



at&t Mobility

PAXTON, MA
SITE NO.: MA4388
196 WEST STREET
PAXTON, MA 01612



LOCUS MAP

FROM FRAMINGHAM, MA: TAKE I-90 W TOWARD WORCESTER. TAKE EXIT 10A FOR RT-146/RT-20. TURN RIGHT AND MERGE ONTO RT-146 N TOWARD WORCESTER. TAKE EXIT 13 TO MERGE ONTO I-290 E. TAKE EXIT 17 TO MERGE ONTO RT-9. TURN LEFT ONTO BELMONT ST. CONTINUE STRAIGHT ONTO HIGHLAND ST. AT THE ROTARY, TAKE THE 2ND EXIT ONTO PLEASANT ST. PLEASANT STREET WILL BECOME RT-122 AND FOLLOW IT INTO PAXTON. TURN LEFT ONTO RT-31/WEST STREET. THE SITE WILL BE ON THE RIGHT.

ENGINEER
DEWBERRY ENGINEERS INC.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE # (617) 895-3400
FAX # (617) 895-3310
CONTACT: PATRICK BARRY, P.E.

SITE ACQUISITION
KJK WIRELESS LLC
127 RIDGE ROAD
NASHUA, NH 03062
PHONE # (603) 888-8974
CONTACT: KEN KOZYRA

CONSTRUCTION
SAI COMMUNICATIONS
27 NORTHWESTERN DRIVE
SALEM, NH 03079
PHONE # (617) 763-6030
FAX # (603) 893-1104
CONTACT: TOM WALSH

CONSULTANT TEAM

SITE NAME:
PAXTON, MA
PROPERTY OWNER:
WILLIAM R. AND PHYLLIS A. O'HEARN
24 PROSPECT STREET
RUTLAND, MA 01543

APPLICANT/DEVELOPER:
AT&T MOBILITY
550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

ELECTRIC UTILITY:
PAXTON MUNICIPAL LIGHT DEPARTMENT
(508) 758-9508

TELEPHONE UTILITY:
VERIZON
(866) 941-9000

CENTER OF PROPOSED MONOPOLE:
LATITUDE: 42° 18' 36.07" N (NAD 83)
LONGITUDE: 71° 56' 45.86" W (NAD 83)
*PER SURVEY

PROJECT SUMMARY

SITE ADDRESS:
196 WEST STREET
PAXTON, MA 01612
ZONING DISTRICT:
GENERAL RESIDENCE B

PROJECT DIRECTORY

A PROPOSED 138' TALL A.G.L. MONOPOLE, EQUIPMENT SHELTER, AND PROPANE GENERATOR WILL BE INSTALLED AT GRADE INSIDE A PROPOSED FENCED COMPOUND. TWELVE (12) PANEL ANTENNAS WILL BE INSTALLED (4/SECTOR) ON THE PROPOSED MONOPOLE. POWER AND TELCO WILL COME FROM AN EXISTING UTILITY POLE OFF OF WEST STREET.

PROJECT DESCRIPTION

SAI CM	DATE
AT&T CM	DATE
SAI RF	DATE
AT&T RF	DATE

APPROVALS

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

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

SHT. NO.	DESCRIPTION
T-1	TITLE SHEET
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C-3	SITE & GRADING PLAN-II
C-4	ROAD PROFILE
C-5	DETAILED SITE PLAN & ELEVATION
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C-7	CONSTRUCTION DETAILS-II
C-8	CONSTRUCTION DETAILS-III
C-9	CONSTRUCTION DETAILS-IV
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SHEET INDEX

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27 NORTHWESTERN DRIVE
SALEM, NH 03079

PAXTON, MA
SITE NO.: MA4388

CONSTRUCTION DRAWINGS

D 10/11/13	FOR CONSTRUCTION
B 09/25/13	FOR COMMENT
A 07/02/13	FOR COMMENT

Dewberry

Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.895.3400
FAX: 617.895.3310



DRAWN BY: SK
REVIEWED BY: ROM
CHECKED BY: PPB
PROJECT NUMBER: 50003936
JOB NUMBER: 50057820
SITE ADDRESS

196 WEST STREET
PAXTON, MA 01612

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1

GENERAL CONSTRUCTION NOTES:

- 1. ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH AT&T MOBILITY SPECIFICATIONS.
- 2. CONTRACTOR SHALL CONTACT "DIG SAFE 1888 DIG SAFE" (888-344-7233) FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
- 3. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
- 4. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
- 5. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
- 6. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
- 7. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 8. CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
- 9. CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
- 10. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO PROCEEDING.
- 11. EACH CONTRACTOR SHALL COOPERATE WITH THE OWNER'S REPRESENTATIVE, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
- 12. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE AT&T MOBILITY CONSTRUCTION MANAGER.
- 13. ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
- 14. WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR WILL NOTIFY ENGINEER, AT&T MOBILITY PROJECT CONSTRUCTION MANAGER, AND LANDLORD IMMEDIATELY.
- 15. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
- 16. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF EACH DAY.
- 17. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH LANDLORD AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
- 18. CONTRACTOR SHALL FURNISH AT&T MOBILITY WITH THREE AS-BUILT SETS OF DRAWINGS UPON COMPLETION OF WORK.
- 19. ANTENNAS AND CABLES ARE TYPICALLY PROVIDED BY AT&T MOBILITY. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH AT&T MOBILITY PROJECT MANAGER TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED BY AT&T MOBILITY WIRELESS. ALL ITEMS NOT PROVIDED BY AT&T MOBILITY SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED BY AT&T MOBILITY.
- 20. PRIOR TO SUBMISSION OF BID, CONTRACTOR WILL COORDINATE WITH AT&T MOBILITY PROJECT MANAGER TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY AT&T MOBILITY. ALL REQUIRED PERMITS NOT OBTAINED BY AT&T MOBILITY MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
- 21. CONTRACTOR SHALL START UP HVAC UNITS AND SYNCHRONIZE THE THERMOSTATS.
- 22. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH AT&T MOBILITY SPECIFICATIONS AND REQUIREMENTS.
- 23. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
- 24. UNLESS OTHERWISE NOTED AT&T MOBILITY SHALL PROVIDE ALL REQUIRED RF MATERIAL FOR CONTRACTOR TO INSTALL, INCLUDING ANTENNAS, TMA'S, BIAS--T'S, COMBINERS, PDU, DC BLOCKS, SURGE ARRESTORS, GPS ANTENNA, GPS SURGE ARRESTOR, COAXIAL CABLE.
- 25. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL VERIFY ALL EQUIPMENT TO BE PROVIDED BY AT&T MOBILITY FOR INSTALLATION BY CONTRACTOR.
- 26. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO AT&T MOBILITY SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
- 27. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLEY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- 28. CONTRACTOR SHALL NOTIFY DEWBERRY A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW AND APPROVAL.
- 29. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.

EROSION AND SEDIMENT CONTROL PLAN:

THIS PLAN HAS BEEN DEVELOPED TO PROVIDE A STRATEGY FOR CONTROLLING SOIL EROSION AND SEDIMENTATION DURING AND AFTER CONSTRUCTION OF THE PROPOSED DEVELOPMENT.

THE EQUIPMENT ANTICIPATED TO BE USED FOR THE CONSTRUCTION INCLUDES THE FOLLOWING: BACKHOES, BULLDOZERS, LOADERS, TRUCKS, CRANES, COMPACTORS, AND GRADERS. THE FOLLOWING MEASURES WILL BE UNDERTAKEN TO PROVIDE MAXIMUM PROTECTION TO THE SOIL, WATER, AND ABUTTING LANDS:

- 1. PRIOR TO GRUBBING OR ANY EARTHMOVING OPERATION, SILTATION FENCE WILL BE INSTALLED ACROSS THE SLOPE ON THE CONTOUR AT THE DOWNHILL LIMIT OF THE WORK AS PROTECTION AGAINST CONSTRUCTION RELATED EROSION.
- 2. STONE CHECK DAMS WILL BE INSTALLED IN THE DRAINAGE SWALES TO PREVENT EROSION PRIOR TO THE STABILIZATION OF THE CHANNELS. EROSION CONTROL MESH WILL ALSO BE INSTALLED IN ALL DITCH TO BE REVEGETATED.
- 3. PERMANENT SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY UNDISTURBED LAND AREA WILL BE COMPLETED WITHIN FIFTEEN CALENDAR DAYS AFTER FINAL GRADING HAS BEEN COMPLETED. WHEN IT IS NOT POSSIBLE OR PRACTICAL TO PERMANENTLY STABILIZE DISTURBED LAND, TEMPORARY EROSION CONTROL MEASURES WILL BE IMPLEMENTED WITHIN THIRTY CALENDAR DAYS OF EXPOSURE OF SOIL. ALL DISTURBED AREAS WILL BE MULCHED FOR EROSION CONTROL UPON COMPLETION OF ROUGH GRADING.
- 4. ANY EXPOSED SLOPES GREATER THAN 3:1 AND NEWLY CONSTRUCTED DRAINAGE SWALES WILL BE STABILIZED WITH EROSION CONTROL MESH TO PREVENT EROSION DURING CONSTRUCTION AND TO FACILITATE REVEGETATION AFTER LOAMING AND SEEDING.
- 5. TO PROVIDE PROTECTION AGAINST EROSION, RIPRAP WILL BE PLACED AT ALL STORM DRAIN INLETS AND OUTLETS AS SHOWN ON THE ATTACHED DRAWINGS.
- 6. IN AREAS OF CONSTRUCTION DEWATERING, ISOLATED SETTLEMENT TRAPS WILL BE CONSTRUCTED ADJACENT TO THE ACTIVITY. WATER WILL BE PUMPED FROM THE EXCAVATIONS TO THESE DEPRESSION AREAS FOR SEDIMENT REMOVAL. ADDITIONAL SEDIMENTATION PROTECTION WILL BE PROVIDED BY THE INSTALLATION OF HAYBALE BARRIERS BETWEEN THE BASINS AND THE RECEIVING DRAINAGE COURSE.
- 7. NATIVE TOPSOIL SHALL BE SAVED, STOCKPILED, MULCHED, AND REUSED AS MUCH AS POSSIBLE ON THE SITE. SILTATION FENCE SHALL BE INSTALLED AT THE BASE OF STOCKPILES AT THE DOWNHILL LIMIT TO PROTECT AGAINST EROSION. STOCKPILES WILL BE STABILIZED BY SEEDING AND MULCHING UPON FORMATION OF THE PILES. UPHILL OF THE STOCKPILES, STABILIZED DITCHES AND/OR BERMS WILL BE CONSTRUCTED TO DIVERT STORMWATER RUNOFF AWAY FROM THE PILES.
- 8. ALL SILTATION FENCE AND HAY BALE BARRIERS WILL BE INSPECTED BY THE CONTRACTOR ON A WEEKLY BASIS OR FOLLOWING ANY SIGNIFICANT RAINFALL (1/2 INCH OR MORE) OR SNOWMELT. ALL DAMAGED EROSION CONTROL DEVICES WILL BE REPAIRED AND/OR REPLACED IMMEDIATELY. TRAPPED SEDIMENT WILL BE REMOVED BEFORE IT HAS ACCUMULATED TO ONE-HALF OF THE INSTALLED SILTATION FENCE OR HAY BALE BARRIER HEIGHT. DEVICES NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION WILL ALSO BE REPAIRED AND/OR REPLACED AS NECESSARY.
- 9. IF FINAL SEEDING OF THE UNDISTURBED AREAS IS NOT COMPLETED BY SEPTEMBER 15 OF THE YEAR OF CONSTRUCTION, THEN WITHIN THE NEXT 10 CALENDAR DAYS THESE AREAS WILL BE GRADED AND SMOOTHED, THEN SEEDED TO A WINTER COVER CROP OF RYE AT A RATE OF 3 LBS. PER 1,000 SQ. FT. THE FOLLOWING WILL BE INCORPORATED INTO THE SOIL PRIOR TO RYE SEEDING. GROUND LIMESTONE AT A RATE OF 130 LBS. PER 1,000 SQ. FT., FOLLOWED BY A 10-10 FERTILIZER AT A RATE OF 14 LBS. PER 1,000 SQ. FT. HAY MULCH WILL BE APPLIED AT A RATE OF 100 LBS. PER 1,000 SQ. FT. FOLLOWING SEEDING. IF THE RYE SEEDING CANNOT BE COMPLETED BY OCTOBER 1, THEN ON THAT DATE HAY MULCH SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE TO PROVIDE WINTER PROTECTION. IF RYE DOES NOT MAKE ADEQUATE GROWTH BY NOVEMBER 5, THEN ON THAT DATE, HAY MULCH SHALL BE APPLIED AT THE RATE OF 100 LBS. PER 1,000 SQ. FT. A SUITABLE BINDER SUCH AS CURASOL OR RMB PLUS SHALL BE USED ON HAY MULCH FOR WIND CONTROL. BIODEGRADABLE NETTING WILL BE INSTALLED ON STEEP SLOPES (3:1 AND STEEPER) AND ON AREAS OF CONCENTRATED FLOWS.
- 10. INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND INCORPORATED INTO THE PROJECT AREA.
- 11. SHOULD CONSTRUCTION OCCUR AFTER NOVEMBER 15, ADDITIONAL EROSION CONTROL METHODS WILL BE IMPLEMENTED. ALL DISTURBED AREAS WILL BE MINIMIZED AS MUCH AS POSSIBLE. PRIOR TO FREEZING, ADDITIONAL EROSION CONTROL DEVICES WILL BE INSTALLED AS APPROPRIATE. INSPECTION OF THESE EROSION CONTROL ITEMS WILL BE CONSTANT, WITH PARTICULAR ATTENTION PAID TO WEATHER PREDICTIONS TO ENSURE THAT THESE MEASURES ARE PROPERLY IN PLACE TO HANDLE LARGE AMOUNTS OF RUNOFF FROM HEAVY RAINS OR THAWS.

