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* PER SCIP PROJECT INFORMATION A PROPOSED EQUIPMENT SHELTER AND DIESEL GENERATOR WILL BE INSTALLED AT GRADE INSIDE AN EXISTING FENCED COMPOUND. A 10'--0" EXTENSION WILL BE ADDED TO EXISTING 90'± A.G.L. TALL MONOPOLE. THREE (3) PANEL ANTENNAS WILL BE INSTALLED (1/SECTOR) ON NEW EXTENSION. POWER & TELCO WILL COME FROM EXISTING SOURCES ON SITE. CUMBERLAND COUNTY 43" 44" 12.81" N (NAD 83)* LIGHTOWER 80 CENTRAL ST. BOXBOROUGH, MA 01719 356 ROUTE 1 FALMOUTH, ME 04105 TELECOMMUNICATIONS FACILITY TELECOMMUNICATIONS FACILITY 70° 13° 35.30" W (NAD 83)* KJK WIRELESS
BECHTEL TELECOMMUNICATIONS
BECHTEL TELECOMMUNICATIONS CENTRAL MAINE POWER PINE TREE NETWORKS DEWBERRY NAGMOC 580 MAIN STREET BOLTON, MA 01740 (617) (603) (508) (508) (866) 746–3873 (800) 565-3181 Mobility HONE NO.) 695-3400) 888-8974) 573-3950) 573-3950 DIRECTIONS: TAKE 1-495 N. MERGE ONTO 1-95 N. TAKE EXIT 52 FOR 1-295 N. TOWARDS BRUNSWICK/FALMOUTH/US-1. MERGE ONTO FALMOUTH SPUR. TAKE EXIT 158 FOR US-1 N. MERGE ONTO BLUE STAR MEMORIAL HIGHWAY/US-1. 356 ROUTE 1 IS ON THE LEFT. ENTER DRIVEWAY AND FOLLOW GRAVEL ACCESS ROAD TO THE SITE. 50014023 WBERRY NO. 24782-423 CONTRACT NO. AT&T MOBILITY BOLTON, MA 01740 LITHE SHEET A3-BOS-1595-T01 VICINITY MAP FALMOUTH, ME 04105 No. 5052

No. 5052

W. Sold Bridge Control of the C THINKING A R A STATE OF THE STA S. Sandita SOALE: AS SHOWN TELECOMMUNICATIONS I ANTENNA TOWER AND THE 607, COMMERCIAL TELECOMMUNICATIONS 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 SHALL GOVERN. IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE") INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT ANSI 11.311, FOR TELECOM - DC POWER SYSTEMS - TELECOM, ENVIRONMENTAL PROTECTION TELCORDIA GR-1503, AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION ELECTRICAL CODE: NATIONAL ELECTRICAL SUBCONTRACTOR'S WORK SHALL COMPLY WITH PROJECT STANDARD NOTES, SYMBOLS AND DETAILS (SEE DRAWING INDEX FOR STANDARD NOTES AND DETAILS INCLUDED WITH TYPICAL DRAWING PACKAGE). SUBCONTRACTOR WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL. STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN. INTERNATIONAL BUILDING CODE (IBC 2003) BUILDING CODE: DESIGNED BY: ROM APPLICAB FOR CONSTRUCTION REVISIONS DRAWN INDUSTRY ASSOCIATION (TIA) 222-F, STRUCTURAL STANDARDS FOR STEEL ANTENNA SUPPORTING STRUCTURES: BUILDING CROUNDING AND BONDING REQUIREMENTS FOR CODE (NEC 2005) COAXIAL CABLE CONNECTIONS LE BUILDING CODES AND STANDARDS **NET 1595** ROM CHN PPB
ROW CHN PPB
BY CHK APP'D ROM GHN BY: GMT PLAN DATE: AUGUST 26, 2008 356 ROUTE 1 FALMOUTH, ME 04105 MAP 150 LOT U53-004 FALMOUTH, ME SITE NO. 1595 THIS DRAWING IS SCALEABLE AT HALF THE NOTED SCALE HALF SIZE PRINT

GENERAL NOTES:

- FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY: CONTRACTOR BECHTEL CONTRACTOR (CONSTRUCTION)

 OWNER ATE!

 OEM ORIGINAL EQUIPMENT MANUFACTURER
- PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONFRACTOR SHALL NSIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE MORRE CAN BE ACCOUNTEDED AS SHOWN ON THE CONSTRUCTION DRAWNOS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODIS, RECULATIONS, AND OPENIMANCES, SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LARS, ORDINANCES, RECULATIONS, AND LAWFUL ORDERS OF ARY PUBLIC AUTHORITY RECARDING THE PERFORMANCE OF THE WORK.
- ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- UNIESS HOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS. DRAWINGS PROVIDED HE'RE ARE NOT TO SCALE UNLESS OTHERWISE NOTED AND ARE INTENDED TO SHOW OUTLINE ONLY.
- 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 DRAWNICS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.
- 0 THE SUBCOMPRACTOR 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. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND TI CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY, SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR.
- SUBCONTRACTOR SHALL LEGALLY AND PROPERTY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COXXIAL CABLES AND OTHER TIEMS RELIDIED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED TO THE OWNER'S DESIGNATED
- SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
- THE SUBCONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN, THE SUBCONTRACTOR SHALL SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- SUBCIDATRACTOR SHALL NOTIFY DEWBERRY 48 HOURS IN ADVANCE OF POURING CONCRETE. OR BACKFILLING TRENCHES. SEALING ROOF AND WALL PENETRATIONS & POST DOWNS, FINISHING NEW WALLS OR FINAL ELECTRICAL CONNECTIONS FOR ENGINEER REVIEW.
- 'n CONSTRUCTION SHALL COMPLY WITH SPECIFICATION 24782-000-3APS-AD92-00002, "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF CINGULAR-GENESIS SITES."
- 6. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DMENSIONS AND CONDITIONS PRICH TO COMMENCING ANY WORK, ALL DMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWNESS WIST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- 8 7 SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC FADIATION, EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANCER, PERSONAL RF EXPOSURE MONTORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANCEROUS EXPOSURE LEVELS. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUFT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MIST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.

