

NEW CINGULAR WIRELESS PCS, LLC

WIRELESS COMMUNICATIONS FACILITY #SR1252

BRIDGEWATER

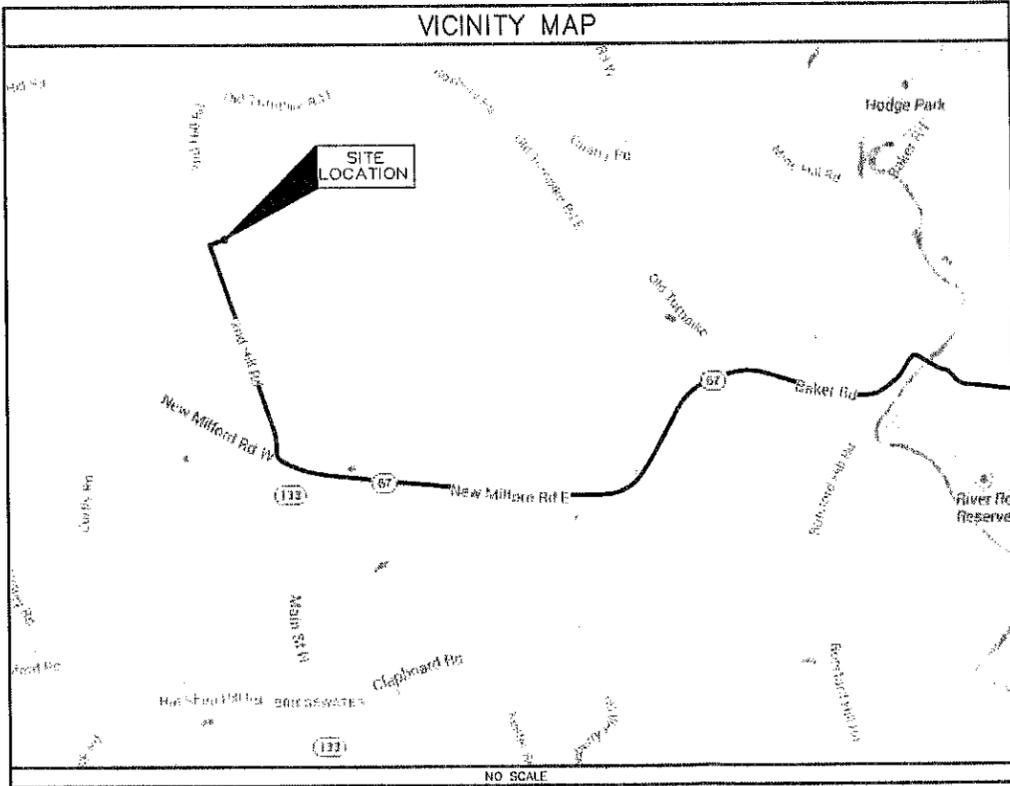
111 SECOND HILL ROAD
BRIDGEWATER, CONNECTICUT



22 KEEWAYDIN DRIVE
SALEM, NH 03079



PROJECT SUMMARY	
SITE NUMBER:	SR1252
SITE NAME:	BRIDGEWATER
SITE ADDRESS:	111 SECOND HILL ROAD BRIDGEWATER, CT 06752
PROPERTY OWNER:	ROBERT REIBE 111 SECOND HILL ROAD BRIDGEWATER, CT 06752
APPLICANT:	NEW CINGULAR WIRELESS PCS, LLC 500 ENTERPRISE DRIVE ROCKY HILL, CT 06867
CONTACT:	BRYON MORAWSKI (860) 513-7223
1A COORDINATES:	41° 33' 17.9"N 72° 22' 15.2"W
HORIZONTAL DATUM:	NA83
GROUND ELEVATION:	908' AMSL
SITE PARCEL NO.:	28-50
CURRENT ZONING:	RR3
ENGINEER:	DOUGH HARBOUR & ASSOCIATES LLP 2139 SILAS DEANE HIGHWAY SUITE 212 ROCKY HILL, CT 06867
CONTACT:	PAUL LUSITANI (860) 257-4557



SHEET INDEX			
SHEET NO:	SHEET TITLE	REVISION HISTORY	
		NO:	DATE
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- DRIVING DIRECTIONS**
- FROM HARTFORD:
- TAKE I-84W.
 - TAKE EXIT 15 FOR US-8E/CT-67N.
 - TAKE A RIGHT ONTO MAIN ST NORTH (US-8E/CT-67N).
 - TAKE A LEFT ONTO ROXBURY RD (CT-67N) AND CONTINUE ONTO SOUTHBURY RD (CT-67N).
 - TAKE A LEFT ONTO CHURCH STREET/WELLS BRIDGE RD.
 - TAKE A LEFT ONTO BAKERS RD (CT-67N) AND CONTINUE ONTO NEW MILFORD RD E (CT-67N).
 - TAKE A RIGHT ONTO SECOND HILL RD. ACCESS DRIVE WILL BE ON RIGHT JUST PAST 111 SECOND HILL ROAD.

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF A 160' MONOPOLE TOWER WITH PANEL ANTENNAS AT AN ELEVATION OF 156' ON THE TOWER. TELECOMMUNICATIONS EQUIPMENT WILL BE PLACED WITHIN A 45' X 90' FENCED COMPOUND AREA AT THE TOWER BASE.

NOVEMBER 13, 2013

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.



SUBMITTAL			
NO:	11/13/13	D&M PLAN SUBMISSION	
BY:	JOM	CHK: PAL	APP: JPS



SITE ID:
SR1252
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BRIDGEWATER, CT
06752
LITCHFIELD COUNTY

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T01

SURVEY NOTES:

1. THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS INC. ON SEPTEMBER 26, 1996. THE BOUNDARY LINES SHOWN ON THIS PLAN WERE COMPILED FROM OTHER MAPS, RECORD RESEARCH OR OTHER SOURCES OF INFORMATION. IT IS NOT TO BE CONSTRUED AS HAVING BEEN OBTAINED AS THE RESULT OF A FIELD SURVEY, AND IS SUBJECT TO SUCH CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE.

TYPE OF SURVEY: COMPILATION PLAN

BOUNDARY DETERMINATION CATEGORY: NONE

CLASS OF ACCURACY: HORIZONTAL CLASS A-2
VERTICAL CLASS V-2
TOPOGRAPHIC CLASS T-2

2. PROPERTY LINE SHOWN HEREON ARE FROM RECORD DEEDS PLOTS AND TAX MAPS AS OVERLAID ON ANY MONUMENTATION OR OTHER EVIDENCE THAT MAY HAVE BEEN LOCATED DURING THE TOPOGRAPHIC SURVEY. A PROPERTY SURVEY WAS NOT PERFORMED BY CHA AND AS A RESULT THE PROPERTY LINES SHOWN ARE APPROXIMATE AND DO NOT PRESENT A PROPERTY/BOUNDARY OPINION.

3. BASE MAPPING PREPARED BY CHA FROM A DECEMBER 2010 FIELD SURVEY.

4. NORTH ORIENTATION IS TRUE NORTH BASED ON GPS OBSERVATIONS TAKEN AT THE TIME OF THE FIELD SURVEY.

5. UNDERGROUND UTILITIES, STRUCTURES AND FACILITIES HAVE BEEN SHOWN FROM SURFACE LOCATIONS AND MEASUREMENTS OBTAINED FROM A FIELD SURVEY. THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER UTILITIES WHICH THE EXISTENCE OF ARE NOT KNOWN. SIZE, TYPE AND LOCATION OF ALL UTILITIES AND STRUCTURES MUST BE VERIFIED BY PROPER AUTHORITIES PRIOR TO ANY AND ALL CONSTRUCTION. CALL DIG SAFE PRIOR.

6. SUBJECT TO ANY STATEMENT OF FACTS THAT AN UP-TO-DATE ABSTRACT OF TITLE WOULD DISCLOSE.

7. SUBJECT TO ALL RIGHTS, EASEMENTS, COVENANTS OR RESTRICTIONS OF RECORD.

8. LATITUDE/LONGITUDE/ELEVATIONS WERE OBTAINED FROM GPS OBSERVATIONS REFERENCED TO NAD83 CONNECTICUT ZONE. COORDINATES SHOWN, IF ANY, ARE EXPRESSED IN U.S. SURVEY FEET. ELEVATIONS ARE REFERENCED TO NAVD83. TOP OF STRUCTURE HEIGHT AS SHOWN, IF ANY, DETERMINED BY VERTICAL ANGLE OR BY ACTUAL LOCATION.

INFORMATION SHOWN BASED ON FAA 1A CERTIFICATION ACCURACY LEVEL DEFINED AS:
HORIZONTAL: ±20 FEET / 15 METERS
VERTICAL: ±3 FEET / 6 METERS

9. SITE FALLS WITHIN ZONE "C" DEFINED AS AREAS OF MINIMAL FLOODING, AS SHOWN ON FLOOD INSURANCE RATE MAP, TOWN OF BRIDGEWATER, CONNECTICUT, LITCHFIELD COUNTY, COMMUNITY PANEL NUMBER 090184 0001 B, EFFECTIVE DATE NOVEMBER 1, 1979.

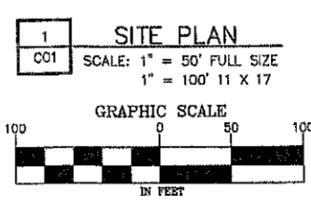
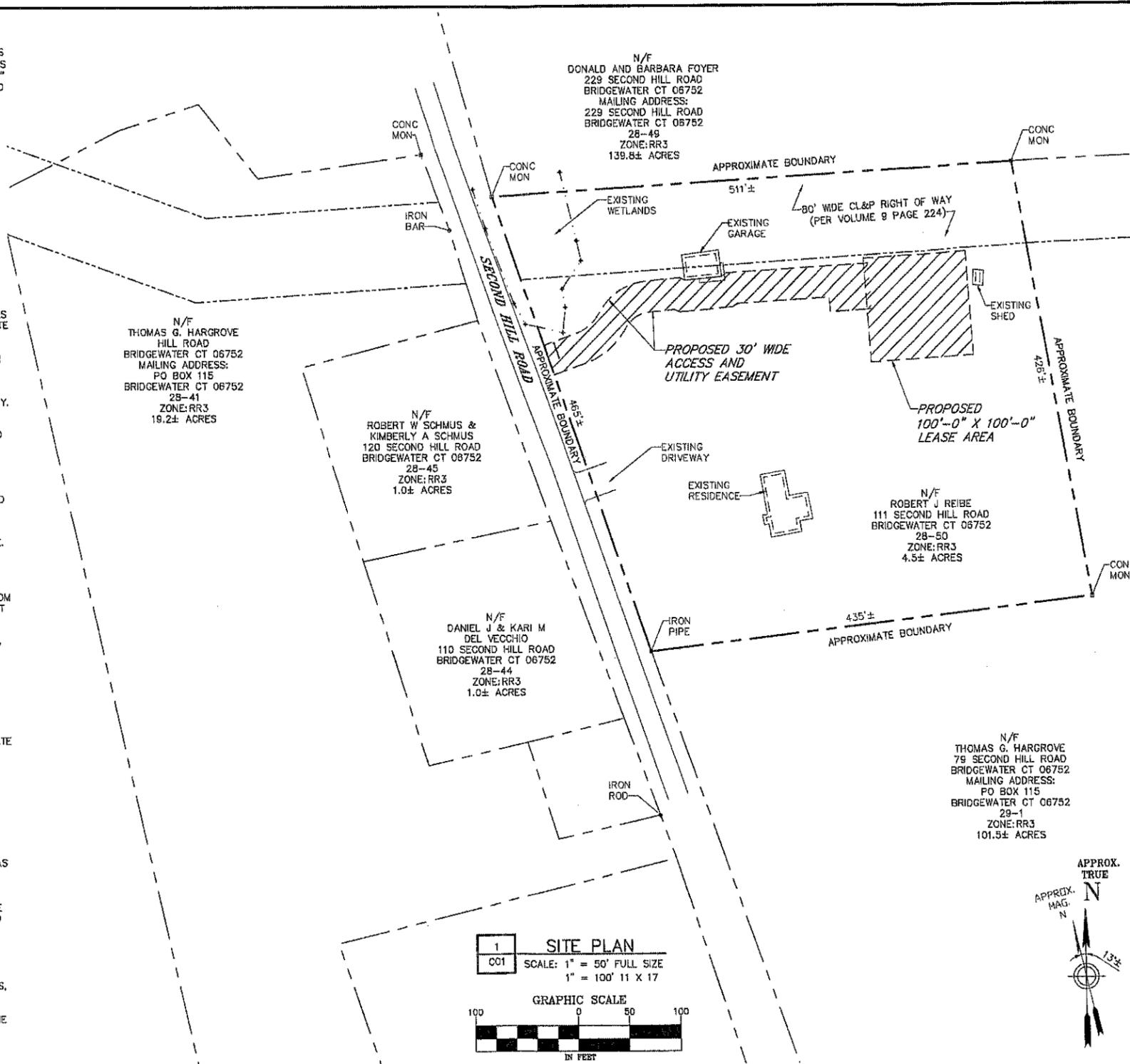
MAP REFERENCES:

1. MAP ENTITLED "42.461 ACRES PREPARED FOR STATE OF CONNECTICUT LOWENTHAL PROPERTY" AS PREPARED BY LINWOOD R. GEE & SON INC., DATED MAY 8, 1990 AND FILED IN THE BRIDGEWATER TOWN CLERKS OFFICE AS MAP NO. 931.

2. MAP ENTITLED "114.735 ACRES (SHEET 1 OF 2) MAP SHOWING DEVELOPMENT RIGHTS TO BE ACQUIRED BY THE STATE OF CONNECTICUT FROM ANDRE VONDERWEIDT AND MARILENE VONDERWEIDT" AS PREPARED BY SAMUEL P. BERTACINI, DATED FEBRUARY 1983 AND FILED IN THE BRIDGEWATER TOWN CLERKS OFFICE AS MAP NO. 904A.

3. MAP ENTITLED "SHEET 1 OF 2 PROPERTY SURVEY PREPARED FOR ELEANOR LOWENTHAL, ANNE C. HERMANS, JAMES D. LOWENTHAL, KATHERINE LEVIN, BARALEVIN & JENNIFER LEVIN" AS PREPARED BY NEW ENGLAND LAND SURVEYING, PC., DATED MAY 20, 2009 AND FILED IN THE BRIDGEWATER TOWN CLERKS OFFICE AS MAP NO. 1155A.