CONCRETE AND REINFORCING STEEL NOTES:

- 1. DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF ALL APPLICABLE CODES INCLUDING: ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", AND ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
- 2. MIX DESIGN SHALL BE APPROVED BY OWNER'S REPRESENTATIVE AND SUBMITTED TO ENGINEER PRIOR TO PLACING CONCRETE.
- 3. CONCRETE SHALL BE NORMAL WEIGHT, 8 % AIR ENTRAINED (+/- 1.5%) WITH A MAXIMUM 4" SLUMP AND HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI UNLESS OTHERWISE NOTED.
- 4. THE FOLLOWING MATERIALS SHALL BE USED:
PORTLAND CEMENT: ASTM C-150, TYPE 1 OR 2
REINFORCEMENT: ASTM A-185, PLAIN STEEL WELDED WIRE FABRIC
REINFORCEMENT BARS: ASTM A615, GRADE 60, DEFORMED
NORMAL WEIGHT AGGREGATE: ASTM C-33
WATER: DRINKABLE
ADMIXTURES: NON-CHLORIDE CONTAINING
- 5. MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS (UNLESS OTHERWISE NOTED):
A. CONCRETE CAST AGAINST EARTH: 3"
B. ALL OTHER CONCRETE: 2"
- 6. A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE IN ACCORDANCE WITH ACI 301 SECTION 4.2.4, UNLESS NOTED OTHERWISE.
- 7. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL, OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE.
- 8. ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED IN ACI 301.
- 9. DO NOT WELD OR TACK WELD REINFORCING STEEL.
- 10. ALL DOWELS, ANCHOR BOLTS, EMBEDDED STEEL, ELECTRICAL CONDUITS, PIPE SLEEVES, GROUNDS AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE BEFORE START OF CONCRETE PLACEMENT.
- 11. REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED.
- 12. DO NOT PLACE CONCRETE IN WATER, ICE, OR ON FROZEN GROUND.
- 13. DO NOT ALLOW REINFORCEMENT, CONCRETE OR SUBBASE TO FREEZE DURING CONCRETE CURING AND SETTING PERIOD, OR FOR A MINIMUM OF 3 DAYS AFTER PLACEMENT.
- 14. FOR COLD-WEATHER AND HOT-WEATHER CONCRETE PLACEMENT, CONFORM TO APPLICABLE ACI CODES AND RECOMMENDATIONS. IN EITHER CASE, MATERIALS CONTAINING CHLORIDE, CALCIUM, SALTS, ETC. SHALL NOT BE USED. PROTECT FRESH CONCRETE FROM WEATHER FOR 7 DAYS, MINIMUM.
- 15. CONCRETE SHALL BE RUBBED TO A ROUGH GROUT FINISH. PADS SHALL BE SEALED BY STEEL TROWEL.
- 16. UNLESS OTHERWISE NOTED:
A. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60.
B. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
- 17. SPICING OF REINFORCEMENT IS PERMITTED ONLY AT LOCATIONS SHOWN IN THE CONTRACT DRAWINGS OR AS ACCEPTED BY THE ENGINEER. UNLESS OTHERWISE SHOWN OR NOTED REINFORCING STEEL SHALL BE SPICED TO DEVELOP ITS FULL TENSILE CAPACITY (CLASS A) IN ACCORDANCE WITH ACI 318.
- 18. REINFORCING BAR DEVELOPMENT LENGTHS, AS COMPUTED IN ACCORDANCE WITH ACI 318, FORM THE BASIS FOR BAR EMBEDMENT LENGTHS AND BAR SPICED LENGTHS SHOWN IN THE DRAWINGS. APPLY APPROPRIATE MODIFICATION FACTORS FOR TOP STEEL, BAR SPACING, COVER AND THE LIKE.
- 19. DETAILING OF REINFORCING STEEL SHALL CONFORM TO "ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI 315).
- 20. ALL SLAB CONSTRUCTION SHALL BE CAST MONOLITHICALLY WITHOUT HORIZONTAL CONSTRUCTION JOINTS, UNLESS SHOWN IN THE CONTRACT DRAWINGS.
- 21. LOCATION OF ALL CONSTRUCTION JOINTS ARE SUBJECT TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, CONFORMANCE WITH ACI 318, AND ACCEPTANCE OF THE ENGINEER. DRAWINGS SHOWING LOCATION OF DETAILS OF THE PROPOSED CONSTRUCTION JOINTS SHALL BE SUBMITTED WITH REINFORCING STEEL PLACEMENT DRAWINGS
- 22. SPICES OF WWF, AT ALL SPICED EDGES, SHALL BE SUCH THAT THE OVERLAP MEASURED BETWEEN OUTERMOST CROSS WIRES OF EACH FABRIC SHEET IS NOT LESS THAN THE SPACING OF THE CROSS WIRE PLUS 2 INCHES, NOR LESS THAN 8".
- 23. BAR SUPPORTS SHALL BE ALL-GALVINIZED METAL WITH PLASTIC TIPS.
- 24. ALL REINFORCEMENT SHALL BE SECURELY TIED IN PLACE TO PREVENT DISPLACEMENT BY CONSTRUCTION TRAFFIC OR CONCRETE. TIE WIRE SHALL BE 16 GAUGE CONFORMING TO ASTM A82
- 25. SLAB ON GROUND
A. COMPACT STRUCTURAL FILL TO 95% DENSITY AND THEN PLACE 6" GRAVEL BENEATH SLAB.
B. PROVIDE VAPOR BARRIER BENEATH SLAB ON GROUND.

GENERAL FOUNDATION NOTES:

- (APPLICABLE FOR EQUIPMENT SHELTER ONLY)
- 1. THOROUGHLY COMPACT BOTTOM OF EXCAVATIONS PRIOR TO PLACING RIGID INSULATION BARRIER. BACKFILL AND COMPACTION PROCEDURES SHALL BE DONE PER INDUSTRY STANDARDS.
- 2. ALL REINFORCING STEEL SHALL BE ASTM A615 - GRADE 60. SECURE REINFORCING IN PLACE TO PREVENT MOVEMENT DURING CONCRETE PLACEMENT.
- 3. PROVIDE A CLEAR COVER OF 2" FOR ALL REINFORCING STEEL. THIS REQUIREMENT SHALL BE CONSIDERED ACTUAL AND SHOULD NOT BE ADJUSTED IN THE FIELD.
- 4. VERIFY DETAILS AND DIMENSIONS WITH SHELTER DRAWINGS. NOTIFY AT&T MOBILITY OF ANY DISCREPANCIES.
- 5. ALL WORK SHALL COMPLY WITH THE STATE BUILDING CODES.
- 6. INSULATION BARRIER PROVIDED IS FOR FROST PROTECTION IN LIEU OF STANDARD FOUNDATIONS WITH BEARING AT CODE REQUIRED FROST DEPTH.
- 7. SHELTER MUST BE ANCHORED TO ITS FOUNDATION. ANCHOR IN ACCORDANCE WITH SHELTER MANUFACTURER SPECIFICATIONS.



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SUITES 13 & 14
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280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.3400
FAX: 617.695.3310



DRAWN BY: SK

REVIEWED BY: ROM

CHECKED BY: PPB

PROJECT NUMBER: 50003936

JOB NUMBER: 50057820

SITE ADDRESS

196 WEST STREET
PAXTON, MA 01612

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GENERAL NOTES

- FIELD SURVEY DATE: MAY 27, 2013
- VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988.
- HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 (NAD 83) GEOID 09.
- CENTER OF PROPOSED MONOPOLE: LAT.: 42° 18' 36.07" N
LON.: 71° 56' 45.86" W
EXISTING GROUND EL.=1058.4'±
PROPOSED GROUND EL.=1060.4'±
PROPOSED TOWER BASE PLATE EL.=1061.9'±
- OWNER: WILLIAM R. AND PHYLLIS A. O'HEARN
24 PROSPECT STREET
RUTLAND, MA 01543
- SITE NAME: PAXTON, MA
- SITE NUMBER: MA4388
- SITE ADDRESS: 196 WEST STREET
PAXTON, MA 01612
- ABUTTERS INFORMATION TAKEN FROM TOWN TAX DATA.
- JURISDICTION: PAXTON, MA
- TAX ID: MAP 12 LOT 54
- DEED REFERENCE: BOOK 18549, PAGE 281
- PLAT REFERENCE: PLAN BOOK 126 PLAN 23
- GRID NORTH BASED ON GPS.
- ELEVATIONS AND COORDINATES FROM GPS LOCATIONS.
- ALL UNDERGROUND UTILITY INFORMATION PRESENTED HEREON WAS DETERMINED FROM SURFACE EVIDENCE AND PLANS OF RECORD. ALL UNDERGROUND UTILITIES SHOULD BE LOCATED IN THE FIELD PRIOR TO COMMENCEMENT OF ALL SITE WORK.
CALL DIGSAFE 1(800) 322-4844 A MINIMUM OF 72 HOURS PRIOR TO PLANNED ACTIVITY.
- ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY MAPS, THE PROPOSED TOWER ON THIS PROPERTY IS LOCATED IN AN AREA DESIGNATED AS ZONE X. NOT WITHIN THE 100 YEAR FLOOD BOUNDARY. COMMUNITY PANEL NO. 25027C0590E JULY 4, 2011
- PROPERTY LINE INFORMATION IS COMPILED FROM DEEDS AND PLANS OF RECORD AND IS NOT THE RESULT OF A FULL BOUNDARY SURVEY.
- BEARING SYSTEM OF THIS PLAN IS BASED ON GRID NORTH.
- SURVEY PERFORMED BY: COLONIAL SURVEYING CO., INC.
28 WOODLAND WAY
STOW, MA 01775