SITE WORK GENERAL NOTES:

- THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION
- ALL EXISTING ACTINE SCHER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR FORTENED CALITION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVAING OR DRILLING PIERS ABOUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL APATECTON BY LIMITED TO A) FALL PROTECTION BY LIMITED TO A) FALL PROTECTION BY COMPINED SPACE C) ELECTRICAL SAFETY
- ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS
- IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES, TOP SOIL AND OTHER REPUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- ALL EXISTING INACTIVE SEWER, WATER, CAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, OWNER AND/OR LOCAL
- SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE BURING CONSTRUCTION.
- THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE AT&T SPECIFICATION FOR SITE SIGNAGE.
- THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE TRANSMISSION EQUIPMENT AND TOWER VREAS.
- NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND, FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN MAY FILL OR EMBANKMENT.
- THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION, SEE SOIL COMPACTION NOTES.
- THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOMER, EQUIPMENT DRIVEWAY, SMALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.

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EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL JURISDICTION'S GUIDELINES FOR EROSION AND SEDIMENT CONTROL.

Dewberry-Goodkind, Inc.

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50014023

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EWBERRY NO.

CONTRACT NO.

GENERAL NOTES

Mobility

Dewberry

CONCRETE AND REINFORCING STEEL NOTES

- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACT 301, ACT 318, ACT 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST—IN-PLACE CONCRETE.
- ALL COMPRETE SHALL HAVE A MINIMUM COMPRESSIVE STREMETH OF 4000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. A HIGHER STREMETH (4000 PSI) MAY BE USED, ALL CONCRETING WORK SHALL BE DONE IN ACCORDANCE WITH ACT 318 CODE REQUIREMENTS.
- REINFORCING STEEL SHALL CONFORM TO ASTM A 515, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC UNLESS NOTED OTHERWISE (UND). SPLICES SHALL CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UND.
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE DRAWINGS:

CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND: SLAB AND WALL

A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE FER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL DOMFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEL DEFTH OR AS SHOWN ON THE DRAWNISS, NO REMA SHALL BE CUI WITHOUT PROP CONTRACTOR APPROAL MINED HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MANUFACTURER'S MAXIMUM ALLOWABLE LOADS, ALL DEPAYSION/MEDIAG CODES, SHALL BE STANLESS STEEL OR HOT GALVANIZED. EXPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD OR APPROVED EQUAL.

CONCRETE CYLNIDER TEST IS NOT REQUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS (IBC 1905.6.2.3) IN THAT EVENT THE FOLLOWING RECORDS SHALL BE PROVIDED BY THE CONCRETE SUPPLIER;

(A) RESULTATION CONCRETE CYLNIDER TESTS PERFORMED AT THE

- SUPPLIER'S PLANT,

 (B) CERTIFICATION OF MINIMUM COMPRESSIVE STRENGTH FOR
 THE CONCRETE GRUDE SUPPLIED,
 FOR GREATER THAN 50 CUBIC YARDS THE GC SHALL PERFORM THE CONCRETE CYLINDER TEST.
- AS AN ALTERNATIVE TO FIEM 7, TEST CYLINDERS SHALL BE TAKEN INITIALLY AND THEREAFTER FOR EVERY 50 YARDS OF CONCRETE FROM EACH DIFFERENT BATCH PLANT.
- EQUIPMENT SHALL NOT BE PLACED ON NEW PAOS FOR SEVEN DAYS AFTER PAO IS POURED, UNLESS IT IS VERIFIED CYLINDER TESTS THAT COMPRESSIVE STRENGTH HAS BEEN ATTAINED.

STRUCTURAL STEEL NOTES:

- ALL STEEL WORK SHALL BE PAINTED OR GALVANIZED IN ACCORDANCE WITH THE DRAWINGS UNLESS NOTED OTHERWISE. STRUCTURAL STREIL SHALL BE ASTIM-A-36 UNLESS OTHERWISE NOTED ON THE SITE SPECIFIC DRAWINGS. STEEL DESIGN, INSTALATION AND BOLTING STALL BE FERFORMED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION."