4. TOWN OF BRIDGEWATER TAX MAP NUMBER 28.



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CHA PROJECT NO:
18301 - 1071 - 43000

NO.	SUBMITTAL
0	11/13/13 D&M PLAN SUBMISSION
	DRG. JDM
	CHKD. PAL
	APP'D. JPS

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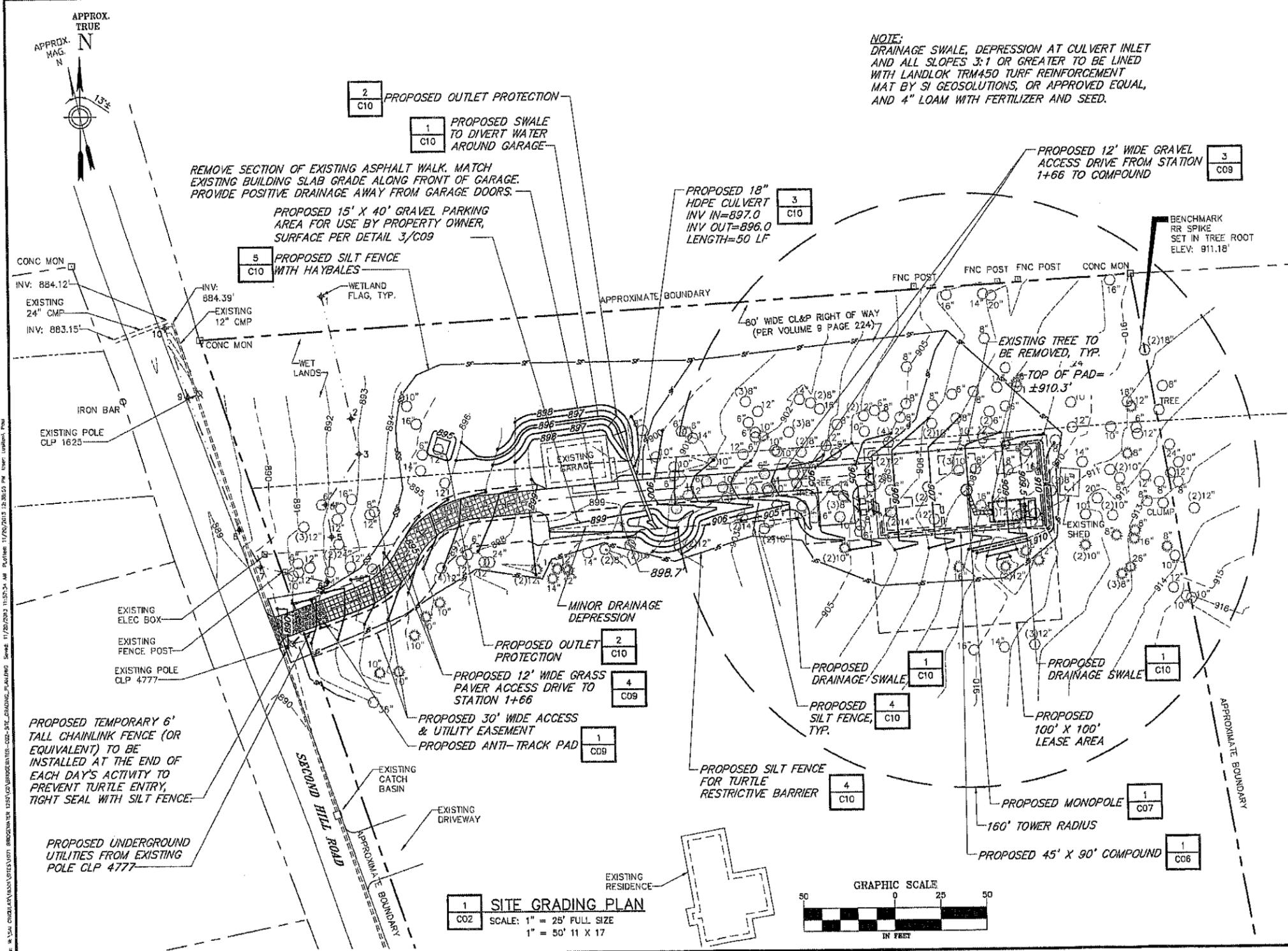
SITE NAME:
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SITE ADDRESS:
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BRIDGEWATER, CT
06752

LITCHFIELD COUNTY

SHEET TITLE
SITE PLAN

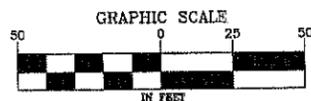
SHEET NUMBER
C01



NOTE:
 DRAINAGE SWALE, DEPRESSION AT CULVERT INLET
 AND ALL SLOPES 3:1 OR GREATER TO BE LINED
 WITH LANDLOK TRM450 TURF REINFORCEMENT
 MAT BY SI GEOSOLUTIONS, OR APPROVED EQUAL,
 AND 4" LOAM WITH FERTILIZER AND SEED.

11/20/2013 11:52:34 AM Plotter: 11/20/2013 12:38:55 PM User: lwh@hpi.com
 C:\Users\lwh\Documents\2013\03\BRIDGEWATER-CO2-SITE GRADING PLAN.dwg Sheet: 1/20/2013 11:52:34 AM

1 SITE GRADING PLAN
 CO2 SCALE: 1" = 25' FULL SIZE
 1" = 50' 11 X 17



NEW CINGULAR WIRELESS PCS, LLC
 500 ENTERPRISE DRIVE
 ROCKY HILL, CT 06087

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 SALEM, NH 03078

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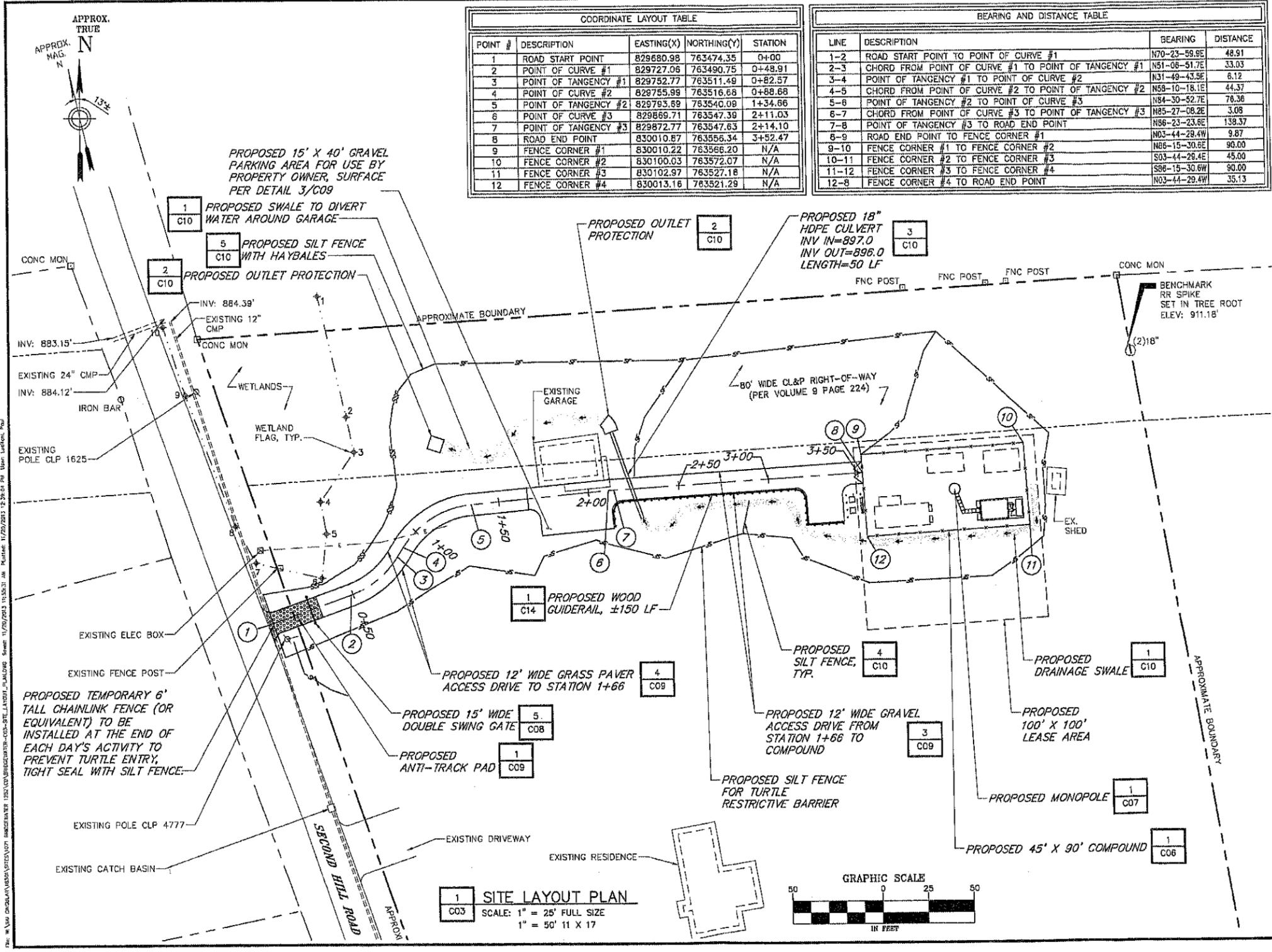
NO.	SUBMITTAL
1	11/13/13 DAM PLAN SUBMISSION
2	BY: JDM CHG: PAL APP'D: JPS

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 LITCHFIELD COUNTY

SHEET TITLE
 SITE GRADING PLAN

SHEET NUMBER
 C02



COORDINATE LAYOUT TABLE				
POINT #	DESCRIPTION	EASTING(X)	NORTHING(Y)	STATION
1	ROAD START POINT	829680.98	763474.35	0+00
2	POINT OF CURVE #1	829727.06	763490.75	0+48.91
3	POINT OF TANGENCY #1	829752.77	763511.49	0+82.57
4	POINT OF CURVE #2	829755.99	763516.68	0+88.68
5	POINT OF TANGENCY #2	829793.89	763540.09	1+34.66
6	POINT OF CURVE #3	829869.71	763547.39	2+11.03
7	POINT OF TANGENCY #3	829872.77	763547.63	2+14.10
8	ROAD END POINT	830010.87	763556.34	3+52.47
9	FENCE CORNER #1	830010.22	763566.20	N/A
10	FENCE CORNER #2	830100.03	763572.07	N/A
11	FENCE CORNER #3	830102.97	763527.18	N/A
12	FENCE CORNER #4	830013.16	763521.29	N/A

BEARING AND DISTANCE TABLE			
LINE	DESCRIPTION	BEARING	DISTANCE
1-2	ROAD START POINT TO POINT OF CURVE #1	N70-23-59.8E	48.91
2-3	CHORD FROM POINT OF CURVE #1 TO POINT OF TANGENCY #1	N51-08-51.7E	33.03
3-4	POINT OF TANGENCY #1 TO POINT OF CURVE #2	N31-49-43.5E	8.12
4-5	CHORD FROM POINT OF CURVE #2 TO POINT OF TANGENCY #2	N58-10-18.1E	44.37
5-6	POINT OF TANGENCY #2 TO POINT OF CURVE #3	N84-30-52.7E	78.36
6-7	CHORD FROM POINT OF CURVE #3 TO POINT OF TANGENCY #3	N85-27-08.2E	3.08
7-8	POINT OF TANGENCY #3 TO ROAD END POINT	N86-23-23.6E	138.37
8-9	ROAD END POINT TO FENCE CORNER #1	N03-44-29.4W	9.87
9-10	FENCE CORNER #1 TO FENCE CORNER #2	N86-15-30.8E	90.00
10-11	FENCE CORNER #2 TO FENCE CORNER #3	S03-44-29.4E	45.00
11-12	FENCE CORNER #3 TO FENCE CORNER #4	S86-15-30.6W	90.00
12-8	FENCE CORNER #4 TO ROAD END POINT	N03-44-29.4W	35.13

Date: 11/20/2013 11:55:31 AM
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	BY: JDM CHK: PAL APP'D: JPS

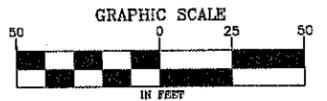
STATE OF CONNECTICUT
 JOHN P. SOBIECH
 No. 17827
 LICENSED PROFESSIONAL ENGINEER
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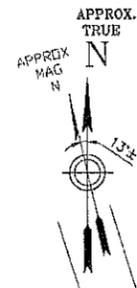
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SHEET TITLE
 SITE LAYOUT PLAN

SHEET NUMBER
 C03

1 SITE LAYOUT PLAN
 C03
 SCALE: 1" = 25' FULL SIZE
 1" = 50' 11 X 17

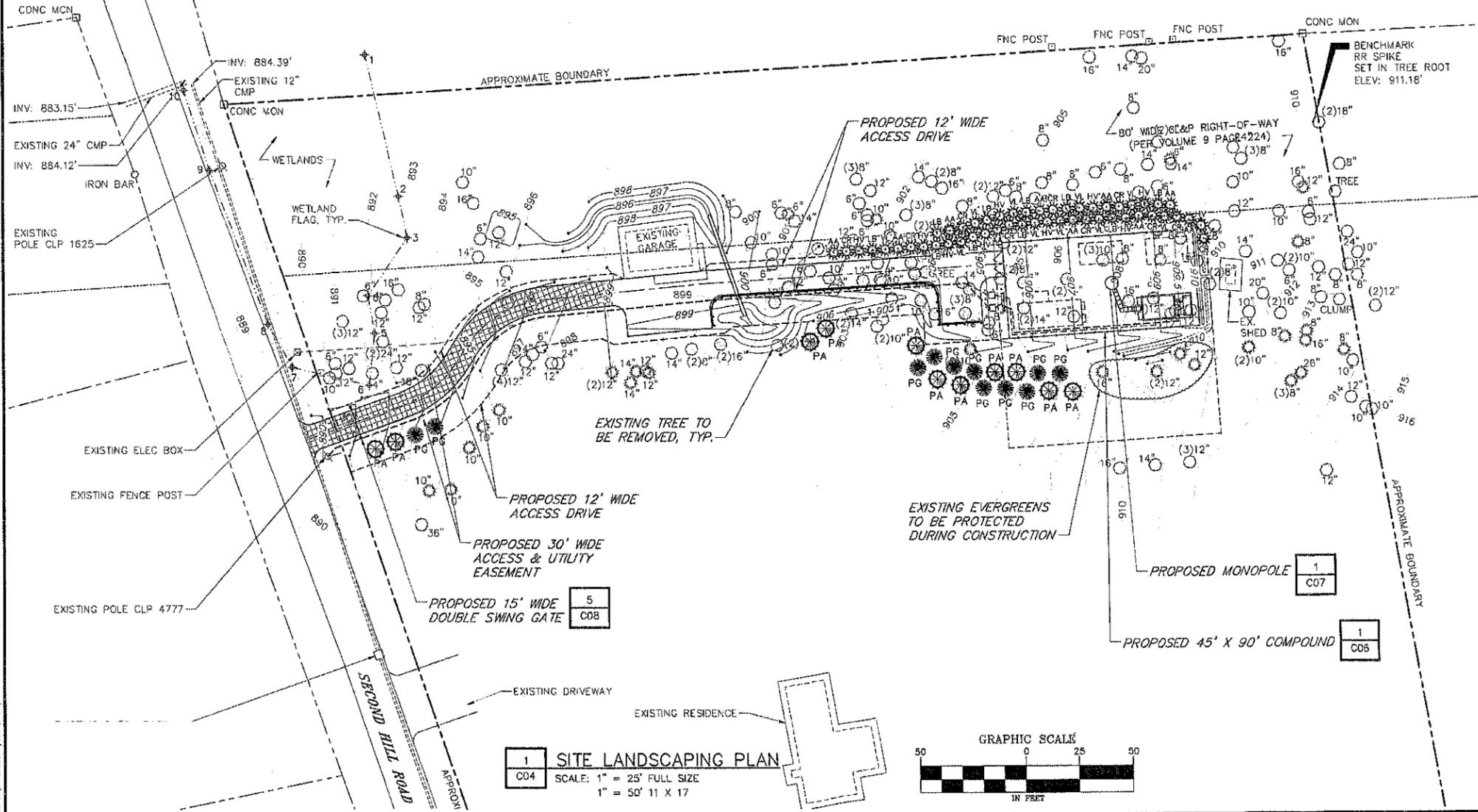




WILDLIFE ENHANCEMENT PLANTINGS SCHEDULE ¹					
QTY SHURBS	BOTANICAL NAME	COMMON NAME	SYMBOL	SIZE	SPACING
10	<i>Aronia arbutifolia</i>	RED CHOKEBERRY	AA	3-4'	5-7' ON CENTER
10	<i>Cornus racemosa</i>	GRAY DOGWOOD	CR	3-4'	5-7' ON CENTER
10	<i>Hamamelis virginiana</i>	WITCH HAZEL	HV	3-4'	5-7' ON CENTER
10	<i>Lindera benzoin</i>	COMMON SPICEBUSH	LB	3-4'	5-7' ON CENTER
10	<i>Viburnum lentago</i>	NANNYBERRY	VB	3-4'	5-7' ON CENTER

1. WILDLIFE ENHANCEMENT PLANTINGS TO BE UNDERSOWN WITH A NEW ENGLAND SEMI-SHADE GRASS AND FORBS MIX (BROAD SPECTRUM OF NATIVE GRASSES AND FORBS PROVIDED BY NEW ENGLAND WETLAND PLANTS, INC., OR APPROVED EQUIVALENT SUPPLIER).