ZONING INFORMATION

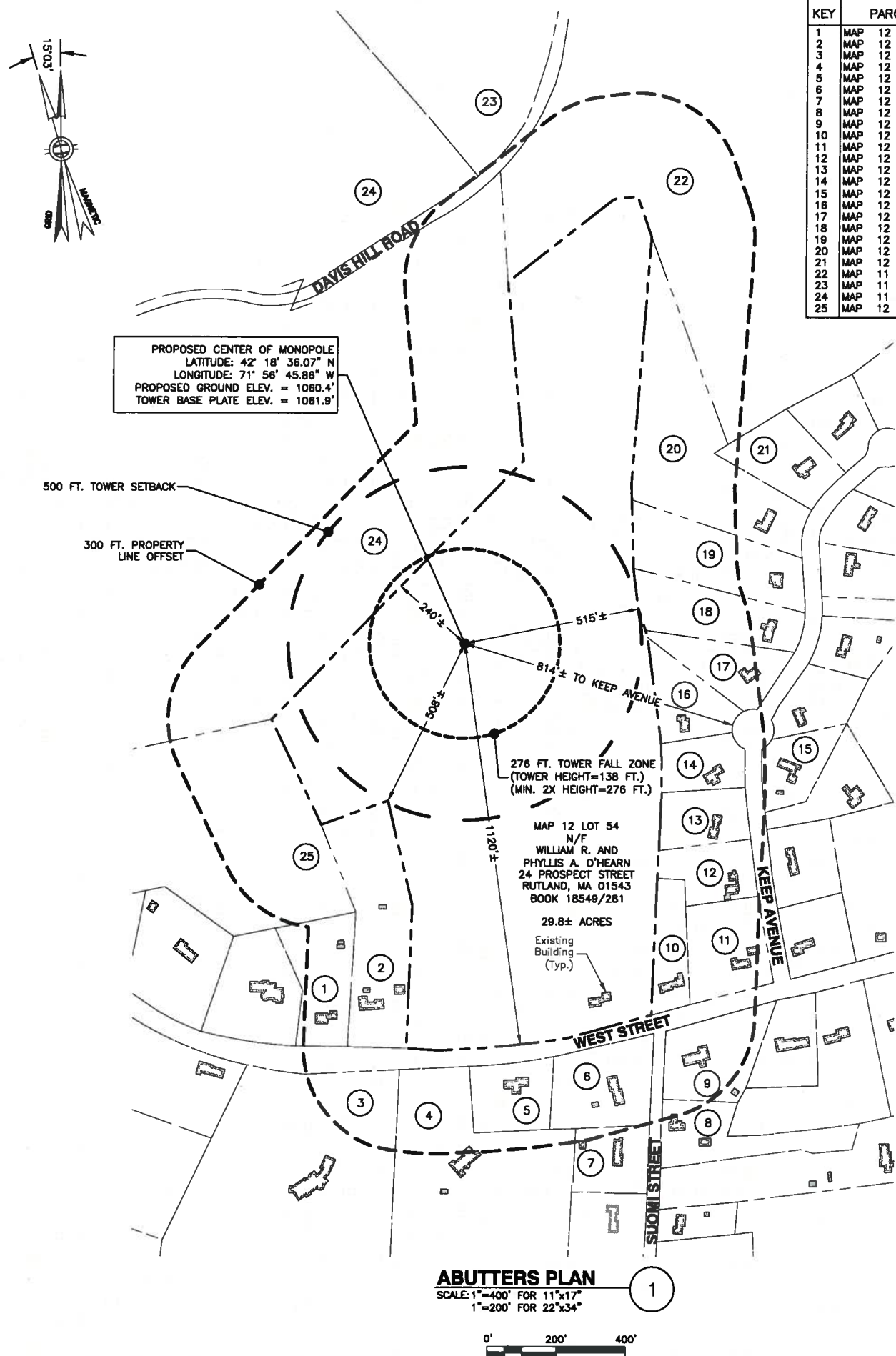
DISTRICT:	GENERAL RESIDENCE B		
	REQUIRED	PROPOSED	
MIN. AREA:	60,000 S.F.	N/C	
MAX HEIGHT:	35 FT.	N/A	
MIN. FRONTAGE:	200 FT.	N/C	
MIN. DEPTH:	150 FT.	N/C	
MIN. FRONT YARD SETBACK:	40 FT.	1120± FT.*	
MIN. SIDE YARD SETBACK:	25 FT.	508± FT.*	
MIN. REAR YARD SETBACK:	30 FT.	240± FT.*	
N/A = NOT APPLICABLE			
N/C = NO CHANGE			
*DISTANCES TO MONOPOLE CENTER			

LEGEND

---	EXISTING PROPERTY LINE
- - -	COMMON OWNERSHIP
---	LOCUS PROPERTY LINE
---	300 FT. PROPERTY LINE OFFSET
---	276 FT. TOWER FALL ZONE
---	500 FT. TOWER SETBACK
▨	EXISTING BUILDING

NOTES:

- ALL ABUTTERS WITHIN 300' OF THE SUBJECT PARCEL ARE SHOWN.
- SOME EXISTING & PROPOSED INFORMATION IS NOT SHOWN FOR CLARITY.
- THIS IS NOT A FULL BOUNDARY SURVEY. ALL DISTANCES AND BEARINGS SHOWN AS APPROXIMATE.



KEY	PARCEL	OWNER'S NAME AND MAILING ADDRESS (N/F)
1	MAP 12 LOT 55	TIMOTHY M. & CHERYL O. BUCKLEY, 226 WEST STREET, PAXTON, MA 01612
2	MAP 12 LOT 54A	FORREST F. & THERESA A. SMITH, 224 WEST STREET, PAXTON, MA 01612
3	MAP 12 LOT 8H	ELLEN M. SAVICKAS, 223 WEST STREET, PAXTON, MA 01612
4	MAP 12 LOT 8K	ROCCO J. & CRISOULA C. FRESOLO, 209 WEST STREET, PAXTON, MA 01612
5	MAP 12 LOT 8	TAMMY L. CLARK, 207 WEST STREET, PAXTON, MA 01612
6	MAP 12 LOT 8F	JEAN M. GOODALL, 10 SUOMI STREET, PAXTON, MA 01612
7	MAP 12 LOT 8E	WILLIAM A. & WENDY O. TROTTA, 12 SUOMI STREET, PAXTON, MA 01612
8	MAP 12 LOT 16	JAMES S. & KARA ANN HANSSON, 9 SUOMI STREET, PAXTON, MA 01612
9	MAP 12 LOT 17	ANTHONY P. RICHARDS, 189 WEST STREET, PAXTON, MA 01612
10	MAP 12 LOT 53	GARY P. LEDERER, 190 WEST STREET, PAXTON, MA 01612
11	MAP 12 LOT 52	AVERY INVESTMENT PROPERTIES, LLC., 199 COBURN AVENUE, WORCESTER, MA 01604
12	MAP 12 LOT 52A	DAVID M. MAGNUSON, 3 KEEP AVENUE, PAXTON, MA 01612
13	MAP 12 LOT 70	JEFFREY S. & ANNE M. DUMAS, 5 KEEP AVENUE, PAXTON, MA 01612
14	MAP 12 LOT 71	MICHAEL W. & SUSAN M. COOMEY, 17 KEEP AVENUE, PAXTON, MA 01612
15	MAP 12 LOT 86	PAUL J. O'RRIORDAN & E.D. CORNALLON, 6 KEEP AVENUE, PAXTON, MA 01612
16	MAP 12 LOT 72	WARREN W. & JEAN A. JEWELL, 19 KEEP AVENUE, PAXTON, MA 01612
17	MAP 12 LOT 73	MICHAEL T. & KIMBERLY T. HANNICAN, 23 KEEP AVENUE, PAXTON, MA 01612
18	MAP 12 LOT 74	MARK G. & GERALDINE A. TARONAS, 27 KEEP AVENUE, PAXTON, MA 01612
19	MAP 12 LOT 75	JEFFREY M. TASCA & ROBERLEY E. HAMAN, 33 KEEP AVENUE, PAXTON, MA 01612
20	MAP 12 LOT 76	RICHARD E. & GERALDINE A. DUMAS, 35 KEEP AVENUE, PAXTON, MA 01612
21	MAP 12 LOT 77	GREGORY M. & JOYCE L. REMMES, 39 KEEP AVENUE, PAXTON, MA 01612
22	MAP 11 LOT 02	COMMONWEALTH OF MASSACHUSETTS, 100 CAMBRIDGE STREET, BOSTON, MA 02202
23	MAP 11 LOT 18A	COMMONWEALTH OF MASSACHUSETTS, 100 CAMBRIDGE STREET, BOSTON, MA 02202
24	MAP 11 LOT 01	COMMONWEALTH OF MASSACHUSETTS, 100 CAMBRIDGE STREET, BOSTON, MA 02202
25	MAP 12 LOT 57	MOJTABA AFSHARI, 274 WEST STREET, PAXTON, MA 01612



550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701



27 NORTHWESTERN DRIVE
SALEM, NH 03079

PAXTON, MA
SITE NO.: MA4388

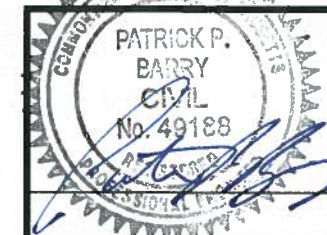
CONSTRUCTION DRAWINGS

0	10/11/13	FOR CONSTRUCTION
B	09/25/13	FOR COMMENT
A	07/02/13	FOR COMMENT



Dewberry Engineers Inc.