 (AISC) "MANUAL OF STEEL CONSTRUCTION".
- 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.
- BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE (3/4*9) connections and shall have minimum of two bolts unless noted otherwise.
- NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DA. ASTN A 307 BOLTS UNLESS NOTED OTHERWISE.
- INSTALATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE MACHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DETEL OR AS SHOWN ON THE DEAVINGS, NO REDAY SHALL BE FOUT WITHOUT PROOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE, SPECIAL INSPECTIONS, REQUIRED BY CONCRETE, SPECIAL INSPECTIONS, REQUIRED BY CONCRETE, SHALL BE PERFORMED IN ORDER TO MAINTAN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS, ALL DEPANSION/WEDGE ANCHORS SHALL BE STANLESS STEEL OR HOT DPPED GALVANIZED. DEPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD OR APPROVED EQUAL.
- SUBCONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER REVIEW & APPROVAL ON PROJECTS REQUIRING STRUCTURAL STEEL
- ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS

SOIL COMPACTION NOTES FOR SLAB ON GRADE:

- EXCAVATE AS REQUIRED TO REMOVE VEGETATION & TOPSOIL EXPOSE UNDISTURBED INTURAL SUBGRADE AND PLACE CRUSHED STONE AS REQUIRED.
- COMPACTION CERTIFICATION, AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICAN OR ENGINEER IS ACCEPTABLE.
- AS AN ALTERNATIVE TO INSPECTION AND WRITTEN CERTIFICATION, THE "UNDISTURBED SOIL" BASE SHALL BE COMPACTED WITH "COMPACTION EQUIPMENT". LISTED BELOW, TO AT LEAST 90% MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM D 1557 NETHOD C.
- COMPACTED SUBBASE SHALL BE UNIFORM & LEVELED. PROVIDE 6" MINIMUM CRUSHED STONE OR GRAVEL COMPACTED IN 3" LET'S ABOVE COMPACTED SOIL GRAVEL SHALL BE NATURAL OR CRUSHED WITH 100% PASSING 1" SIEVE.
- AS AN ALTERNATIVE TO ITEMS 2 AND 3 PROOFFIGIL THE SUBGRADE SOILS WITH 5 PASSES OF A MEDIUM SIZED VIBRATORY PLATE COMPACTOR (SUCH AS BOMAG BER 30/28) OR HAND-OPERATED SHOLLE DRUM VIBRATORY ROLLER (SUCH AS BOMAG BW 55E), ANY SOFT AREAS THAT ARE EXCOUNTERED SHOULD BE REMOVED AND REPLACED WITH A WELL-GRADED GRANULAR FILL, AND COMPACTED AS STATED ABOVE.

COMPACTION EQUIPMENT:

HAND OPERATED DOUBLE DRUM, VIBRATORY ROLLER, VIBRATORY PLATE COMPACTOR OR JUMPING JACK COMPACTOR

- CONSTRUCTION NOTES:
- FIELD VERIFICATION:
 SUBCONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, AT&T ANTENNA PLATFORM LOCATION AND ANTENNAS TO BE REPLACED.
- COORDINATION OF WORK.
 SUBCONTRACTION SHALL COORDINATE RF WORK AND PROCEDURES WITH CONTRACTION MINERALL CABLE LADDER RACK, CABLE LADDER RACK, CABLE LADDER RACK, CABLE LADDER RACK, CABLES TO THE NEW 8TS LOCATION.

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AT&T MOBILITY BOLTON, MA 01740 MILLS A No. 5052 MILLS A HE 1989 OIT 1 1055 ON AL EXIGNATION OF THE PROPERTY OF THE PROPERTY

ELECTRICAL INSTALLATION NOTES:

- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
- CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED. SUBCONTRACTOR SHALL MODIFY EXISTING CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABUNG TO THE NEW BTS EQUIPMENT, SUBCONTRACTOR SHALL SUBMIT MODIFICATIONS TO THE CONTRACTOR FOR APPROVAL
- WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.

SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND

- ALL CIRCUITS
 TELCORDIA.
- CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
- EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING, AND TI CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA, AND MATCH EXISTING INSTALLATION REQUIREMENTS.
- ALL ELECTRICA SHALL BE LAB RATING, AND E "AL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMCOUD PLYSTIC LABELS. ALL EQUIPMENT MEDITED WITH THERE VOLTAGE RATING, PHASE CONFIGURATION, MEDIC CONFIGURATION, POWER OR AMPACTITY BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).
- PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
- ALL THE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.

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- POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (SIZE 14 AWG OR LARGER), 600V, OIL RESISTANT THAN OR THWN-2, CLASS B STRANDED COPPER CAGLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- 12 POWER PHASE CONDUCTORS (I.E., HOTS) SHALL BE LABELED WITH COLOR—CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL.) PHASE CONDUCTOR COLOR CO SHALL CONFORM WITH THE NEC & OSHA AND MATCH EXISTING INSTALLATION REQUIREMENTS.
- ü SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (SIZE 6 AWG OR LAGGER), 600Y, DIL RESISTANT TIHHN OR THANN-Z GREN INSULATION, CLASS 8 STRANDED COPER CABLE RATED FOR 90 'C (WET AND DRY) OPERATION; USTED OR LABELED FOR THE LOCATION AND RACEMAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR $\pounds 2$ AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.
- 5 POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TO CABLE (SIZE 14 AWG OR LARGER), 600V, OIL REISISTANT THAN OR THMN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (NET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
- ij. ALL POWER AND POWER GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE. COMPRESSION WHE LIES AND WIREMITS BY THOMAS AND BETTS (OR EQUAL), LUCS AND WIRENITS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75'C (SOTC IF AVAILABLE).
- RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEWA, UL, ANSI/REEE, AND NEC.
- NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
- ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVG SCHEDULE 40, OR RIGID PVG SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
- GALVANIZED STEEL INTERMEDIATE METALLIC CONDUST (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (EMT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- RIGD NOMETALIC CONDUT (I.E., RIGID PAC SCHEDILE 40 OR RIGID PAC SCHEDILE 80) SHALL BE USED UNDERGROUND, DRECT BURED, IN JAESS OF DOCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
- LIQUID—TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID—TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION—TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.