EVERGREEN SCREENING PLANTINGS SCHEDULE					
QTY TREES	BOTANICAL NAME	COMMON NAME	SYMBOL	SIZE	SPACING
11	<i>Picea abies</i>	NORWAY SPRUCE	PA	5-6'	10' ON CENTER
11	<i>Picea glauca</i>	WHITE SPRUCE	PG	5-6'	10' ON CENTER



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NO.	SUBMITTAL
0	11/13/13 B&M PLAN SUBMISSION
1	07/15/14 CHG: PAL APP'D: JPS

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SHEET TITLE
SITE LANDSCAPING PLAN

SHEET NUMBER
C04

FILE: W:\SAI\CINGULAR\WIRELESS\CT\BRIDGEWATER\18301-1071-43000\11\LANDSCAPING\C04.DWG DATE: 11/13/2013 10:45:25 AM PLOT: 11/20/2013 12:35:10 PM USER: jps

ENVIRONMENTAL NOTES:

WOOD TURTLE PROTECTION PROGRAM

THE CONSTRUCTION AREA IS LOCATED IN PROXIMITY TO WOOD TURTLE (GLYPTEMYS INSCULPTA) HABITAT, A STATE SPECIAL CONCERN SPECIES. THE FOLLOWING PROTECTIVE MEASURES WILL AVOID UNINTENTIONAL MORTALITY TO WOOD TURTLE AS A RESULT OF CONSTRUCTION ACTIVITIES FOR THE SITE IMPROVEMENTS PROPOSED. THESE PROTECTIVE MEASURES SATISFY RECOMMENDATIONS FROM THE CONNECTICUT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION ("CTDEEP") WILDLIFE DIVISION AS SPECIFIED IN A MARCH 26, 2013 LETTER. THIS PROTECTION PLAN IS VALID UNTIL MARCH 26, 2014, AT WHICH POINT IF CONSTRUCTION HAS NOT BEEN INITIATED, A NEW NATURAL DIVERSITY DATA BASE REVIEW REQUEST FROM CTDEEP IS REQUIRED.

IT IS OF THE UTMOST IMPORTANCE THAT THE CONTRACTOR COMPLIES WITH THE REQUIREMENTS FOR THE INSTALLATION OF PROTECTIVE MEASURES AND THE EDUCATION OF EMPLOYEES AND SUBCONTRACTORS PERFORMING WORK ON THE PROJECT SITE IF WORK WILL OCCUR DURING THE WOOD TURTLE'S ACTIVE PERIOD (APRIL 1 TO NOVEMBER 15). ALL-POINTS TECHNOLOGY CORPORATION, P.C. ("APT") WILL SERVE AS THE ENVIRONMENTAL MONITOR FOR THIS PROJECT TO ENSURE THAT THE WOOD TURTLE PROTECTION MEASURES ARE IMPLEMENTED PROPERLY AND WILL PROVIDE AN EDUCATION SESSION ON WOOD TURTLE PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL CONTACT DEAN GUSTAFSON, SENIOR WETLAND SCIENTIST AT APT, AT LEAST 5 BUSINESS DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING. MR. GUSTAFSON CAN BE REACHED BY PHONE AT (860) 884-9515 OR VIA EMAIL AT DGUSTAFSON@ALLPOINTSTECH.COM.

THE PROPOSED WOOD TURTLE PROTECTION PROGRAM CONSISTS OF SEVERAL COMPONENTS: ISOLATION OF THE PROJECT PERIMETER; PERIODIC INSPECTION AND MAINTENANCE OF ISOLATION STRUCTURES; TURTLE SWEEPS; EDUCATION OF ALL CONTRACTORS AND SUB-CONTRACTORS PRIOR TO INITIATION OF WORK ON THE SITE; PROTECTIVE MEASURES; AND, REPORTING.

1. ISOLATION MEASURES

a. INSTALLATION OF CONVENTIONAL SILT FENCING, WHICH WILL ALSO SERVE AS AN ISOLATION OF THE WORK ZONE FROM SURROUNDING AREAS AND IS REQUIRED FOR EROSION CONTROL COMPLIANCE, SHALL BE PERFORMED BY THE CONTRACTOR FOLLOWING CLEARING ACTIVITIES AND PRIOR TO ANY EARTHWORK. APT WILL INSPECT THE WORK ZONE AREA PRIOR TO AND FOLLOWING EROSION CONTROL BARRIER INSTALLATION TO ENSURE THE AREA IS FREE OF WOOD TURTLES PRIOR TO START OF CONSTRUCTION ACTIVITIES.

b. THE FENCING WILL CONSIST OF CONVENTIONAL EROSION CONTROL WOVEN FABRIC, INSTALLED APPROXIMATELY SIX INCHES BELOW SURFACE GRADE TO BURY THE BOTTOM OF THE SILT FENCE AND STAKED AT SEVEN TO TEN-FOOT INTERVALS USING FOUR-FOOT OAK STAKES OR APPROVED EQUIVALENT. THE CONTRACTOR IS RESPONSIBLE FOR DESIGNATING A QUALIFIED ON-SITE CONSTRUCTION PERSON TO BE RESPONSIBLE FOR THE DAILY INSPECTION AND UPKEEP OF ALL EROSION AND SEDIMENTATION CONTROLS.

c. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A RESERVE SUPPLY OF EROSION CONTROLS ON SITE FOR USE AS REQUIRED OR AS DIRECTED BY THE ENVIRONMENTAL MONITOR.

d. THE ENVIRONMENTAL MONITOR WILL MONITOR THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS THROUGHOUT THE DURATION OF THE PROJECT'S CONSTRUCTION. INSPECTIONS WILL BE PERFORMED AS FOLLOWS: 1) WEEKLY OR 2) BIWEEKLY, WHICH INCLUDES INSPECTIONS FOLLOWING PRECIPITATION EVENTS TOTALING 0.25 INCH OR GREATER.

e. THE EXTENT OF THE BARRIER FENCING WILL EFFECTIVELY ISOLATE THE CONSTRUCTION AREA, INCLUDING EQUIPMENT AND MATERIAL STORAGE AREAS, FROM POSSIBLE MIGRATING TURTLES. FIELD CONDITIONS MAY REQUIRE THE INSTALLATION OF ADDITIONAL BARRIER FENCING AT THE DIRECTION OF APT.

f. NO EQUIPMENT, VEHICLES OR CONSTRUCTION MATERIALS SHALL BE STORED OUTSIDE OF BARRIER FENCING.

g. ALL SILT FENCING SHALL BE REMOVED WITHIN 30 DAYS OF COMPLETION OF WORK AND PERMANENT STABILIZATION OF SITE SOILS SO THAT REPTILE AND AMPHIBIAN MOVEMENT BETWEEN UPLANDS AND WETLANDS IS NOT RESTRICTED.

CONTRACTOR EDUCATION:

a. PRIOR TO WORK ON SITE, THE CONTRACTOR SHALL ATTEND AN EDUCATIONAL SESSION AT THE PRE-CONSTRUCTION MEETING WITH APT. THIS ORIENTATION AND EDUCATIONAL SESSION WILL CONSIST OF AN INTRODUCTORY SESSION WITH PHOTOS IDENTIFYING WOOD TURTLE, STRESSING THE NON-AGGRESSIVE NATURE OF THIS SPECIES AND THE ABSENCE OF NEED TO DESTROY ANIMALS THAT MIGHT BE ENCOUNTERED, HOW TO PROPERLY HANDLE THESE SPECIES IF ENCOUNTERED AND THE NEED TO FOLLOW PROTECTIVE MEASURES AS DESCRIBED IN SECTION 3. WORKERS WILL ALSO BE PROVIDED INFORMATION REGARDING THE IDENTIFICATION OF OTHER TURTLE SPECIES THAT COULD BE ENCOUNTERED.

b. THE EDUCATION SESSION WILL ALSO FOCUS ON MEANS TO DISCRIMINATE BETWEEN THE SPECIES OF CONCERN AND OTHER NATIVE SPECIES TO AVOID UNNECESSARY "FALSE ALARMS". ENCOUNTERS WITH ANY SPECIES OF TURTLES WILL BE DOCUMENTED.

c. THE CONTRACTOR WILL BE PROVIDED WITH CELL PHONE AND EMAIL CONTACTS FOR APT ENVIRONMENTAL MONITOR STAFF TO IMMEDIATELY REPORT ANY ENCOUNTERS WITH WOOD TURTLE. EDUCATIONAL POSTER MATERIALS WILL BE PROVIDED BY APT AND DISPLAYED ON THE JOB SITE TO MAINTAIN WORKER AWARENESS AS THE PROJECT PROGRESSES.

PROTECTIVE MEASURES

a. A THOROUGH COVER SEARCH OF THE CONSTRUCTION AREA WILL BE PERFORMED BY AN APT ENVIRONMENTAL MONITOR FOR WOOD TURTLE PRIOR TO AND FOLLOWING INSTALLATION OF SILT FENCING TO REMOVE ANY SPECIES FROM THE WORK ZONE PRIOR TO THE INITIATION OF CONSTRUCTION ACTIVITIES.

b. PRIOR TO THE START OF CONSTRUCTION EACH DAY, THE CONTRACTOR SHALL SEARCH THE ENTIRE WORK AREA FOR WOOD TURTLE.

c. IF WOOD TURTLE ARE FOUND, IT SHOULD BE CAREFULLY GRASPED IN BOTH HANDS, ONE ON EACH SIDE OF THE SHELL, BETWEEN THE TURTLE'S FORELIMBS AND THE HIND LIMBS, AND PLACED JUST OUTSIDE OF THE ISOLATION BARRIER IN THE APPROXIMATE DIRECTION IT WAS HEADING.

d. SPECIAL CARE SHALL BE TAKEN BY THE CONTRACTOR DURING EARLY MORNING AND EVENING HOURS SO THAT POSSIBLE BASKING OR FORAGING TURTLES ARE NOT HARMED BY CONSTRUCTION ACTIVITIES.

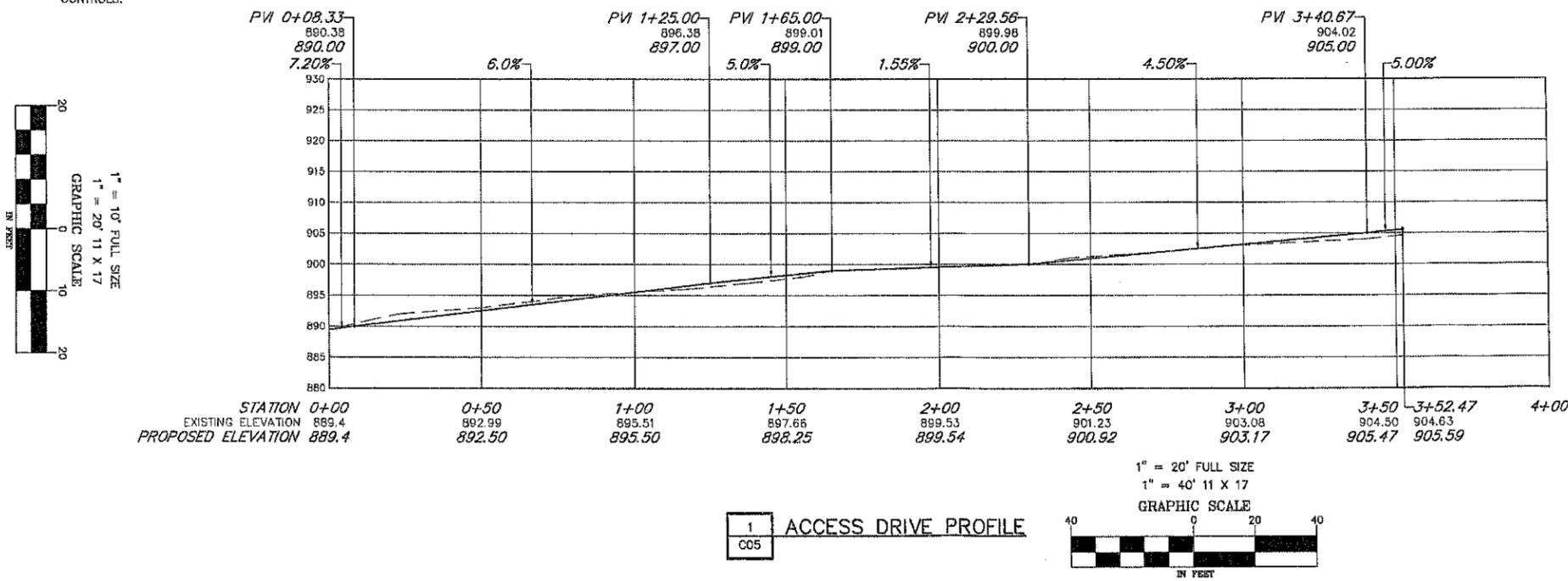
e. EROSION CONTROL MEASURES WILL BE REMOVED NO LATER THAN 30 DAYS FOLLOWING FINAL SITE STABILIZATION SO AS NOT TO IMPEDE MIGRATION OF TURTLES OR OTHER WILDLIFE.

4. REPORTING

a. BIWEEKLY INSPECTION REPORTS (BRIEF NARRATIVE AND APPLICABLE PHOTOS) WILL BE SUBMITTED BY THE ENVIRONMENTAL MONITOR TO THE CONNECTICUT SITING COUNCIL FOR COMPLIANCE VERIFICATION. ANY OBSERVATIONS OF WOOD TURTLE WILL BE INCLUDED IN THE REPORTS.

b. FOLLOWING COMPLETION OF THE CONSTRUCTION PROJECT, APT WILL PROVIDE A SUMMARY REPORT TO CTDEEP DOCUMENTING THE MONITORING AND MAINTENANCE OF THE BARRIER FENCE AND OBSERVATIONS OF ANY WOOD TURTLE ENCOUNTERED. ANY OBSERVATIONS OF WOOD TURTLE WILL INCLUDE PHOTO-DOCUMENTATION (IF POSSIBLE) ALONG WITH SPECIFIC INFORMATION ON THE LOCATION AND DISPOSITION OF THE ANIMAL.

THE WOOD TURTLE PROTECTION PROGRAM DETAILED ABOVE WILL ADEQUATELY PROTECT THIS SPECIAL CONCERN SPECIES IN THE EVENT THAT THIS SPECIES IS ENCOUNTERED IN THE PROJECT AREA DURING CONSTRUCTION ACTIVITIES. WITH ADHERENCE TO THESE PROTECTIVE MEASURES, NEW CINGULAR WIRELESS PCS, LLC ("AT&T") PROPOSED DEVELOPMENT AT THIS PROPERTY WILL NOT HAVE AN ADVERSE EFFECT ON WOOD TURTLE.



