMPOUND; FDOT TYPE NO. 67 FOR ACCESS DRIVE AREA.
- IN ALL AREAS TO RECEIVE FILL, REMOVE ALL VEGETATION, TOPSOIL, DEBRIS, WET AND UNSATISFACTORY SOIL MATERIALS, OBSTRUCTIONS, AND DELETERIOUS MATERIALS FROM GROUND SURFACE. PLOW STRIP OR BREAK UP SLOPED SURFACES STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL SUCH THAT FILL MATERIAL WILL BIND WITH EXISTING/PREPARED SOIL SURFACE.



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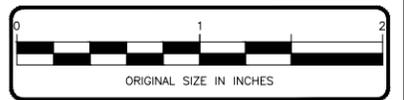
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DRAWINGS ISSUED FOR:

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PROJECT INFORMATION:

**SITE:**  
**14652325**  
**CHESTER II**

**KINGS HWY**  
**WARWICK, NY 10990**  
**ORANGE COUNTY**  
**WATER TANK**

SHEET TITLE: **GENERAL NOTES**

SHEET NUMBER: **GN01**      REVISION: **0**

10. WHEN SUBGRADE OR PREPARED GROUND SURFACE HAS A DENSITY LESS THAN THAT REQUIRED FOR THE FILL MATERIAL, SCARIFY THE GROUND SURFACE TO DEPTH REQUIRED, PULVERIZE, MOISTURE-CONDITION AND/OR AERATE THE SOILS AND RE-COMPACT TO THE REQUIRED DENSITY PRIOR TO PLACEMENT OR FILLS.
11. IN AREAS WHICH EXISTING GRAVEL SURFACING IS REMOVED OR DISTURBED DURING CONSTRUCTION OPERATIONS, REPLACE GRAVEL SURFACING TO MATCH ADJACENT GRAVEL SURFACING AND RESTORED TO THE SAME THICKNESS AND COMPACTION AS SPECIFIED. ALL RESTORED GRAVEL SURFACING SHALL BE FREE FROM CORRUGATIONS AND WAVES.
12. EXISTING GRAVEL SURFACING MAY BE EXCAVATED SEPARATELY AND REUSED WITH THE CONDITION THAT ANY UNFAVORABLE AMOUNTS OF ORGANIC MATTER, OR OTHER DELETERIOUS MATERIALS ARE REMOVED PRIOR TO REUSE. FURNISH ANY ADDITIONAL GRAVEL RESURFACING MATERIAL AS NEEDED TO PROVIDE A FULL DEPTH COMPACTED SURFACE THROUGHOUT SITE.
13. GRAVEL SUB SURFACE SHALL BE PREPARED TO REQUIRED COMPACTION AND SUBGRADE ELEVATIONS BEFORE GRAVEL SURFACING IS PLACED AND/OR RESTORED. ANY LOOSE OR DISTURBED MATERIALS SHALL BE THOROUGHLY COMPACTED AND ANY DEPRESSIONS IN THE SUBGRADE SHALL BE FILLED AND COMPACTED WITH APPROVED SELECTED MATERIAL. GRAVEL SURFACING MATERIAL SHALL NOT BE USED FOR FILLING DEPRESSIONS IN THE SUBGRADE.
14. PROTECT EXISTING GRAVEL SURFACING AND SUBGRADE IN AREAS WHERE EQUIPMENT LOADS WILL OPERATE. USE PLANKING 'MATTS' OR OTHER SUITABLE PROTECTION DESIGNED TO SPREAD EQUIPMENT LOADS AS MAY BE NECESSARY. REPAIR ANY DAMAGE TO EXISTING GRAVEL SURFACING OR SUB GRADE WHERE SUCH DAMAGE IS DUE TO THE CONTRACTORS OPERATIONS.
15. DAMAGE TO EXISTING STRUCTURES AND/OR UTILITIES RESULTING FROM CONTRACTORS NEGLIGENCE SHALL BE REPAIRED AND/OR REPLACED TO THE OWNERS SATISFACTION AT NO ADDITIONAL COST TO THE CONTRACT.
16. ALL SUITABLE BORROW MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID. EXCESS TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATIONS APPROVED BY GOVERNING AGENCIES AT NO ADDITIONAL COST TO THE CONTRACT.

**ENVIRONMENTAL NOTES:**

1. ALL WORK PERFORMED SHALL BE DONE IN ACCORDANCE WITH ISSUED PERMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF FINES AND PROPER CLEAN UP FOR AREAS IN VIOLATION.
2. CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS DURING CONSTRUCTION FOR PROTECTION OF ADJACENT PROPERTIES, ROADWAYS AND WATERWAYS AND SHALL BE MAINTAINED IN PLACE THROUGH FINAL JURISDICTIONAL INSPECTION & RELEASE OF SITE.
3. CONTRACTOR SHALL INSTALL/CONSTRUCT ALL NECESSARY SEDIMENT/SILT CONTROL FENCING AND PROTECTIVE MEASURES WITHIN THE LIMITS OF SITE DISTURBANCE PRIOR TO CONSTRUCTION.
4. NO SEDIMENT SHALL BE ALLOWED TO EXIT THE PROPERTY. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ADEQUATE MEASURES FOR CONTROLLING EROSION. ADDITIONAL SEDIMENT CONTROL FENCING MAY BE REQUIRED IN ANY AREAS SUBJECT TO EROSION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTIONS AND ANY REPAIRS OF ALL SEDIMENT CONTROL MEASURES INCLUDING SEDIMENT REMOVAL AS NECESSARY.
6. CLEARING OF VEGETATION AND TREE REMOVAL SHALL BE ONLY AS PERMITTED AND BE HELD TO A MINIMUM. ONLY TREES NECESSARY FOR CONSTRUCTION OF THE FACILITIES SHALL BE REMOVED.
7. SEEDING AND MULCHING AND/OR SODDING OF THE SITE WILL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE PROJECT FACILITIES AFFECTING LAND DISTURBANCE.
8. CONTRACTOR SHALL PROVIDE ALL EROSION AND SEDIMENTATION CONTROL MEASURES AS REQUIRED BY LOCAL, COUNTY AND STATE CODES AND ORDINANCES TO PROTECT EMBANKMENTS FROM SOIL LOSS AND TO PREVENT ACCUMULATION OF SOIL AND SILT IN STREAMS AND DRAINAGE PATHS LEAVING THE CONSTRUCTION AREA. THIS MAY INCLUDE SUCH MEASURES AS SILT FENCES, STRAW BALE SEDIMENT BARRIERS, AND CHECK DAMS.
9. RIP RAP OF SIZES INDICATED SHALL CONSIST OF CLEAN, HARD, SOUND, DURABLE, UNIFORM IN QUALITY STONE FREE OF ANY DETRIMENTAL QUANTITY OF SOFT, FRIABLE, THIN, ELONGATED OR LAMINATED PIECES, DISINTEGRATED MATERIAL, ORGANIC MATTER, OIL, ALKALI, OR OTHER DELETERIOUS SUBSTANCES.

**CONCRETE MASONRY NOTES:**

1. CONCRETE MASONRY UNITS SHALL BE MEDIUM WEIGHT UNITS CONFORMING TO ASTM C90, GRADE N-1, (F<sub>m</sub>=1,500 PSI). MEDIUM WEIGHT (115).
2. MORTAR SHALL BE TYPE "S" (MINIMUM 1,800 PSI AT 28 DAYS).
3. GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI AT 28 DAYS.
4. ALL CELLS CONTAINING REINFORCING STEEL OR EMBEDDED ITEMS AND ALL CELLS IN RETAINING WALLS AND WALLS BELOW GRADE SHALL BE SOLID GROUTED.
5. ALL HORIZONTAL REINFORCING STEEL SHALL BE PLACED IN BOND BEAM OR LINTEL BEAM UNITS.
6. WHEN GROUTING IS STOPPED FOR ONE HOUR OR LONGER, HORIZONTAL CONSTRUCTION JOINTS SHALL BE FORMED BY STOPPING THE GROUT POUR 1-1/2" BELOW TOP OF THE UPPERMOST UNIT.
7. ALL BOND BEAM BLOCK SHALL BE "DEEP CUT" UNITS.
8. PROVIDE INSPECTION AND CLEAN-OUT HOLES AT BASE OF VERTICAL CELLS HAVING GROUT LIFTS IN EXCESS OF 4'-0" OF HEIGHT.
9. ALL GROUT SHALL BE CONSOLIDATED WITH A MECHANICAL VIBRATOR. CEMENT SHALL BE AS SPECIFIED FOR CONCRETE.
11. REINFORCING BARS - SEE NOTES UNDER "REINFORCING STEEL" FOR REQUIREMENTS.

31. PROVIDE ONE BAR DIAMETER (A MINIMUM OF 1/2") GROUT BETWEEN MAIN REINFORCING AND MASONRY UNITS.
32. LOW LIFT CONSTRUCTION, MAXIMUM GROUT POUR HEIGHT IS 4 FEET.
33. LIFT GROUTED CONSTRUCTION MAY BE USED IN CONFORMANCE WITH PROJECT SPECIFICATIONS AND SECTION 2104.6.1 OF CURRENT BUILDING CODE.
34. ALL CELLS IN CONCRETE BLOCKS SHALL BE FILLED SOLID WITH GROUT, EXCEPT AS NOTED IN THE DRAWINGS OR SPECIFICATIONS.
35. CELLS SHALL BE IN VERTICAL ALIGNMENT, DOWELS IN FOOTINGS SHALL BE SET TO ALIGN WITH CORES CONTAINING REINFORCING STEEL.
36. REFER TO ARCHITECTURAL DRAWINGS FOR SURFACE AND HEIGHT OF UNITS, LAYING PATTERN AND JOINT TYPE.
37. SAND SHALL BE CLEAN, SHARP AND WELL GRADED, FREE FROM INJURIOUS AMOUNTS OF DUST, LUMPS, SHALE, ALKAU OR ORGANIC MATERIAL.
38. BRICK SHALL CONFORM TO ASTM C-62 AND SHALL BE GRADE MW OR BETTER.

**STRUCTURAL CONCRETE NOTES:**

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI-301-10
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH f<sub>c</sub>'=2,500 PSI AT 28 DAYS UNLESS NOTED OTHERWISE.
3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE.
4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
 

CONCRETE CAST AGAINST EARTH	3 IN.
CONCRETE EXPOSED TO EARTH OR WEATHER:	
#6 AND LARGER	2 IN.
#5 AND SMALLER & WWF	1-1/2 IN.
CONCRETE NOT EXPOSED TO EARTH OR WEATHER, NOR CAST AGAINST THE GROUND:	
SLAB AND WALL	3/4 IN.
BEAMS AND COLUMNS	1-1/2 IN.
5. A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE U.N.O. IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
6. HOLES TO RECEIVE EXPANSION/WEDGE ANCHORS SHALL BE 1/8" LARGER IN DIAMETER THAN THE ANCHOR BOLD, DOWEL OR ROD AND SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. LOCATE AND AVOID CUTTING EXISTING REBAR WHEN DRILLING HOLES IN ELEVATED CONCRETE SLABS.
7. USE AND INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER ICBO & MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURES.

**STRUCTURAL STEEL NOTES:**

1. ALL STEEL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AISC MANUAL OF STEEL CONSTRUCTION. STEEL SECTIONS SHALL BE IN ACCORDANCE WITH ASTM AS INDICATED BELOW:  
W-SHAPES: ASTM A992, 50 KSI  
ANGLES, BARS CHANNELS: ASTM A36, 36 KSI  
HSS SECTIONS: ASTM 500, 46 KSI  
PIPE SECTIONS: ASTM A53-E, 35 KSI
2. ALL EXTERIOR EXPOSED STEEL AND HARDWARE SHALL BE HOT DIPPED GALVANIZED.
3. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION." PAINTED SURFACES SHALL BE TOUCHED UP.
4. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE 3/4" Ø CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
5. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" Ø ASTM A307 BOLTS UNLESS NOTED OTHERWISE.
6. FIELD MODIFICATIONS ARE TO BE COATED WITH ZINC ENRICHED PAINT.

**SITE WORK & DRAINAGE:**

**PART 1 - GENERAL**

CLEARING, GRUBBING, STRIPPING, EROSION CONTROL, SURVEY, LAYOUT, SUBGRADE PREPARATION AND FINISH GRADING AS REQUIRED TO COMPLETE THE PROPOSED WORK SHOWN IN THESE PLANS.

**1.1 REFERENCES:**

- A. DOT (STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR WAY CONSTRUCTION - CURRENT EDITION)
- B. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS)
- C. OSHA (OCCUPATION SAFETY AND HEALTH ADMINISTRATION)

**1.2 INSPECTION AND TESTING:**

- A. FIELD TESTING OF EARTHWORK COMPACTION AND CONCRETE CYLINDERS
- B. ALL WORK SHALL BE INSPECTED AND RELEASED BY THE GENERAL CONTRACTOR WHO SHALL CARRY OUT THE GENERAL INSPECTION OF THE WORK WITH SPECIFIC CONCERN TO PROPER PERFORMANCE OF THE WORK AS SPECIFIED AND/OR CALLED FOR ON THE DRAWINGS. IT IS THE SUBCONTRACTOR'S RESPONSIBILITY TO REQUEST TIMELY INSPECTIONS PRIOR TO PROCEEDING WITH FURTHER WORK THAT WOULD MAKE PARTS OF WORK INACCESSIBLE OR DIFFICULT TO INSPECT.

**1.3 SITE MAINTENANCE AND PROTECTION:**

- A. PROVIDE ALL NECESSARY JOB SITE MAINTENANCE FROM COMMENCEMENT OF WORK UNTIL COMPLETION OF THE SUBCONTRACT.
- B. AVOID DAMAGE TO THE SITE AND TO EXISTING FACILITIES, STRUCTURES, TREES, AND SHRUBS DESIGNATED TO REMAIN. TAKE PROTECTIVE MEASURES TO PREVENT EXISTING FACILITIES THAT ARE NOT DESIGNATED FOR REMOVAL FROM BEING DAMAGED BY THE WORK.
- C. KEEP SITE FREE OF ALL PONDING WATER.
- D. PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH STATE DOT AND EPA REQUIREMENTS.
- E. PROVIDE AND MAINTAIN ALL TEMPORARY FENCING, BARRICADES, WARNING SIGNALS AND SIMILAR DEVICES NECESSARY TO PROTECT AGAINST THEFT FROM PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION. REMOVE ALL SUCH DEVICES UPON COMPLETION OF THE WORK.
- F. EXISTING UTILITIES: DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED BY THE OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING BY THE ENGINEER, AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICES HAVE BEEN PROVIDED.

PROVIDE A MINIMUM 48-HOUR NOTICE TO THE ENGINEER AND RECEIVE WRITTEN NOTICE TO PROCEED BEFORE INTERRUPTING ANY UTILITY SERVICE.