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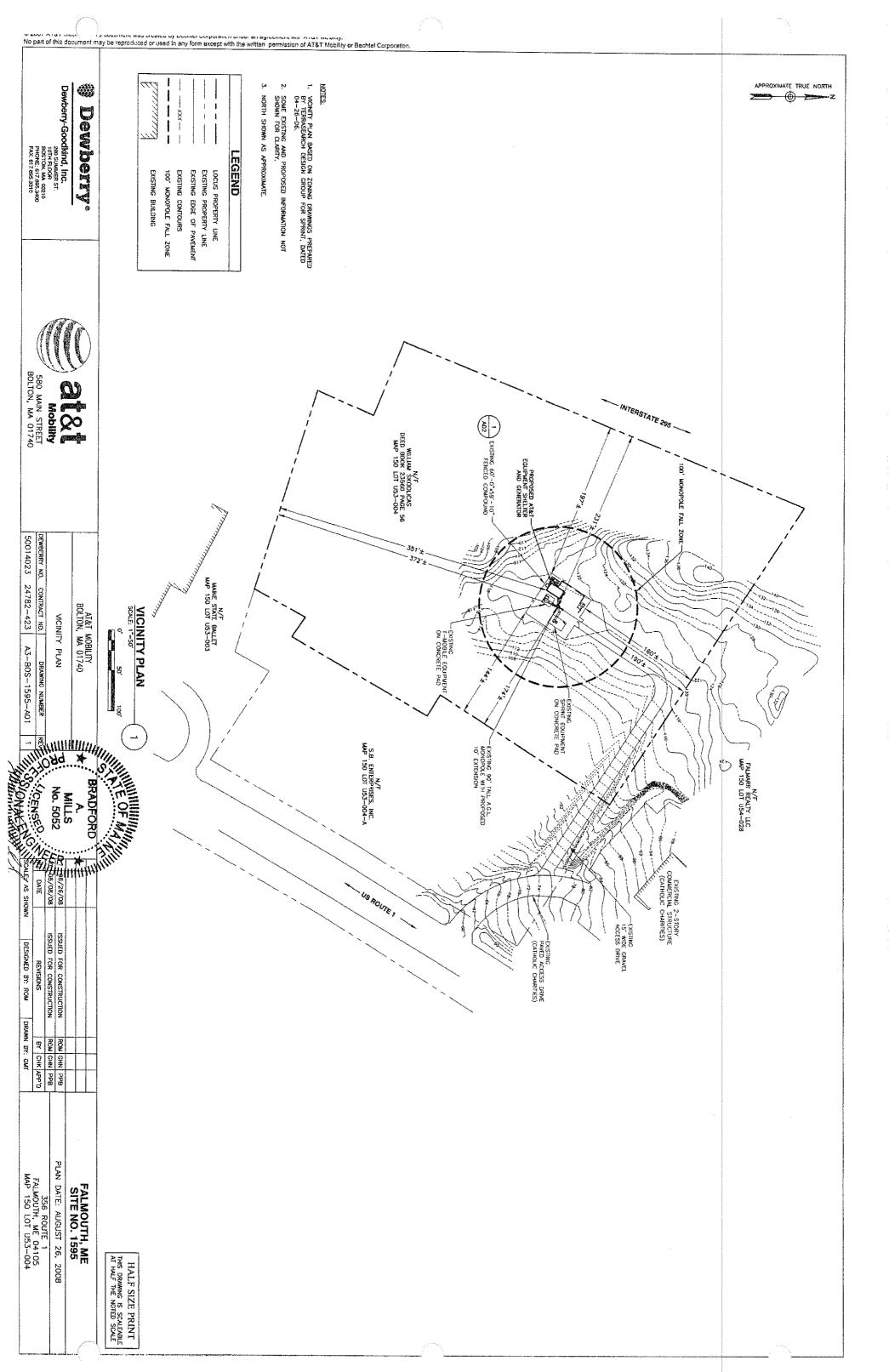
- 25 CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEWA, UL. ANSI/IEEE, AND NEC.
- 26 CABINETS, BOXES, AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE
- 27. WRENAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNMARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEW. 1 (OR BETTER) INDOORS, OR NEWA JR (OR BETTER) OUTDOORS.
- 28. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PUIL BOXES SHALL BE CALVANIZED OR EPOXY—COATED SHEEL SHALL MEET OR EXCEED UL SO, AND RATED NEMA I (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS
- 7 METAL RECEPTACLE, SWITCH, AND DEMCE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- 30 NONMETALLIC RECEPTACLE, SMITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEWA OS 2; AND RAITED NEWA 1 (OR BETTER) INDOORS, OR WIJAHER PROTECTED (WIT OR BETTER) CUTDOORS.
- THE SUBCONTR RACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE WORK ON THE AC POWER DISTRIBUTION PANELS.