1 ACCESS DRIVE PROFILE
C05



NO.	DATE	DESCRIPTION
0	11/13/13	D&M PLAN SUBMISSION
	BY: JDM	CHK: PAL
		APP'D: JFS

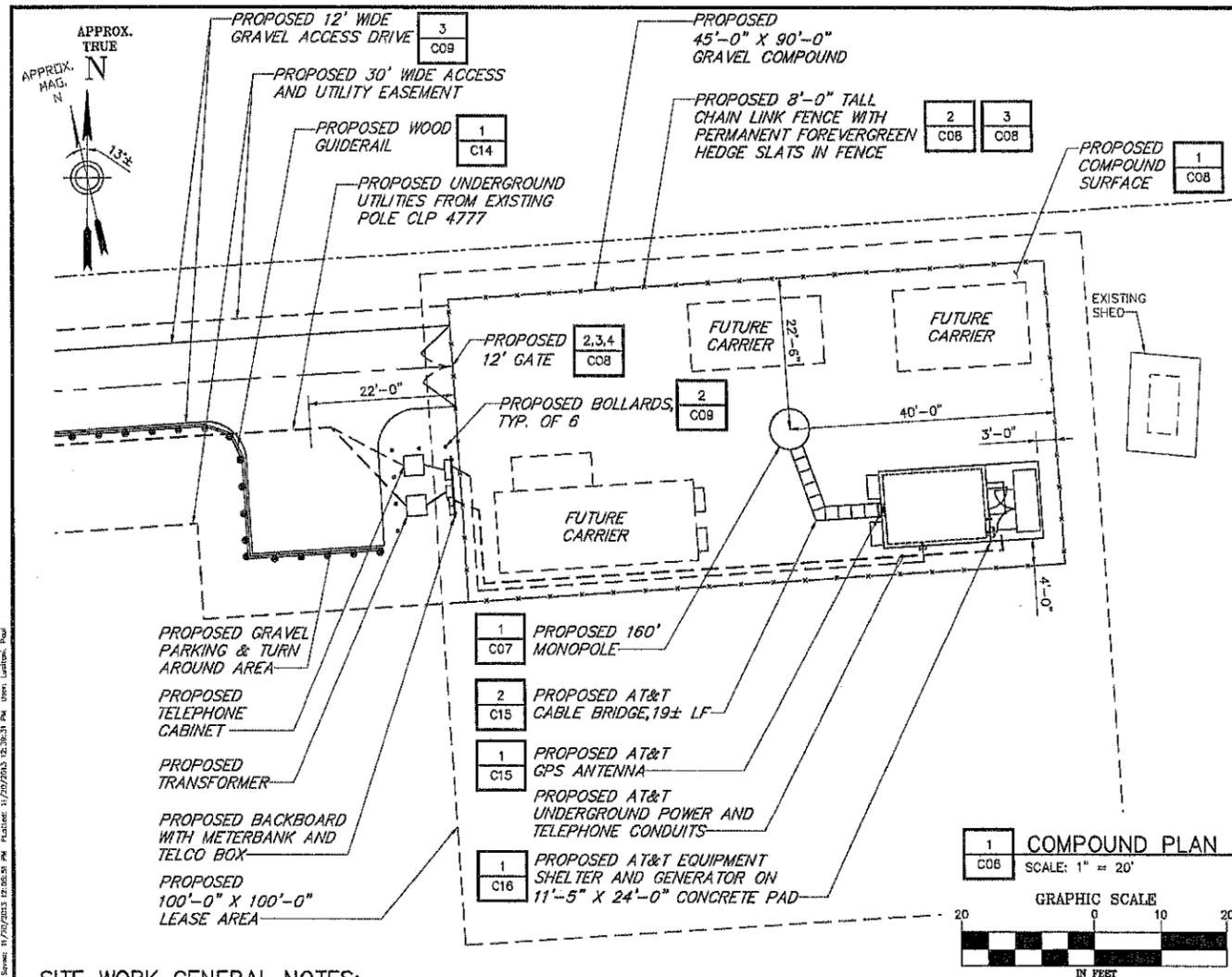


IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SITE ID: SR1252
 SITE NAME: BRIDGEWATER
 SITE ADDRESS: 111 SECOND HILL ROAD, BRIDGEWATER, CT 06752, LITCHFIELD COUNTY

SHEET TITLE: ACCESS DRIVE PROFILE & ENVIRONMENTAL NOTES

SHEET NUMBER: C05



SITE WORK GENERAL NOTES:

- ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWING AND AS STIPULATED HEREIN.
- RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE EQUIPMENT AREA.
- NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
- THE SUBGRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- ALL EXISTING ACTIVE SEWER, 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 ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR PIER DRILLING AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW.
- ALL EXISTING INACTIVE SEWER, WATER, GAS, 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 ENGINEERING.
- CONTRACTOR IS TO SUPPLY COMBINATION LOCKS PER OWNER SPECIFICATIONS.
- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES SHALL BE IN CONFORMANCE WITH STATE OF CONNECTICUT GUIDELINES FOR EROSION AND SEDIMENT CONTROL AND COORDINATED WITH THE TOWN/COUNTY CODE ENFORCEMENT OFFICE.
- TEMPORARY SILT FENCE EROSION CONTROL BARRIER SHALL BE MAINTAINED THROUGHOUT SITE CONSTRUCTION. STOCK PILE ON SITE 100 FT. OF SILT FENCE FOR EMERGENCY USE. TEMPORARY EROSION BARRIERS SHALL REMAIN IN PLACE UNTIL PERMANENT VEGETATIVE GROUND COVER IS ESTABLISHED.
- STILLING BASIN SHALL BE UTILIZED FOR ANY DE-WATERING DISCHARGE WHICH MAY OCCUR DURING CONSTRUCTION OPERATIONS.
- CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENTATION CONTROL MEASURES PRIOR TO ANY GRADING ACTIVITIES IN LOCATIONS SHOWN ON THIS PLAN.
- IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
- SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
- SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATION.
- NOT GREATER THAN 80,000 SQUARE FEET OF LAND SHALL BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME AND SHALL NOT EXCEED 90 DAYS. LAND SHOULD NOT BE LEFT EXPOSED DURING THE WINTER MONTHS.
- ANY DISTURBED AREAS OUTSIDE LIMITS OF CONSTRUCTION SHALL BE TOPSOILED, SEEDED WITH RYE GRASS, AND MACHINE HAY MULCHED TO PREVENT EROSION. HAY OR STRAW MULCH SHALL BE APPLIED TO ALL FRESHLY SEEDED AREAS AT A RATE OF 2 TONS PER ACRES. BALES SHALL BE UNSPOILED, AIR-DRIED, AND FREE FROM WEED, SEEDS, AND ANY COARSE MATERIAL.

EROSION CONTROL NOTES:

- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES SHALL BE IN CONFORMANCE WITH STATE OF CONNECTICUT GUIDELINES FOR EROSION AND SEDIMENT CONTROL AND COORDINATED WITH THE TOWN/COUNTY CODE ENFORCEMENT OFFICE.
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- ALL DISTURBED AREAS OUTSIDE THE LIMITS OF THE EQUIPMENT LEASE AREA AND ACCESS ROADWAY SHALL BE PERMANENTLY ESTABLISHED WITH A VEGETATIVE GROUND COVER.
- STILLING BASIN SHALL BE UTILIZED FOR ANY DE-WATERING DISCHARGE WHICH MAY OCCUR DURING CONSTRUCTION OPERATIONS.
- PROPOSED CONSTRUCTION IMPACTS AND PERMANENT IMPROVEMENTS SHALL NOT SIGNIFICANTLY IMPACT STORM WATER RUNOFF PATTERNS, VOLUME OR PEAK FLOW RATES. THE FLAT GRADE OF THE EQUIPMENT COMPOUND AND STONE SURFACE WILL PROMOTE STORM WATER INFILTRATION.
- CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENTATION CONTROL MEASURES PRIOR TO ANY GRADING ACTIVITIES IN LOCATIONS SHOWN ON THIS PLAN.
- SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
- IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
- SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
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SALEM, NH 03079

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Tel: (860) 527-4587 • www.chaprojects.com
CHA PROJECT NO:
16301 - 1071 - 43000

NO.	SUBMITTAL
0	11/13/13 D&M PLAN SUBMISSION
	BY: JDM CHK: PAL APP'D: JPB

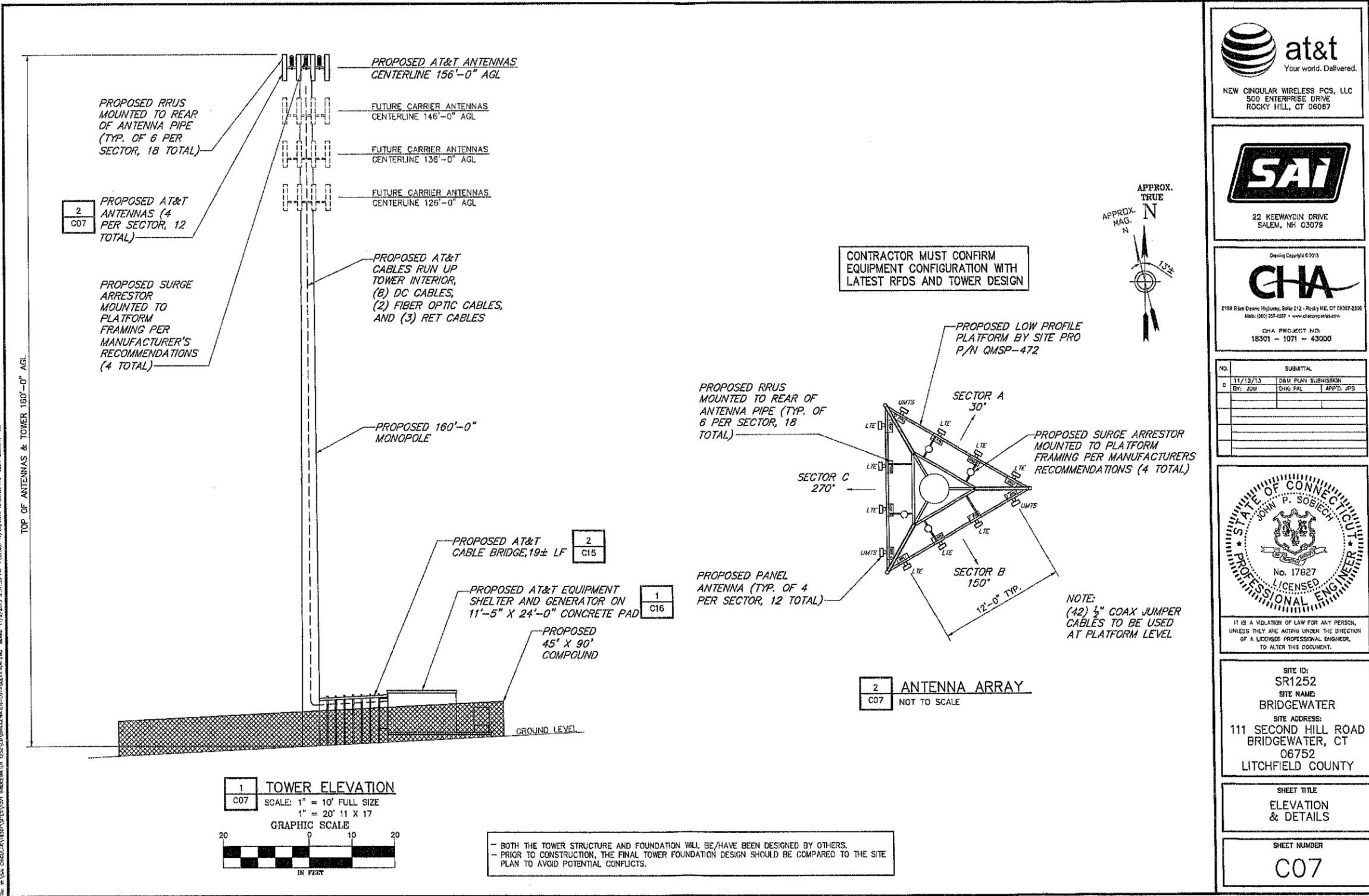
STATE OF CONNECTICUT
JOHN P. SOBIECH
No. 17827
LICENSED PROFESSIONAL ENGINEER

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SITE ID:
SR1252
SITE NAME:
BRIDGEWATER
SITE ADDRESS:
111 SECOND HILL ROAD
BRIDGEWATER, CT
06752
LITCHFIELD COUNTY

SHEET TITLE
COMPOUND PLAN
& SITE NOTES

SHEET NUMBER
C06



TOP OF ANTENNAS & TOWER 160'-0" AGL

2
C07
PROPOSED AT&T ANTENNAS (4 PER SECTOR, 12 TOTAL)

PROPOSED SURGE ARRESTOR MOUNTED TO PLATFORM FRAMING PER MANUFACTURER'S RECOMMENDATIONS (4 TOTAL)

PROPOSED AT&T ANTENNAS
CENTERLINE 156'-0" AGL

FUTURE CARRIER ANTENNAS
CENTERLINE 146'-0" AGL

FUTURE CARRIER ANTENNAS
CENTERLINE 136'-0" AGL

FUTURE CARRIER ANTENNAS
CENTERLINE 126'-0" AGL

PROPOSED AT&T CABLES RUN UP TOWER INTERIOR, (8) DC CABLES, (2) FIBER OPTIC CABLES, AND (3) RET CABLES

PROPOSED 160'-0" MONOPOLE

PROPOSED AT&T CABLE BRIDGE, 19± LF

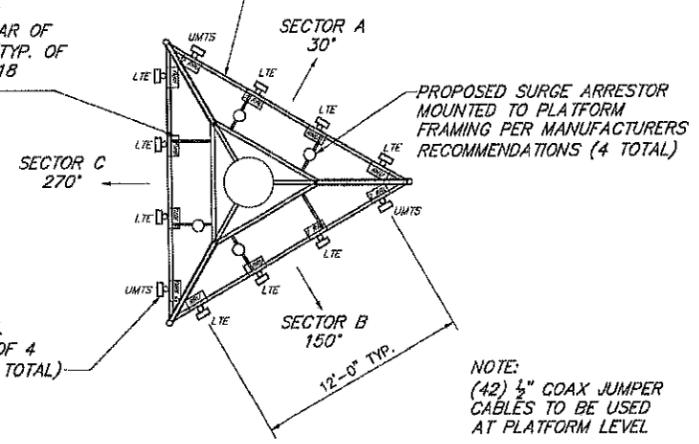
PROPOSED AT&T EQUIPMENT SHELTER AND GENERATOR ON 11'-5" X 24'-0" CONCRETE PAD

PROPOSED 45' X 90' COMPOUND

CONTRACTOR MUST CONFIRM EQUIPMENT CONFIGURATION WITH LATEST RFDS AND TOWER DESIGN

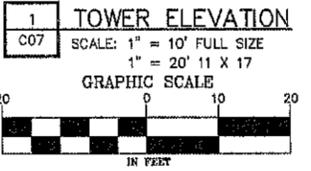


PROPOSED RRUS MOUNTED TO REAR OF ANTENNA PIPE (TYP. OF 6 PER SECTOR, 18 TOTAL)



NOTE:
(42) 1/2" COAX JUMPER CABLES TO BE USED AT PLATFORM LEVEL

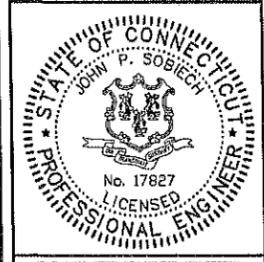
2
C07
ANTENNA ARRAY
NOT TO SCALE



BOTH THE TOWER STRUCTURE AND FOUNDATION WILL BE/HAVE BEEN DESIGNED BY OTHERS.
PRIOR TO CONSTRUCTION, THE FINAL TOWER FOUNDATION DESIGN SHOULD BE COMPARED TO THE SITE PLAN TO AVOID POTENTIAL CONFLICTS.