**PART 2 - PRODUCTS**

- 2.1 SUITABLE BACKFILL: ASTM D2321 (CLASS I, II, III, OR IVA) FREE FROM FROZEN LUMPS, REFUSE, STONES OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.
- 2.2 NON-POROUS GRANULAR EMBANKMENT AND BACKFILL: ASTM D2321 (CLASS III, IVA OR IVB) COARSE AGGREGATE, FREE FROM FROZEN LUMPS, REFUSE, STONES, OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.
- 2.3 POROUS GRANULAR EMBANKMENT AND BACKFILL: ASTM D2321 (CLASS IA, IB, OR II) COARSE AGGREGATE FREE FROM FROZEN LUMPS, REFUSE, STONES, OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.
- 2.4 SELECT STRUCTURAL FILL: GRANULAR FILL MATERIAL MEETING THE REQUIREMENTS OF ASTM E850-95. FOR USE AROUND AND UNDER STRUCTURES WHERE STRUCTURAL FILL MATERIAL ARE REQUIRED.
- 2.5 GRANULAR BEDDING AND TRENCH BACKFILL: WELL-GRADED SAND MEETING THE GRADATION REQUIREMENTS OF ASTM D2487 (SE OR SW-SM).
- 2.6 COARSE AGGREGATE FOR ACCESS ROAD SUB BASE COURSE SHALL CONFORM TO ASTM D2940.
- 2.7 UNSUITABLE MATERIAL: AND MODERATELY PLASTIC SILTS AND CLAYS (LL>45). MATERIAL CONTAINING REFUSE, FROZEN LUMPS, DEMOLISHED BITUMINOUS MATERIAL, VEGETATIVE MATTER, WOOD, STONES IN EXCESS OF 3 INCHES IN ANY DIMENSION, AND DEBRIS AS DETERMINED BY THE CONSTRUCTION MANAGER. TYPICAL THESE WILL BE SOILS CLASSIFIED BY ASTM AS PT, MH, CH, OH, ML, AND OL.
- 2.8 GEOTEXTILE FABRIC: MIRAFI 500X OR APPROVED EQUAL.
- 2.9 PLASTIC MARKING TAPE: SHALL BE ACID AND ALKALI RESISTANT POLYETHYLENE FILM SPECIFICALLY MANUFACTURED FOR MARKING AND LOCATING UNDERGROUND UTILITIES, 6 INCHES WIDE WITH A MINIMUM THICKNESS OF 0.004 INCH. TAPE SHALL HAVE MINIMUM STRENGTH OF 1500 PSI IN BOTH DIRECTIONS AND MANUFACTURED WITH INTEGRAL CONDUCTORS, FOIL BACKING OR OTHER MEANS TO ENABLE DETECTION BY A METAL DETECTOR WHEN BURIED UP TO 3 FEET DEEP. THE METALLIC CORE OF THE TAPE SHALL BE ENCASED IN A PROTECTIVE JACKET OR PROVIDED WITH OTHER MEANS TO PROTECT IT FROM CORROSION. TAPE COLOR SHALL BE RED FOR ELECTRIC UTILITIES AND ORANGE FOR TELECOMMUNICATION UTILITIES.

**PART 2 - EXECUTION**

**3.1 GENERAL:**

- A. BEFORE STARTING GENERAL SITE PREPARATION ACTIVITIES, INSTALL EROSION AND SEDIMENT CONTROL MEASURES. THE WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH A CONDITION THAT IN THE EVENT OF RAIN THE SITE WILL BE DRAINED AT ANY TIME.
- B. BEFORE ALL SURVEY, LAYOUT, STAKING, AND MARKING, ESTABLISH AND MAINTAIN ALL LINES, GRADES, ELEVATIONS AND BENCHMARKS NEEDED FOR EXECUTION OF THE WORK.
- C. CLEAR AND GRUB THE AREA WITHIN THE LIMITS OF THE SITE. REMOVE TREES, BRUSH, STUMPS, RUBBISH AND OTHER DEBRIS AND VEGETATION RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE SITE AREA TO BE CLEARED.
  1. REMOVE THE FOLLOWING MATERIALS TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE ORIGINAL GROUND SURFACE: ROOTS, STUMPS, AND OTHER DEBRIS, BRUSH, AND REFUSE EMBEDDED IN OR PROTRUDING THROUGH THE GROUND SURFACE, RAKE, DISK OR PLOW THE AREA TO A DEPTH OF NO LESS THAN 6 INCHES, AND REMOVE TO A DEPTH OF 12 INCHES ALL ROOTS AND OTHER DEBRIS THEREBY EXPOSED.
  2. REMOVE TOPSOIL MATERIAL COMPLETELY FROM THE SURFACE UNTIL THE SOIL NO LONGER MEETS THE DEFINITION OF TOPSOIL. AVOID MIXING TOPSOIL WITH SUBSOIL OR OTHER UNDESIRABLE MATERIALS.
  3. EXCEPT WHERE EXCAVATION TO GREATER DEPTH IS INDICATED, FILL DEPRESSIONS RESULTING FROM CLEARING, GRUBBING, AND DEMOLITION WORK COMPLETELY WITH SUITABLE FILL.
  4. REMOVE FROM THE SITE AND DISPOSE IN AN AUTHORIZED LANDFILL ALL DEBRIS RESULTING FROM CLEARING AND GRUBBING OPERATIONS. BURNING WILL NOT BE PERMITTED.

- E. PRIOR TO EXCAVATING, THOROUGHLY EXAMINE THE AREA TO BE EXCAVATED AND/OR TRENCHED TO VERIFY THE LOCATIONS OF FEATURES INDICATED ON THE DRAWINGS AND TO ASCERTAIN THE EXISTENCE AND LOCATION OF ANY STRUCTURE, UNDERGROUND STRUCTURE, OR OTHER ITEM NOT SHOWN THAT MIGHT INTERFERE WITH THE PROPOSED CONSTRUCTION. NOTIFY THE CONSTRUCTION MANAGER OF ANY OBSTRUCTIONS THAT WILL PREVENT ACCOMPLISHMENT OF THE WORK AS INDICATED ON THE DRAWINGS.
- F. SEPARATE AND STOCK PILE ALL EXCAVATED MATERIALS SUITABLE FOR BACKFILL. ALL EXCESS EXCAVATED AND UNSUITABLE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.

**3.2 BACKFILL:**

- A. AS SOON AS PRACTICAL, AFTER COMPLETING CONSTRUCTION OF THE RELATED STRUCTURE, INCLUDING EXPIRATION OF THE SPECIFIED MINIMUM CURING PERIOD FOR CAST-IN-PLACE CONCRETE, BACKFILL THE EXCAVATION WITH APPROVED MATERIAL TO RESTORE THE REQUIRED FINISHED GRADE.
- B. PRIOR TO PLACING BACKFILL AROUND STRUCTURES, ALL FORMS SHALL BE REMOVED AND THE EXCAVATION CLEANED OF ALL TRASH, DEBRIS, AND UNSUITABLE MATERIALS.
- C. BACKFILL BY PLACING AND COMPACTING SUITABLE BACKFILL MATERIAL OR SELECT GRANULAR BACKFILL MATERIAL WHEN REQUIRED IN UNIFORM HORIZONTAL LAYERS OF NO GREATER THAN 8-INCHES LOOSE THICKNESS AND COMPACTED. WHERE HAND OPERATED COMPACTORS ARE USED, THE FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 4 INCHES IN LOOSE DEPTH AND COMPACTED.
- D. WHENEVER THE DENSITY TESTING INDICATES THAT THE CONTRACTOR HAS NOT OBTAINED THE SPECIFIED DENSITY, THE SUCCEEDING LAYER SHALL NOT BE PLACED UNTIL THE SPECIFICATION REQUIREMENTS ARE MET UNLESS OTHERWISE AUTHORIZED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL TAKE WHATEVER APPROPRIATE ACTION IS NECESSARY , SUCH AS DISKING AND DRYING, ADDING WATER, OR INCREASING THE COMPACTIVE EFFORT TO MEET THE MINIMUM COMPACTION REQUIREMENTS.
- E. THOROUGHLY COMPACT EACH LAYER OF BACKFILL TO A MINIMUM 95% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 698.

**3.3 TRENCH EXCAVATION:**

- A. UTILITY TRENCHES SHALL BE EXCAVATED TO THE LINES AND GRADES SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE GENERAL CONTRACTOR. PROVIDE SHORING, SHEETING AND BRACING AS REQUIRED TO PREVENT CAVING OR SLOUGHING OF THE TRENCH WALLS.
- B. EXTEND THE TRENCH WIDTH A MINIMUM OF 6 INCHES BEYOND THE OUTSIDE EDGE OF THE OUTERMOST CONDUIT.
- C. WHEN SOFT YIELDING, OR OTHERWISE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, BACKFILL AT THE REQUIRED TRENCH TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE REQUIRED ELEVATION AND BACKFILL WITH GRANULAR BEDDING MATERIAL.

**3.4 TRENCH BACKFILL:**

- A. PROVIDE GRANULAR BEDDING MATERIAL IN ACCORDANCE WITH THE DRAWINGS AND THE UTILITY REQUIREMENTS.
- B. NOTIFY THE GENERAL CONTRACTOR 24 HOURS IN ADVANCE OF BACKFILLING.
- C. CONDUCT UTILITY CHECK TESTS BEFORE BACKFILLING. BACKFILL AND COMPACT TRENCH BEFORE ACCEPTANCE TESTING.
- D. PLACE GRANULAR TRENCH BACKFILL UNIFORMLY ON BOTH SIDES OF THE CONDUITS IN 6-INCH UNCOMPACTED LIFTS UNTIL 12 INCHES OVER THE CONDUITS. SOLIDLY RAM AND TAMP BACKFILL INTO SPACE AROUND CONDUITS.
- E. PROTECT CONDUIT FROM LATERAL MOVEMENT, IMPACT DAMAGE, OR UNBALANCED LOADING.
- F. ABOVE THE CONDUIT EMBEDMENT ZONE, PLACE AND COMPACT SATISFACTORY BACKFILL MATERIAL IN 8-INCH MAXIMUM LOOSE THICKNESS LIFTS TO RESTORE THE REQUIRED FINISHED SURFACE GRADE.
- G. COMPACT FINAL TRENCH BACKFILL TO A DENSITY EQUAL TO OR GREATER THAN THAT OF THE EXISTING UNDISTURBED MATERIAL IMMEDIATELY ADJACENT TO THE TRENCH BUT NO LESS THAN A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 698.

**3.5 FINISH GRADING:**

- A. PERFORM ALL GRADING TO PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND SMOOTH, EVEN SURFACE DRAINAGE OF THE ENTIRE AREA WITHIN THE LIMITS OF CONSTRUCTION. GRADING SHALL BE COMPATIBLE WITH ALL SURROUNDING TOPOGRAPHY AND STRUCTURES.
- B. UTILIZE SATISFACTORY FILL MATERIAL RESULTING FROM THE EXCAVATION WORK IN THE CONSTRUCTION OF FILLS, EMBANKMENTS AND FOR REPLACEMENT OF REMOVED UNSUITABLE MATERIALS.
- C. ACHIEVE FINISHED GRADE BY PLACING A MINIMUM OF 4 INCHES OF 1/2" - 3/4" CRUSHED STONE ON TOP SOIL STABILIZER FABRIC.
- D. REPAIR ALL ACCESS ROADS AND SURROUNDING AREAS USED DURING THE COARSE OF THIS WORK TO THEIR ORIGINAL CONDITION.

**3.7 ASPHALT PAVING ROAD:**

- A. DIVISION 600 - KDOT FLEXIBLE PAVEMENT. (UPDATE PER LOCAL DOT)
- B. SECTION 403 - MODOOT ASPHALT CONCRETE PAVEMENT.



CONSULTANT TEAM:

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**AIROSMITH ENGINEERING**  
 318 WEST AVE.  
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 CLUSTER #  
 ATT NSB NYC 202103

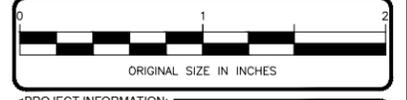
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DRAWINGS ISSUED FOR:

REV.	DATE	DRAWN	DESCRIPTION	QA/QC
0	08/22/22	SKB	ZD FOR PERMIT	AJD



PROJECT INFORMATION:

**SITE:**  
**14652325**  
**CHESTER II**  
**KINGS HWY**  
**WARWICK, NY 10990**  
**ORANGE COUNTY**  
**WATER TANK**

SHEET TITLE:  
**GENERAL NOTES CON'T**

SHEET NUMBER: **GN02**      REVISION: **0**



**LOCATION MAP**

**NOTE:**  
PER ORANGE COUNTY NY GIS MAP  
THERE ARE NO EXISTING WETLANDS  
PRESENT ON THE SUBJECT PARCEL

**NOTE:**  
NO SITE CLEARING IS REQUIRED  
FOR PROPOSED INSTALLATION

**NOTE:**  
SITE IS LOCATED WITHIN  
FEMA FLOOD ZONE "X"

INFORMATION CONTAINED WITHIN THESE DRAWINGS IS BASED  
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RESULT OF AN ON-SITE FIELD SURVEY. CONTRACTOR TO  
VERIFY PRIOR TO CONSTRUCTION.