280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.3400
FAX: 617.696.3310



DRAWN BY: SK

REVIEWED BY: ROM

CHECKED BY: PPB

PROJECT NUMBER: 50003936

JOB NUMBER: 50057820

SITE ADDRESS

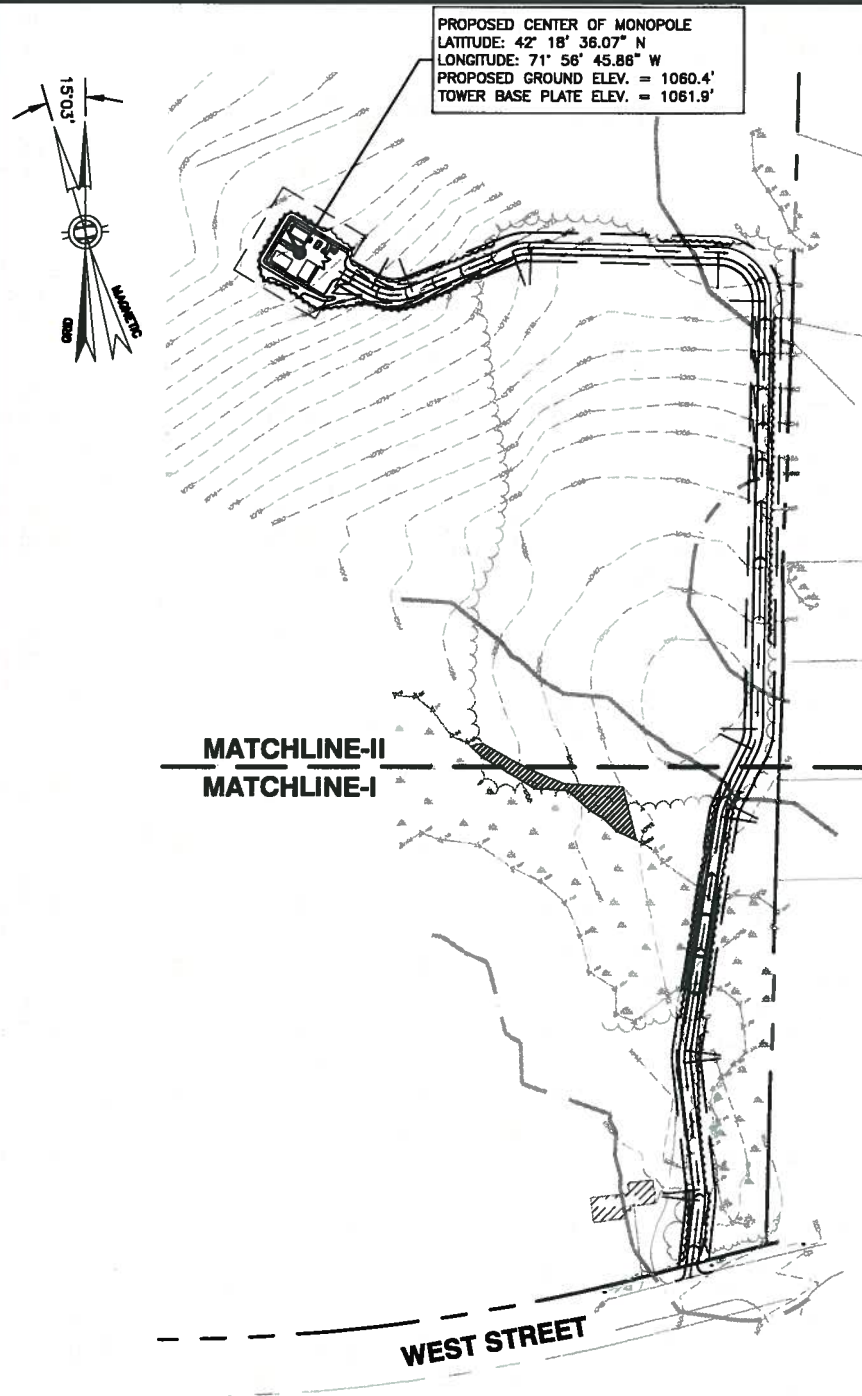
196 WEST STREET
PAXTON, MA 01612

SHEET TITLE

ABUTTERS PLAN

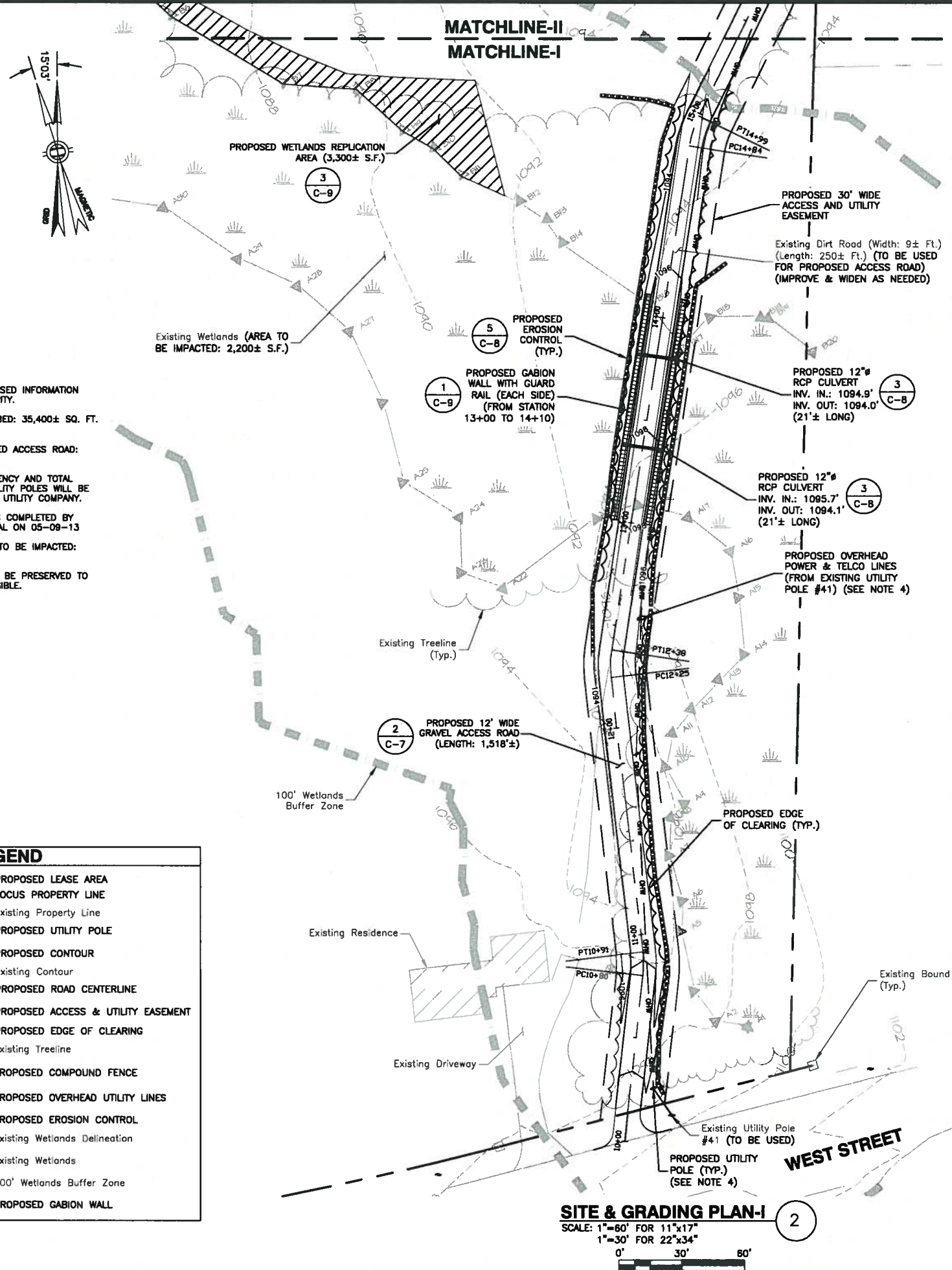
SHEET NUMBER

C-1



- NOTES:**
1. SOME EXISTING AND PROPOSED INFORMATION ARE NOT SHOWN FOR CLARITY.
 2. TOTAL AREA TO BE DISTURBED: 35,400± SQ. FT. (0.81± ACRES)
 3. TOTAL LENGTH OF PROPOSED ACCESS ROAD: 1,518± FT.
 4. LOCATION, SPACING, FREQUENCY AND TOTAL NUMBER OF PROPOSED UTILITY POLES WILL BE DETERMINED BY THE LOCAL UTILITY COMPANY.
 5. WETLANDS DELINEATION WAS COMPLETED BY SOUTH RIVER ENVIRONMENTAL ON 05-09-13
 6. TOTAL AREA OF WETLANDS TO BE IMPACTED: 2,200± S.F.
 7. EXISTING VEGETATION SHALL BE PRESERVED TO THE MAXIMUM EXTENT POSSIBLE.

LEGEND	
	PROPOSED LEASE AREA
	LOCUS PROPERTY LINE
	Existing Property Line
	PROPOSED UTILITY POLE
	PROPOSED CONTOUR
	Existing Contour
	PROPOSED ROAD CENTERLINE
	PROPOSED ACCESS & UTILITY EASEMENT
	PROPOSED EDGE OF CLEARING
	Existing Treeline
	PROPOSED COMPOUND FENCE
	PROPOSED OVERHEAD UTILITY LINES
	PROPOSED EROSION CONTROL
	Existing Wetlands Delineation
	Existing Wetlands
	100' Wetlands Buffer Zone
	PROPOSED GABION WALL



550 COCHITUATE ROAD
 SUITES 13 & 14
 FRAMINGHAM, MA 01701



27 NORTHWESTERN DRIVE
 SALEM, NH 03079

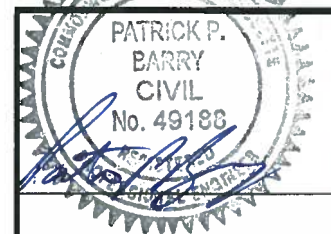
PAXTON, MA
SITE NO.: MA4388

CONSTRUCTION DRAWINGS

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A	07/02/13	FOR COMMENT



Dewberry Engineers Inc.
 280 SUMMER STREET
 10TH FLOOR
 BOSTON, MA 02210
 PHONE: 617.695.3400
 FAX: 617.695.3310



DRAWN BY: SK

REVIEWED BY: ROM

CHECKED BY: PPB

PROJECT NUMBER: 50003936

JOB NUMBER: 50057820

SITE ADDRESS

196 WEST STREET
 PAXTON, MA 01612

SHEET TITLE

SITE & GRADING PLAN-I

SHEET NUMBER

C-2



27 NORTHWESTERN DRIVE
SALEM, NH 03079

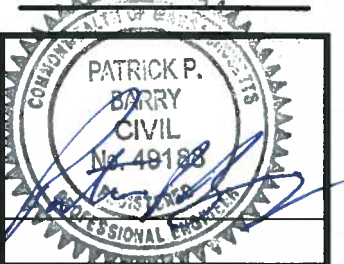
PAXTON, MA
SITE NO.: MA4388

CONSTRUCTION DRAWINGS

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Dewberry

Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.3400
FAX: 617.695.3310



DRAWN BY: SK

REVIEWED BY: RDM

CHECKED BY: PPB

PROJECT NUMBER: 50003936

JOB NUMBER: 50057820

SITE ADDRESS

196 WEST STREET
PAXTON, MA 01612

SHEET TITLE

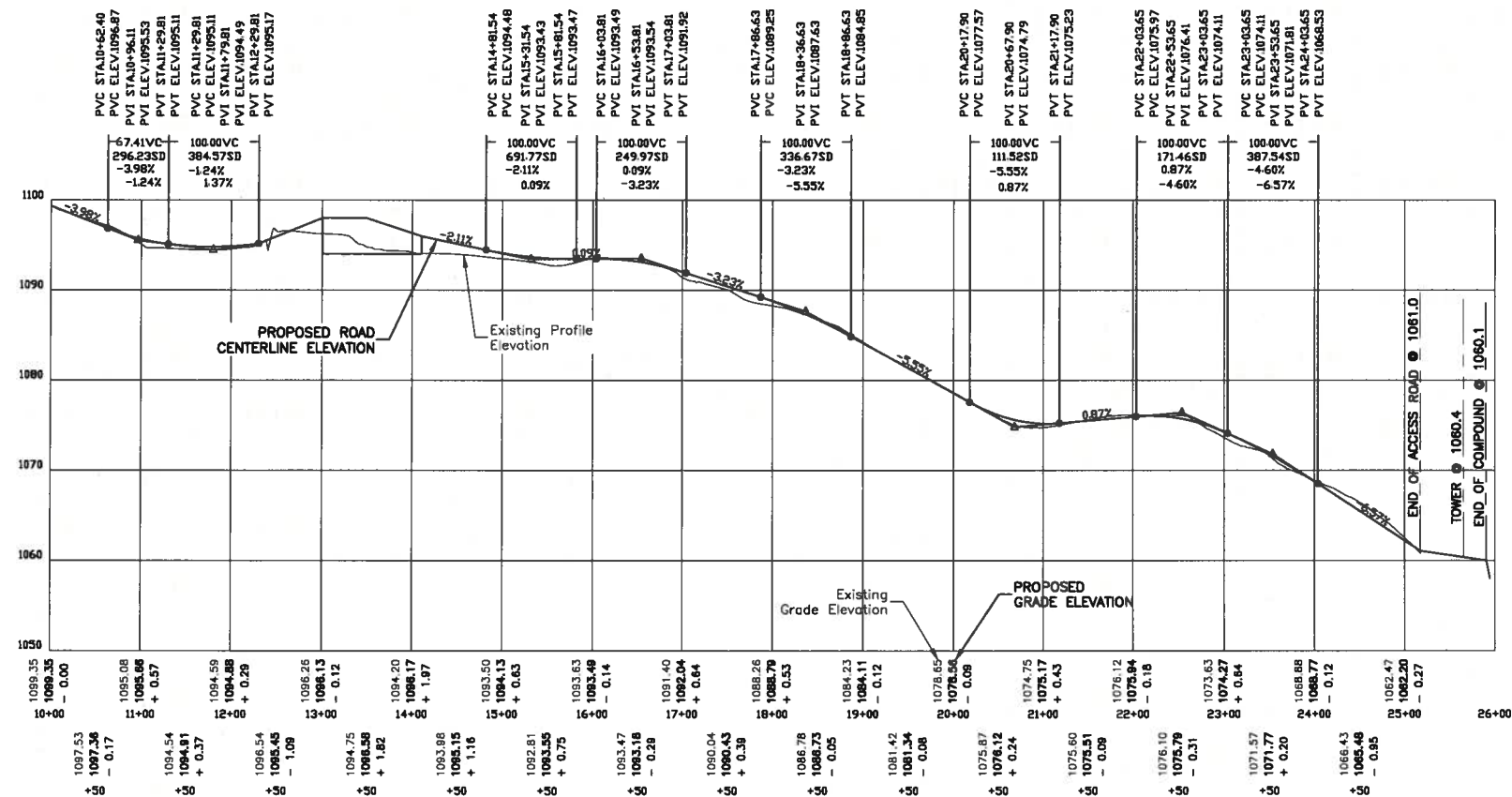
ROAD PROFILE

SHEET NUMBER

C-4

LEGEND

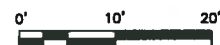
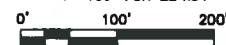
PVC - POINT OF VERTICAL CURVE
PVI - POINT OF VERTICAL INTERSECTION
PVT - POINT OF VERTICAL TANGENCY



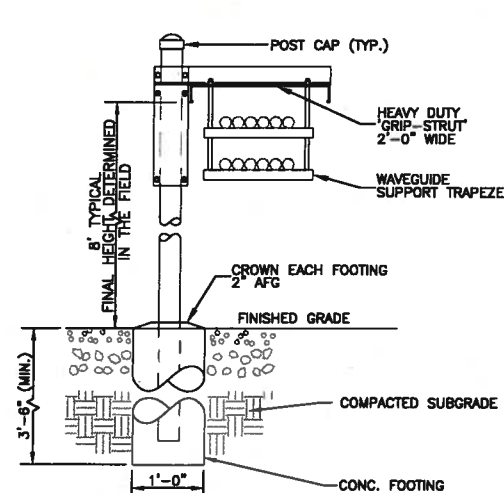
ROAD PROFILE

HORIZONTAL SCALE: 1"=200' FOR 11"x17"
1"=100' FOR 22"x34"

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



1



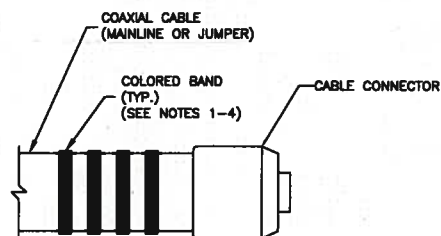
ICE BRIDGE NOTES:

1. ICE BRIDGE SHALL BE VALMONT GRIP STRUT TRANSMISSION LINE BRIDGE KIT (P/N: 82734) OR APPROVED EQUAL.
2. CABLE SUPPORT SHALL BE VALMONT DOUBLE LEVEL CHANNEL (P/N: 802264) OR APPROVED EQUAL.
3. ALL COMPONENTS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
4. CONTRACTOR SHALL DETERMINE REQUIRED QUANTITY OF ALL ICE BRIDGE COMPONENTS.
5. SNAP-IN HANGERS, SPLICE KITS, HINGE KITS, EXTENSION KITS, STIFFENERS, AND OTHER MISCELLANEOUS HARDWARE SHALL BE PROVIDED BY THE CONTRACTOR AS REQUIRED.
6. ICE BRIDGE SHALL BE ROUTED TO ACCOMMODATE THE MINIMUM BENDING RADIUS OF THE COAXIAL CABLE.
7. ICE BRIDGE COMPONENTS SHOWN ARE SCHEMATIC, CONSULT MANUFACTURER FOR EXACT AND CURRENT SPECIFICATIONS.