NO.	SUBMITTAL
1	11/13/13 DAM PLAN SUBMISSION
2	BY: JDM CHK: PAL APP'D: JPS

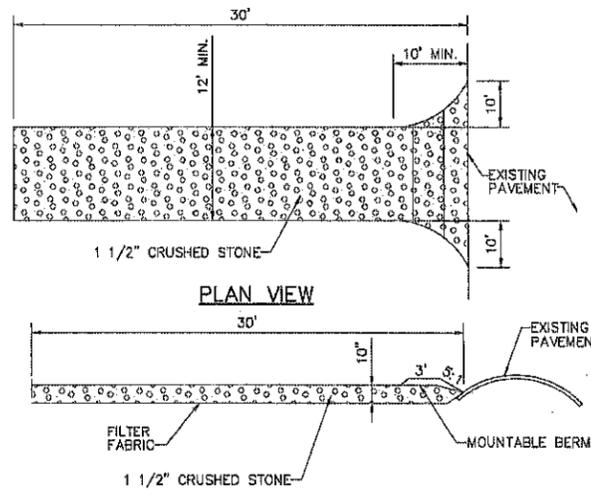


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SR1252
SITE NAME:
BRIDGEWATER
SITE ADDRESS:
111 SECOND HILL ROAD
BRIDGEWATER, CT
06752
LITCHFIELD COUNTY

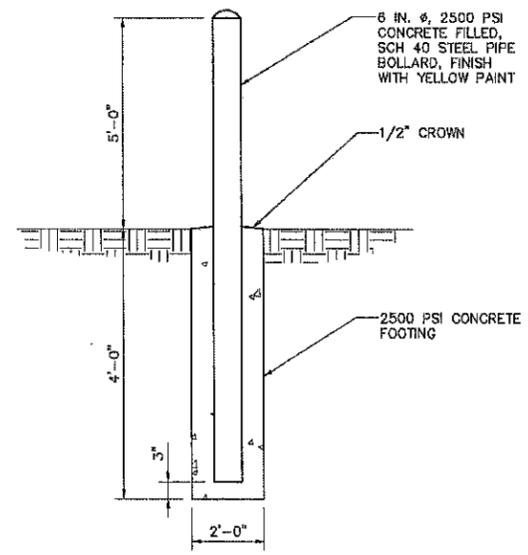
SHEET TITLE
ELEVATION
& DETAILS

SHEET NUMBER
C07

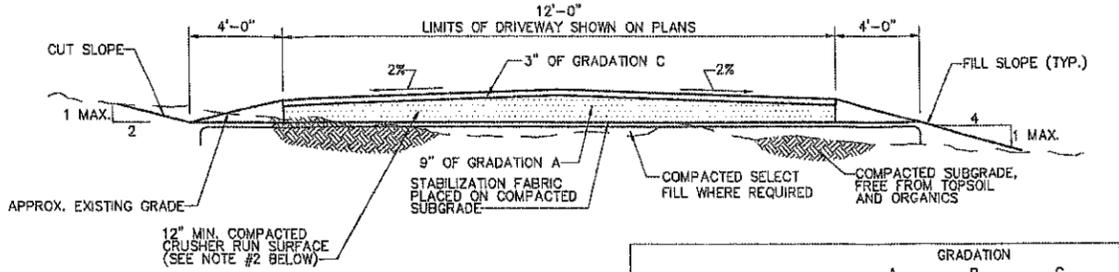


- NOTES:**
- ENTRANCE WIDTH SHALL BE A TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
 - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.

1 CONSTRUCTION DEBRIS ANTI-TRACKING PAD
C09 NO SCALE



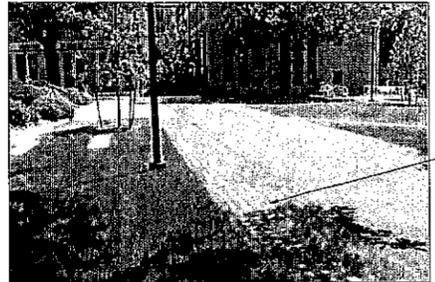
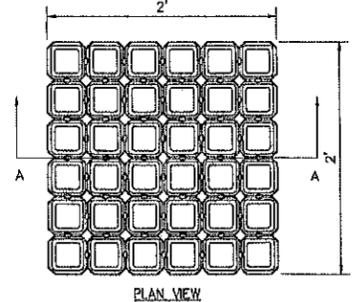
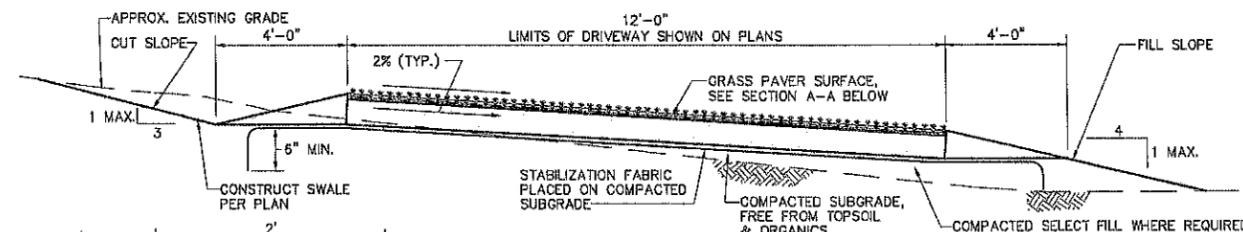
2 BOLLARD DETAIL
C09 NO SCALE



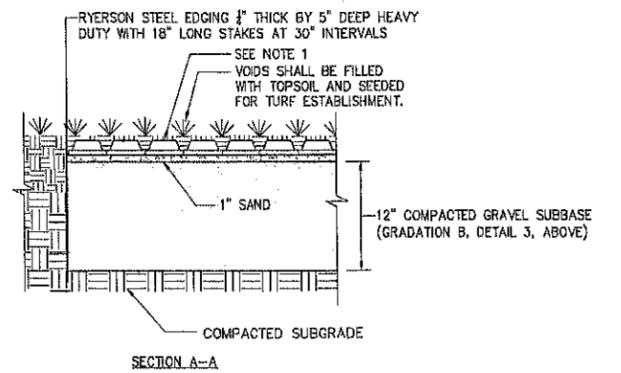
- NOTES:**
- WHERE REQUIRED BY THE ENGINEER, THE PROPOSED DRIVEWAY BED SHALL BE OVER-EXCAVATED AND FILLED WITH BANK RUN GRAVEL. THE MATERIAL USED SHALL BE APPROVED BY THE ENGINEER. THE CONTRACTOR WILL BE PAID EXTRA FOR OVER-EXCAVATION AND BACKFILL WITH BANK RUN GRAVEL, ON A UNIT PRICE BASIS.
 - THE MATERIALS FOR THE ROLLED BANK GRAVEL SURFACE AND TRAFFIC-BOUND GRAVEL SURFACE SHALL CONSIST OF SOUND, TOUGH, DURABLE PARTICLES OF BANK OR CRUSHED GRAVEL. ALL MATERIALS SHALL BE FREE FROM THIN OR ELONGATED PIECES, LUMPS OF CLAY, LOAM, VEGETABLE MATTER, OR SAND. BINDER MAY BE ADDED AND INCORPORATED BY APPROVED METHODS AS SPECIFIED ELSE WHERE. THE BOTTOM 9" SHALL MEET GRADING "A" AND THE TOP 3" SHALL CONFORM TO GRADING "C".

SQUARE MESH SIEVES	GRADATION		
	A	B	C
PASS 5" (125mm)	100	90-100	100
PASS 3.5" (90mm)	55-100	55-95	100
PASS 1.5" (37.5mm)	25-60	25-60	45-80
PASS 0.75" (19mm)	15-45	15-45	15-45
PASS 0.25" (6.3mm)	5-25	5-25	5-25
PASS #10 (2.0mm)	0-10	0-10	0-10
PASS #40 (425um)	0-5	0-5	0-5
PASS #100 (150um)			
PASS #200 (75um)			

3 GRAVEL DRIVEWAY SECTION
C09 NO SCALE



4 PITCHED DRIVEWAY SECTION
C09 NO SCALE



- NOTES:**
- 24" X 24" X 4" CHECKER BLOCK CONCRETE PAVERS BY HASTINGS ARCHITECTURAL & ORNAMENTAL CONCRETE PRODUCTS, 24" X 24" X 1.5" DRIVABLE GRASS BY SOIL RETENTION PLANTABLE CONCRETE SYSTEMS, OR APPROVED EQUAL
 - WHERE REQUIRED BY THE ENGINEER, THE PROPOSED DRIVEWAY BED SHALL BE OVER-EXCAVATED AND FILLED WITH BANK RUN GRAVEL. THE MATERIAL USED SHALL BE APPROVED BY THE ENGINEER. THE CONTRACTOR WILL BE PAID EXTRA FOR OVER-EXCAVATION AND BACKFILL WITH BANK RUN GRAVEL, ON A UNIT PRICE BASIS.

NEW CINGULAR WIRELESS PCS, LLC
500 ENTERPRISE DRIVE
ROCKY HILL, CT 06067

22 KEEWAYDIN DRIVE
SALEM, NH 03079

CHA PROJECT NO:
18301 - 1071 - 43000

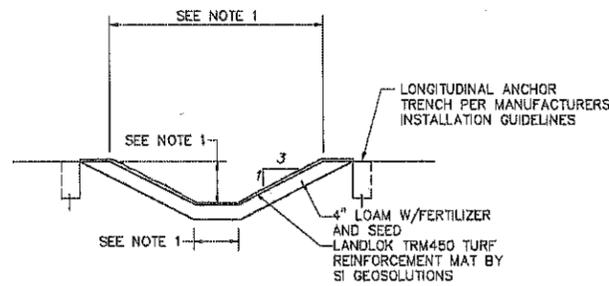
NO.	DATE	DESCRIPTION
0	11/15/13	DATA PLAN SUBMISSION
		CHRI: PJA
		APP'D: JPB

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SITE ID:
SR1252
SITE NAME:
BRIDGEWATER
SITE ADDRESS:
111 SECOND HILL ROAD
BRIDGEWATER, CT
06752
LITCHFIELD COUNTY

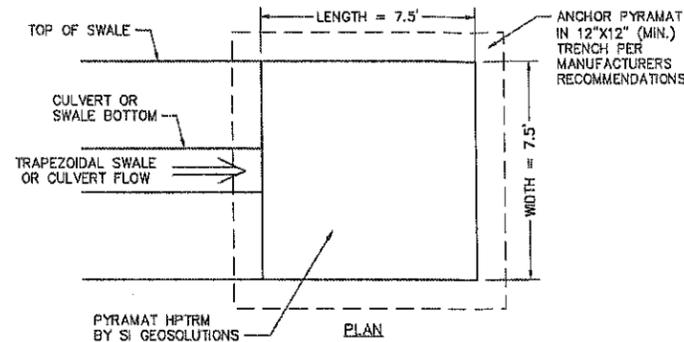
SHEET TITLE
SITE DETAILS

SHEET NUMBER
C09

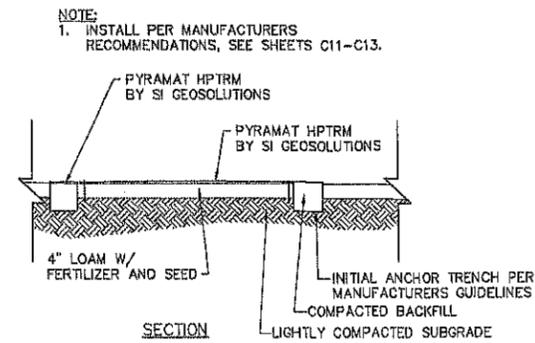


- NOTES:
 1. DIMENSION VARIES, REFER TO GRADING PLANS.
 2. INSTALL PER MANUFACTURERS RECOMMENDATIONS, SEE SHEETS C11-C13.

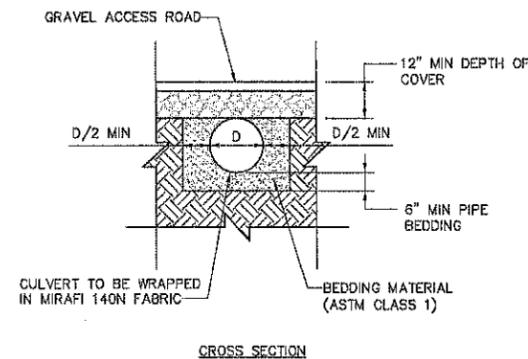
1 VEGETATED DRAINAGE SWALE
 C10 NO SCALE



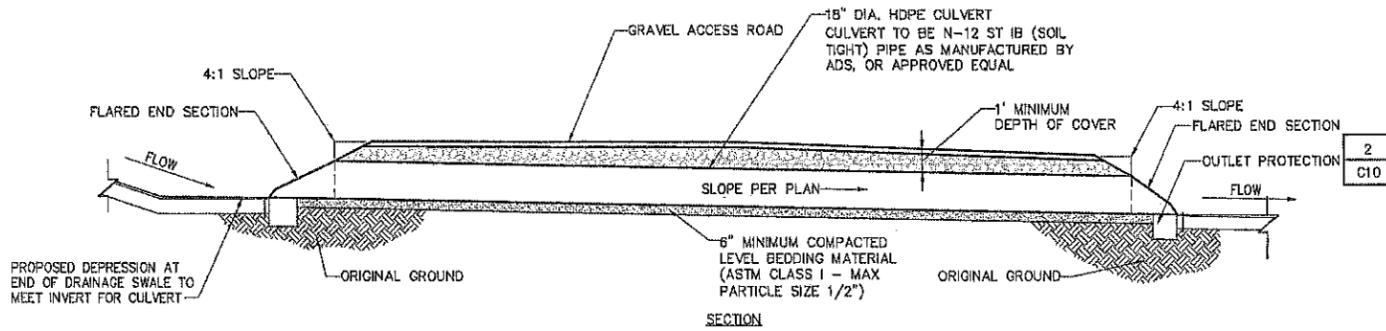
2 OUTLET PROTECTION
 C10 NO SCALE



- NOTE:
 1. INSTALL PER MANUFACTURERS RECOMMENDATIONS, SEE SHEETS C11-C13.



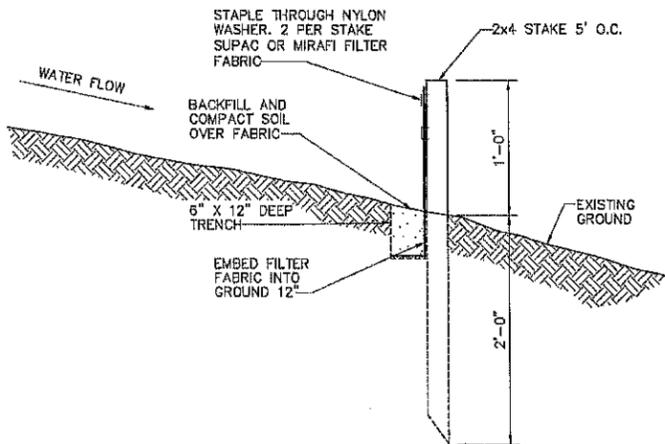
CROSS SECTION



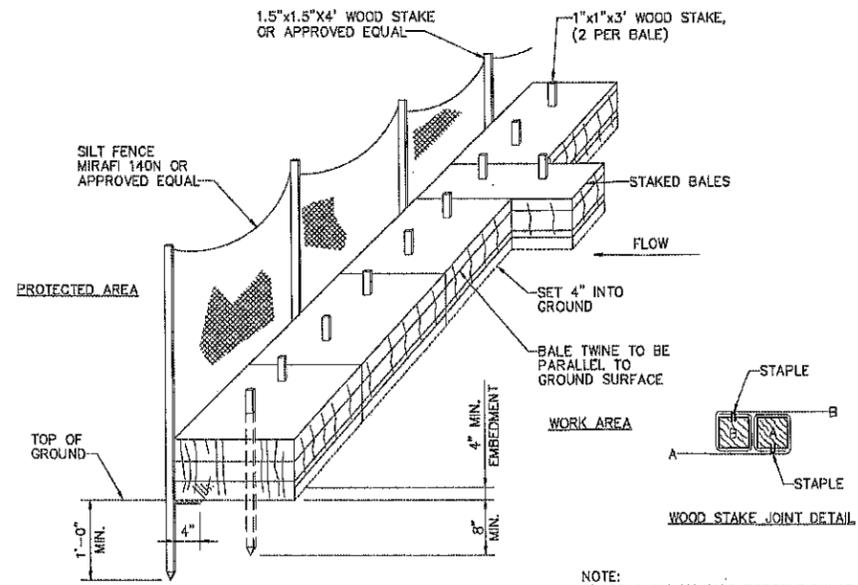
SECTION

3 TYPICAL CULVERT INSTALLATION
 C10 NO SCALE

- NOTE:
 1. THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR SILT FENCES.
 2. THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 12" INTO THE GROUND AND THE SOIL COMPACTED OVER THE EMBEDDED FABRIC.
 3. WOVEN WIRE FENCES SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES OR STAPLES.
 4. FILTER CLOTH SHALL BE FASTENED SECURELY TO THE WOVEN WIRE FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP, MID-SECTION, AND BOTTOM.
 5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN ONE ANOTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.
 6. FENCE POSTS SHALL BE A MINIMUM OF 36" LONG AND DRIVEN A MINIMUM OF 24" INTO THE GROUND. WOOD POSTS SHALL BE OF SOUND QUALITY HARDWOOD AND SHALL HAVE A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQUARE INCHES.
 7. MAINTENANCE SHALL BE PERFORMED AS NEEDED TO PREVENT BULGES IN THE SILT FENCE DUE TO DEPOSITION OF SEDIMENT.