ZONING TABLE (SR-1)		
	REQUIRED	PROPOSED
MINIMUM LOT		
AREA (ACRES):	5 AC.	NO CHANGE
WIDTH (FEET):	400'	NO CHANGE
MINIMUM REQUIRED YARDS (FT)		
FRONT:	100'	±186'
ONE SIDE:	100'	±375'
TOTAL SIDE:	200'	±1,135'
REAR:	100'	±38'
MAXIMUM BUILDING HEIGHT (FT):	35'	±107.25'
MAXIMUM PERCENTAGE OF BUILDING COVERAGE:	10%	NO CHANGE

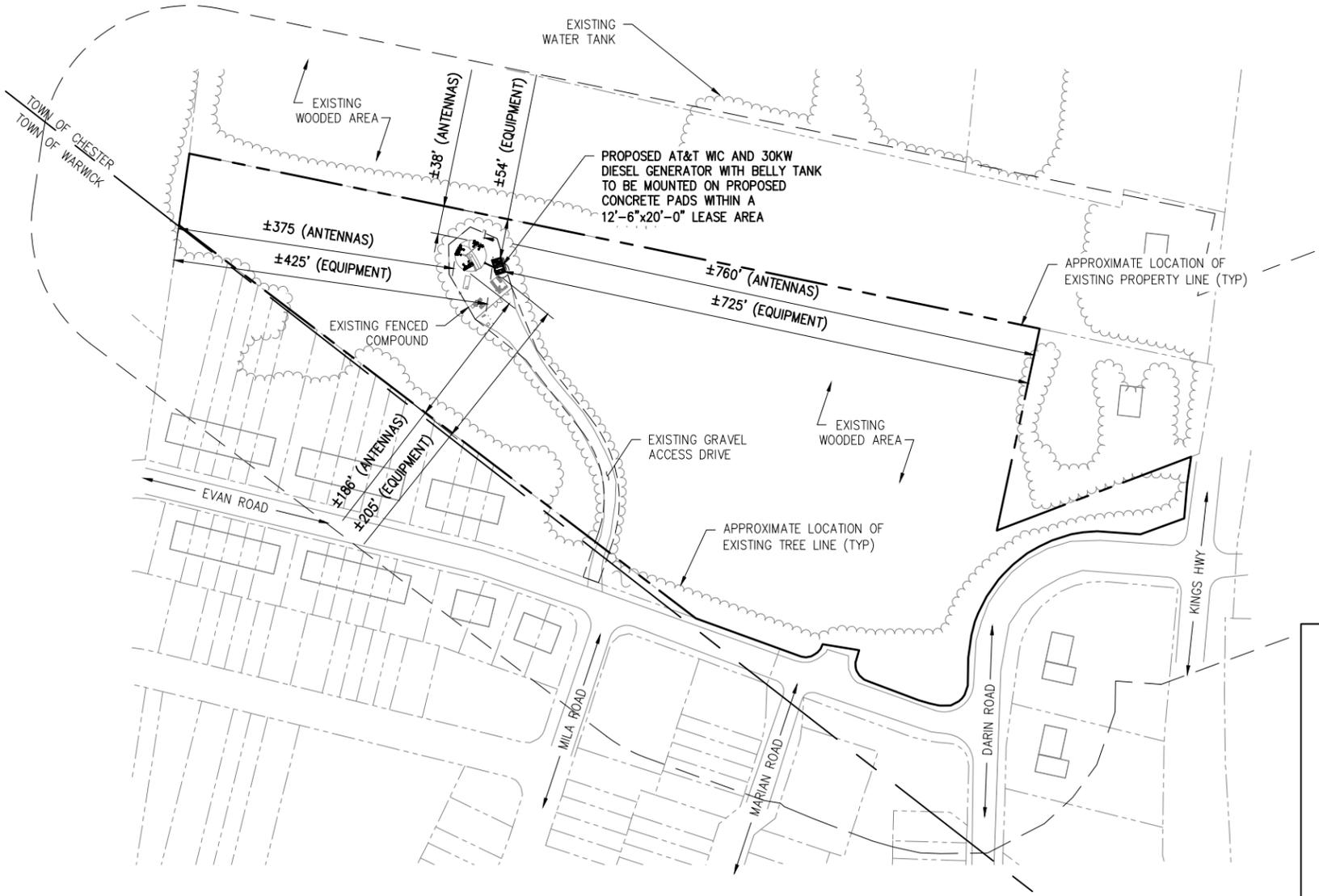
- NOTES:**
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  - INSTALLER SHALL PROVIDE ALL NECESSARY CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETED INSTALLATION AND SHALL COMPLY WITH EQUIPMENT MANUFACTURER'S INSTALLATION REQUIREMENTS.
  - INSTALLER SHALL PROVIDE ALL STRAIN RELIEF FOR ALL CABLE ASSEMBLIES ROUTING TO THE ANTENNAS. UTILIZATION OF HOISTING GRIPS ON ALL DC POWER AND FIBER OPTIC CABLES SHALL BE UTILIZED.

**ABBREVIATIONS**

- AWG AMERICAN WIRE GAUGE
- BFG BELOW FINISH GRADE
- BTS BARE TINNED STRANDED
- C CONDUIT
- CAB CABINET
- DLO DIESEL LOCOMOTIVE CABLE
- DWG DRAWING
- EGR EXTERIOR GROUND RING
- EIGB EXTERIOR ISOLATED GROUND BAR
- G GROUND
- HALO INTERIOR GROUND RING
- MIGB MAIN ISOLATED GROUND BAR
- MGN MULTI-GROUNDED NEUTRAL
- MSC MOBILE SWITCHING CENTER
- MTSO MOBILE TELEPHONE SWITCHING OFFICE
- PVC POLYVINYL CHLORIDE
- RGS RIGID GALVANIZED STEEL
- SS STAINLESS STEEL
- SST SELF SUPPORTING TOWER
- TGR TOWER GROUND RING
- TYP TYPICAL

**LEGEND**

- | EXISTING |                        | PROPOSED |
|----------|------------------------|----------|
|          | UTILITY POLE           |          |
|          | TREE                   |          |
|          | UTILITY POLE GUY WIRE  |          |
|          | FENCE LINE             |          |
|          | SILT FENCE             |          |
|          | BUILDING LINE          |          |
|          | GROUNDING LINE         |          |
|          | GROUND ROD             |          |
|          | GROUND TEST WELL       |          |
|          | UNDERGROUND ELEC. LINE |          |
|          | UNDERGROUND TELE. LINE |          |
|          | UNDERGROUND GAS LINE   |          |



CONSULTANT TEAM:

**AIROSMITH DEVELOPMENT**  
AIROSMITH ENGINEERING  
318 WEST AVE.  
SARATOGA SPRINGS, NY 12866  
CLUSTER #  
ATT NSB NYC 202103

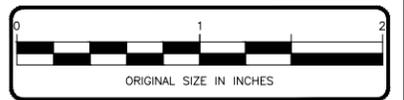
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PROFESSIONAL STAMP:

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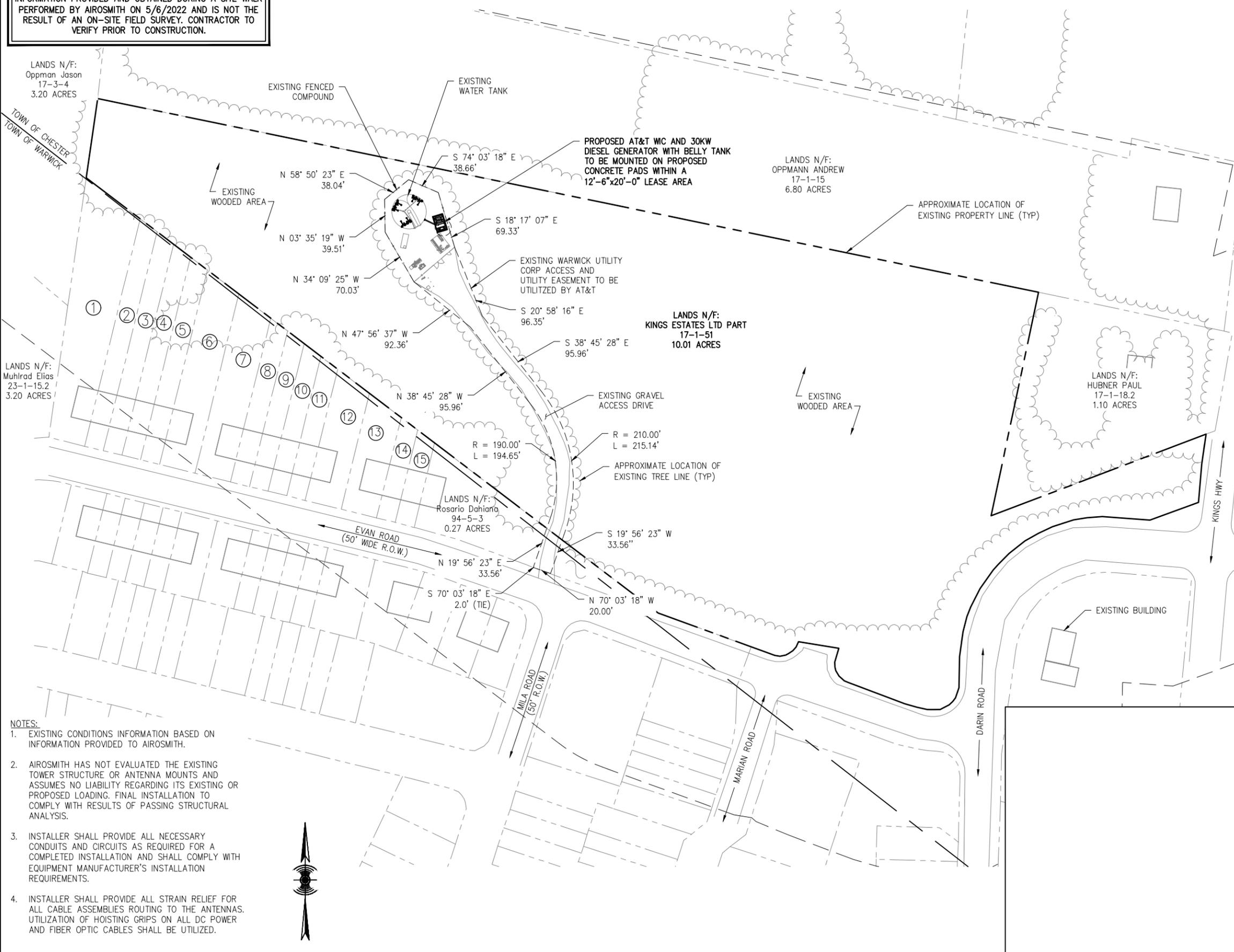
**SITE:**  
14652325  
CHESTER II  
KINGS HWY  
WARWICK, NY 10990  
ORANGE COUNTY  
WATER TANK

SHEET TITLE:  
**OVERALL  
SITE PLAN**

SHEET NUMBER: **Z01**      REVISION: **0**



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**ABUTTORS LIST**

- ① LANDS N/F: Scott Frank R 94-5-18 0.27 ACRES
- ② LANDS N/F: Smith Curtis 94-5-17 0.15 ACRES
- ③ LANDS N/F: Lewis Aubre 94-5-16 0.16 ACRES
- ④ LANDS N/F: Austin Sophia R 94-5-15 0.15 ACRES
- ⑤ LANDS N/F: Belfort Marlene 94-5-14 0.15 ACRES
- ⑥ LANDS N/F: Oliveras Charles 94-5-13 0.24 ACRES
- ⑦ LANDS N/F: Jordan Martin T 94-5-12 0.10 ACRES
- ⑧ LANDS N/F: Washington Sharon 94-5-11 0.10 ACRES
- ⑨ LANDS N/F: Walker Charles 94-5-10 0.11 ACRES
- ⑩ LANDS N/F: Jones Fatimah 94-5-9 0.10 ACRES
- ⑪ LANDS N/F: Kraus Rifka 94-5-8 0.10 ACRES
- ⑫ LANDS N/F: Del Salto Vinicio 94-5-7 0.10 ACRES
- ⑬ LANDS N/F: Hirsch Samuel 94-5-6 0.14 ACRES
- ⑭ LANDS N/F: Juliano Alfred M 94-5-5 0.10 ACRES
- ⑭ LANDS N/F: Wilson Leshonda 94-5-4 0.10 ACRES

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CARRIER:  
**AT&T**

CONSULTANT TEAM:  
**AIROSMITH**  
AIROSMITH DEVELOPMENT  
AIROSMITH ENGINEERING  
318 WEST AVE.  
SARATOGA SPRINGS, NY 12866  
CLUSTER #  
ATT NSB NYC 202103

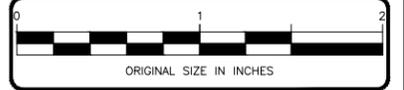
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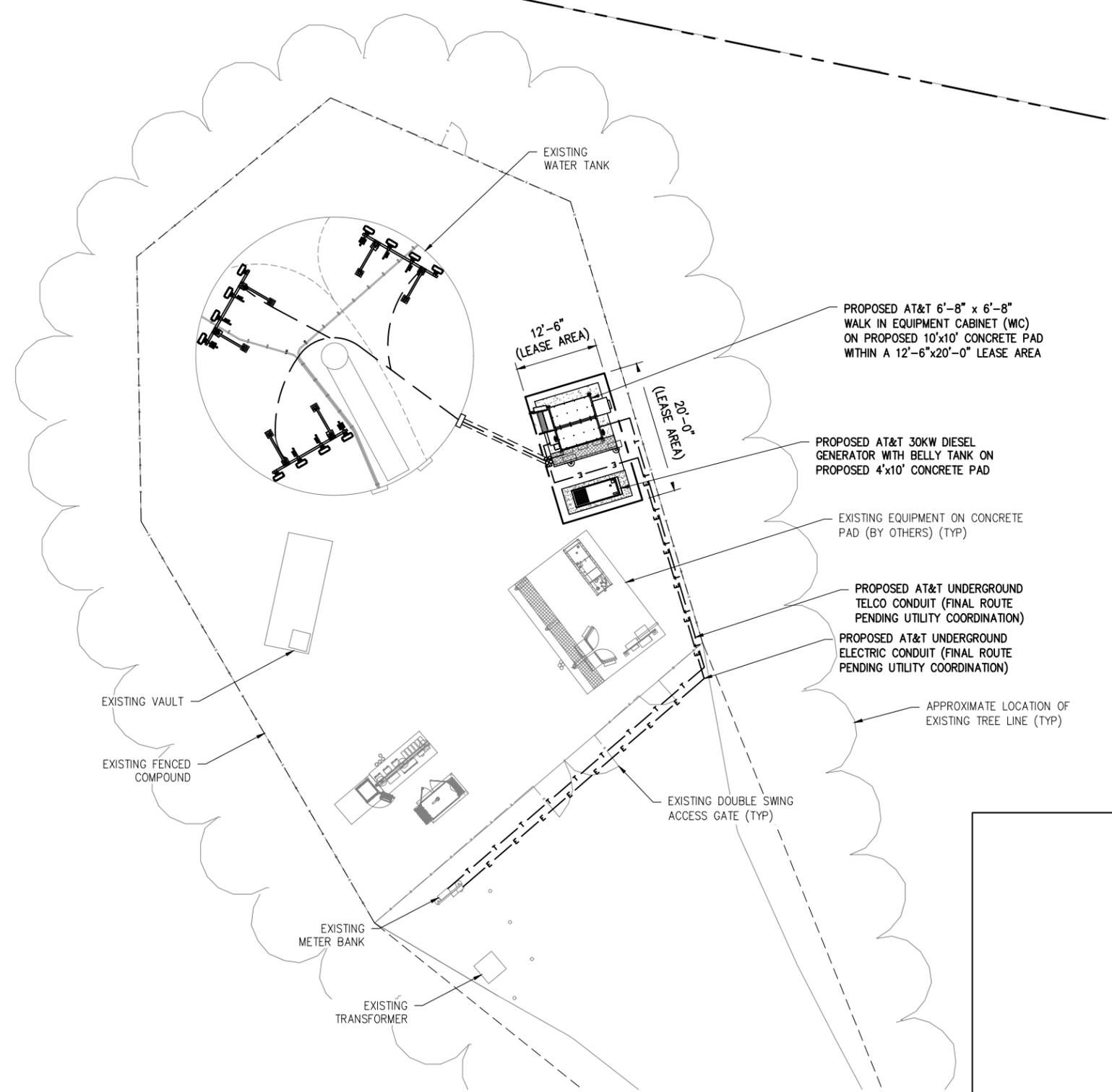
**PROJECT INFORMATION:**