ICE BRIDGE DETAIL

SCALE: N.T.S.

1



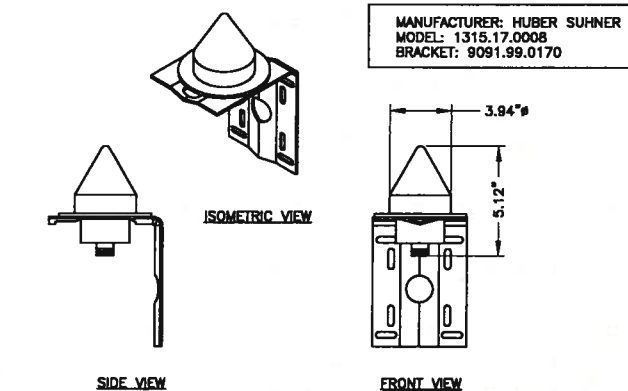
CODING NOTES:

1. COLOR CODING SHALL BE PLACED ON BOTH ENDS OF ALL MAINLINE COAXIAL CABLES AND ALL JUMPER CABLES NEAR THE CONNECTORS. COLOR CODING SHALL ALSO BE PLACED ON EACH MAINLINE COAX ON THE EXTERIOR OF THE SHELTER NEAR THE CABLE PORT.
2. COLORED TAPE SHALL BE MINIMUM 3/4" WIDE.
3. THE SPACING BETWEEN THE COLORED BANDS SHALL NOT BE LESS THAN THE THICKNESS OF THE COLORED TAPE.
4. COLOR AND QUANTITY OF COLORED BANDS SHALL BE AS SPECIFIED IN THE RF SCHEDULE.

CABLE COLOR CODING DETAIL

SCALE: N.T.S.

6



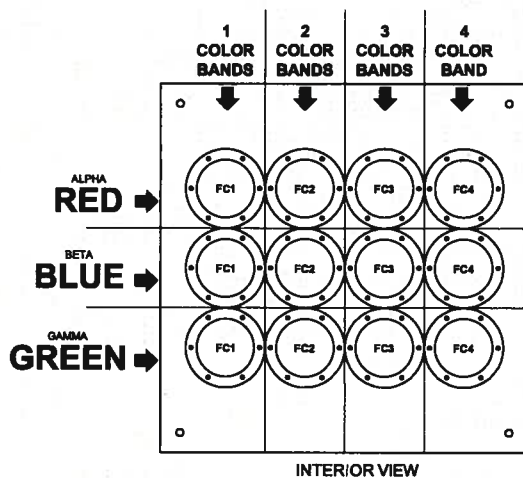
GPS NOTES:

1. GROUND ANTENNAS AND MOUNTS PER MANUFACTURER'S RECOMMENDATIONS AND AT&T STANDARDS.
2. FIELD LOCATE GPS ANTENNAS WITH AT&T CM APPROVAL.
3. MOUNT ANTENNAS PER MANUFACTURER'S RECOMMENDATIONS.
4. PIPE MOUNT GPS TO CABLE ICE BRIDGE WITH REQUIRED HARDWARE.
5. IF MOUNTED TO EQUIPMENT SHELTER, HILTI 1/4" KWIK BOLT 3 EXPANSION ANCHOR TO BE USED.

GPS ANTENNAS

SCALE: N.T.S.

2



COAX COLOR CODING AND LABELING DETAIL

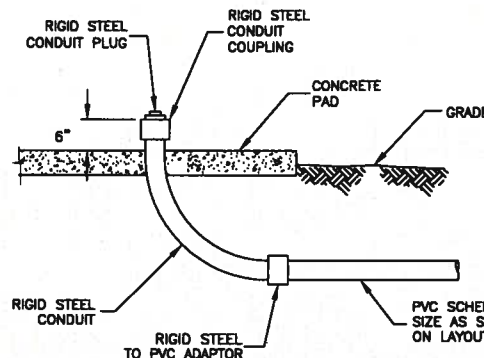
SCALE: N.T.S.

7

CABLE PORT GROUNDING EXTERIOR OF SHELTER (EXTERIOR VIEW)

SCALE: N.T.S.

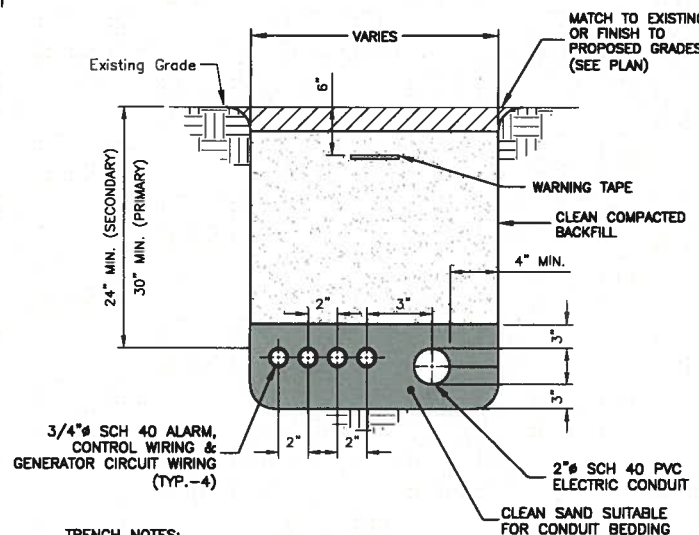
3



UNDERGROUND CONDUIT STUB-UP DETAIL

SCALE: N.T.S.

5



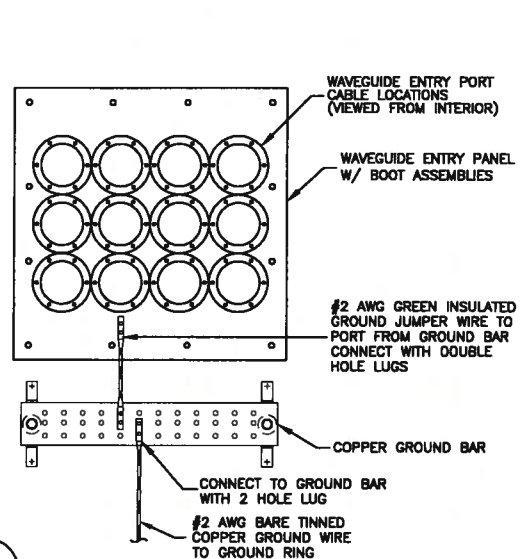
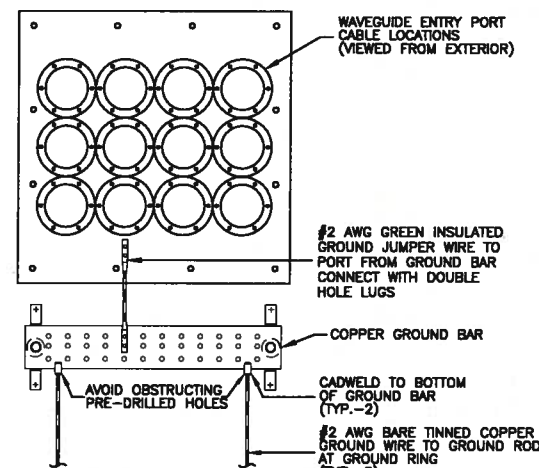
TRENCH NOTES:

1. IF FREE OF ORGANIC OR OTHER DELETERIOUS MATERIAL, EXCAVATED MATERIAL MAY BE USED FOR BACKFILL.
2. IF NOT, PROVIDE CLEAN, COMPACTIBLE MATERIAL. COMPACT IN 8" LIFTS. REMOVE ANY LARGE ROCKS PRIOR TO BACKFILLING. CONTRACTOR TO VERIFY LOCATION OF EXISTING U/G UTILITIES PRIOR TO DIGGING.
3. IF CURRENT AS-BUILT DRAWINGS ARE NOT AVAILABLE CONTRACTOR SHALL HAND DIG U/G TRENCHING.

GENERATOR SERVICE TRENCH CONDUIT

SCALE: N.T.S.

8



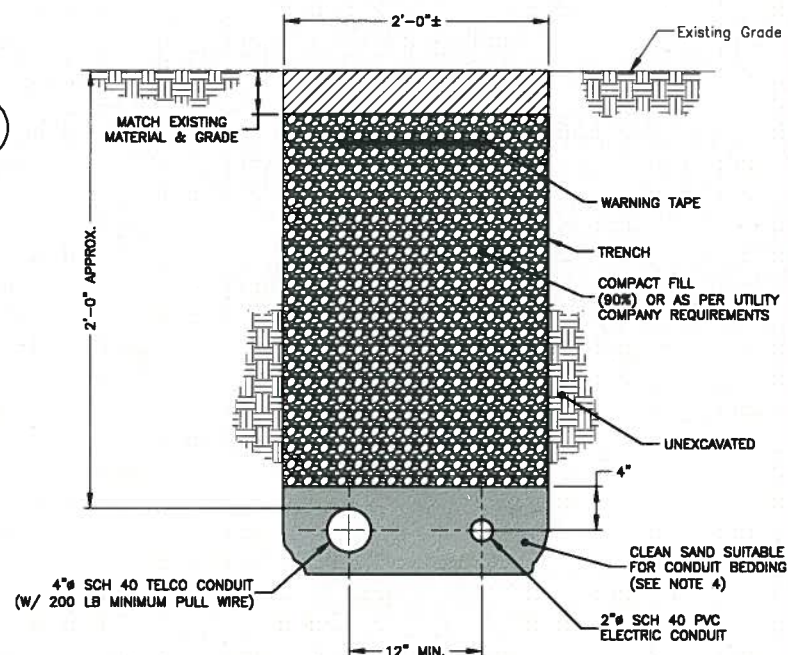
NOTE:

1. CONTRACTOR SHALL INSTALL AS SHOWN UNLESS GROUND BAR IS PREINSTALLED BY SHELTER MANUFACTURER.

CABLE PORT GROUNDING ON INTERIOR OF SHELTER (INTERIOR VIEW)

SCALE: N.T.S.

4



TRENCH NOTES:

1. IF FREE OF ORGANIC OR OTHER DELETERIOUS MATERIAL, EXCAVATED MATERIAL MAY BE USED FOR BACKFILL.
2. IF NOT, PROVIDE CLEAN, COMPACTIBLE MATERIAL. COMPACT IN 8" LIFTS. REMOVE ANY LARGE ROCKS PRIOR TO BACKFILLING. CONTRACTOR TO VERIFY LOCATION OF EXISTING U/G UTILITIES PRIOR TO DIGGING.
3. IF CURRENT AS-BUILT DRAWINGS ARE NOT AVAILABLE CONTRACTOR SHALL HAND DIG U/G TRENCHING.
4. CONCRETE ENCASE CONDUIT WHEN TRENCHING UNDER SITE ACCESS ROAD.

JOINT SERVICE TRENCH BURIED CONDUIT (ELECTRIC/TELEPHONE)

SCALE: N.T.S.

9

at&t
Mobility
550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701



27 NORTHWESTERN DRIVE
SALEM, NH 03079

PAXTON, MA
SITE NO.: MA4388

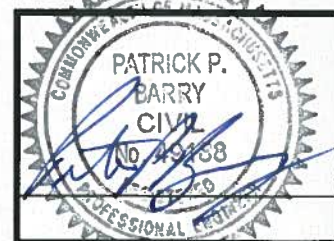
CONSTRUCTION DRAWINGS

0 10/11/13	FOR CONSTRUCTION	
B 09/25/13	FOR COMMENT	
A 07/02/13	FOR COMMENT	

Dewberry

Dewberry Engineers Inc.