4 SILT FENCE DETAIL
 C10 NO SCALE



5 SILT FENCE/HAY BALE BARRIER
 C10 NO SCALE

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 CHA
 2155 Silas Deane Highway, Suite 212 • Rocky Hill, CT 06067-2338
 Main: (860) 257-8957 • www.chacompanies.com
 CHA PROJECT NO:
 18301 - 1071 - 43000

NO.	DATE	DESCRIPTION	BY	CHKD BY	APP'D BY
0	11/13/13	D&M PLAN SUBMISSION	JPM	CHG	JPM

STATE OF CONNECTICUT
 JOHN P. SOBIECH
 No. 17827
 LICENSED PROFESSIONAL ENGINEER

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SITE ID:
 SR1252
 SITE NAME:
 BRIDGEWATER
 SITE ADDRESS:
 111 SECOND HILL ROAD
 BRIDGEWATER, CT
 06752
 LITCHFIELD COUNTY

SHEET TITLE
 SITE DETAILS

SHEET NUMBER
 C10

The W. S. M. CINGULAR WIRELESS PCS, LLC BRIDGEWATER, CT 06067-2338
 11/20/2013 9:19:21 AM Plotfile: 11/20/2013 12:36:53 PM User: jpm@cha.com

SITE PREPARATION

- ▶ Grade and compact area of TRM/HPTRM installation as directed and approved by Engineer. Subgrade shall be uniform and smooth. Remove all rocks, clods, vegetation or other objects so the installed mat will have direct contact with soil surface.
- ▶ Prepare seedbed by loosening the top 2-3 in (50-75 mm) minimum of soil.
- ▶ Incorporate amendments such as lime and fertilizer and/or wet the soil, if needed.
- ▶ Do not mulch areas where mat is to be placed.

SEEDING

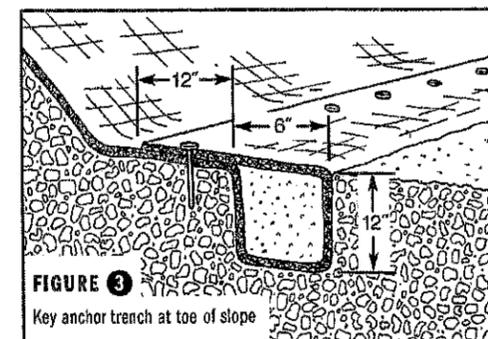
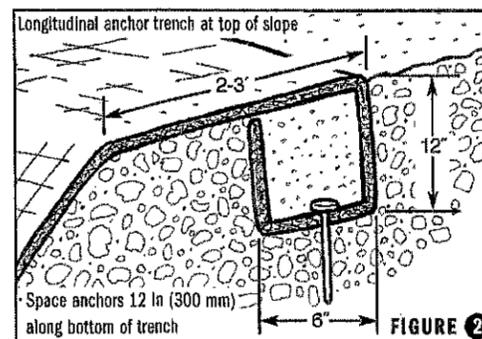
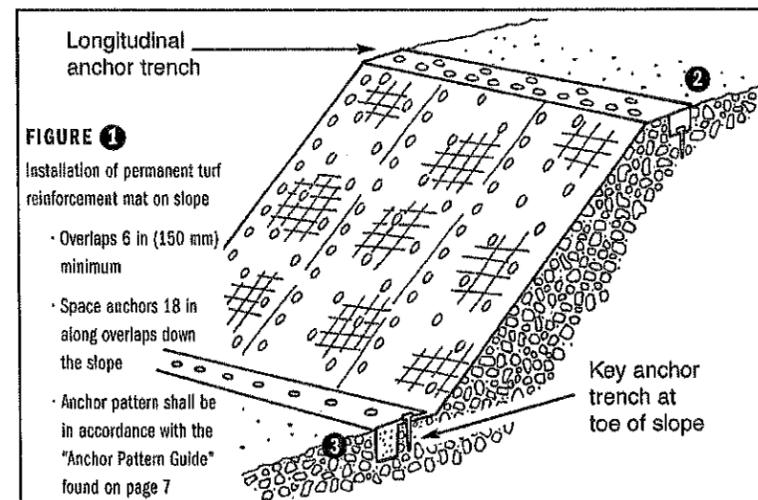
- ▶ Apply seed to soil surface before installing mat. Disturbed areas shall be reseeded.
- ▶ When soil filling, first install the mat, apply seed and then soil-fill per guidelines (see page 8).
- ▶ Consult project plans and/or specifications for seed types and application rates.

SOIL FILLING

- ▶ Soil filling is suggested for optimum performance.
- ▶ After seeding, spread and lightly rake 1/2-3/4 in (12-19 mm) minimum of fine site soil or topsoil into the mat and completely fill the voids using backside of rake or other flat tool.
- ▶ If equipment must operate on the mat, make sure it is of the rubber-tired type. No tracked equipment or sharp turns are allowed on the mat.
- ▶ Avoid any traffic over the mat if loose or wet soil conditions exist.
- ▶ Smooth soil-fill in order to just expose the top netting of matrix. Do not place excessive soil above the mat.
- ▶ Broadcast additional seed and install a Landlok® ECB above the soil-filled mat (if desired).
- ▶ Hydraulically-applied mulch or seed may be used as an alternate to soil-fill on select applications. Consult manufacturer's technical representative for more information.
- ▶ Consult manufacturer's technical representative or local distributor for installation assistance, particularly if unique conditions apply (sandy soils and infertile environments).

INSTALLATION ON STABLE SOIL SLOPES

- ▶ Excavate a 12 x 6 in (300 x 150 mm) minimum longitudinal anchor trench 2-3 ft (600-900 mm) over crest of slope (see Figure 2).
- ▶ Install top end of mat into trench and secure to bottom using suggested ground anchoring devices (see Tables 1 and 2 on page 7) spaced every 12 in (300 mm) minimum. Backfill and compact soil into trench (see Figure 2).
- ▶ Unroll mat down slope. Landlok® 1051 shall have the geotextile on bottom.
- ▶ Overlaps shall be 6 in (150 mm) minimum and anchored every 18 in (450 mm) minimum along the overlap. Secure using suggested ground anchoring devices shown in Table 1 for appropriate frequency and pattern. Overlaps are shingled away from prevailing winds (see Figure 1).
- ▶ Unroll mat in a manner to maintain direct contact with soil. Secure mat to ground surface using ground anchoring devices (see Table 1). Anchors shall be placed in accordance with the Anchor Pattern Guide on page 7.
- ▶ Excavate a 12 x 6 in (300 x 150 mm) key anchor trench at toe of slope (see Figure 3).
- ▶ Place bottom end of mat into key anchor trench at toe of slope and secure to bottom of trench using suggested ground anchoring devices (see Tables 1 and 2) spaced every 12 in (300 mm) minimum. Backfill and compact soil into trench (see Figure 3).
- ▶ If the potential for standing and/or flowing water exists at the toe of slope, the key anchor trench at the toe detail (see Figure 3) is not sufficient. Consult the project engineer for the appropriate detail.
- ▶ Irrigate as necessary to establish/maintain vegetation. Do not over-irrigate.



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CHA PROJECT NO:
18301 -- 1071 -- 43000

NO.	REVISION
1	11/13/13 D&M PLAN SUBMISSION
2	BY: JEM CHR: PAL APP'D: JPS

STATE OF CONNECTICUT
JOHN P. SOBIECH
No. 17827
LICENSED PROFESSIONAL ENGINEER

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SITE ID:
SR1252

SITE NAME:
BRIDGEWATER

SITE ADDRESS:
111 SECOND HILL ROAD
BRIDGEWATER, CT
06752
LITCHFIELD COUNTY

SHEET TITLE
SITE DETAILS

SHEET NUMBER
C11

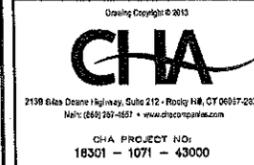
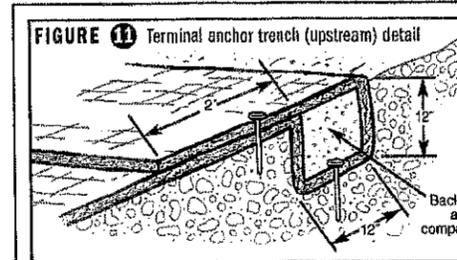
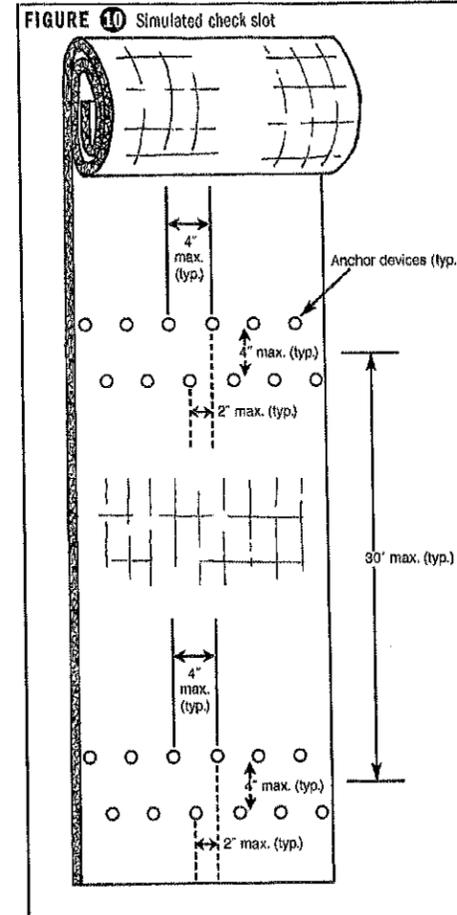
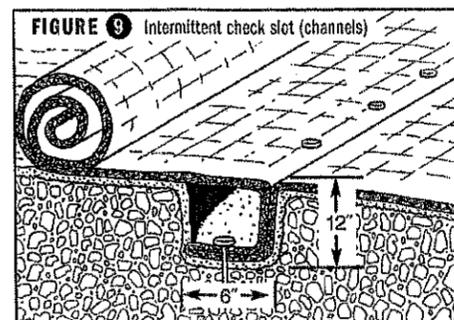
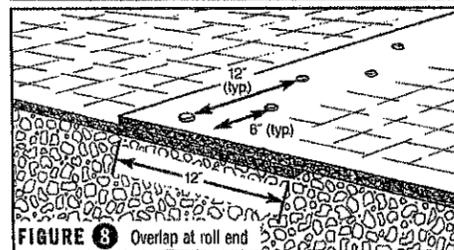
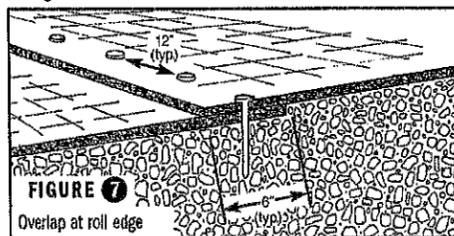
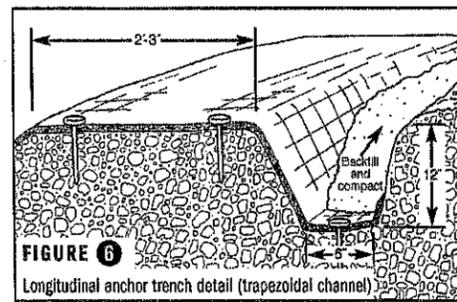
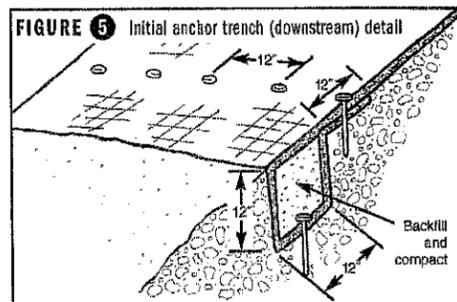
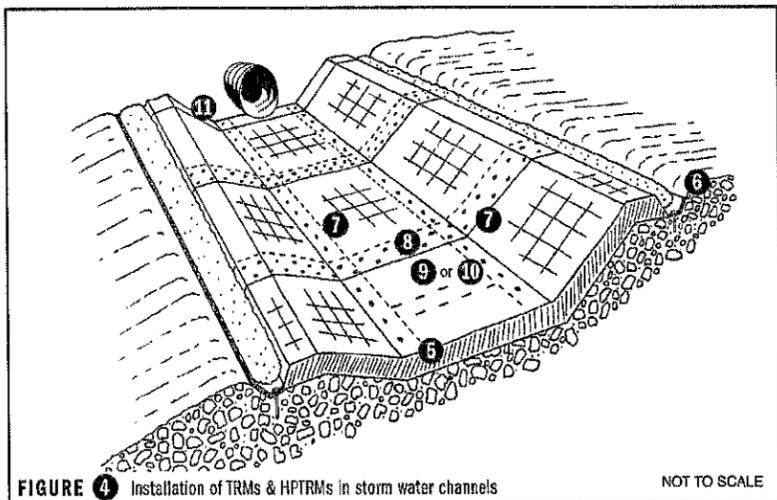
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INSTALLATION IN STORM WATER CHANNELS

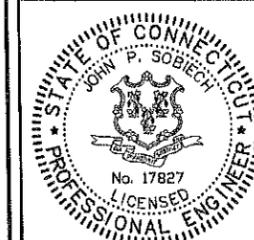
- ▶ Figure 4 shows general installation layout and details for TRMs and HPTRMs in storm water channels.
- ▶ Excavate an initial anchor trench 12 in (300 mm) minimum deep and 12 in (300 mm) minimum wide across the channel at downstream end of project (see Figure 5). Deeper initial anchor trench is needed in channels that have the potential for scour.
- ▶ Excavate longitudinal anchor trenches 12 in (300 mm) minimum deep and 6 in (150 mm) minimum wide along both sides of the installation to bury edges of mat (see Figure 6). The trench shall be located 2-3 ft (600-900 mm) over crest of slope.
- ▶ Place roll end into the initial anchor trench and secure with anchoring devices at 12 in (300 mm) minimum intervals (see Figure 5). Position adjacent rolls and secure in anchor trench in same manner. Backfill and compact soil into trench.
- ▶ Unroll mat in the upstream direction over the compacted trench.
- ▶ Continue installation as described above, overlapping adjacent rolls as follows:
 - Roll edge: 6 in (150 mm) minimum with upslope mat on top. Secure with one row of ground anchoring devices on 12 in (300 mm) minimum intervals (see Figure 7).
 - Roll end: 12 in (300 mm) minimum with upstream mat on top. Secure with two rows of ground anchoring devices staggered 12 in (300 mm) minimum apart on 12 in (300 mm) minimum intervals (see Figure 8).
- ▶ Fold and secure mat rolls snugly into intermittent check slots. Lay mat in the bottom and fold back against itself. Anchor through both layers of blanket or mat at 1 ft (300 mm) intervals then backfill and compact soil (Figure 9). Continue rolling upstream over the compacted slot to the next check slot or terminal anchor trench. Check slots are placed at 25 to 30 ft (7.6 to 9.1 m) intervals perpendicular to flow.