**SITE:**  
14652325  
CHESTER II  
KINGS HWY  
WARWICK, NY 10990  
ORANGE COUNTY  
WATER TANK

**SHEET TITLE:**  
ABUTTORS MAP

**SHEET NUMBER:** Z02 **REVISION:** 0

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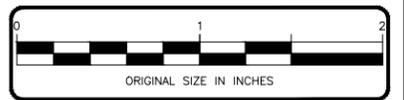
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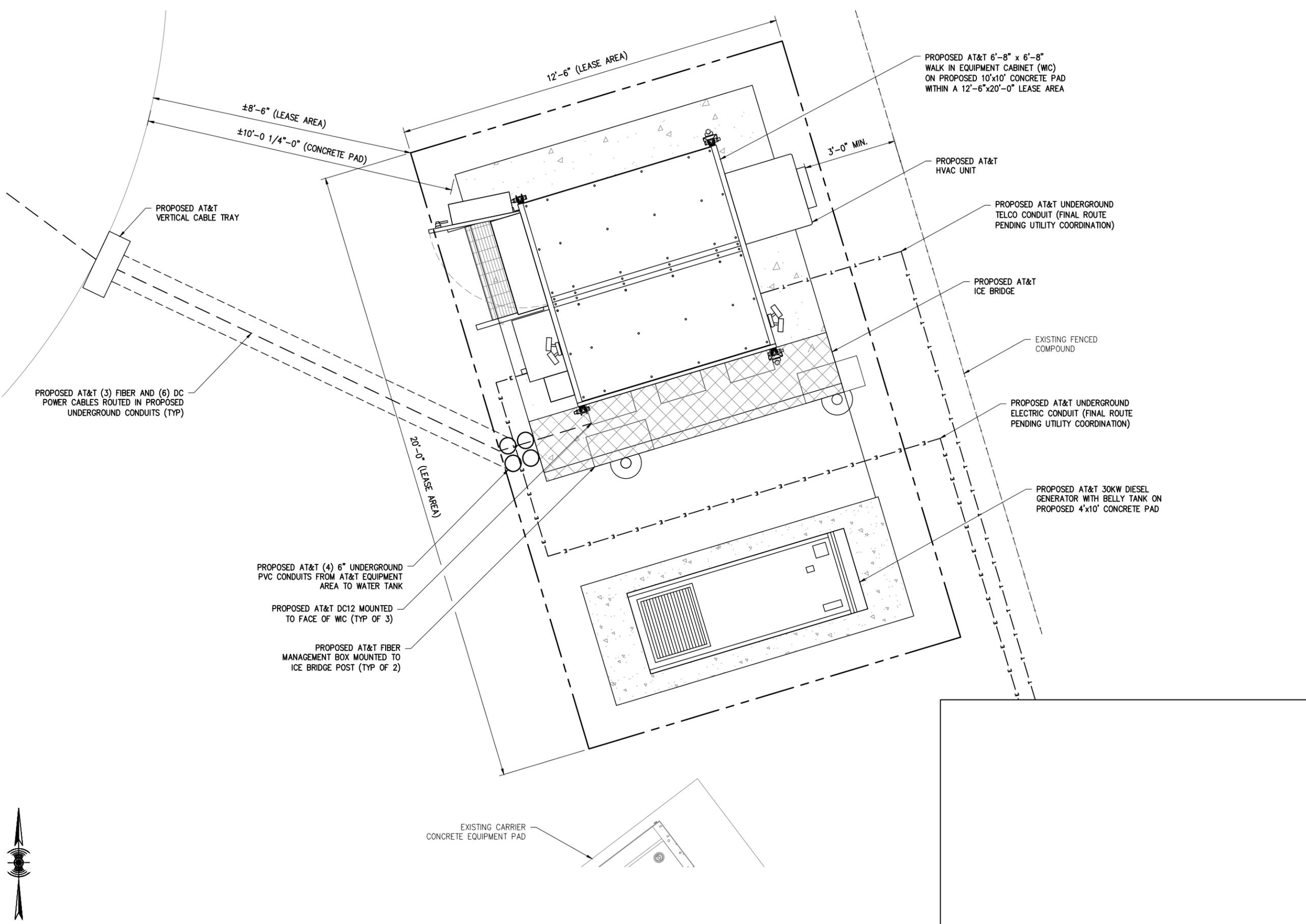
PROJECT INFORMATION:

SITE:  
 14652325  
 CHESTER II  
 KINGS HWY  
 WARWICK, NY 10990  
 ORANGE COUNTY  
 WATER TANK

SHEET TITLE:  
 COMPOUND PLAN

SHEET NUMBER: **Z03** REVISION: **0**





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PROJECT INFORMATION:

SITE:  
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CHESTER II  
KINGS HWY  
WARWICK, NY 10990  
ORANGE COUNTY  
WATER TANK

SHEET TITLE:  
ENLARGED SITE PLAN

SHEET NUMBER: **Z04** REVISION: **0**

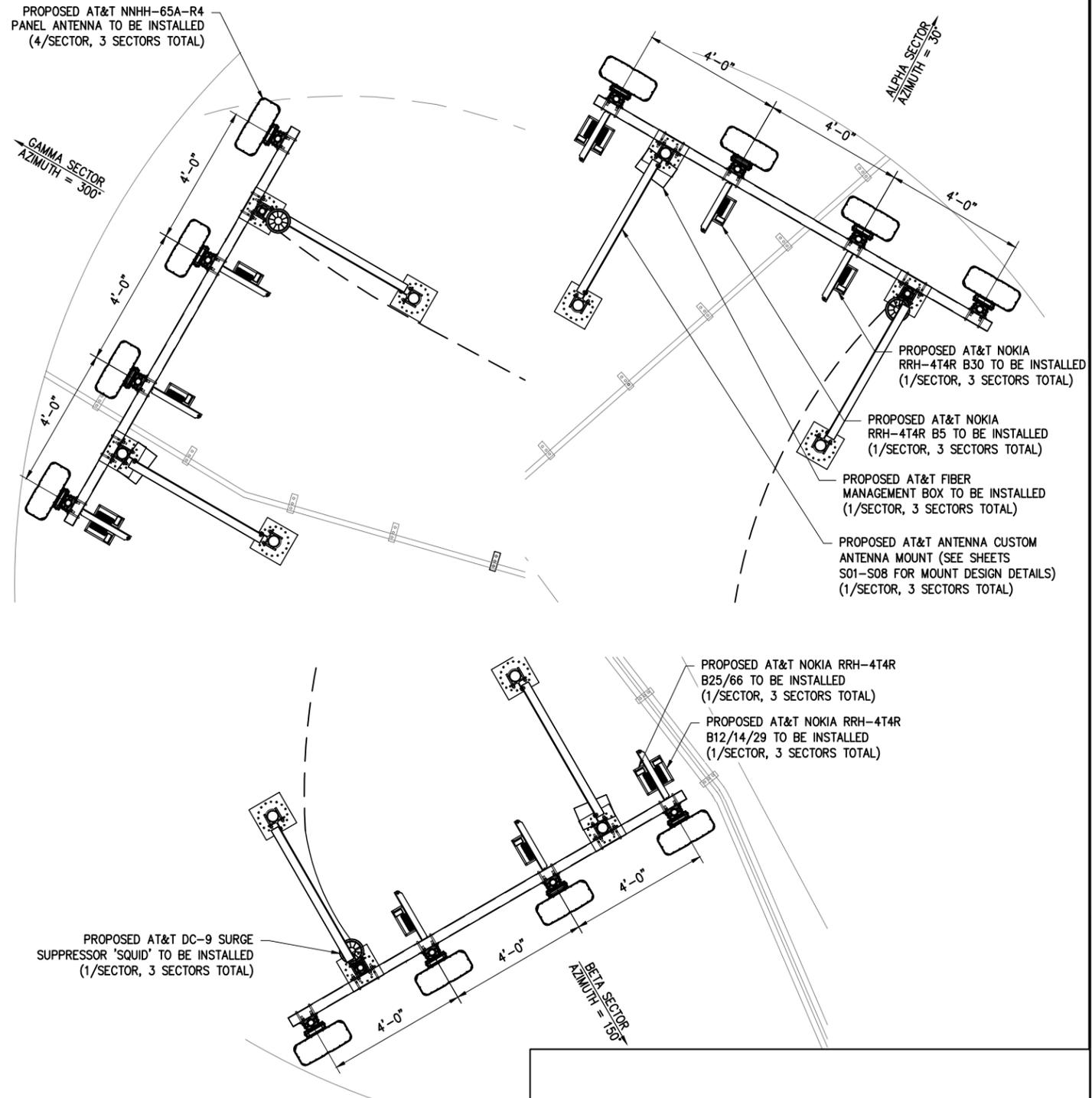
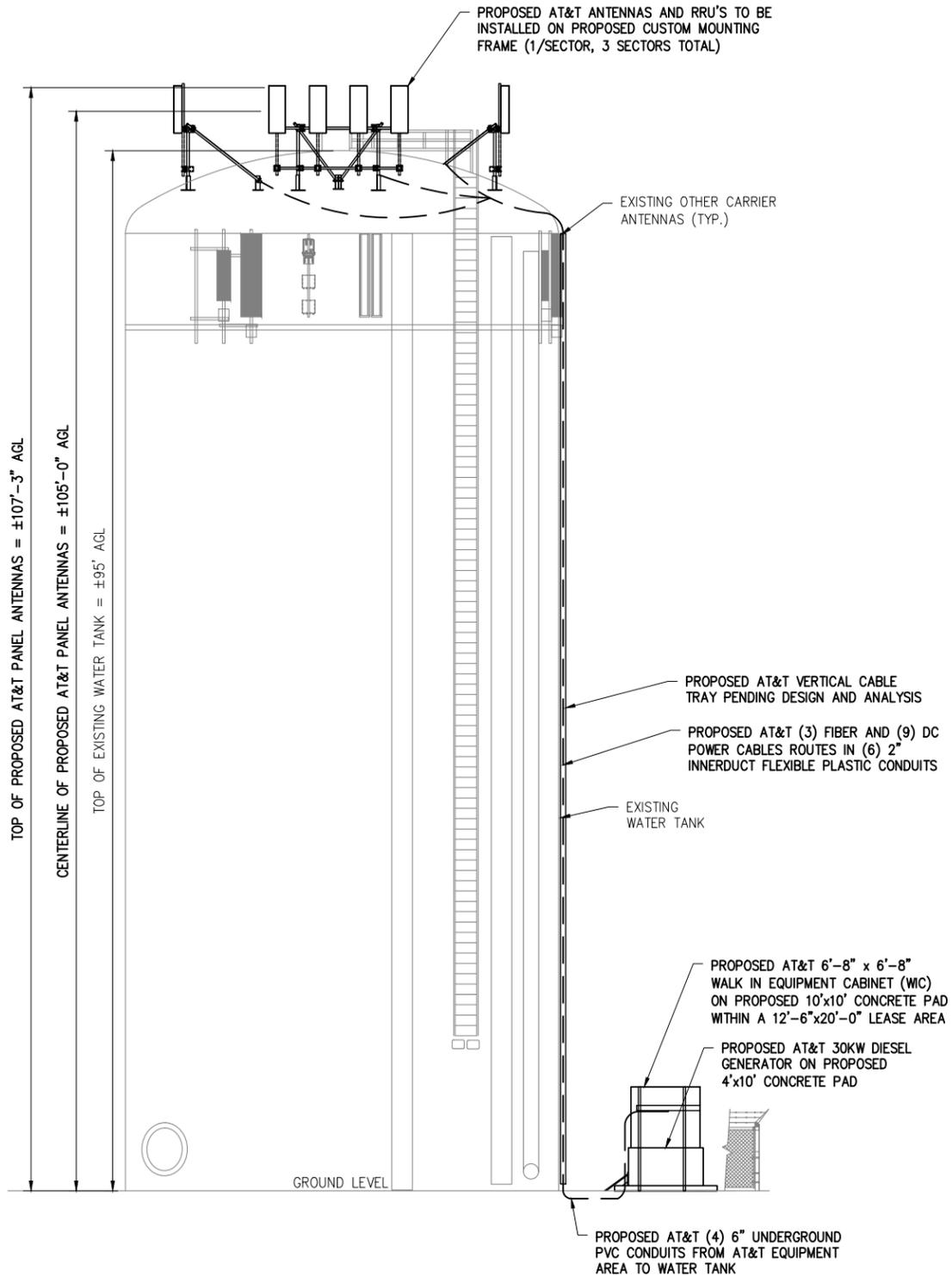


**1 ENLARGED SITE PLAN**

SCALE: 1" = 3' (11"x17"), 1" = 1'-6" (22"x34")

STRUCTURAL NOTE:  
 STRUCTURAL ANALYSIS COMPLETED BY AIROSMITH  
 ENGINEERING, TITLED 'STRUCTURAL ANALYSIS REPORT',  
 DATED 7/1/22.

MOUNT ANALYSIS NOTE:  
 MOUNT DESIGN AND ANALYSIS COMPLETED BY  
 AIROSMITH ENGINEERING, TITLED 'MOUNT DESIGN  
 REPORT', DATED 7/1/22. SEE SHEETS S01-S08 FOR  
 MOUNT DESIGN AND INSTALLATION DETAILS.