280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.895.3400
FAX: 617.895.3310



DRAWN BY: SK

REVIEWED BY: ROM

CHECKED BY: PPB

PROJECT NUMBER: 50003936

JOB NUMBER: 50057820

SITE ADDRESS

196 WEST STREET
PAXTON, MA 01612

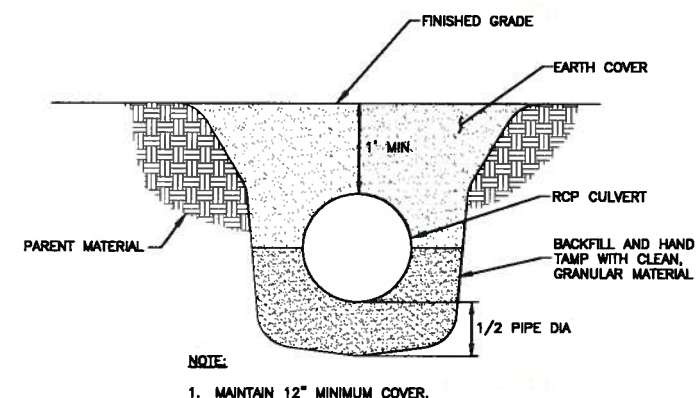
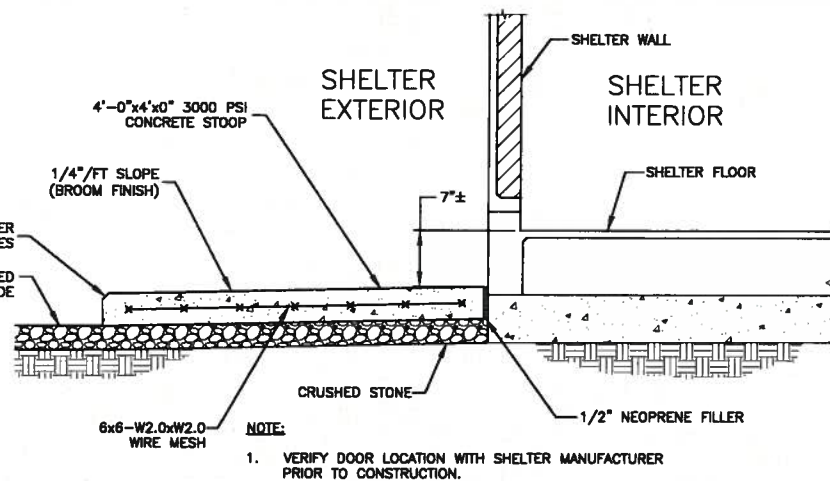
SHEET TITLE

CONSTRUCTION DETAILS-I

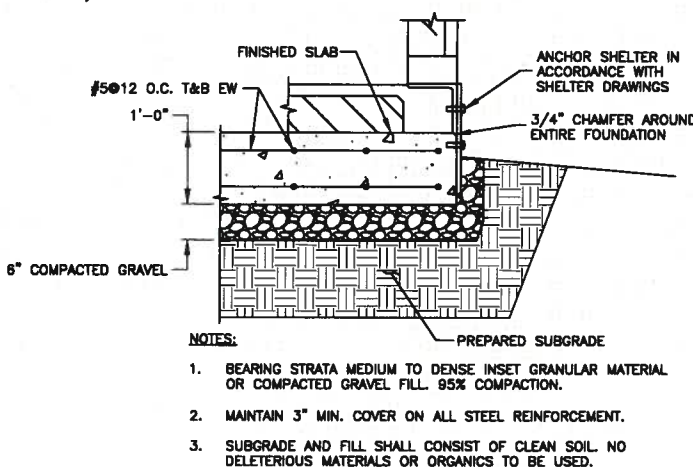
SHEET NUMBER

C-6

C-7



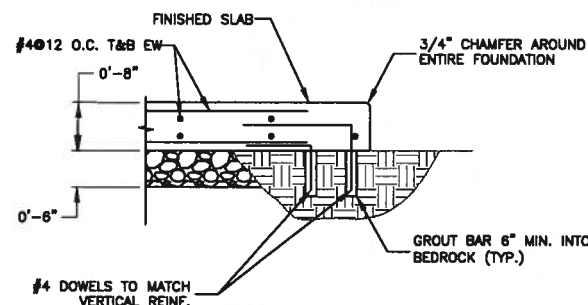
CULVERT
SCALE: N.T.S.



1. CONTRACTOR TO VERIFY FINAL SHELTER DIMENSIONS PRIOR TO CONSTRUCTION OF FOUNDATION.
2. GRADE SHALL SLOPE AWAY FROM THE CONCRETE PAD TO ALLOW FOR PROPER WATER RUN OFF.
3. ANCHOR SHELTER TO FOUNDATION PER SHELTER MANUFACTURER RECOMMENDATIONS.
4. IF BEDROCK IS ENCOUNTERED @ A SHALLOW DEPTH USE DETAIL 7, THIS SHEET.
5. BEARING STRATA MEDIUM TO DENSE INSET GRANULAR MATERIAL OR COMPACTED GRAVEL FILL. 95% COMPACTION.
6. SUBGRADE AND FILL SHALL CONSIST OF CLEAN SOIL NO DELETERIOUS MATERIALS OR ORGANICS TO BE USED.

FOUNDATION WALL & SLAB DETAIL

SCALE: $3/16"=1'-0"$ FOR $11" \times 17"$
 $3/8"=1'-0"$ FOR $22" \times 34"$



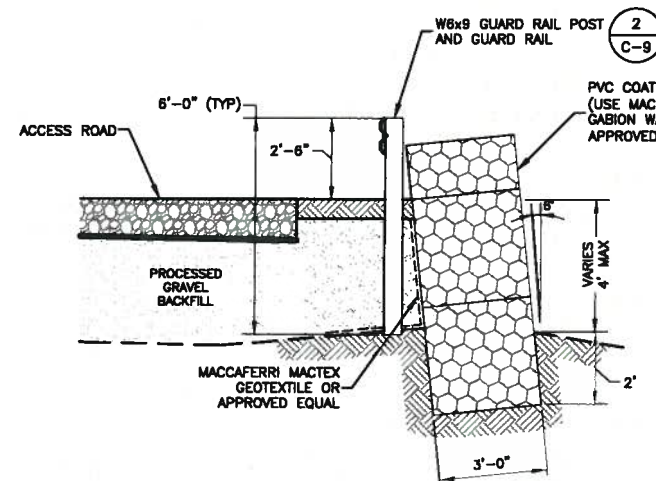
OUTDOOR PAD FOR MINOR EQUIPMENT

SCALE: N.T.S.

PROPANE TANK		
A	B	t (THICKNESS)
16'	4'	6"

1. USE GALVANIZED HILTI EXPANSION ANCHORS OR, APPROVED EQUAL, FOR EQUIPMENT ANCHORAGE.
2. FOR SIZE AND LOCATION OF ANCHORS AND OTHER REQUIREMENTS, SEE EQUIPMENT VENDOR DRAWINGS.
3. IF BEDROCK IS ENCOUNTERED @ A SHALLOW DEPTH USE DETAIL 7, THIS SHEET.
4. BEARING STRATA MEDIUM TO DENSE INSET GRANULAR MATERIAL OR COMPACTED GRAVEL FILL. 95% COMPACTION.
5. SUBGRADE AND FILL SHALL CONSIST OF CLEAN SOIL. NO DELETERIOUS MATERIALS OR ORGANICS TO BE USED.

C-8



PROCESSED GRAVEL SHALL BE FREE OF ORGANICS AND CONSIST SOLELY OF CRUSHED GRAVEL WITH THE FOLLOWING GRADATION:

SIEVE: 3 1/2"	% PASSING: 100
SIEVE: 1 1/2"	% PASSING: 75-100
SIEVE: 3/4"	% PASSING: 40-80
SIEVE: 1/4"	% PASSING: 25-55
SIEVE: NO. 10	% PASSING: 15-40
SIEVE: NO. 40	% PASSING: 5-25
SIEVE: NO. 100	% PASSING: 0-10
SIEVE: NO. 200	% PASSING: 0-5

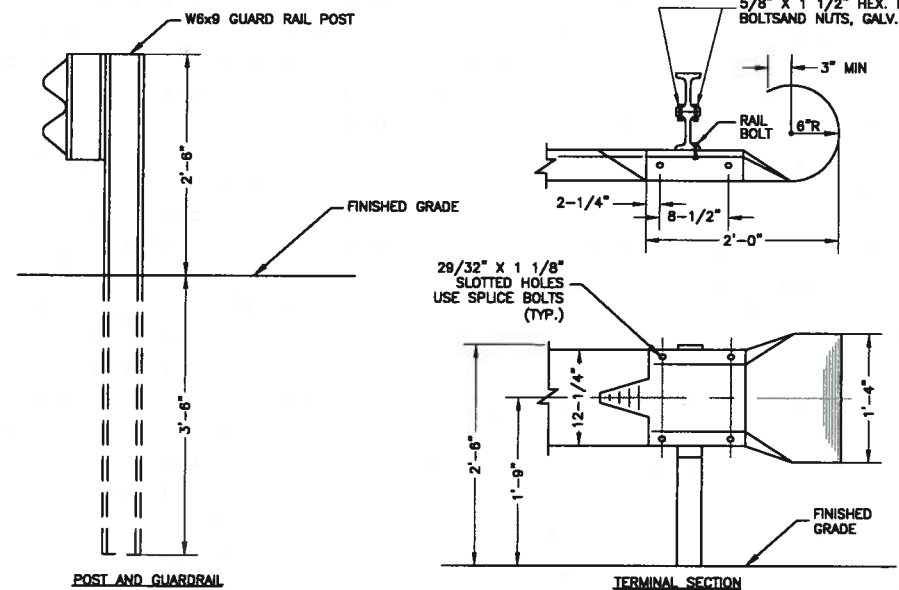
NOTES:

- GABIONS MUST CONFORM TO ASTM A975-97 AND ALL OTHER APPLICABLE ASTM STANDARDS.
- PVC COATED WIRE IS REQUIRED.

GABION WALL SECTION

SCALE: N.T.S.

1



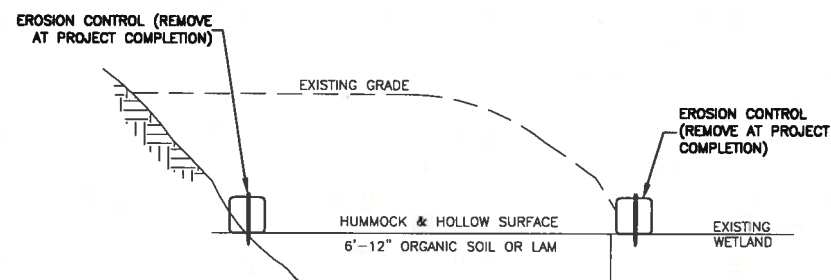
GUARD RAIL NOTES:

- INSTALL H-PILE OR STEEL POST AS PER MANUFACTURER'S RECOMMENDATIONS.
- AUGERING OR DRIVING OF POST MAY PIERCE UPPER LAYER OF GEOSYNTHETIC FABRIC.

TYPE SS STEEL GUARD RAIL DETAIL

SCALE: N.T.S.

2



NOTES:

- PLANTINGS TO BE INSTALLED UNDER SUPERVISION OF WETLAND SCIENTIST.
- FINAL GRADE TO BE DETERMINED BY WETLAND SCIENTIST IN THE FIELD.

WETLAND REPLICATION CROSS SECTION

SCALE: N.T.S.

3



550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701



27 NORTHWESTERN DRIVE
SALEM, NH 03079

PAXTON, MA
SITE NO.: MA4388

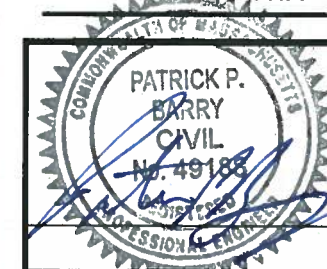
CONSTRUCTION DRAWINGS

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Dewberry Engineers Inc.