- ▶ An alternate method to the intermittent check slot is the simulated check slot. This method includes placing two staggered rows of anchors on 4 in (100 mm) centers at 30 ft (9.1 m) intervals (see Figure 10).
- ▶ Excavate terminal anchor trench 12 in wide x 12 in deep (300 x 300 mm) minimum across the channel at the upstream end of the project (see Figure 11). Deeper terminal anchor trench is needed in channels that have the potential for scour.
- ▶ Anchor, backfill and compact upstream end of mat in 12 x 12 in (300 x 300 mm) minimum terminal anchor trench (see Figure 11). Unroll mat in downstream direction over compacted trench with a minimum 2 ft (600 mm) lap. Secure with anchors in accordance with Figure 8.
- ▶ Secure mat using suggested ground anchoring devices (see Tables 1 and 2 on page 7) for appropriate frequency and pattern (see Anchor Pattern Guide on page 7).
- ▶ Seed and fill with soil for enhanced performance. See Soil Filling Section on page 8.
- ▶ When using Landlok® 1051, seed after installing mat and then fill with soil.
- ▶ Irrigate as necessary to establish/maintain vegetation. Do not over irrigate.

NOTE: If you encounter roll with factory overlap, install factory seam such that it shingles in the direction of the flow of water. Place anchoring devices in accordance with Figure 8 "Overlap at roll end" on page 5.



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NO.	11/13/13
BY	JDM
CHK. PAL.	
APP'D.	JRS



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 SITE NAME: BRIDGEWATER
 SITE ADDRESS: 111 SECOND HILL ROAD, BRIDGEWATER, CT 06752, LITCHFIELD COUNTY

SHEET TITLE: SITE DETAILS

SHEET NUMBER: C12

MAINTENANCE

All slopes, channels, banks and other transition structures shall be maintained to assure the expected design life of the reinforced vegetated system. Here are a few tips that should prove helpful:

► **Monitoring**

- Should be conducted semi-annually and after major storm events. This should include: observing the condition of the vegetation; testing the irrigation system; checking condition of all permanent erosion control systems; observing sediment and debris deposits that need removal.

► **Vegetation**

- Repair and maintenance of various types of vegetation shall be consistent with their original design intent, including:
 - Grass/Turf Areas: applications shall be maintained for adequate cover and height.
 - Mowing: grasses shall be mowed according to normal maintenance schedules as determined by local jurisdictions or maintenance agreements; operations shall not start until vegetation achieves a minimum height of 6 in (150 mm); mower blades shall be greater than 6 in (150 mm) above the mat.
 - Unvegetated Areas: shall be re-seeded and soil-filled (if applicable).

► **Sediment and Debris Deposits**

- Accumulation of sediment and debris can reduce the hydraulic capacity of channels, clog inlet and outlet structures and can damage existing vegetation. Sediment and debris removal is a vital part of system maintenance.
 - Removal: shall be done carefully to avoid damage. When excavation is within 12 in (300 mm) minimum of matting, removal shall be done by hand or with a visual "spotter." If equipment must operate on the mat, make sure it is of the rubber-tired type. No tracked equipment or sharp turns are allowed on the mat.
 - Alternatively, "stake chasers" or some other form of permanent visual markers can be utilized to provide a visual marker for maintenance activities.

► **Damaged Sections**

- Missing or damaged sections of the matting should be replaced per the installation guidelines.
 - Repairing Rips or Holes: these should be patched with identical matting material. First, carefully cut out the damaged section with a knife. Then replace and compact soil to the elevation of the surrounding subgrade and plant seed. Cut a piece of replacement material a minimum of 12 in (300 mm) larger than the rip or tear. Use ties to attach the replacement material to the existing material. At overlaps, the upstream and upslope material should be on top. Secure the replacement material with ground anchoring devices spaced every 6 in (150 mm) around the circumference of the repair and at the frequency and spacing shown in the Anchor Pattern Guide on page 7. Seed and soil fill replacement area.

SPECIAL TRANSITION GUIDELINES

► **Pipe Inlets/Outlets (HPTRMs Only)**

- Review the construction drawings and project specifications to evaluate the required area to be treated.
- Excavate an anchor trench 12 x 12 in (300 x 300 mm) minimum above the pipe to bury end of HPTRM roll. The trench shall be located a minimum 2-3 ft (600-900 mm) above the pipe inlet/outlet.
- Backfill and compact soil into trench.
- Cut HPTRM to meet project requirements, slope length and pipe diameter.
- Unroll HPTRM down the slope and secure around pipe circumference with ground anchoring devices spaced 6 in (150 mm) minimum. Also, the HPTRM can be secured around the pipe in a 12 x 12 in (300 x 300 mm) minimum trench filled with concrete slurry.

GROUND ANCHORING DEVICES

- Ground anchoring devices are used to secure the mat to the soil using the suggested anchor device (see Tables 1 and 2 on page 7) at a minimum frequency and pattern shown on the Anchor Pattern Guide on page 7.
- U-shaped wire staples or metal geotextile pins can be used to anchor mat to the ground surface. Wire staples should be a minimum thickness of 8 gauge (4.3 mm). Metal pins should be at least 0.20 in (5 mm) diameter steel with a 1 1/2 in (38 mm) steel washer at the head of the pin. Wire staples and metal pins should be driven flush to the soil surface. All anchors should be between 6-24 in (150-600 mm) long and have sufficient ground penetration to resist pullout. Longer anchors may be required for loose soils. Heavier metal stakes may be required in rocky soils.

TABLE 1: SUGGESTED GROUND ANCHORING DEVICE SELECTION*

APPLICATION	DEVICE TYPE/SPACING			
	6" (150mm)	12" (300mm)	18" (450mm)	24" (600mm)
PRODUCT				
LANDLOK® ECbs	●	●		
LANDLOK® TRMs		●	●	●
PYRAMAT®		●	●	●
APPLICATION				
SLOPES	●	●	●	●
BANKS			●	●
CHANNELS		●	●	●

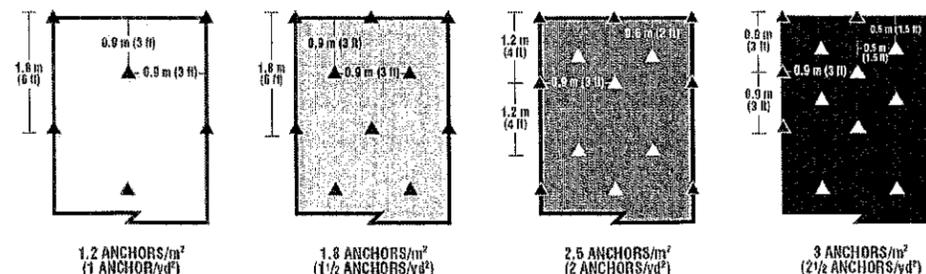
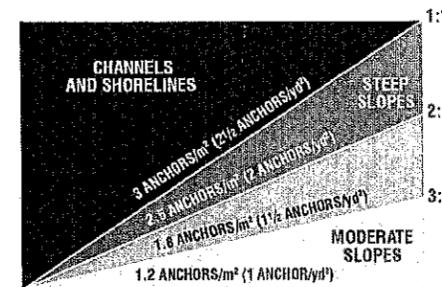
TABLE 2: SUGGESTED LENGTHS OF GROUND ANCHORING DEVICES*

SOIL TYPES	LENGTH			
	6" (150mm)	12" (300mm)	18" (450mm)	24" (600mm)
ROCKY	●			
CLAYEY	●	●		
SILTY		●	●	
SANDY			●	●

*The performance of ground anchoring devices is highly dependent on numerous site/project specific variables. It is the sole responsibility of the project engineer and/or contractor to select the appropriate anchor type and length. Anchoring shall be selected to hold the mat in intimate contact with the soil subgrade and resist pullout in accordance with the project's design intent.

ANCHOR PATTERN GUIDE

► The shaded areas in the diagram provide anchor suggestions based on slope gradient and/or anticipated flow conditions. When the correct number of anchors has been determined, refer to the four illustrations below to establish anchor pattern. Increased anchoring may be required depending upon site conditions.



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CHA PROJECT NO.
16301 -- 1071 -- 43000

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	BY: JDM	CHK: PAL
		APP'D: JFS

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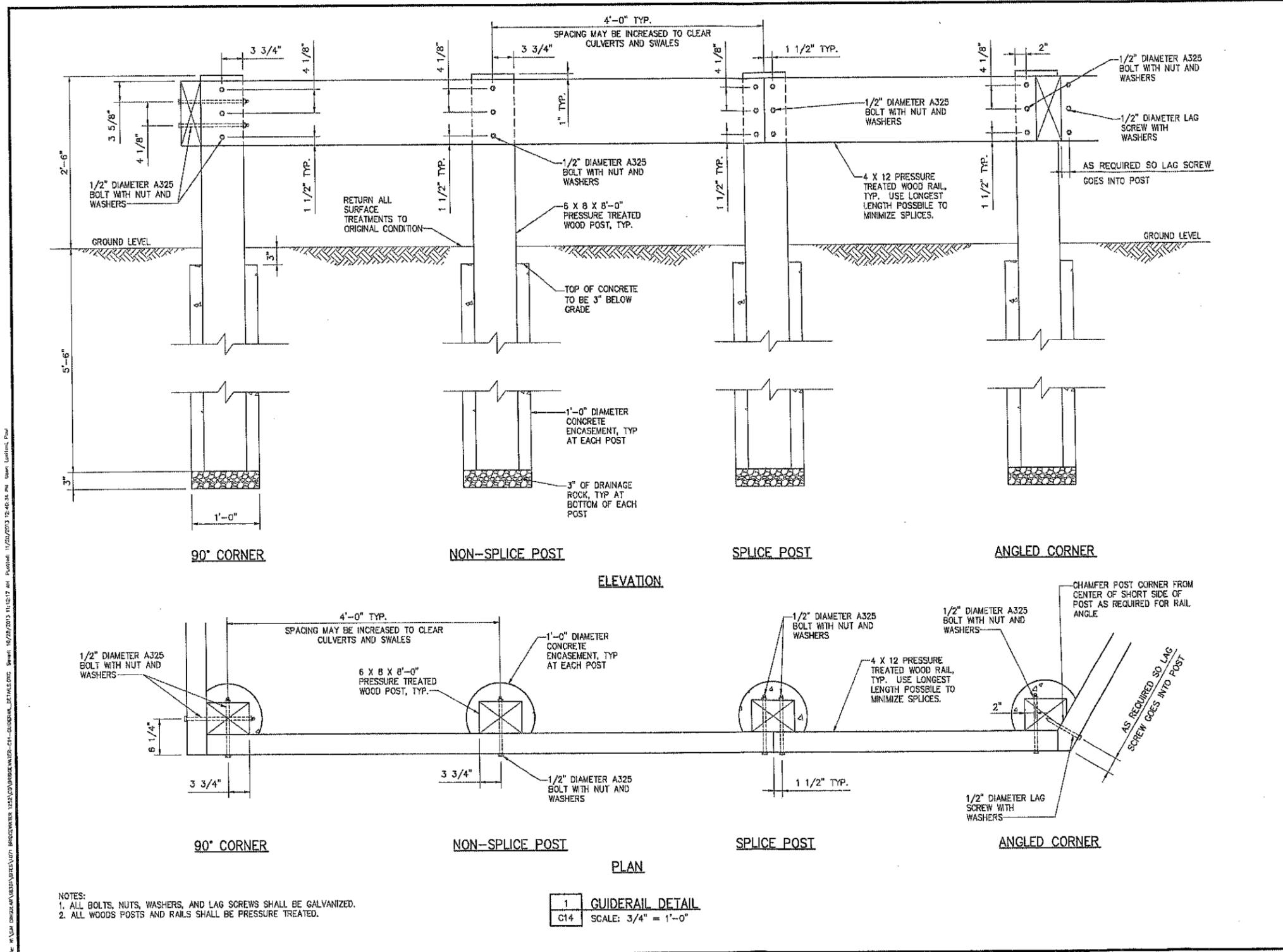
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SHEET TITLE
SITE DETAILS

SHEET NUMBER
C13

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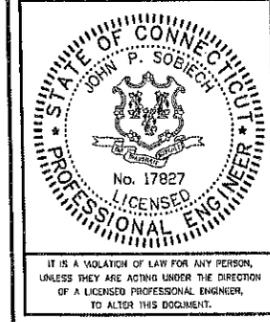


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NO.	DESCRIPTION	DATE
1	SUBMITTAL	
2	11/13/13	D&M PLAN SUBMISSION
	BY: JOM	CHK: PAL
		APP'D: JFS

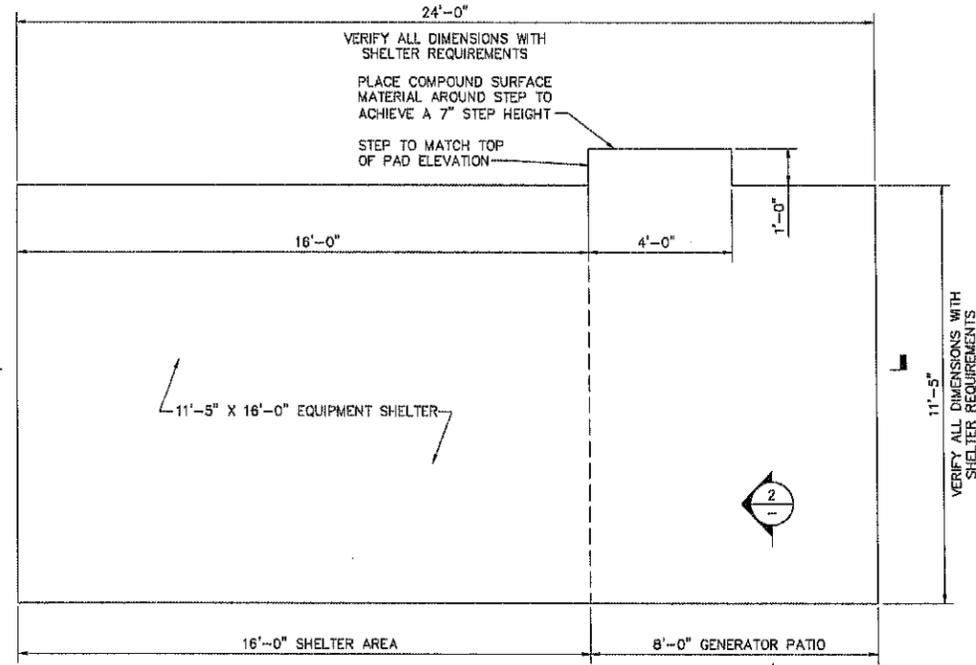


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BRIDGEWATER, CT
06752
LITCHFIELD COUNTY

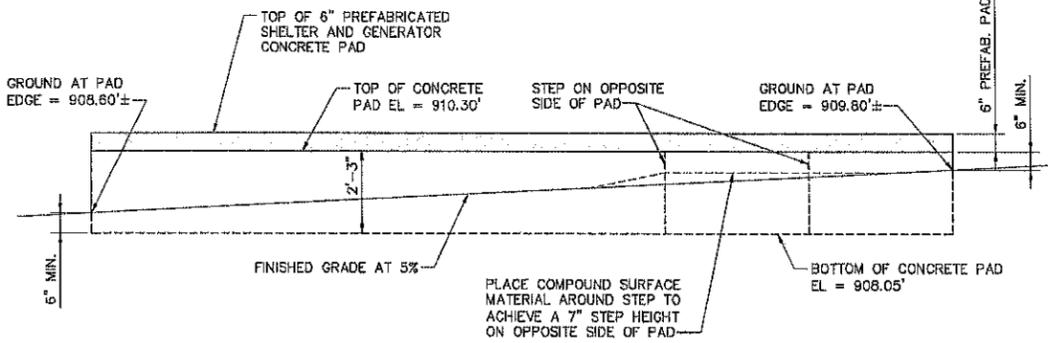
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GUIDERAIL DETAILS