CONSULTANT TEAM:  
**AIROSMITH**  
 AIROSMITH DEVELOPMENT  
 AIROSMITH ENGINEERING  
 318 WEST AVE.  
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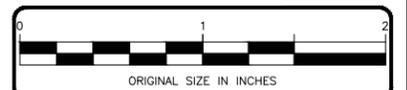
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PROJECT INFORMATION:  
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 WARWICK, NY 10990  
 ORANGE COUNTY  
 WATER TANK

SHEET TITLE:  
 ELEVATION VIEW  
 AND ORIENTATION PLAN

SHEET NUMBER: **Z05** REVISION: **0**

**1 ELEVATION VIEW**  
 NOT TO SCALE

**2 AT&T ANTENNA ORIENTATION PLAN**  
 SCALE: 1" = 3' (11"x17"), 1" = 1'-6" (22"x34")

PROPOSED ANTENNA AND RADIO MODEL NUMBERS									
SECTOR	EXISTING/ PROPOSED	BAND	ANTENNA	ANTENNA CL HEIGHT	AZIMUTH	RRU	TMA/DIPLEXER	CABLE	CABLE LENGTH
ALPHA	PROPOSED	LTE 700/1900/AWS	(1) COMMSCOPE NNHH-65A-R4	105'	30°	(1) RRH 4T4R B12/14/29 370W AHLBBA (P) (1) RRH 4T4R B25/66 320W AHFIB (P)	--	(2) DC POWER	±150'
							--	(1) FIBER	±150'
	PROPOSED	LTE 5G 850	(1) COMMSCOPE NNHH-65A-R4	105'	30°	(1) RRH 4T4R B5 160W AHCA (P)	--	--	--
	PROPOSED	LTE 700/WCS	(1) COMMSCOPE NNHH-65A-R4	105'	30°	(1) RRH 4T4R B30 100W AHNA (P)	--	--	--
BETA	PROPOSED	LTE 700/1900/AWS	(1) COMMSCOPE NNHH-65A-R4	105'	150°	(1) RRH 4T4R B12/14/29 370W AHLBBA (P) (1) RRH 4T4R B25/66 320W AHFIB (P)	--	(2) DC POWER	±150'
							--	(1) FIBER	±150'
	PROPOSED	LTE 5G 850	(1) COMMSCOPE NNHH-65A-R4	105'	150°	(1) RRH 4T4R B5 160W AHCA (P)	--	--	--
	PROPOSED	LTE 700/WCS	(1) COMMSCOPE NNHH-65A-R4	105'	150°	(1) RRH 4T4R B30 100W AHNA (P)	--	--	--
GAMMA	PROPOSED	LTE 700/1900/AWS	(1) COMMSCOPE NNHH-65A-R4	105'	300°	(1) RRH 4T4R B12/14/29 370W AHLBBA (P) (1) RRH 4T4R B25/66 320W AHFIB (P)	--	(2) DC POWER	±150'
							--	(1) FIBER	±150'
	PROPOSED	LTE 5G 850	(1) COMMSCOPE NNHH-65A-R4	105'	300°	(1) RRH 4T4R B5 160W AHCA (P)	--	--	--
	PROPOSED	LTE 700/WCS	(1) COMMSCOPE NNHH-65A-R4	105'	300°	(1) RRH 4T4R B30 100W AHNA (P)	--	--	--
	PROPOSED	LTE	(1) COMMSCOPE NNHH-65A-R4	105'	300°	--	--	--	--

\* CABLE LENGTH INCLUDES:  
• VERTICAL RUN ON TOWER (GRADE TO CL)  
• HORIZONTAL ICE BRIDGE LENGTH  
• VERTICAL RUN INSIDE WIC (GRADE TO CEILING, +10')  
NO ADDITIONAL BUFFER HAS BEEN ADDED.



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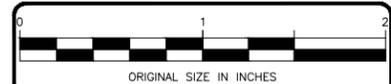
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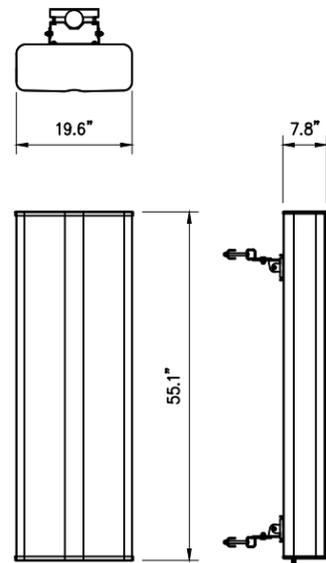
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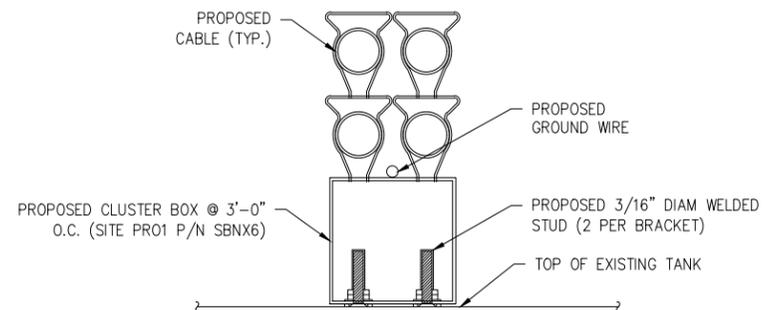
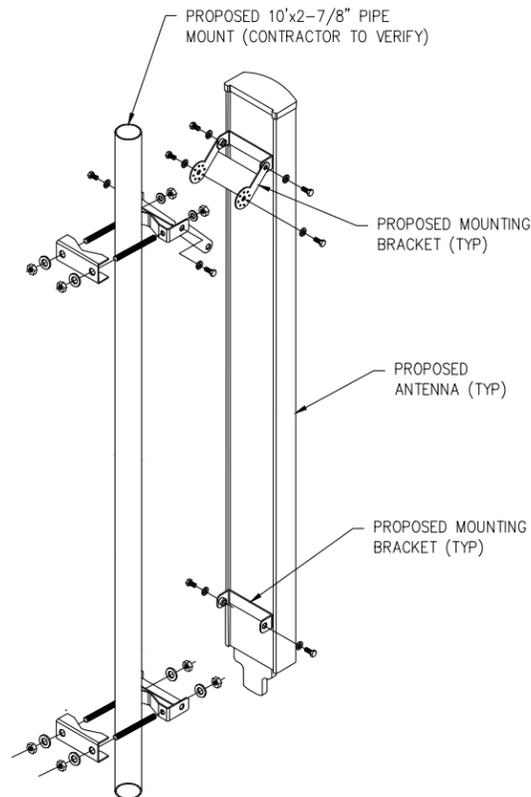
PROJECT INFORMATION:  
**SITE:**  
14652325  
CHESTER II  
KINGS HWY  
WARWICK, NY 10990  
ORANGE COUNTY  
WATER TANK

SHEET TITLE:  
**AT&T RF  
TABLE**

SHEET NUMBER: **Z06** REVISION: **0**



<b>COMMSCOPE MODEL NO.:</b>	<b>NNHH-65A-R4</b>
RADOME MATERIAL:	FIBERGLASS, UV RESISTANT
RADOME COLOR:	LIGHT GRAY
DIMENSIONS, HxWxD:	55.1"x19.6"x7.8"
WEIGHT, W/ PRE-MOUNTED BRACKETS:	66.1 LBS
CONNECTOR:	8 x 4.3-10 FEMALE



### 1 ANTENNA DETAIL

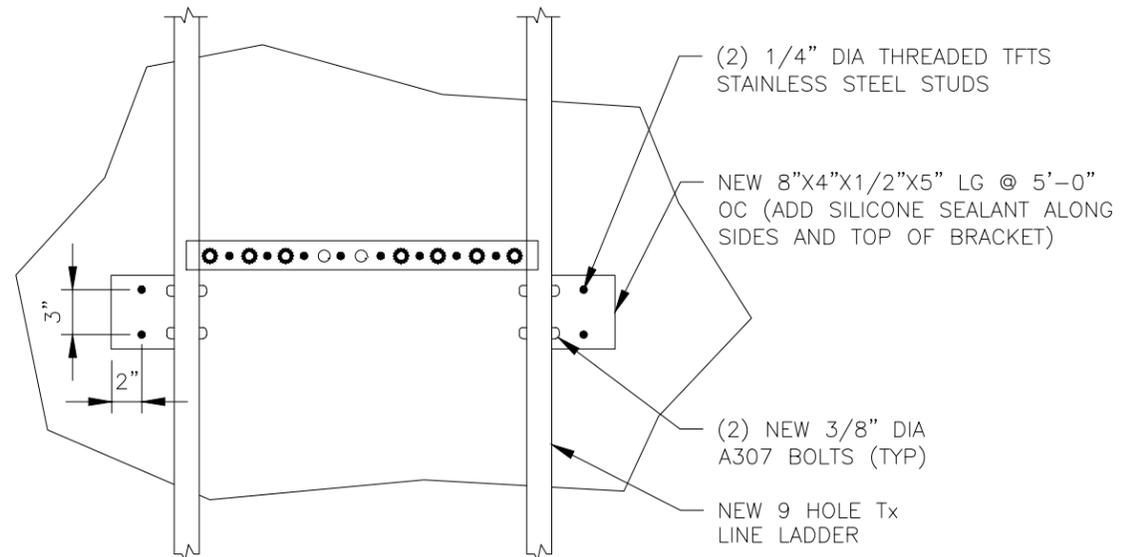
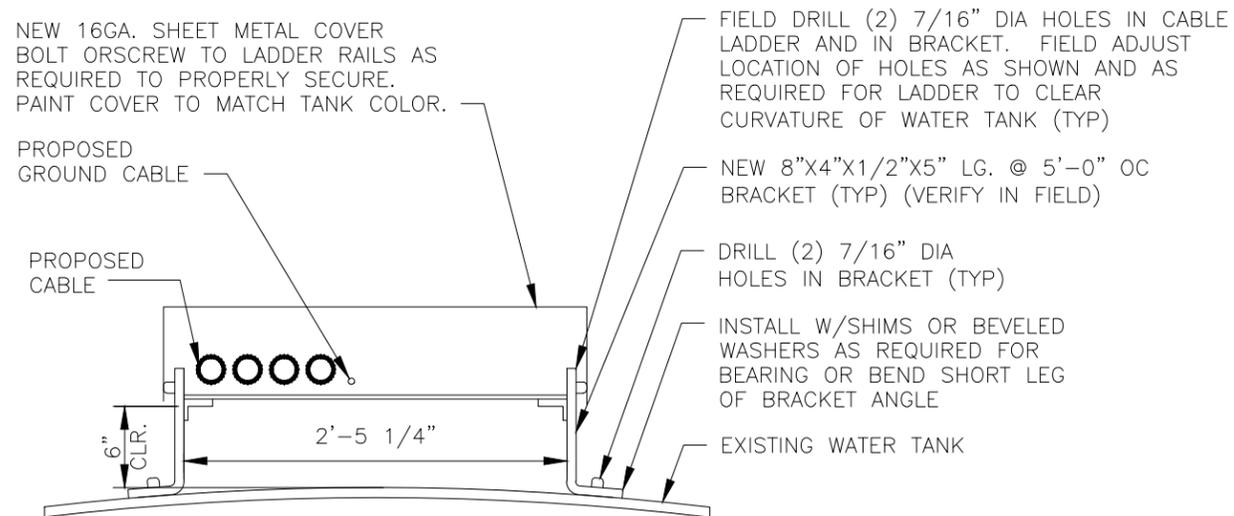
SCALE: NOT TO SCALE

### 2 MOUNTING DETAIL

SCALE: NOT TO SCALE

### 3 TOP OF TANK CABLE ROUTING

SCALE: NOT TO SCALE



NOTE: CABLES AND COVER NOT SHOWN FOR CLARITY.

**NOTES:**

- LOCATE NEW BRACKETS AT TOP AND BOTTOM OF EACH CABLE LADDER SECTION.
- ALL CABLE TRAY COMPONENTS TO BE HOT-DIP GALVANIZED, U.N.O..
- 6x24 HCS SHOWN SCHEMATICALLY. ATTACH HCS TO CABLE LADDER USING APPROPRIATE 1-5/8" SITE PRO 1 SNAP-IN CLIPS OR EQUIVALENT.

### 4 VERTICAL CABLE TRAY DETAIL

SCALE: NOT TO SCALE



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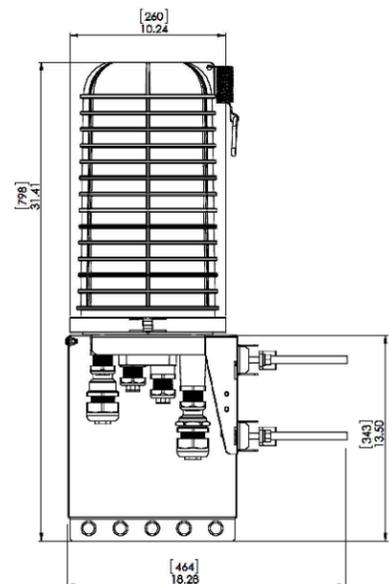
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REV.	DATE	DRAWN	DESCRIPTION	QA/QC
0	08/22/22	SKB	ZD FOR PERMIT	AJD



PROJECT INFORMATION:  
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 14652325  
 CHESTER II  
 KINGS HWY  
 WARWICK, NY 10990  
 ORANGE COUNTY  
 WATER TANK

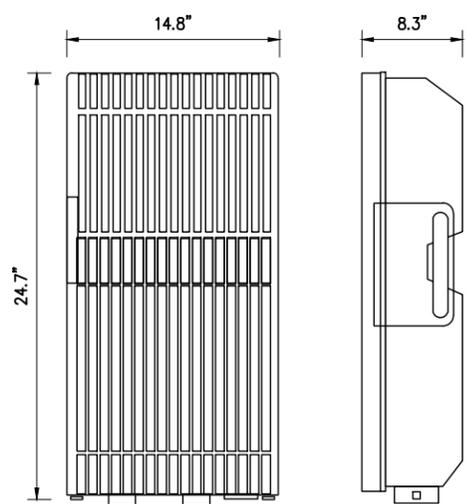
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**EQUIPMENT  
 DETAILS**

SHEET NUMBER: **Z07** REVISION: **0**

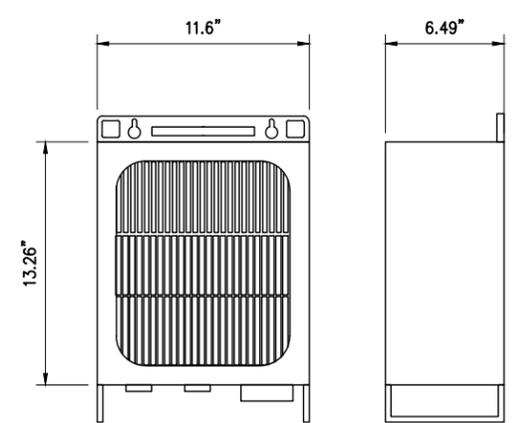


**RAYCAP DC9-48-60-24-8C-EV**

- HxWxD, (INCHES): 31.41"x10.24"x18.28"
- WEIGHT (LBS): 26.2 LBS

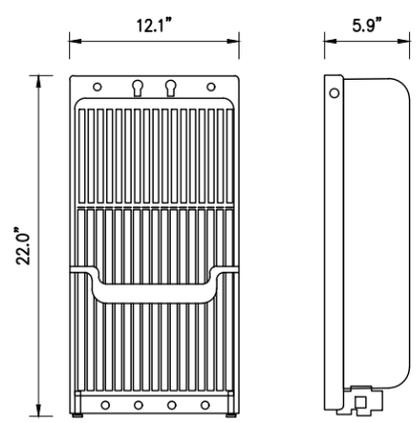


**MANUFACTURER:** NOKIA  
**MODEL:** AIRSCALE RRH 4T4R B12/14/29  
**TECHNOLOGY:** TRI BAND  
**DIMENSIONS (HxWxD):** 24.7" x 14.8" x 8.3"  
 627mm x 376mm x 210mm  
**WEIGHT:** <101.4 LBS  
**POWER SUPPLY:** -48V DC