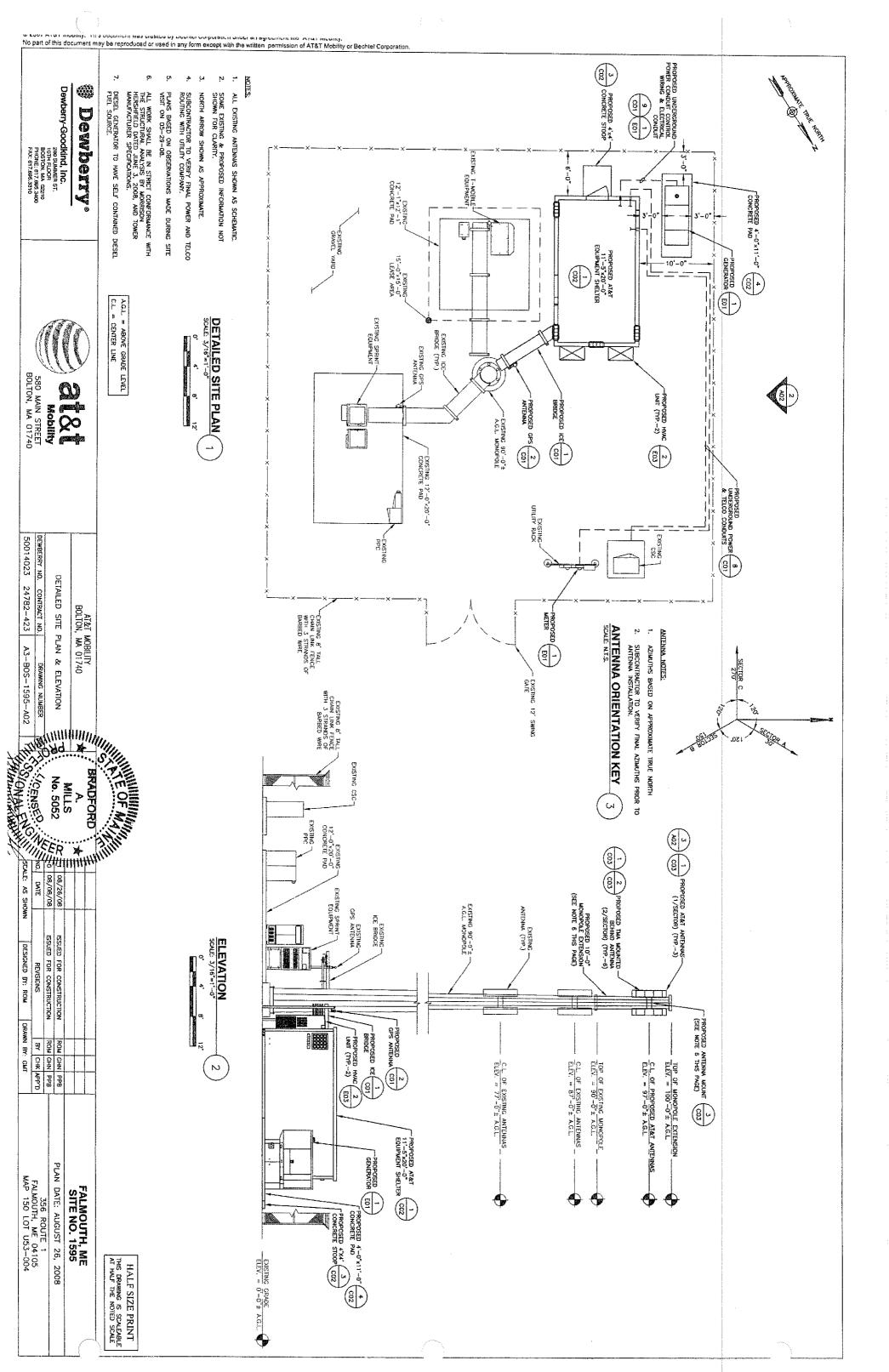
31

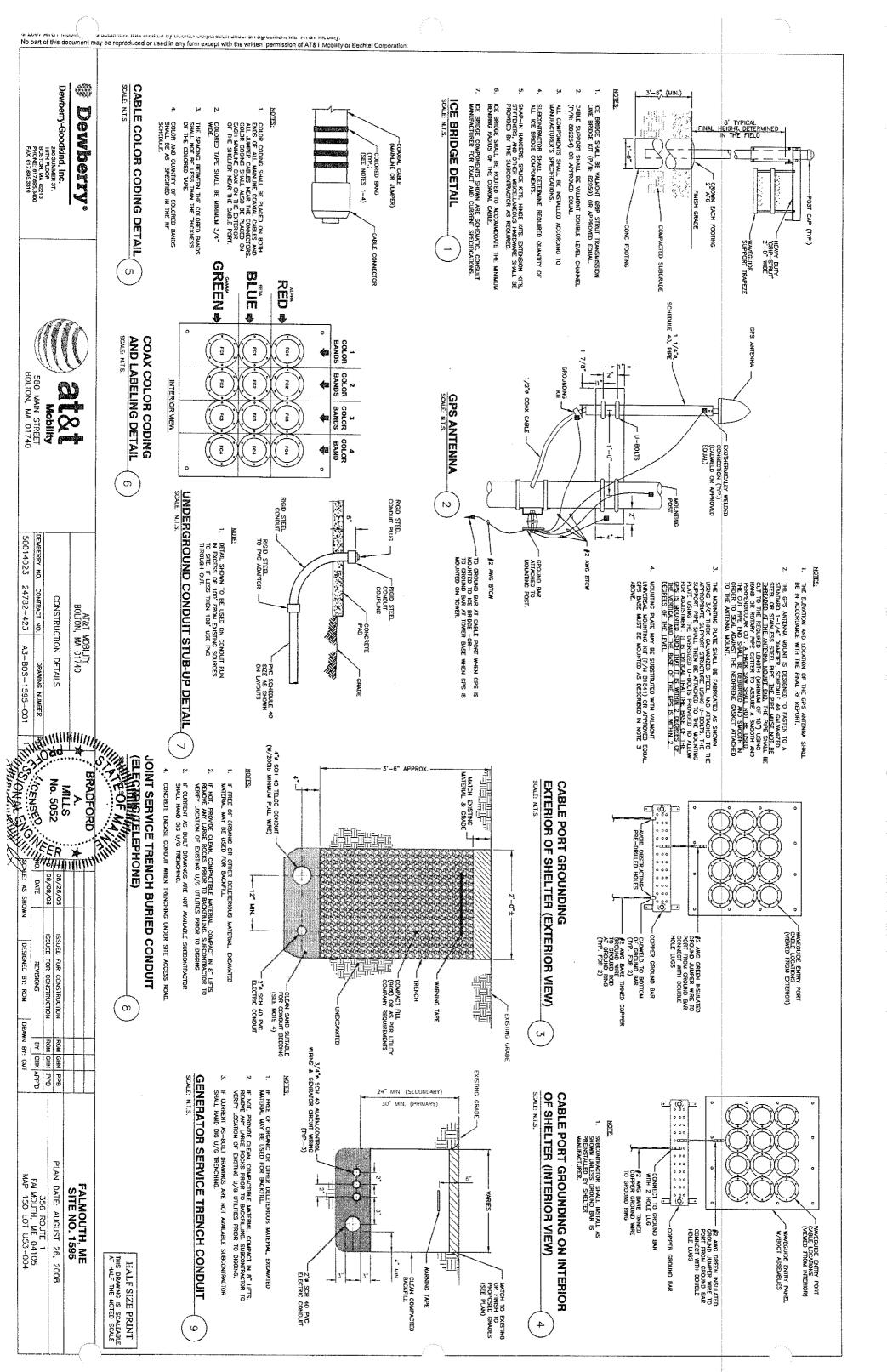
32 THE SUBCONTR PACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