SHEET NUMBER
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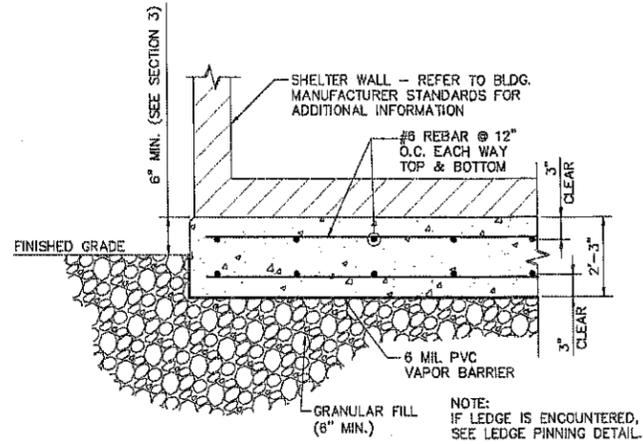
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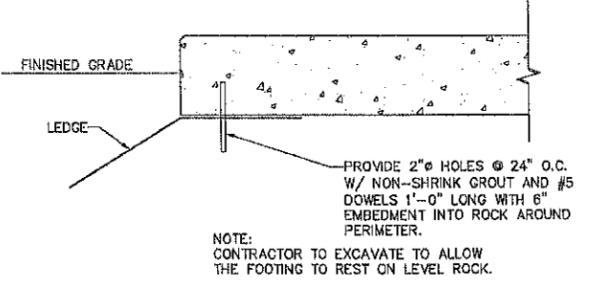
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C16 NO SCALE



3 FOUNDATION SECTION
C16



PAD FOUNDATION SECTION



PAD LEDGE PINNING DETAIL

2 PAD FOUNDATION
C16


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0	11/13/13 D&B PLAN SUBMISSION
	BY: JDM
	CHK: PJA
	APP: DJP

STATE OF CONNECTICUT

 JOHN P. SOBIECH
 No. 17827
 LICENSED PROFESSIONAL ENGINEER

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 BRIDGEWATER, CT
 06752
 LITCHFIELD COUNTY

SHEET TITLE
STRUCTURAL DETAILS

SHEET NUMBER
C16

GENERAL NOTES

1. 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.
2. DO NOT CHANGE SIZE NOR SPACING OF STRUCTURAL ELEMENTS.
3. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
4. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
5. BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
6. DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
7. 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 ACTION SHALL REQUIRE APPROVAL.
8. EACH CONTRACTOR SHALL COOPERATE WITH THE OWNER'S REPRESENTATIVE, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
9. CONTRACTOR TO FOLLOW ALL STATE, LOCAL AND NATIONAL CODES AS APPLICABLE.

DESIGN DATA

LIVE LOADS: PER INTERNATIONAL BUILDING CODE
 WIND LOADS: PER INTERNATIONAL BUILDING CODE & TIA/EIA-222-F
 ICE LOADS: 1/2" RADIAL ON ALL COMPONENTS & CABLE
 SNOW LOADS: PER INTERNATIONAL BUILDING CODE
 SEISMIC LOADS: PER INTERNATIONAL BUILDING CODE

ANTENNA SUPPORT BRACKET NOTES

1. DESIGN RESPONSIBILITY OF ANTENNA MOUNTING BRACKETS AND POLES AND ALL COMPONENTS THERE OF AND ATTACHMENT THERE TO SHALL BE THE RESPONSIBILITY OF THE MANUFACTURER. MFR. SHALL PROVIDE TO THE ENGINEER FOR APPROVAL, DRAWINGS DETAILING ALL COMPONENTS OF THE ASSEMBLY, INCLUDING CONNECTIONS, DESIGN LOADS, AND ALL OTHER PERTINENT DATA. ALL SUBMISSIONS SHALL BEAR THE STAMP AND SIGNATURE OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE THE WORK IS BEING PERFORMED.
2. BRACKETS SHALL BE DESIGNED TO SUPPORT CURRENT AND FUTURE PANEL ANTENNAS AND COAXIAL CABLES AS SHOWN.

STRUCTURAL STEEL NOTES

1. STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
2. ALL INTERIOR STRUCTURAL STEEL USED SHALL BE, WHEN DELIVERED, FINISHED WITH ONE COAT FABRICATOR'S NON-LEAD, RED OXIDE PRIMER. PRIMING SHALL BE PERFORMED AFTER SHOP FABRICATION TO THE GREATEST EXTENT POSSIBLE. ALL DINGS, SCRAPES, MARKS, AND WELDS IN THE PRIMED AREAS SHALL BE REPAIRED BY FIELD TOUCHUP PRIOR TO COMPLETION OF THE WORK.
3. ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH SPECIFICATION ASTM A123 UNLESS OTHERWISE NOTED. GALVANIZING SHALL BE PERFORMED AFTER SHOP FABRICATION TO THE GREATEST EXTENT POSSIBLE. ALL DINGS, SCRAPES, MARKS, AND WELDS IN THE GALVANIZED AREAS SHALL BE REPAIRED BY FIELD TOUCHUP PRIOR TO COMPLETION OF THE WORK USING ZRC COLD GALVANIZING COMPOUND OR APPROVED EQUAL.
4. DO NOT PLACE HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
5. CONNECTIONS:
 - A. ALL WELDING SHALL BE DONE BY A CERTIFIED WELDER USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND AWS D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 9TH EDITION. AT THE COMPLETION OF WELDING, ALL DAMAGE TO GALVANIZED COATING SHALL BE REPAIRED.
 - B. BOLTED CONNECTIONS SHALL USE BEARING TYPE GALVANIZED ASTM A325 BOLTS (3/4" DIA) AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
 - C. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. GALVANIZED ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.
 - D. CONNECTION DESIGN BY FABRICATOR WILL BE SUBJECT TO REVIEW AND APPROVAL BY ENGINEER.
 - E. ALL BOLTED CONNECTIONS SHALL HAVE A FLAT WASHER & NUT TIGHTENED TO AISC "SNUGTIGHT" CRITERIA, UNLESS NOTED OTHERWISE.

STRUCTURAL STEEL NOTES (CONT.)

6. STRUCTURAL STEEL GRATING SHALL BE 1 1/2" X 3/16" GALVANIZED STEEL BAR GRATING (KG BORDEN TYPE-WB OR EQUAL) ATTACHED @ 1'-6" o.c. WITH GRATING CLAMPS, UNLESS OTHERWISE NOTED.
7. NEW STRUCTURAL STEEL LOCATED WITHIN A BUILDING OR ENCLOSURE SHALL BE FIRE-RATED PER LOCAL CODE.
8. REINFORCING BARS: ASTM A625, GRADE 60 DEFORMED BARS.
9. WELDED WIRE MESH: TO ASTM A185. PROVIDE IN FLAT SHEETS ONLY. VERTICAL PLACEMENT TOLERANCE TO BE 3/8 INCH.
10. THE CONTRACTOR SHALL FABRICATE ALL REINFORCEMENT AND FURNISH ALL ACCESSORIES, BOLSTERS, CHAIRS, SPACER BARS AND SUPPORTS NECESSARY TO SECURE THE REINFORCEMENT UNLESS INDICATED OTHERWISE.
11. IN SLABS WHERE REINFORCING IS SHOWN IN ONE DIRECTION ONLY, PROVIDE INDICATED TEMPERATURE REINFORCEMENT AT 90 DEGREES TO PRINCIPAL REINFORCEMENT.
12. LAP SPLICES:
 - a) CONCRETE: PROVIDE CLASS B TENSION LAP SPLICES U.N.O.
 - b) WELDED WIRE MESH: MINIMUM LAP 8 INCHES, MEASURED BETWEEN OUTERMOST CROSS-WIRES OF EACH SHEET.

CONCRETE NOTES

1. DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING APPLICABLE CODES: ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"; ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
2. MIX DESIGN SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO PLACING CONCRETE. PREPARE AND SUBMIT MIX DESIGNS FOR EACH TYPE AND STRENGTH OF CONCRETE IN ACCORDANCE WITH ACI 211, "PROPORTIONING CONCRETE MIXTURES, AND ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE".
3. CONCRETE (EXCEPT TREMIE MIX) SHALL BE NORMAL WEIGHT, 6% AIR ENTRAINED ($\pm 1.5\%$) WITH A MAXIMUM 4" SLUMP, AND HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI UNLESS OTHERWISE NOTED.
4. MAXIMUM AGGREGATE SIZE SHALL BE 3/4".
5. THE FOLLOWING MATERIALS SHALL BE USED:

PORTLAND CEMENT:	ASTM C 150, TYPE I
REINFORCEMENT:	ASTM A 615, GRADE 60
NORMAL WEIGHT AGGREGATE:	ASTM C 33
WATER:	POTABLE
ADMIXTURES:	NON-CHLORIDE CONTAINING

6. REINFORCING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 315.
7. 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. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
8. 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 OR NOT CAST AGAINST THE GROUND:	
SLAB AND WALL	3/4 IN.
BEAMS AND COLUMNS	1 1/2 IN.
9. A CHAMFER 1" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
10. 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.
11. CURING COMPOUNDS SHALL CONFORM TO ASTM C-309.
12. ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED IN ACI-301.
13. DO NOT WELD OR TACKWELD REINFORCING STEEL.
14. 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.

CONCRETE NOTES (CONT.)

15. LOCATE ADDITIONAL CONSTRUCTION JOINTS REQUIRED TO FACILITATE CONSTRUCTION AS ACCEPTABLE TO ENGINEER. PLACE REINFORCEMENT CONTINUOUSLY THROUGH JOINT.
16. REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED.
17. PLACE CONCRETE IN A UNIFORM MANNER TO PREVENT THE FORMATION OF COLD JOINTS AND OTHER PLANES OF WEAKNESS. VIBRATE THE CONCRETE TO FULLY EMBED REINFORCING. DO NOT USE VIBRATORS TO TRANSPORT CONCRETE THROUGH CHUTES OR FORMWORK.
18. DO NOT PLACE CONCRETE IN WATER, ICE, OR ON FROZEN GROUND.
19. DO NOT ALLOW CONCRETE SUBBASE TO FREEZE DURING CONCRETE CURING AND SETTING PERIOD, OR FOR A MINIMUM OF 14 DAYS AFTER PLACEMENT.
20. 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.
21. READY-MIX CONCRETE SUPPLIERS TO BE NRMCA-CERTIFIED.
22. NO ADDITIONAL WATER SHALL BE ADDED TO THE CONCRETE AT THE JOB SITE.
23. HOT WEATHER CONCRETE: COMPLY WITH ACI 305R.
24. NO PLASTIZISOR TO BE USED IN TREMIE MIX.

EXCAVATIONS/FOUNDATION

1. FOUNDATION EXCAVATION SHALL BE HAND-TRIMMED TO REMOVE LOOSE MATERIALS.
2. DO NOT PLACE FOOTINGS IN WATER OR ON FROZEN GROUND.
3. SOIL BEARING SURFACES, PREVIOUSLY ACCEPTED BY GEOTECHNICAL ENGINEER, WHICH ARE ALLOWED TO BECOME SATURATED, FROZEN OR DISTURBED SHALL BE REWORKED TO SATISFACTION OF GEOTECHNICAL ENGINEER.
4. DO NOT ALLOW GROUND BENEATH FOOTINGS TO FREEZE.
5. ALL STRUCTURAL BACKFILL AND SUBBASE UNDER SLABS SHALL BE SELECT STRUCTURAL FILL MEETING THE GRADATION AND SOUNDNESS REQUIREMENTS IN ACCORDANCE WITH THE FOLLOWING GRADATION:
 - A. GRADATION. THE MATERIAL SHALL HAVE THE FOLLOWING GRADATION:

SEIVE SIZE	PERCENT PASSING BY WEIGHT
4 INCH	100
NO. 40	0 TO 70
NO. 200	0 TO 15
 - B. MATERIALS SHALL BE SUBSTANTIALLY FREE OF SHALE OR OTHER SOFT, POOR DURABILITY PARTICLES. IF TESTING IS ELECTED BY OWNER, MATERIAL WITH A MAGNESIUM SULFATE SOUNDNESS LOSS EXCEEDING 30% WILL BE REJECTED.
6. COMPACT TO 95% STANDARD PROCTOR DENSITY PER ASTM D-698.
7. SUBGRADE BELOW SLAB-ON-GRADE SHALL BE REVIEWED AND ACCEPTED BY GEOTECHNICAL ENGINEER BEFORE CONCRETE SLAB PLACEMENT.
8. ALL LOOSE AND/OR ORGANIC MATERIAL SHALL BE REMOVED PRIOR TO PREPARATION OF THE AREA FOR PLACEMENT OF STRUCTURAL BACKFILL. OVERALL PLAN AREA OF WORK SHALL EXTEND 3'-0" MINIMUM BEYOND THE FINAL DIMENSIONS.
9. SCARIFY THE EXISTING SOILS TO A DEPTH OF 8" AND RE-COMPACT USING A PLATE TAMPER. ANY SOFT AREAS SHALL BE OVEREXCAVATED 12" AND BACKFILLED WITH MATERIALS AND COMPACTION REQUIREMENTS SHOWN ON THE DRAWINGS.
10. PLACEMENT AND COMPACTION OF STRUCTURAL BACKFILL AND SUBBASE SHALL BE DONE IN 8" LIFTS. EXCAVATE FOR THE FOOTING EDGE AS SHOWN ON THE DRAWINGS.
11. CONTRACTOR TO GRADE SITE LEVEL WITH EXISTING, TWO FEET BEYOND PROPOSED EQUIPMENT PAD FOOTPRINT, THEN TAPER TO EXISTING GRADE IF REQUIRED AT A MAXIMUM OF 3:1 SLOPE.

DESIGN NOTES

MATERIALS:	
STRUCTURAL STEEL	A572 GRADE 50
ANGLES AND PLATES	A36
RECTANGULAR STRUCTURAL TUBING	A500 GRADE B (46 KSI)
STANDARD PIPE	A501 OR A53 GRADE B
HIGH STRENGTH BOLTS	A325 N OR 5C CLASS A
ANCHOR BOLTS	A307
WELDING ELECTRODES	E70XX
CONCRETE (28 DAYS):	
FOOTINGS	4000 PSI
SLAB-ON-GRADE	4000 PSI
ALL OTHER CONCRETE	3000 PSI
REINFORCING STEEL	A615 GRADE 60
WELDED WIRE FABRIC	A185
HEADED STUDS	A108



NEW CINGULAR WIRELESS PCS, LLC
 500 ENTERPRISE DRIVE
 ROCKY HILL, CT 06067



22 KEEWAYDIN DRIVE
 SALEM, NH 03079

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CHA PROJECT NO:
 18301 - 1071 - 43000

NO.	SUBMITTAL
0	11/13/13 D&M PLAN SUBMISSION
	BY: JDU CHK: PAL APP'D: JPS



STATE OF CONNECTICUT
 JOHN P. SOBIECH
 No. 17827
 LICENSED PROFESSIONAL ENGINEER

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SITE ID:
 SR1252
 SITE NAME:
 BRIDGEWATER
 SITE ADDRESS:
 111 SECOND HILL ROAD
 BRIDGEWATER, CT
 06752
 LITCHFIELD COUNTY

SHEET TITLE
 STRUCTURAL NOTES

SHEET NUMBER
 C17

File: R:\New\CONCRETE\ANTENNA SUPPORT BRACKET.dwg Date: 11/13/13 11:16:34 AM Plot Date: 11/20/2013 12:40:45 PM User: Lashon, Rob