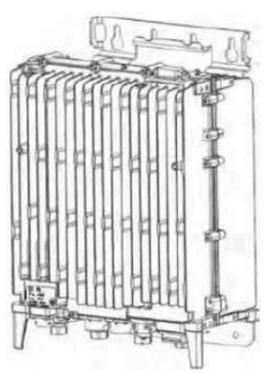
**MANUFACTURER:** NOKIA  
**MODEL:** AIRSCALE RRH 4T4R B5 160W  
**DIMENSIONS (HxWxD):** 13.26" x 11.6" x 6.49"  
 337mm x 295mm x 165mm  
**WEIGHT:** <36.8 LBS  
**POWER SUPPLY:** -48V DC

**1 SQUID DETAIL**  
SCALE: NOT TO SCALE



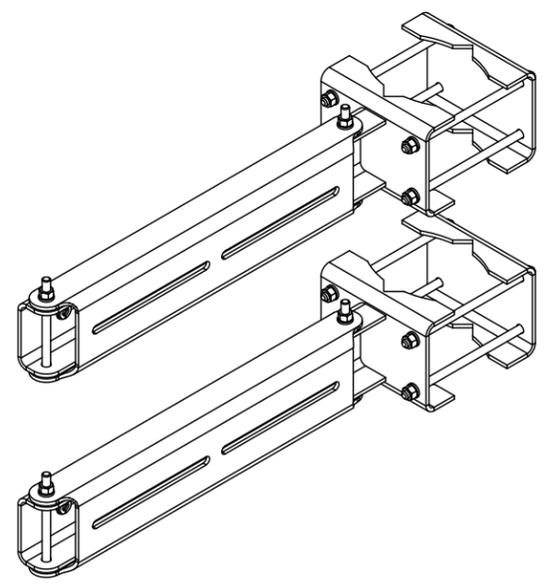
**MANUFACTURER:** NOKIA  
**MODEL:** AIRSCALE RRH 4T4R B25/66 320W AHFIB  
**TECHNOLOGY:** DUAL BAND  
**DIMENSIONS (HxWxD):** 22.0" x 12.1" x 5.9"  
 560mm x 308mm x 149mm  
**MODEM:** <66.1 LBS  
**POWER SUPPLY:** -48V DC

**2 RRH - 4T4R B12/B14/29**  
SCALE: NOT TO SCALE



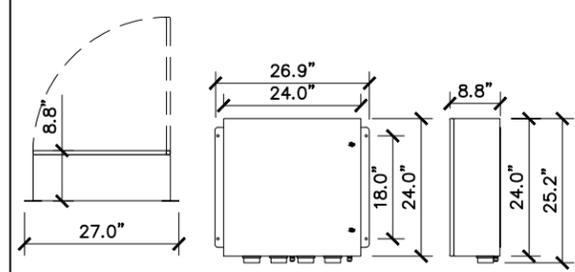
**MANUFACTURER:** NOKIA  
**MODEL:** AIRSCALE RRH 4T4R B30 100W AHNA  
**TECHNOLOGY:** DUAL BAND  
**DIMENSIONS (HxWxD):** 13.25" x 12.76" x 7.22"  
 336.5mm x 324mm x 183.5mm  
**MODEM:** <34.17 LBS  
**POWER SUPPLY:** -48V DC

**3 RRH - 4T4R B5 160W**  
SCALE: NOT TO SCALE



**ROSENBERGER DUAL RRU MOUNT**

- P/N: D220RRUDSM
- HxLxW, (INCHES): 4.0"x22.75"x6.5"
- INSTALLATION NOTE: UTILIZE (2) BRACKETS PER RRU MOUNTING LOCATION.



**PLAN VIEW FRONT VIEW SIDE VIEW**  
**RAYCAP - DC12-48-60-0-25E**  
 DC SURGE PROTECTION SOLUTION  
**SURGE PROTECT** 60 kA  
**MAXIMUM IMPULSE CURRENT** 5 kA  
**ENCLOSURE TYPE (OUTDOOR)** NEMA 4  
**WEIGHT** 56.3 LBS

**4 RRH - 4T4R B25/66 32W**  
SCALE: NOT TO SCALE

**5 RRH - 4T4R B30 100W**  
SCALE: NOT TO SCALE

**6 RRU MOUNTING BRACKET**  
SCALE: NOT TO SCALE

**7 DC12 DETAIL**  
SCALE: NOT TO SCALE



**CONSULTANT TEAM:**

**AIROSMITH**

AIROSMITH DEVELOPMENT  
 AIROSMITH ENGINEERING  
 318 WEST AVE.  
 SARATOGA SPRINGS, NY 12866  
 CLUSTER #  
 ATT NSB NYC 202103

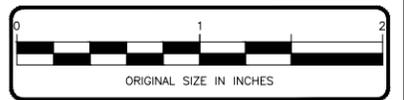
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0	08/22/22	SKB	ZD FOR PERMIT	AJD

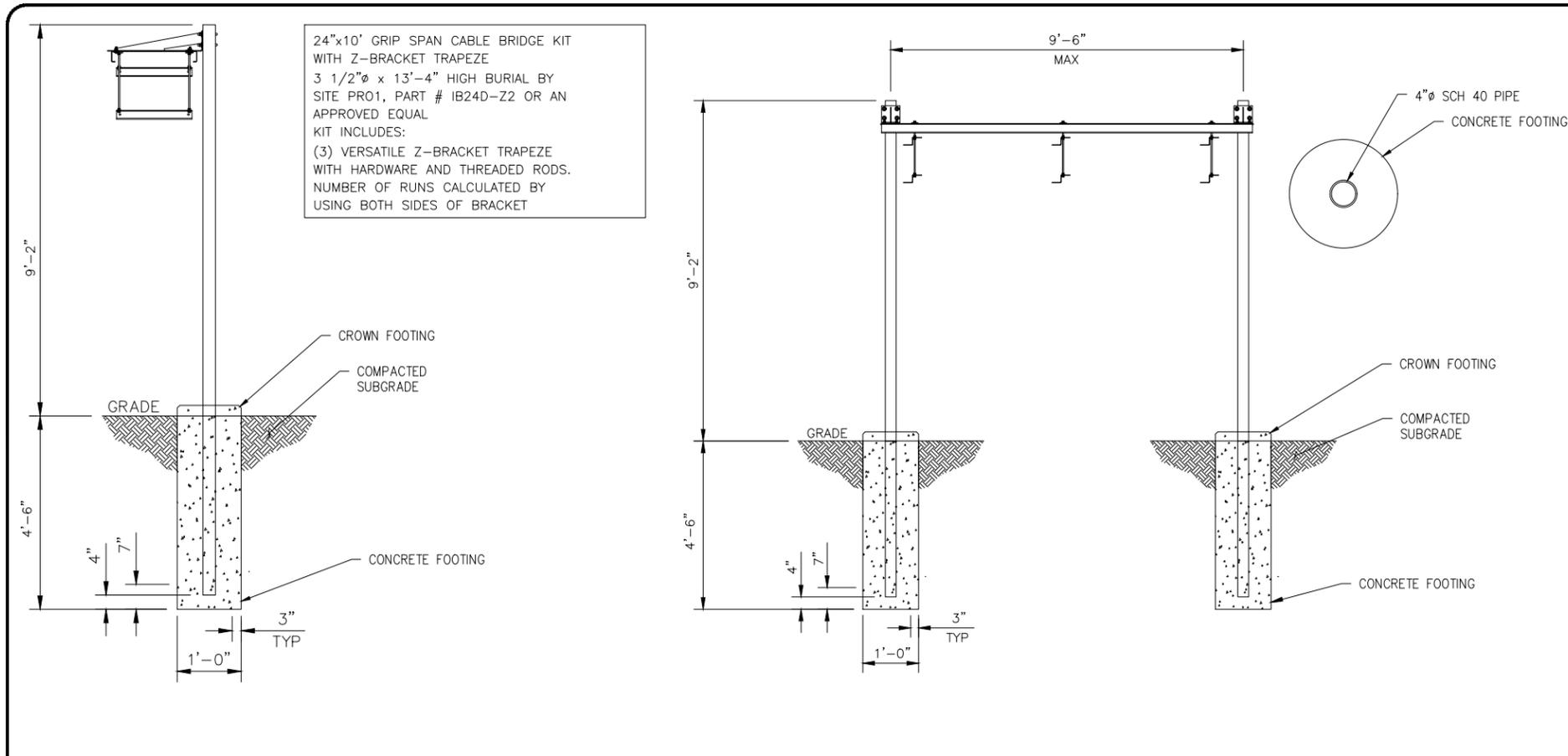


**PROJECT INFORMATION:**

**SITE:**  
 14652325  
 CHESTER II  
 KINGS HWY  
 WARWICK, NY 10990  
 ORANGE COUNTY  
 WATER TANK

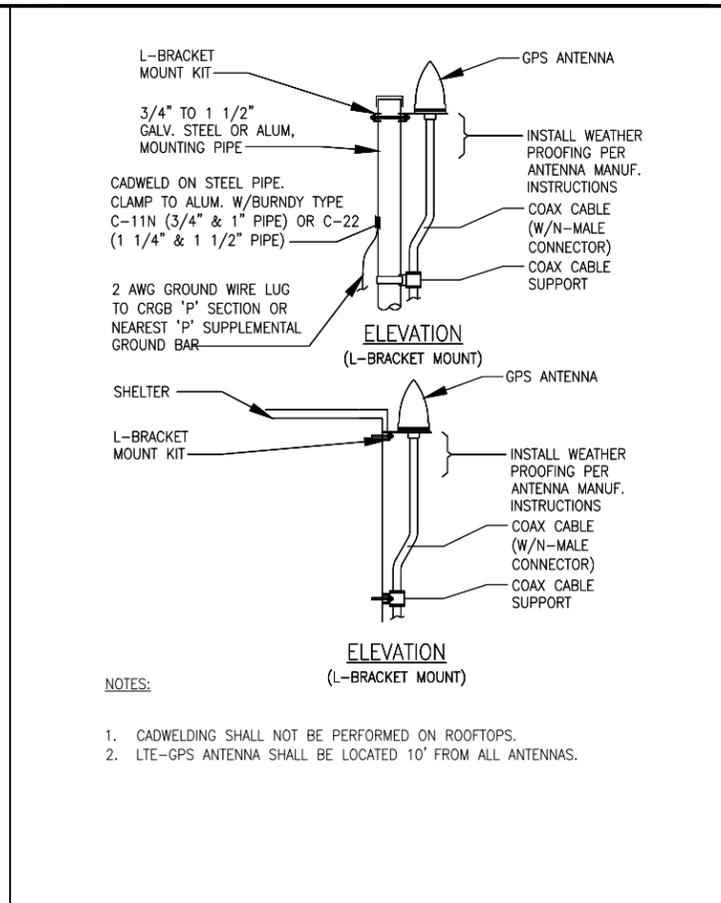
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**SHEET NUMBER:** Z08 **REVISION:** 0



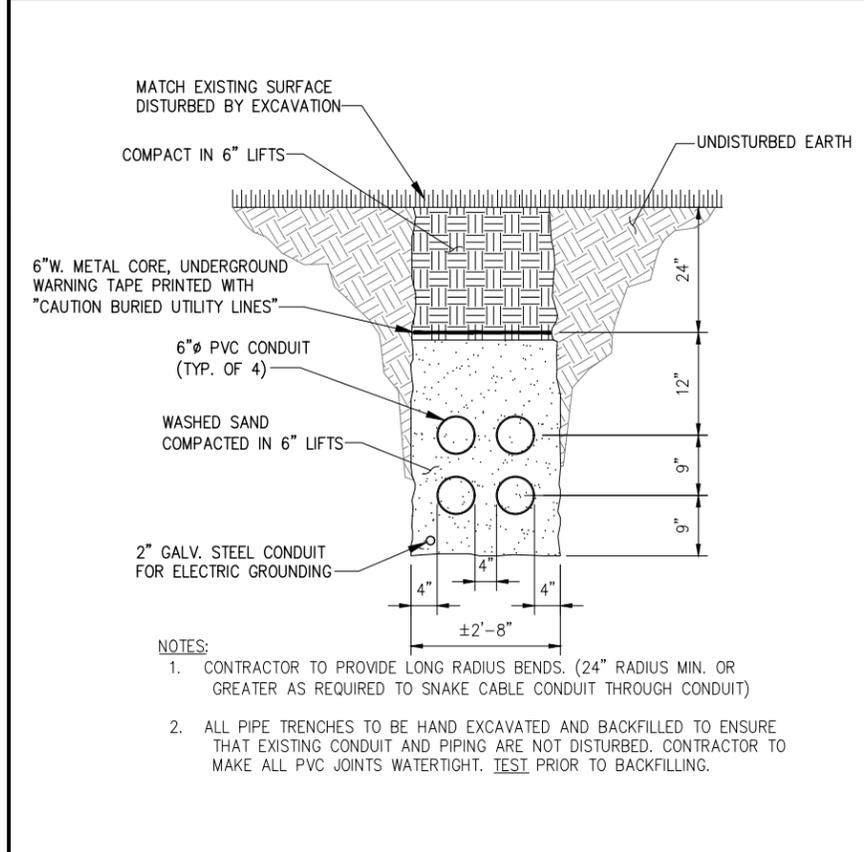
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SCALE: NOT TO SCALE



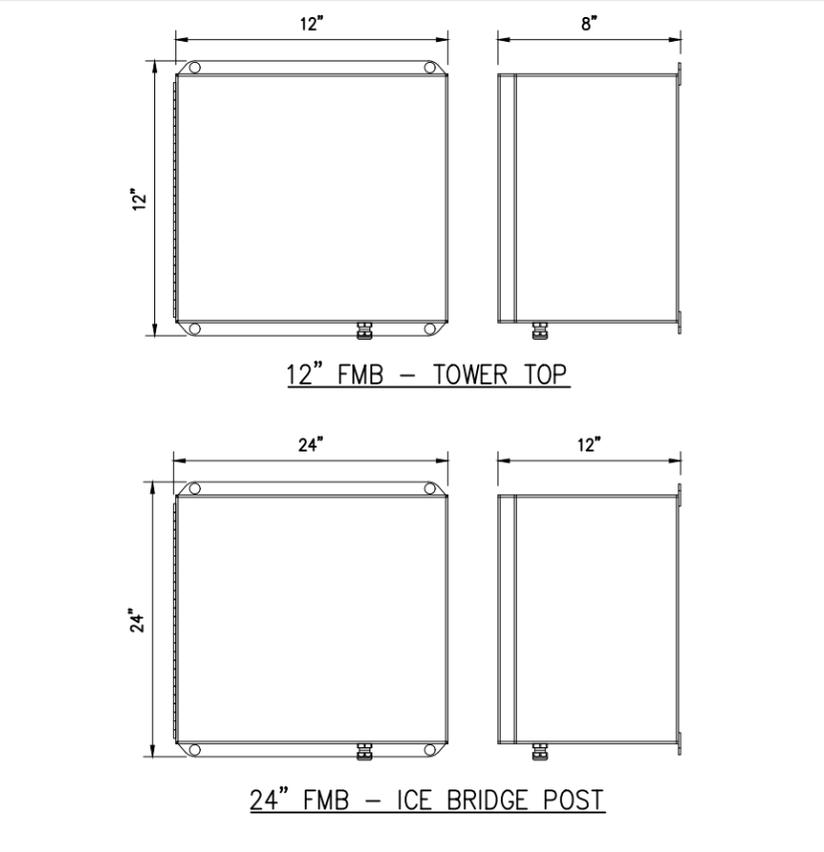
**2 GPS DETAIL**

SCALE: NOT TO SCALE



**3 UNDERGROUND CONDUIT DETAIL**

SCALE: NOT TO SCALE



**4 FIBER MANAGEMENT BOX DETAIL**

SCALE: NOT TO SCALE

**NOTICE**

**Beyond This Point** you are entering an area where RF Emissions *may exceed* the FCC General Population Exposure Limits  
Follow all posted signs and site guidelines for working in an RF environment

**CAUTION**

**Beyond This Point** you are entering a controlled area where RF Emissions *may exceed* the FCC Occupational Exposure Limits  
Obey all posted signs and site guidelines for working in an RF environment

**WARNING**

**Beyond This Point** you are entering a controlled area where RF Emissions *exceed* the FCC Controlled Exposure Limits  
**Failure to obey** all posted signs and site guidelines could result in serious injury

NOTES:

- INSTALLATION CONTRACTOR SHALL INSTALL SIGNS IN ACCORDANCE WITH FCC, OSHA AND AT&T STANDARDS.
- AFFIX APPLICABLE SIGNS ON EACH FENCE GATE VISIBLE TO EXTERIOR OF FENCED COMPOUND.

