

280 Trumbull Street  
Hartford, CT 06103-3597  
Main (860) 275-8200  
Fax (860) 275-8299  
kbaldwin@rc.com  
Direct (860) 275-8345

Also admitted in Massachusetts

November 13, 2013

*Via Hand Delivery*

Melanie A. Bachman  
Acting Executive Director  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

Re: **Docket No. 438 – Application Of Cellco Partnership d/b/a Verizon Wireless For A Certificate Of Environmental Compatibility And Public Need For The Construction, Maintenance And Operation Of A Wireless Telecommunications Facility In Voluntown, Connecticut – Development and Management Plan**

Dear Ms. Bachman:

Enclosed please find the fifteen (15) copies of the final Development and Management (“D&M”) Plan for the approved telecommunications facility at 53 Gallup Road in Voluntown, Connecticut. Cellco Partnership d/b/a Verizon Wireless (“Cellco”) is filing, and will be seeking Siting Council (“Council”) approval for the D&M Plan in two parts. In this initial filing, Cellco seeks Council approval of the development plans only due to the concerns for potential construction impacts on two bat species that may nest in the trees in this area. To eliminate these potential construction impacts, Cellco has imposed on itself a seasonal restriction on the site/tree clearing activity and plans to clear the trees and do some limited site grading activity before April 1, 2014.

Work related to the geotechnical survey, the tower foundation design and tower design is underway and will be completed shortly. Once that information is available we will submit the second part of the Docket No. 438 D&M Plan for review and approval. Construction of the tower and foundation and related compound improvements will not commence until late Spring of 2014.



*Law Offices*

BOSTON

PROVIDENCE

HARTFORD

NEW LONDON

STAMFORD

WHITE PLAINS

NEW YORK CITY

ALBANY

SARASOTA

[www.rc.com](http://www.rc.com)

12557395-v1

# ROBINSON & COLE<sup>LLP</sup>

Melanie A. Bachman  
November 13, 2013  
Page 2

Thank you in advance for your cooperation. If you have any questions or need any additional information regarding this D&M Plan submission please do not hesitate to contact me.