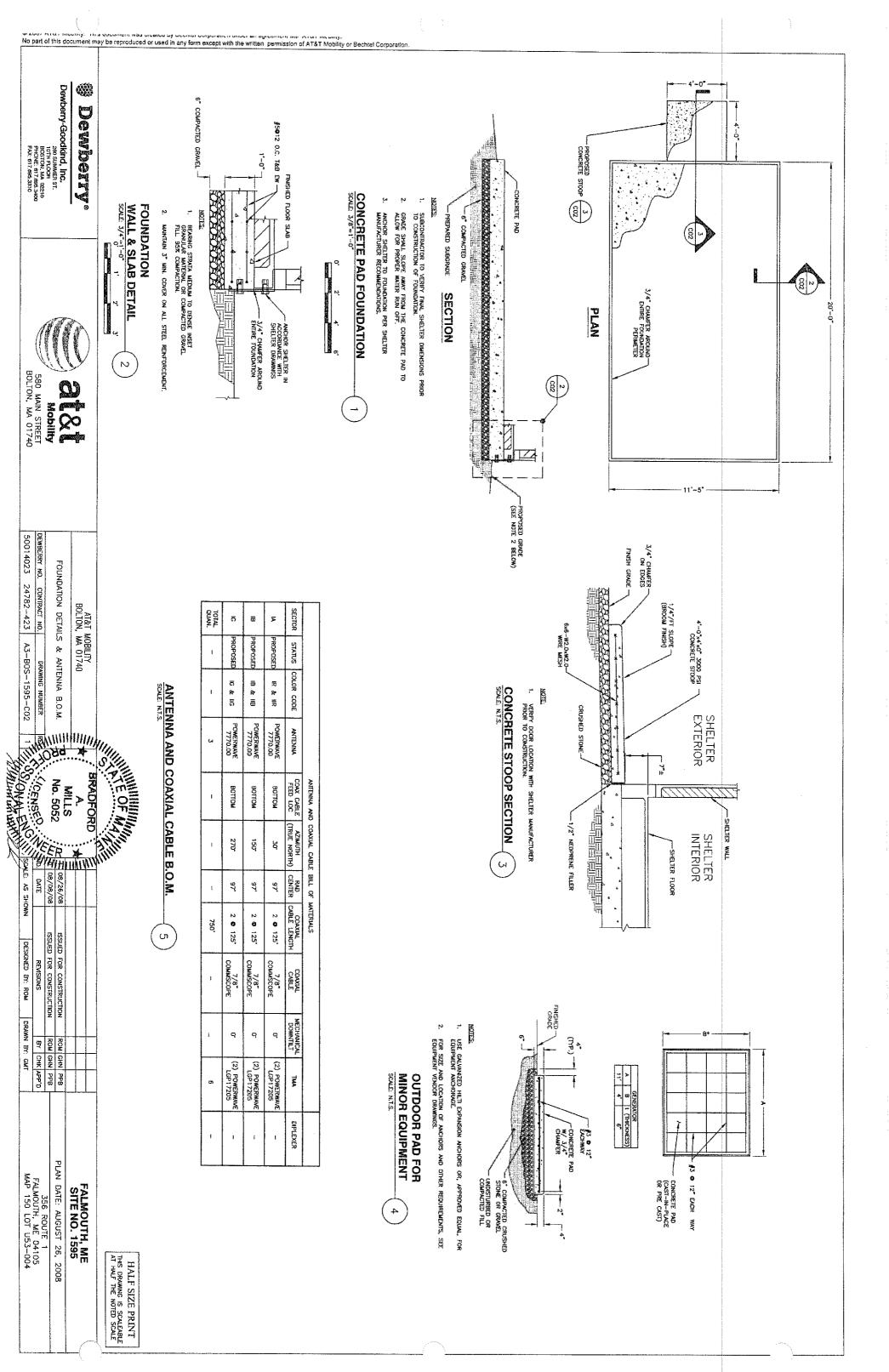
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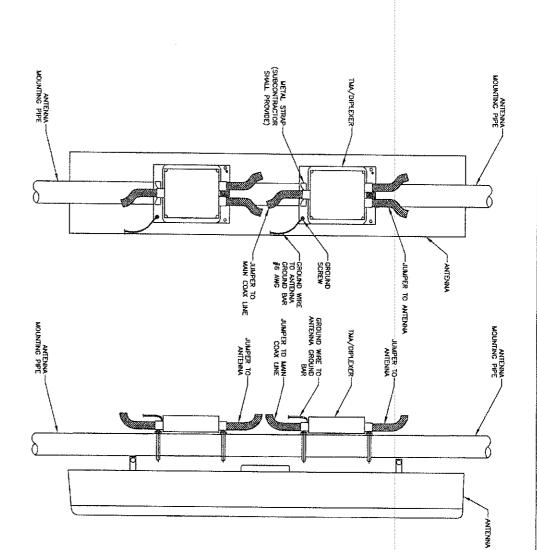
SCALE: AS SHOWN 08/26/08 08/08/08 0. DATE ISSUED FOR CONSTRUCTION DESIGNED BY: ROM REVISIONS DRAWN BY: GMT ROM CHN PPB ROM GHN PPB BY CHK APP'D PLAN DATE: AUGUST 26, 2008 FALMOUTH, ME 04105 MAP 150 LOT U53-004 FALMOUTH, ME SITE NO. 1595 356 ROUTE











- TWA IS WEATHERPROOFED ENCLOSURE RATED TO IP65.
- THA SHALL NOT BE PAINTED. A LABEL STATING "DO NOT PAINT" IS PROVIDED WITH TIMA AND SHALL BE MOUNTED ON UNIT WHERE IT IS CLEARLY VISIBLE.
- If possible, tha shall be mounted behind antenna to minimize wind loading on structure.
- PROVIDE SUFFICIENT LENGTH OF JUMPER TO ALLOW FOR PROPER APPLICATION OF WEATHER PROOFING AT ANTENNA AND TMA CONNECTIONS.
- bond tha ground stud to ground bar with No. 6 awg ground wire and 2-hole ground lug.
- BACKPLATE AND POLE CLAMPS FOR MOUNTING TO 2 $3/8\ensuremath{^\circ}$ DIA. ANTENNA MOUNTING PIPE PROVIDED WITH TMA.
- THA SHALL BE MOUNTED VERTICALLY,
- JUMPER CABLES SHALL BE SUPPORTED WITHIN 1 TO 2 FEET OF CONNECTORS. CONNECTORS SHALL BE WEATHERPROOFED IN ACCORDANCE WITH REQUIREMENTS OF STANDARD BECHTEL DETAIL NO. 520/ED4, NOTE 13.
- SUBCONTRACTOR SHALL REPLACE ANY DAMAGED OR CORRODED HARDWARE.

AMPLIFIER/DIPLEXER MOUNTING TOWER MOUNTED





50014023 EWBERRY NO.

24782-423 CONTRACT NO.

A3-BOS-1595-C03

SCALE: AS SHOWN

DESIGNED BY: ROM

DRAWN BY: GMT

DRAWING NUMBER

TMA & DIPLEXER DETAILS

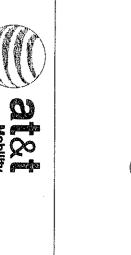
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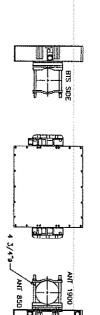


Dewberry

Dewberry-Goodkind, Inc.