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10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.3400
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DRAWN BY: SK

REVIEWED BY: ROM

CHECKED BY: PPB

PROJECT NUMBER: 50003936

JOB NUMBER: 50057820

SITE ADDRESS

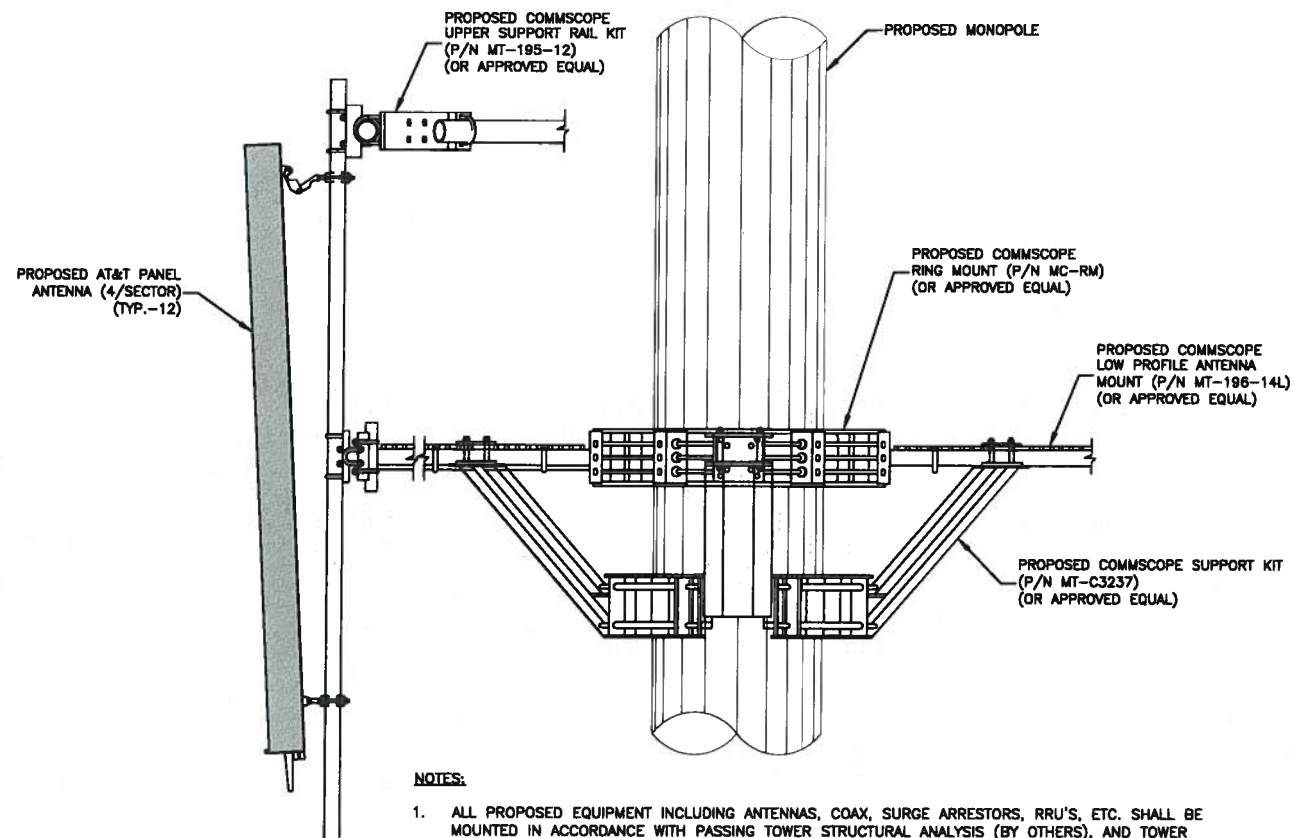
196 WEST STREET
PAXTON, MA 01612

SHEET TITLE

CONSTRUCTION DETAILS-IV

SHEET NUMBER

C-9



NOTES:

1. ALL PROPOSED EQUIPMENT INCLUDING ANTENNAS, COAX, SURGE ARRESTORS, RRU'S, ETC. SHALL BE MOUNTED IN ACCORDANCE WITH PASSING TOWER STRUCTURAL ANALYSIS (BY OTHERS), AND TOWER MANUFACTURER'S DESIGN AND RECOMMENDATIONS.
2. SPACING OF PROPOSED EQUIPMENT SHALL BE CONFIRMED AND PROPOSED MOUNTS SHALL NOT IMPEDE TOWER CLIMBING PEGS OR EQUIPMENT CLEARANCES.

PROPOSED ANTENNA MOUNTING DETAIL

SCALE: N.T.S.

1

RF SCHEDULE & B.O.M.*

SECTOR	ANTENNA	AZIMUTH (TRUE NORTH)	RAD CENTER	COAX	TMA	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	RRH	RET CABLES	FIBER	DC LINES	SURGE
IA	KMW AM-X-CD-17-65-00T-RET	30°	134'	-	-	0°	2'	(2) RRH UMTS	(3) LINES (175'±)	(2) TRUNK LINES (175'±)	(8) DC CABLES (175'±)	(4) RAYCAP DC6-48-60-18-8F
IIA	KMW AM-X-CD-17-65-00T-RET	30°	134'	-	-	0°	2'	(1) RRH LTE				
IIIA	KMW AM-X-CD-17-65-00T-RET	30°	134'	-	-	0°	2'	(1) RRH LTE				
IVA	ERICSSON KRC 118 054/1	30°	134'	-	-	0°	2'	(1) RRH LTE				
IB	KMW AM-X-CD-17-65-00T-RET	150°	134'	-	-	0°	2'	(2) RRH UMTS				
IIB	KMW AM-X-CD-17-65-00T-RET	150°	134'	-	-	0°	2'	(1) RRH LTE				
IIIB	KMW AM-X-CD-17-65-00T-RET	150°	134'	-	-	0°	2'	(1) RRH LTE				
IVB	ERICSSON KRC 118 054/1	150°	134'	-	-	0°	2'	(1) RRH LTE				
IG	KMW AM-X-CD-17-65-00T-RET	270°	134'	-	-	0°	2'	(2) RRH UMTS				
IIG	KMW AM-X-CD-17-65-00T-RET	270°	134'	-	-	0°	2'	(1) RRH LTE				
IIIG	KMW AM-X-CD-17-65-00T-RET	270°	134'	-	-	0°	2'	(1) RRH LTE				
IVG	ERICSSON KRC 118 054/1	270°	134'	-	-	0°	2'	(1) RRH LTE				

*RF SCHEDULE PENDING. CONTRACTOR TO VERIFY FINAL RFDS AND CABLE LENGTHS PRIOR TO CONSTRUCTION.

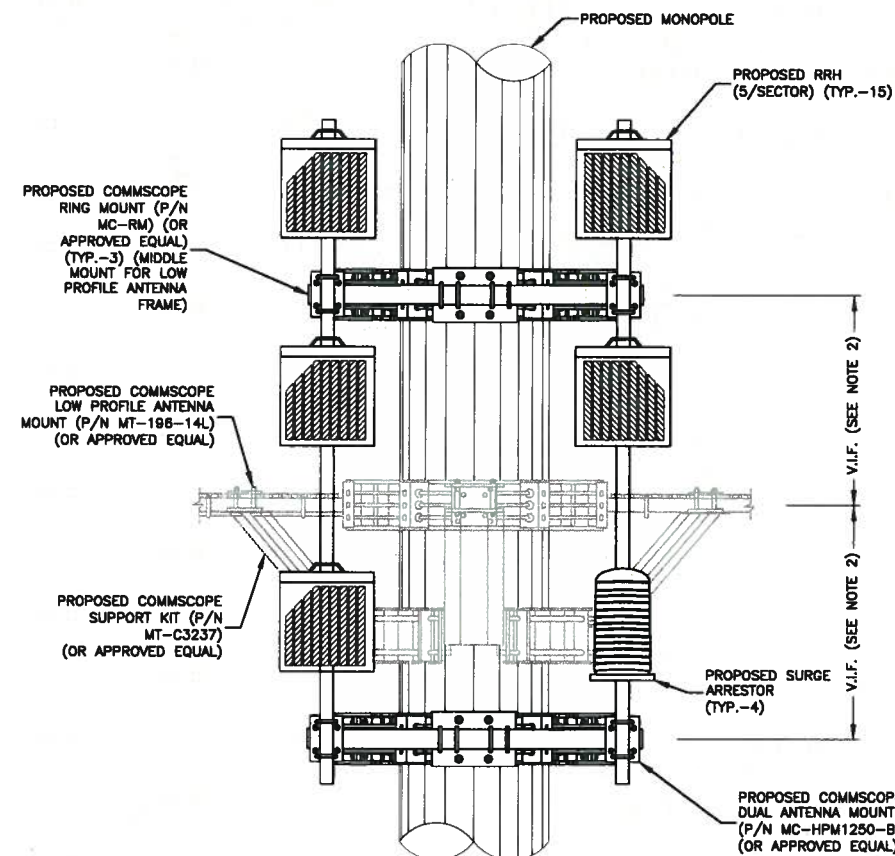
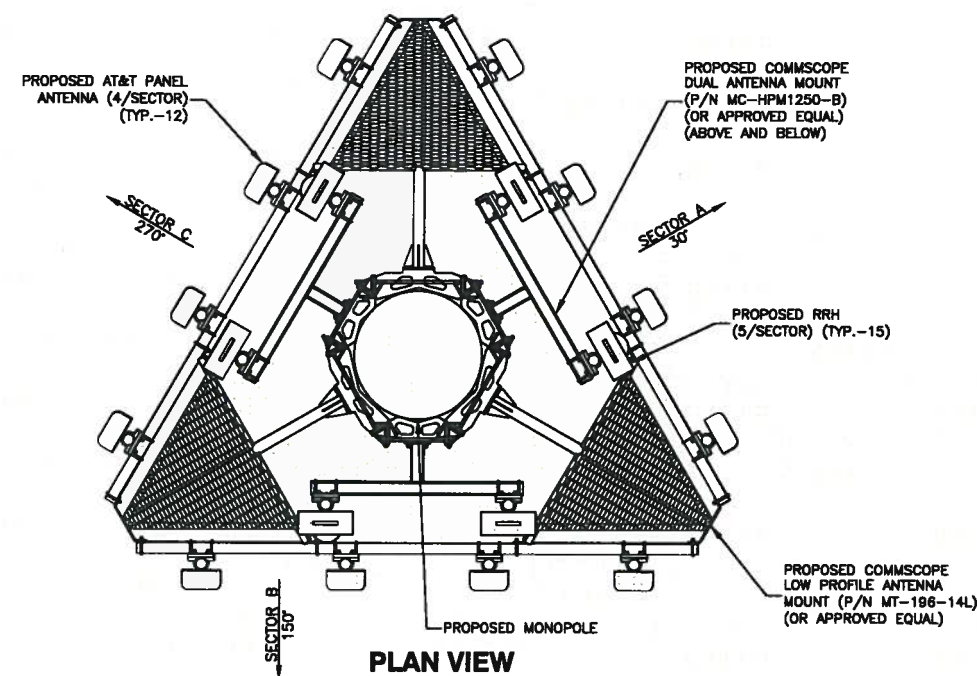
B.O.M. NOTE:

1. VERIFY LATEST RFDS SHEET WITH CONSTRUCTION PRIOR TO INSTALLATION.

RF SCHEDULE & B.O.M.

SCALE: N.T.S.

2



NOTES:

1. ALL PROPOSED EQUIPMENT INCLUDING ANTENNAS, COAX, SURGE ARRESTORS, RRU'S, ETC. SHALL BE MOUNTED IN ACCORDANCE WITH PASSING TOWER STRUCTURAL ANALYSIS (BY OTHERS), AND TOWER MANUFACTURER'S DESIGN AND RECOMMENDATIONS.
2. SPACING OF PROPOSED EQUIPMENT SHALL BE CONFIRMED AND PROPOSED MOUNTS SHALL NOT IMPEDE TOWER CLIMBING PEGS OR EQUIPMENT CLEARANCES.

PROPOSED RRH & SURGE ARRESTOR MOUNTING DETAIL

SCALE: N.T.S.