**5 RF SIGNAGE**

SCALE: NOT TO SCALE



CONSULTANT TEAM:  
**AIROSMITH**  
AIROSMITH DEVELOPMENT  
AIROSMITH ENGINEERING  
318 WEST AVE.  
SARATOGA SPRINGS, NY 12866  
CLUSTER #  
ATT NSB NYC 202103

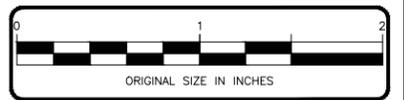
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DRAWINGS ISSUED FOR:

REV.	DATE	DRAWN	DESCRIPTION	QA/QC
0	08/22/22	SKB	ZD FOR PERMIT	AJD



PROJECT INFORMATION:  
SITE:  
14652325  
CHESTER II  
KINGS HWY  
WARWICK, NY 10990  
ORANGE COUNTY  
WATER TANK

SHEET TITLE:  
**EQUIPMENT DETAILS**

SHEET NUMBER: **Z09** REVISION: **0**

Specification sheet



# Diesel generator set

25 kW - 40 kW  
EPA emissions  
stationary Standby



**Description**

Cummins® generator sets are fully integrated power generation systems providing optimum performance, reliability and versatility for stationary Standby applications.

**Features**

**Cummins heavy-duty engine** - Rugged 4-cycle, liquid-cooled, industrial diesel engine delivers reliable power, low emissions and fast response to load changes.

**Alternator** - Several alternator sizes offer selectable motor starting capability with low reactance 2/3 pitch windings, low waveform distortion with non-linear loads and fault clearing short-circuit capability.

**Control system** - The PowerCommand® 1.1 electronic control is standard equipment and provides total generator set system integration including automatic remote starting/stopping, precise frequency and voltage regulation, alarm and status message display, output metering, auto-shutdown at fault detection and NFPA 110 Level 1 compliance.

**Cooling system** - Standard cooling package provides reliable running at up to 50 °C (122 °F) ambient temperature.

**Enclosures** - The aesthetically appealing enclosure incorporates special designs that deliver one of the quietest generators of its kind. Aluminum material plus durable powder coat paint provides the best anti-corrosion performance. The generator set enclosure has been evaluated to withstand 180 MPH wind loads in accordance with ASCE7-10. The intelligent design has removable panels and service doors to provide easy access for service and maintenance.

**Fuel tanks** - Two dual wall sub-base fuel tank series are offered as optional features, providing economical and flexible solutions to meet extensive code requirements on diesel fuel tanks.

**NFPA** - The generator set accepts full rated load in a single step in accordance with NFPA 110 for Level 1 systems.

**Warranty and service** - Backed by a comprehensive warranty and worldwide distributor network.

Model	Standby rating 60 Hz		Prime rating 60 Hz		Data sheets 60 Hz
	kW	kVA	kW	kVA	
C25 D6	25	31.3	22.7	28.4	NAD-5860
C30 D6	30	37.5	27	33.8	NAD-5861
C35 D6	35	43.8	32	40	NAD-5862
C40 D6	40	50	36	45	NAD-5863

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**Generator set specifications**

Governor regulation class	ISO8528 Part 1 Class G2
Voltage regulation, no load to full load	± 1.0%
Random voltage variation	± 0.5% - 3 Phase only
Frequency regulation	Isochronous
Random frequency variation	± 0.5%
Radio frequency emissions compliance	FCC code Title 47 Part 15 Class B

**Engine specifications**

Bore	95.0 mm (3.74 in.)
Stroke	115.1 mm (4.53 in.)
Displacement	3.3 litres (199 in³)
Configuration	Cast iron, in-line, 4 cylinder
Battery capacity	550 amps at ambient temperature of 0 °F to 32 °F (-18 °C to 0 °C)
Battery charging alternator	40 amps
Starting voltage	12 volt, negative ground
Fuel system	Indirect injection, number 2 diesel fuel, fuel filter, electric fuel shut off
Fuel filter	Single element, 10 micron filtration, spin-on fuel filter with water separator
Air cleaner type	Dry replaceable element
Lube oil filter type(s)	Spin-on, full flow
Standard cooling system	50 °C (122 °F) ambient cooling system

**Alternator specifications**

Design	Brushless, 4 pole, drip proof, revolving field
Stator	2/3 pitch
Rotor	Direct coupled, flexible disc
Insulation system	Class H per NEMA MG1-1.65
Standard temperature rise	120 °C (248 °F) Standby
Exciter type	Torque match (shunt) with PMG/EBS as option
Alternator cooling	Direct drive centrifugal blower
AC waveform Total Harmonic Distortion (THDV)	< 5% no load to full linear load, < 3% for any single harmonic
Telephone Influence Factor (TIF)	< 50 per NEMA MG1-22.43
Telephone Harmonic Factor (THF)	0.03

**Available voltages**

Single phase	3 phase
• 120/240	• 120/208 • 120/240 delta • 277/480 • 347/600

Note: Consult factory for other voltages.

**Generator set options**

- Fuel system**
  - Basic fuel tanks
  - Regional fuel tanks
- Engine**
  - Engine air cleaner – normal or heavy duty
  - Shut down – low oil pressure
  - Extension – oil drain
- Alternator**
  - 120 °C (248 °F) temperature rise alternator
  - 105 °C (221 °F) temperature rise alternator
  - Excitation Boost System (EBS) or PMG
  - Alternator heater, 120 V

- Control**
  - AC output analog meters (bargraph)
  - Stop switch – emergency
  - Auxiliary output relays (2)
  - Auxiliary configurable signal inputs (8) and relay outputs (8)
- Electrical**
  - Single circuit breaker
  - Dual circuit breakers
  - 80% rated circuit breakers
  - 100% rated circuit breakers
- Enclosure**
  - Aluminum enclosure sound level 1 or level 2, with muffler installed, sandstone or green color
  - Open set

- Cooling system**
  - Shutdown – low coolant level
  - Warning – low coolant level
  - Extension – coolant drain
  - Cold weather option for operating at < 4 °C (40 °F)
- Exhaust system**
  - Exhaust connector - NPT
  - Open set with muffler mounted
- Generator set application**
  - Battery rack, larger battery
  - Radiator outlet duct adapter

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**Generator set options (continued)**

- Warranty**
- Base warranty – 2 year, 1000 hour, Standby
  - Standby, 3 year, 1500 hour, parts
  - Standby, 5 year, 2500 hour, parts and labor
  - Standby, 3 year, 1500 hour, parts and labor
  - Standby, 5 year, 2500 hour, parts and labor

**Generator set accessories**

- Extreme cold weather kit
- Battery rack, larger battery
- Battery heater kit
- HMI211RS in-home display, including pre-configured 12" harness
- HMI211 remote display, including pre-configured 12" harness
- HMI220 remote display
- Auxiliary output relays (2)
- Auxiliary configurable signal inputs (8) and relay outputs (8)
- Annunciator – RS485
- Remote monitoring device – PowerCommand 500
- Battery charger – stand-alone, 12 V
- Circuit breakers
- Enclosure Sound Level 1 to Sound Level 2 upgrade kit
- Enclosure paint touch up kit
- Mufflers – industrial, residential or critical
- Alternator Excitation Boost System (EBS) or PMG
- Alternator heater
- Maintenance and service kit
- Engine lift kit
- Various fuel tanks and accessories

**Control system PowerCommand 1.1**



PowerCommand control is an integrated generator set control system providing voltage regulation, engine protection, operator interface and isochronous governing (optional). Major features include:

- Battery monitoring and testing features and smart starting control system.
- Standard PCNet interface to devices such as remote annunciator for NFPA 110 applications.
- Control boards potted for environmental protection.
- Control suitable for operation in ambient temperatures from -40 °C to +70 °C (-40 °F to +158 °F) and altitudes to 5000 meters (13,000 feet).
- Prototype tested; UL, CSA, and CE compliant.
- InPower™ PC-based service tool available for detailed diagnostics.
- Operator/display panel**
  - Manual of switch
  - Alpha-numeric display with pushbutton access for viewing engine and alternator data and providing setup, controls and adjustments (English or international symbols)
  - LED lamps indicating generator set running, not in auto, common warning, common shutdown, manual run mode and remote start
  - Suitable for operation in ambient temperatures from -40 °C to +70 °C
  - Bargraph display (optional)

**AC protection**

- Over current warning and shutdown
- Over and under voltage shutdown
- Over and under frequency shutdown
- Over excitation (loss of sensing) fault
- Field overload

**Engine protection**

- Overspeed shutdown
- Low oil pressure warning and shutdown
- High coolant temperature warning and shutdown
- Low coolant level warning or shutdown
- Low coolant temperature warning
- High, low and weak battery voltage warning
- Fail to start (overcrank) shutdown
- Fail to crank shutdown
- Redundant start disconnect
- Cranking lockout
- Sensor failure indication
- Low fuel level warning or shutdown

**Alternator data**

- Line-to-Line and Line-to-Neutral AC volts
- 3-phase AC current
- Frequency
- Total kVA
- DC voltage
- Lube oil pressure
- Coolant temperature
- Engine speed

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Model	Dim "A" mm (in.)	Dim "B" mm (in.)	Dim "C" mm (in.)	Set weight* dry kg (lbs)	Set weight* wet kg (lbs)
<b>Open set</b>					
C25 D6	2224 (87.5)	864 (34)	1121 (44.13)	504 (1115)	525 (1161)
C30 D6	2224 (87.5)	864 (34)	1121 (44.13)	533 (1178)	553 (1224)
C35 D6	2224 (87.5)	864 (34)	1121 (44.13)	552 (1221)	573 (1267)
C40 D6	2224 (87.5)	864 (34)	1121 (44.13)	566 (1252)	587 (1298)
<b>Sound attenuated enclosure Level 1</b>					
C25 D6	2384 (93.8)	864 (34)	1156 (45.5)	551 (1219)	572 (1265)
C30 D6	2384 (93.8)	864 (34)	1156 (45.5)	580 (1282)	600 (1328)
C35 D6	2384 (93.8)	864 (34)	1156 (45.5)	599 (1325)	620 (1371)
C40 D6	2384 (93.8)	864 (34)	1156 (45.5)	613 (1356)	634 (1402)
<b>Sound attenuated enclosure Level 2</b>					
C25 D6	2629 (103.5)	864 (34)	1156 (45.5)	570 (1261)	591 (1307)
C30 D6	2629 (103.5)	864 (34)	1156 (45.5)	599 (1324)	619 (1370)
C35 D6	2629 (103.5)	864 (34)	1156 (45.5)	618 (1367)	639 (1413)
C40 D6	2629 (103.5)	864 (34)	1156 (45.5)	632 (1398)	653 (1444)

\*Weights represent a set with standard features. See outline drawings for weights of other configurations.

**Codes and standards**

Codes or standards compliance may not be available with all model configurations – consult factory for availability.

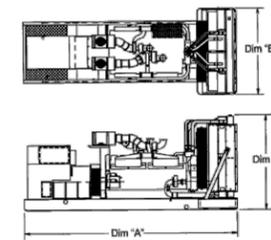
	This generator set is designed in facilities certified to ISO 9001 and manufactured in facilities certified to ISO 9001 or ISO 9002.		The generator set is available Listed to UL 2200, Stationary Engine Generator Assemblies.
	The Prototype Test Support (PTS) program verifies the performance integrity of the generator set design. Cummins products bearing the PTS symbol meet the prototype test requirements of NFPA 110 for Level 1 systems.		Engine certified to U.S. EPA SI Stationary Emission Regulation 40 CFR, Part 60.
	All low voltage models are CSA certified to product class 4215-01.		The generator set is certified for seismic application in accordance with International Building Code (IBC) 2012.

Warning: Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open.

- Other data**
  - Generator set model data
  - Start attempts, starts, running hours
  - Fault history
  - RS485 Modbus® interface
  - Data logging and fault simulation (requires InPower service tool)
- Digital governing (optional)**
  - Integrated digital electronic isochronous governor
  - Temperature dynamic governing
- Digital voltage regulation**
  - Integrated digital electronic voltage regulator
  - 2-phase Line-to-Line sensing
  - Configurable torque matching
- Control functions**
  - Time delay start and cooldown
  - Cycle cranking
  - PCNet interface
  - (2) Configurable inputs
  - (2) Configurable outputs
  - Remote emergency stop
  - Automatic Transfer Switch (ATS) control
  - Generator set exercise, field adjustable

**Ratings definitions**

- Emergency Standby Power (ESP):** Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.
- Limited-Time Running Power (LTP):** Applicable for supplying power to a constant electrical load for limited hours. Limited-Time Running Power (LTP) is in accordance with ISO 8528.
- Prime Power (PRP):** Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.
- Base Load (Continuous) Power (COP):** Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514.



This outline drawing is for reference only. See respective model data sheet for specific model outline drawing number.