10TH FLOOR BOSTON, MA 02210 PHONE: 617.695.3400 FAX: 617.695.3310





KOTS

MOUNTING TO A POLE OR BEAM

ASSEMBLE THE POLE MOUNTING HARDWARE ON THE TMA AND INSTALL THE DESIRED LOCATION AS SHOWN IN DETAIL 1, THIS SHEET.

- INSERT THE 3/8—16 UNC x 7" LG (MB X 180MM) HEX BOLTS WITH THE WASHERS THROUGH THE HOLES IN THE THA BRACKETS, BOLTS AND WASHERS MAY BE PRE-INSTALLED ON SOME VERSIONS OF THE ETB SERIES THA.
- ORIENT THE TIME IN THE SELECTED LOCATION WITH THE BTS PORT POMITING DOWN, OR AS REQUIRED, ALIEN THE V-GRIPS OF THE TIME BRACKETS WITH THE POLE OR THE TOWER MEMBER.
- ATTACH THE REAR BRACKETS TO THE HEX BOLTS AND NISTALL FLAT WASHER, SAID THE HEX AUT ON EACH BOLT. TIGHTEN HEX NUTS SECURELY WHILE MAINTANING ALIGNMENT BETWEEN THAN BRACKET AND REAR BRACKET.
- ATACH A GROUND CABLE TO THE TMA USING THE PRE-INSTALLED HEX BOLT AND WASHERS, ROUTE THE GROUND CABLE TO THE GROUND BAR ON THE TOWER STRUCTURE AND ATTACH SECURELY WITH SUITABLE

THE TMA CAN BE MOUNTED TO A SUITABLE FLAT SURFACE.

THE REAR BRACKETS AND HARDWARE ARE NOT USED.

MOUNT THE TMA TO THE WALL USING FOUR 5/16" OR BIAM BOLTS (NOT SUPPLIED) THROUGH THE HOLES IN THE TIM BRACKETS.

SUBCONTRACTOR TO VERIFY MOUNTING HARDWARE SIZE. CONNECT RF AND GROUND CABLES, WEATHERSEAL AND SECURE WITH STRAPS AS OUTLINES ABOVE.

IF PRE-INSTALLED, 3/8-16 UNC x 6 1/4" LG (MB X 150 MM) HEX 50LTS MUST BE REMOVED PRIOR TO WALL-MOUNTING, UNDO THE TWO CAP SCREWS TO DETACH THE TAM BRACKET AND RETRACT THE BOLTS. RE-INSTALL THE TAM BRACKETS AND TIGHTEN THE CAP SCREWS SECURELY.

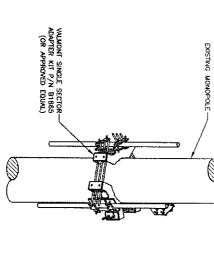
TMA MOUNTING DETAIL

MOUNTING TO A WALL

- ROUTE A JUMPER CABLE FROM THE 850 MHz
 ANTENNA TO THE TIMA PORT MARKED "ANT 850".
 ROUTE A SECOND JUMPER CABLE FROM THE 1900
 MHz ANTENNA TO THE TIMA PORT MARKED "ANT 1900".
 ROUTE A THIRD JUMPER CABLE FROM THE TIMA PORT
 MARKED "81"S" TO THE TOWER PEEDER. BE SURE TO
 PROVIDE ADEQUATE CURVE OR LOOP TO RELEVE
 UNDUE STRAIN ON CONNECTIONS AT EITHER END. TIGHTEN RF CONNECTIONS TO 18-FT-LBS (25Nm) TORQUE.
- WEXHERSEAL THE CABLE CONNECTIONS PER STANDARD PRACTICES IF REQUIRED BY LOCAL CONDITIONS. PROVIDED MATERIALS, IF ANY, CAN BE APPLIED ACCORDING TO THE INSTRUCTIONS ON THE PACKAGE.
- APPLY CABLE TIES OR STRAPS (NOT SUPPLIED TO SECURE THE CABLES TO THE TOWER STRUCTURE
- SUBCONTRACTOR TO VERIFY MOUNTING HARDWARE SIZE

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SUBCONTRACTOR TO CONSULT PLUMBING DIAGRAM PRIOR TO INSTALLATION.



NOTE

INSTALL MOUNT & ANTENNA PER STRUCTURAL ANALYSIS & MANUFACTURER'S RECOMMENDATIONS.

MONOPOLE PIPE MOUNTS

BRADFORD

MILLS

No. 5052

DE 08/28/08

1 11/05/ONAL ENGLANCE AS SHOWN ISSUED FOR CONSTRUCTION REVISIONS ROM CHN PPB ROM CHN PPB BY CHK APP'D PLAN DATE: AUGUST 26, 2008 356 ROUTE 1 FALMOUTH, ME 04105 MAP 150 LOT U53-004 FALMOUTH, ME SITE NO. 1595

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DEWBERRY NO. CONTRACT NO.

50014023

24782-423 A3-B0S-1595-E01

DESIGNED BY: ROM DRAWN BY: ROM CHN PPB

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