3

at&t
Mobility
550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701



27 NORTHWESTERN DRIVE
SALEM, NH 03079

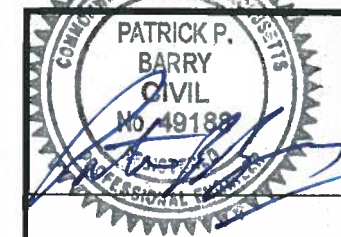
PAXTON, MA
SITE NO.: MA4388

CONSTRUCTION DRAWINGS

0	10/11/13	FOR CONSTRUCTION
B	09/25/13	FOR COMMENT
A	07/02/13	FOR COMMENT

Dewberry

Dewberry Engineers Inc.
280 SUMMER STREET
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BOSTON, MA 02210
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DRAWN BY:	SK
REVIEWED BY:	ROM
CHECKED BY:	PPB
PROJECT NUMBER:	50003936
JOB NUMBER:	50057820
SITE ADDRESS	

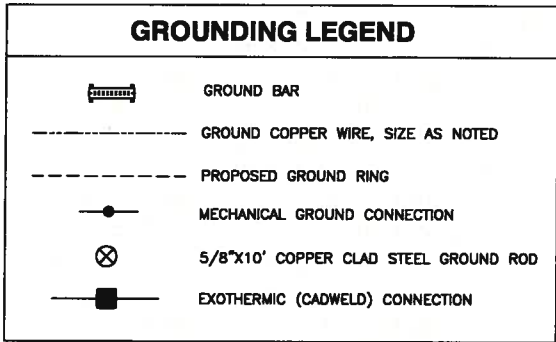
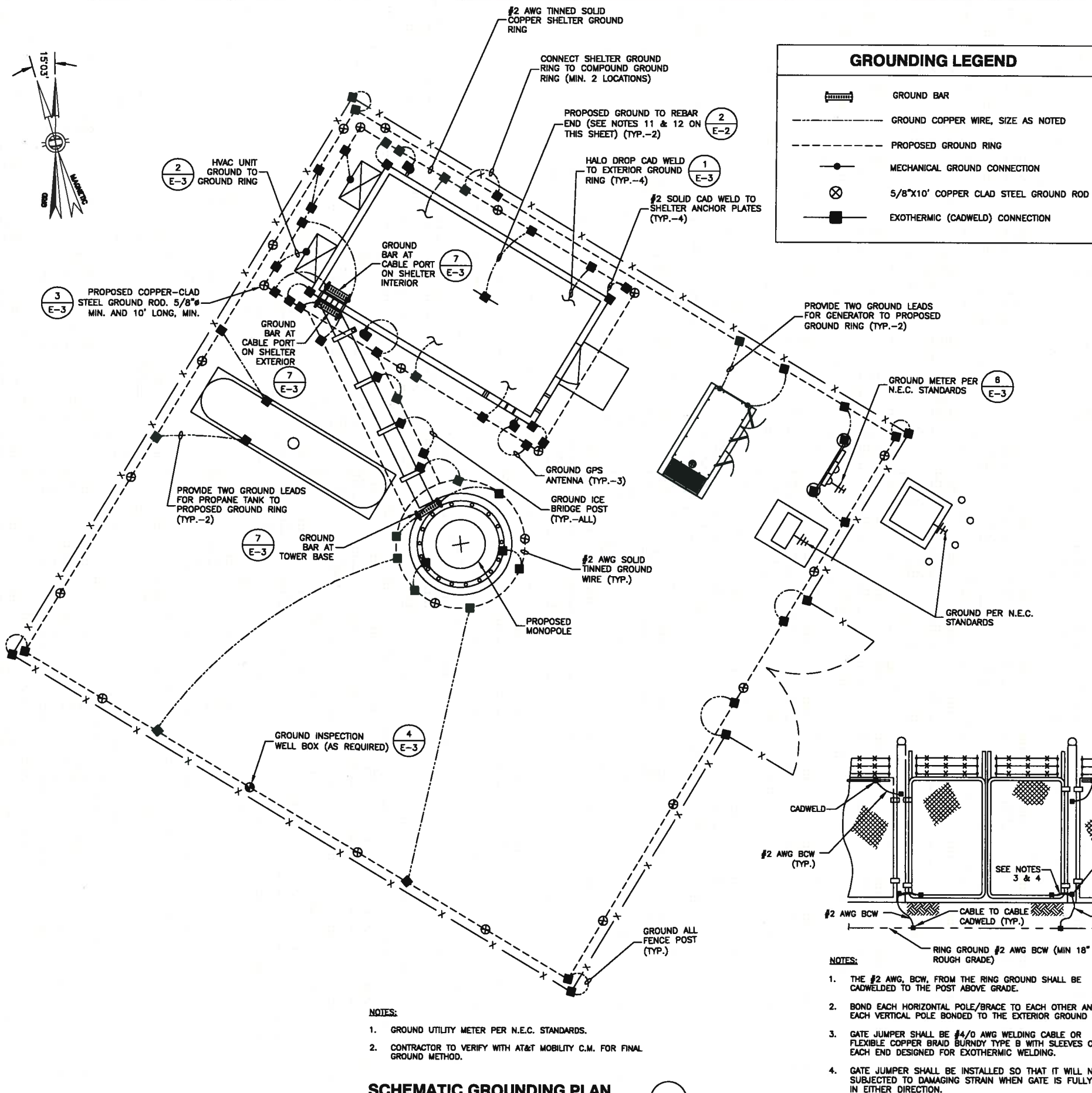
196 WEST STREET
PAXTON, MA 01612

SHEET TITLE

ANTENNA B.O.M. &
ANTENNA DETAILS

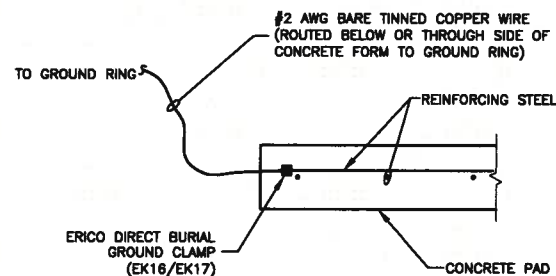
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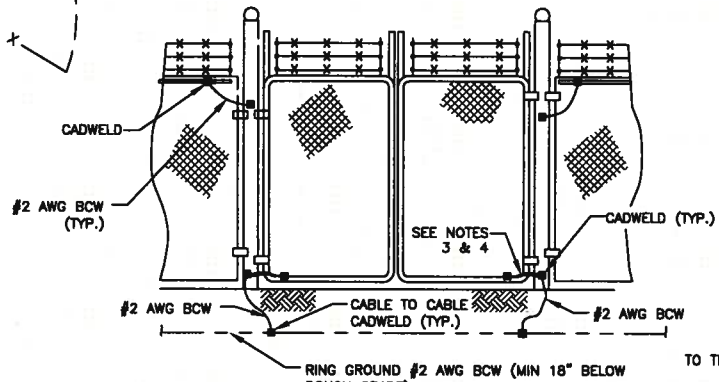


GROUNDING GENERAL NOTES

- ALL DOWN CONDUCTORS AND THE GROUND RING CONDUCTOR SHALL BE #2 AWG, SOLID, BARE, TINNED COPPER, UNLESS OTHERWISE NOTED. ALL CONNECTIONS TO GROUND RING SHALL BE EXOTHERMICALLY WELDED. CONDUCTOR SHALL BE AT A MINIMUM DEPTH BELOW GRADE OF 18 INCHES OR TO LEDGE. MINIMUM BEND RADIUS SHALL BE 8 INCHES. CONDUCTOR SHALL BE AT LEAST 24 INCHES FROM ANY FOUNDATION, UNLESS OTHERWISE NOTED.
- GROUND RODS SHALL BE 5/8" DIAMETER COPPER CLAD, HARGER, T&B, ERICO, OR EQUIVALENT. TOP OF ROD SHALL BE A MINIMUM OF 18" BELOW GRADE. IF LEDGE IS ENCOUNTERED, INSTALL GROUND ROD AT AN ANGLE. ELECTRICAL METER GROUND ROD EXCEPTED.
- WHERE MECHANICAL CONNECTIONS ARE SPECIFIED, BOLTED, COMPRESSION-TYPE, CLAMPS OR SPLIT-BOLT TYPE CONNECTORS SHALL BE USED.
- GRIND OFF GALVANIZING IN AFFECTED AREA. EXOTHERMICALLY WELD #2 CONDUCTOR AT 6" ABOVE GRADE OR FOUNDATION, WHICHEVER IS HIGHER. COLD-GALV AFTER. EXOTHERMICALLY WELD OTHER END TO GROUND RING.
- INSTALL GROUNDING KITS AT ANTENNA CENTERLINE, AND TOWER EXIT POINTS. GROUND COAX LINES. EXOTHERMICALLY WELD #2 DOWN CONDUCTOR TO PLATES, RUN DOWN TOWER, AND TIE INTO GROUNDING SYSTEM.
- ALL GROUNDING WORK SHALL COMPLY WITH AT&T CONSTRUCTION CONTRACT STANDARDS. FOLLOWING COMPLETION OF WORK, GROUND SYSTEM MUST BE TESTED AND SHALL HAVE A RESISTANCE OF 5 OHMS OR LESS SUBMIT AN INDEPENDENT "FALL POTENTIAL" TESTING REPORT.
- ALL GROUNDING CONDUCTORS ON EXTERIOR WALL OF SHELTER SHALL BE INSTALLED IN 3/4" SCH 40 PVC CONDUIT TO 12" BELOW GRADE. ATTACH PVC WITH GALVANIZED "C" CLAMPS.
- CONTRACTOR SHALL HAND-DIG IN AREAS AROUND EXISTING UTILITIES.
- NOTIFY CONSTRUCTION ENGINEER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.
- GROUNDING RING IS SHOWN AS SCHEMATIC ONLY. IT IS DESIGNED WITHOUT BENEFIT OF RESISTIVITY TESTING AND DOES NOT NECESSARILY REPRESENT A GROUNDING SYSTEM TO MEET ANY SPECIFIC GROUND RESISTANCE.
- PRIOR TO POURING CONCRETE, ALL REBAR LOCATED NEAR THE BOTTOM OF THE FOUNDATION SHALL BE BONDED TOGETHER TO FORM A SINGLE GROUNDING ELECTRODE, BY STEEL TIES OF OTHER EFFECTIVE MEANS APPROVED BY NEC 2011 AND STRUCTURAL ENGINEER, AND BONDED TO THE GROUND RING AS DETAILED IN THESE PLANS. (INSPECTION MAY BE REQUIRED PRIOR TO POURING CONCRETE AND MUST BE COORDINATED BY CONTRACTOR.)
- IN ACCORDANCE WITH NEC 2011 REQUIREMENTS, ALL GROUNDING ELECTRODES PRESENT ON SITE SHALL BE BONDED TOGETHER (REFERENCE 2011 NEC ARTICLE 250.50).
- CAULK AND SEAL ALL NON-FACTORY SHELTER PENETRATIONS.

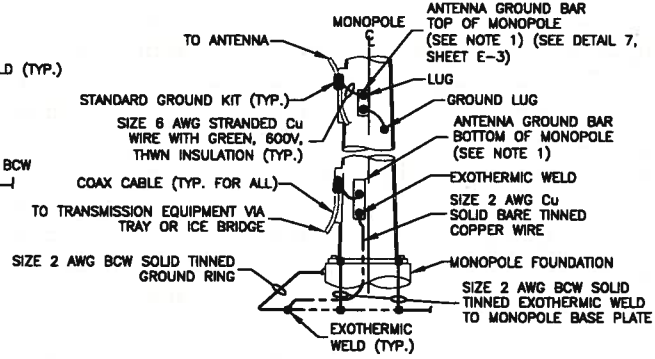


REBAR GROUNDING DETAIL
SCALE: N.T.S.



- NOTES:
- THE #2 AWG, BCW, FROM THE RING GROUND SHALL BE CADWELDED TO THE POST ABOVE GRADE.
 - BOND EACH HORIZONTAL POLE/BRACE TO EACH OTHER AND TO EACH VERTICAL POLE BONDED TO THE EXTERIOR GROUND RING.
 - GATE JUMPER SHALL BE #4/0 AWG WELDING CABLE OR FLEXIBLE COPPER BRAID BURNDY TYPE B WITH SLEEVES ON EACH END DESIGNED FOR EXOTHERMIC WELDING.
 - GATE JUMPER SHALL BE INSTALLED SO THAT IT WILL NOT BE SUBJECTED TO DAMAGING STRAIN WHEN GATE IS FULLY OPEN IN EITHER DIRECTION.

FENCE GROUNDING DETAIL
SCALE: N.T.S.



- NOTE:
- NUMBER OF GROUND BARS MAY VARY DEPENDING ON THE TYPE OF MONOPOLE, ANTENNA LOCATION AND CONNECTION ORIENTATION. PROVIDE AS REQUIRED. GROUND BAR IS NOT REQUIRED FOR SITES WITH ONE COAX CABLE.

MONOPOLE GROUNDING
SCALE: N.T.S.



27 NORTHWESTERN DRIVE
SALEM, NH 03079

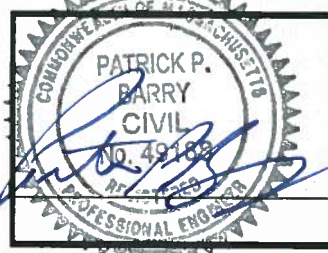
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SHEET TITLE

SCHEMATIC
GROUNDING PLAN

SHEET NUMBER