Do not use for installation design

CARRIER:



CONSULTANT TEAM:



AIROSMITH DEVELOPMENT  
AIROSMITH ENGINEERING  
318 WEST AVE.  
SARATOGA SPRINGS, NY 12866  
CLUSTER #  
ATT NSB NYC 202103

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PROFESSIONAL STAMP:



**DRAWINGS ISSUED FOR:**

REV.	DATE	DRAWN	DESCRIPTION	QA/QC
0	08/22/22	SKB	ZD FOR PERMIT	AJD



ORIGINAL SIZE IN INCHES

PROJECT INFORMATION:

SITE:  
14652325  
CHESTER II  
KINGS HWY  
WARWICK, NY 10990  
ORANGE COUNTY  
WATER TANK

SHEET TITLE:

GENERATOR DETAILS

SHEET NUMBER:

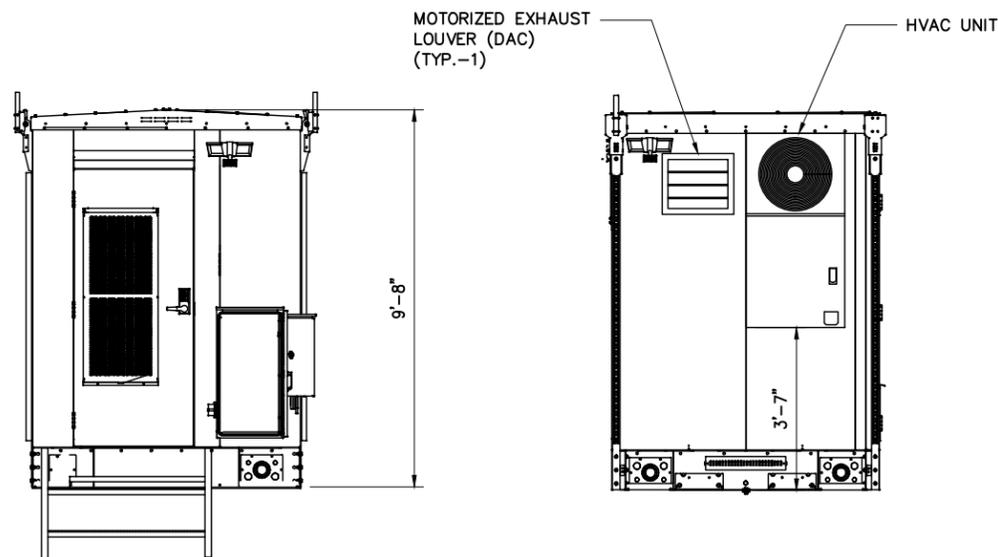
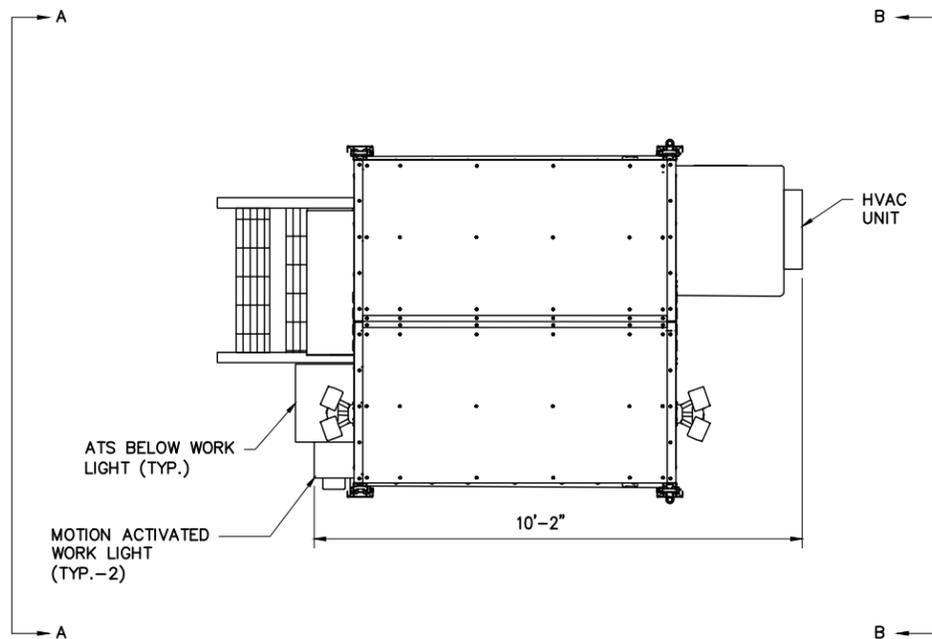
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REVISION:

0

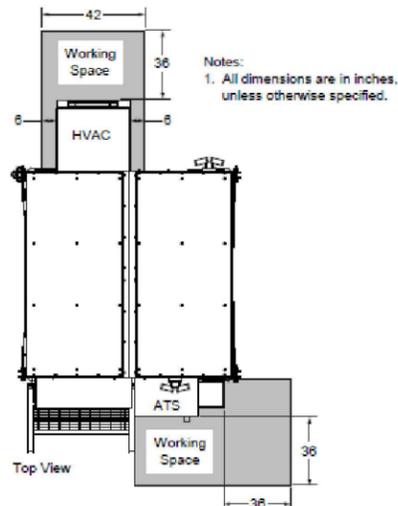
# 1 GENERATOR DETAILS

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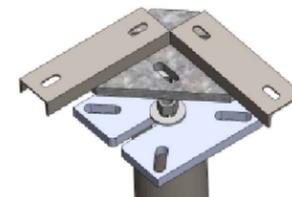


SECTION A-A

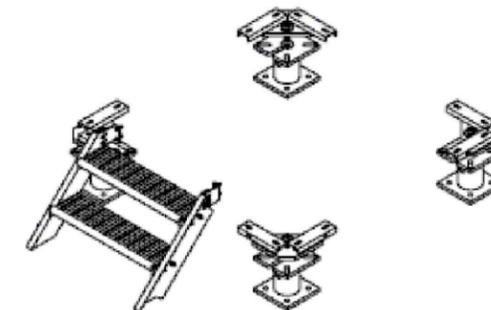
SECTION B-B



REQUIRED CLEARANCES

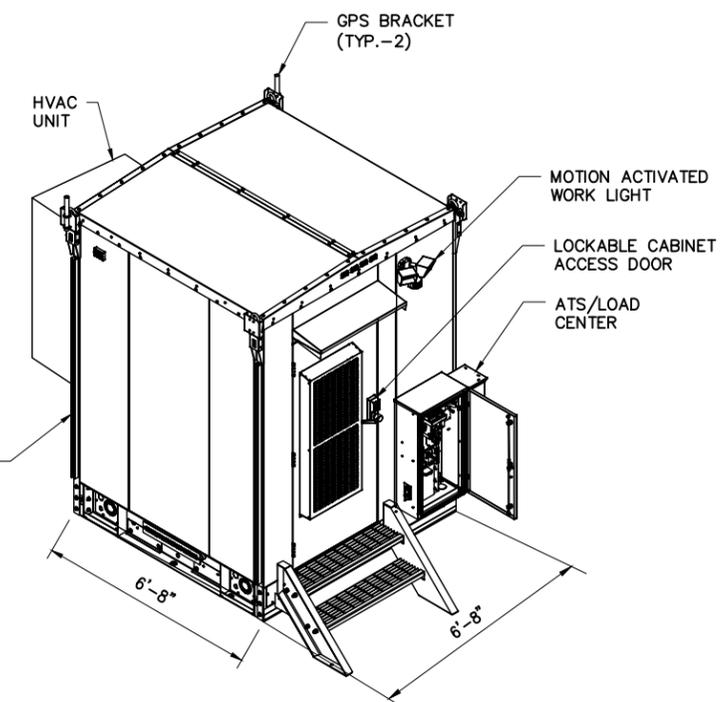


CORNER PLATES



LEVELING AND ANCHOR PLATES

GALVANIZED UNISTRUT RACK PROVIDED ON LEFT & RIGHT SIDES OF WIC TO BE UTILIZED FOR DC12, FMB & RRH'S. INSTALL CAPS ON ALL UNISTRUT EXPOSED ENDS.



ISOMETRIC VIEW

EQUIPMENT PLATFORM AND EQUIPMENT AS SHOWN IS A SCHEMATIC DEPICTION OF PROPOSED EQUIPMENT AND PLATFORM FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO REFER TO SITE SPECIFIC PLATFORM AND EQUIPMENT DESIGN AS SUPPLIED BY AT&T.

ABOVE DETAILS EXTRACTED FROM "VERTIV XTE 802 WALK-IN-CABINET (WIC) DESCRIPTION AND INSTALLATION MANUAL", SPECIFICATION NUMBER: F2018009. DOCUMENT NUMBER: 631-205-434\_REV4



CONSULTANT TEAM:

**AIROSMITH**

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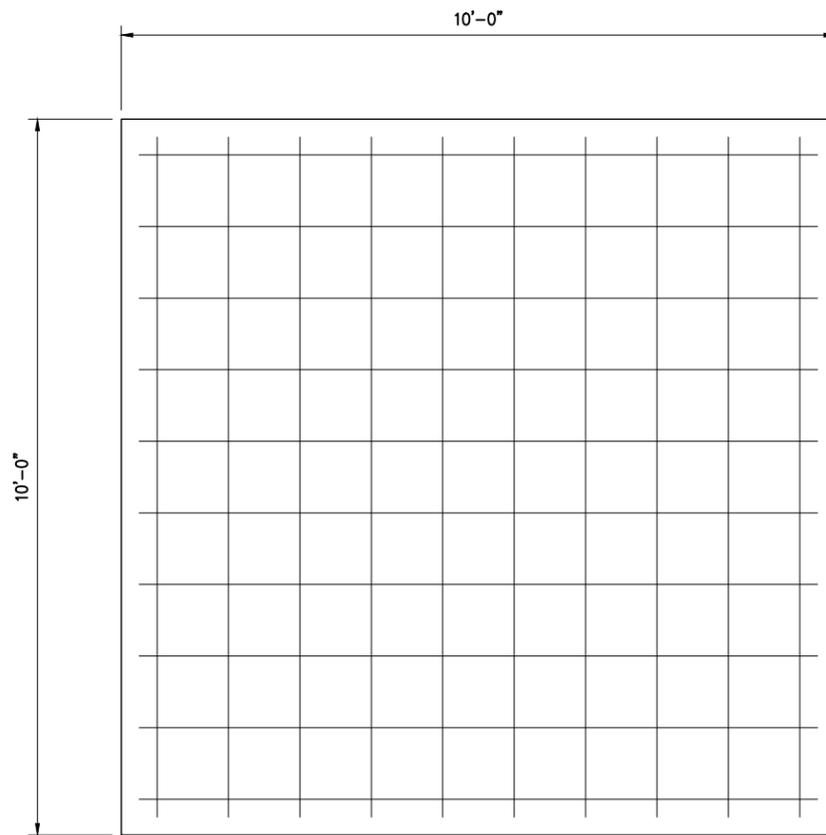


PROJECT INFORMATION:

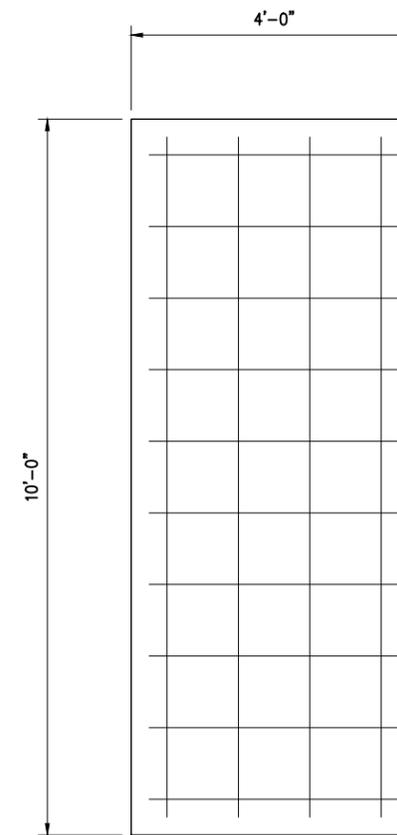
SITE:  
14652325  
CHESTER II  
KINGS HWY  
WARWICK, NY 10990  
ORANGE COUNTY  
WATER TANK

SHEET TITLE: **WIC DETAILS**

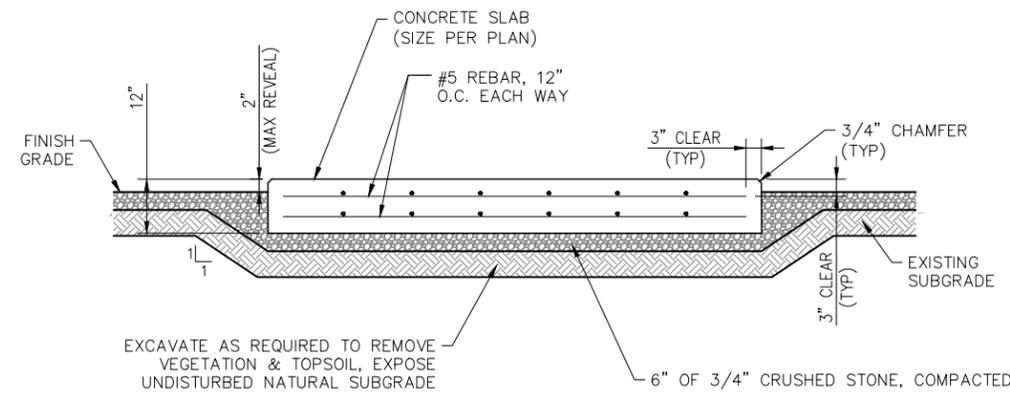
SHEET NUMBER: **Z11** REVISION: **0**



WIC SLAB PLAN



GENERATOR PLAN



NOTES:

1. CONTRACTOR TO VERIFY FINAL PAD DIMENSIONS PRIOR TO CONSTRUCTION OF PAD.
2. PROVIDE POSITIVE DRAINAGE FROM CONCRETE PAD.
3. ANCHOR EQUIPMENT TO PAD PER MANUFACTURER REQUIREMENTS.
4. COMPACT CRUSHED STONE FILL TO 95% COMPACTION
5. ANY SOIL THAT IS UTILIZED AS FILL SHALL BE FREE FROM ORGANIC MATERIAL.
6. CONCRETE TO HAVE A COMPRESSIVE STRENGTH OF 4,000 PSI.
7. ALL STEEL REINFORCEMENT SHALL HAVE A MINIMUM OF 3" COVER IN ALL DIRECTIONS.



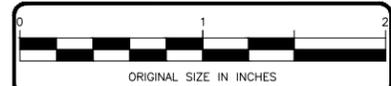
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 14652325  
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 WATER TANK

SHEET TITLE:  
 CONCRETE PAD DETAILS

SHEET NUMBER: Z12 REVISION: 0