Sincerely,



Kenneth C. Baldwin

KCB/kmd  
Enclosures  
Copy to:  
Sandy M. Carter



# Cellco Partnership

d.b.a. **verizon** wireless

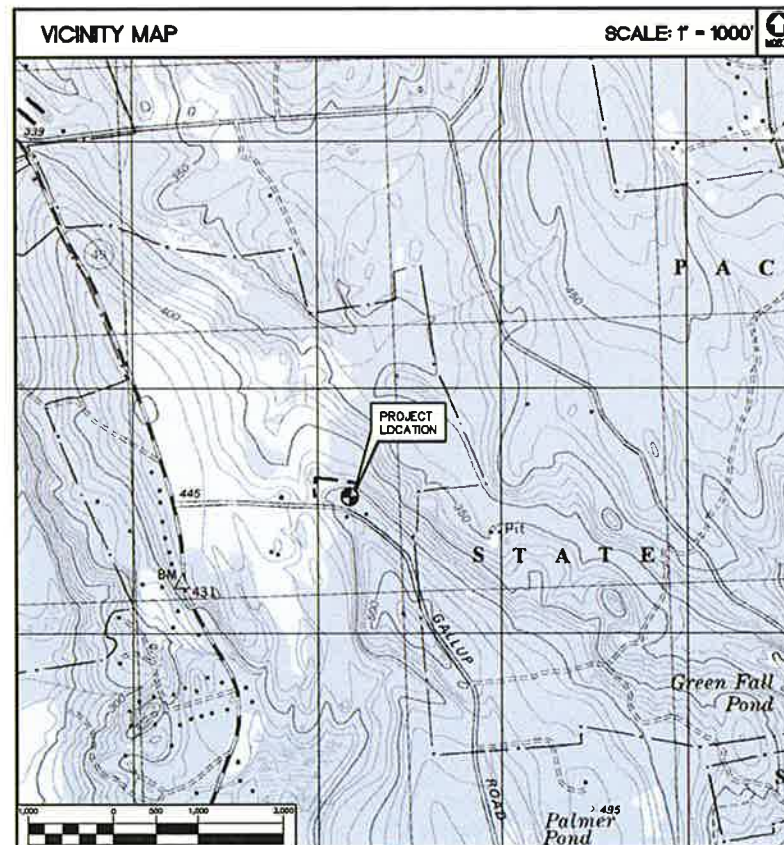
## WIRELESS COMMUNICATIONS FACILITY DEVELOPMENT AND MANAGEMENT PLAN

PALMER POND  
53 GALLUP ROAD  
VOLUNTOWN, CT 06384

SITE DIRECTIONS		
FROM:	TO:	
99 EAST RIVER DRIVE EAST HARTFORD, CONNECTICUT	53 GALLUP ROAD VOLUNTOWN, CONNECTICUT	
1. Head Southwest on E RIVER DR toward PITKIN ST		0.9 mi.
2. Turn RIGHT merge onto CT-2 E toward NETWORK		35.9 mi.
3. Take exit 28N to merge onto I-395 N toward PROVIDENCE		8.2 mi.
4. Take exit 85 for CT-184 toward CT-138/PRESTON CITY/PACHAUG		0.2 mi.
5. Continue straight		0.4 mi.
6. Turn RIGHT at CT-138 E/VOLUNTOWN RD		6.0 mi.
7. Turn RIGHT toward CT-165 W/CT-49 S/BEACH DR/SHETUCKET TURNPIKE		118 ft.
8. Turn RIGHT at CT-165 W/CT-49 S/BEACH DR/SHETUCKET TURNPIKE		187 ft.
9. Take the 1st LEFT onto CT-49 S/PENDLETON HILL RD		2.9 mi.
10. Turn LEFT at GALLUP RD. Destination will be on the LEFT		0.3 mi.

GENERAL NOTES
1. PROPOSED ANTENNA LOCATIONS AND HEIGHTS PROVIDED BY CELCO PARTNERSHIP.

SITE INFORMATION
THE SCOPE OF WORK SHALL INCLUDE:
1. THE CONSTRUCTION OF A 50'X52' FENCED WIRELESS COMMUNICATIONS COMPOUND WITHIN A 100'X100' LEASE AREA.
2. A TOTAL OF (12) DIRECTIONAL PANEL ANTENNAS ARE PROPOSED TO BE MOUNTED AT A CENTERLINE ELEVATION OF 150'-0"± ASL ON A 150'-0"± PROPOSED STEEL MONOPOLE TOWER.
3. TOTAL ACCESS DRIVE LENGTH IS 30'± OFF OF GALLUP ROAD VIA PROPOSED 12' WIDE GRAVEL ACCESS DRIVE.
4. POWER AND TELCO UTILITIES SHALL BE ROUTED UNDERGROUND FROM EXISTING RESPECTIVE DEMARCS TO THE PROPOSED UTILITY BACKBOARD LOCATED ADJACENT TO THE PROPOSED FENCED COMPOUND. FINAL DEMARC LOCATION AND UTILITY ROUTING TO PROPOSED BACKBOARD WILL BE VERIFIED/DETERMINED BY LOCAL UTILITY COMPANIES. UTILITIES WILL BE ROUTED UNDERGROUND FROM UTILITY BACKBOARD TO THE PROPOSED NOMINAL 12'X30' WIRELESS EQUIPMENT SHELTER LOCATED WITHIN FENCED COMPOUND AREA.
5. THE PROPOSED WIRELESS FACILITY INSTALLATION WILL BE DESIGNED IN ACCORDANCE WITH THE 2003 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2009 CONNECTICUT SUPPLEMENT.
6. THERE WILL NOT BE ANY LIGHTING UNLESS REQUIRED BY THE FCC OR THE FAA.
7. THERE WILL NOT BE ANY SIGNS OR ADVERTISING ON THE ANTENNAS OR EQUIPMENT.



PROJECT SUMMARY	
SITE NAME:	PALMER POND
SITE ADDRESS:	53 GALLUP ROAD VOLUNTOWN, CONNECTICUT 06384
PROPERTY OWNER:	BENJAMIN GALLUP & VANNER BYRON PO BOX 133 VOLUNTOWN, CONNECTICUT
LESSEE/TENANT:	CELCO PARTNERSHIP d.b.a. VERIZON WIRELESS 99 EAST RIVER DRIVE EAST HARTFORD, CT 06108
CONTACT PERSON:	SANDY CARTER CELCO PARTNERSHIP d.b.a. VERIZON WIRELESS 99 EAST RIVER DRIVE EAST HARTFORD, CT 06108
TOWER COORDINATES:	LATITUDE 41°-32'-12.140" LONGITUDE 71°-49'-45.695" PROPOSED GROUND ELEVATION: 462.0'± A.M.S.L. COORDINATES AND GROUND ELEVATION BASED ON FAA 1-A SURVEY CERTIFICATION AS PREPARED FOR VERIZON WIRELESS, BY MARTINEX COUCH AND ASSOCIATES DATED NOVEMBER 6, 2013

SHEET INDEX		
SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	1
C-1.1	SITE PLAN	1
C-1.2	SITE UTILITY PLAN	1
C-2	COMPOUND PLAN AND ELEVATION	1
C-3	SITE CONSTRUCTION, S&E CONTROL NOTES & DETAILS	1
C-4	SITE DETAILS	1
C-5	SITE DETAILS AND ENVIRONMENTAL NOTES	1
C-6	SITE DETAILS AND SHELTER ELEVATIONS	1
C-7	SHELTER FOUND. PLAN, DETAILS AND NOTES	1



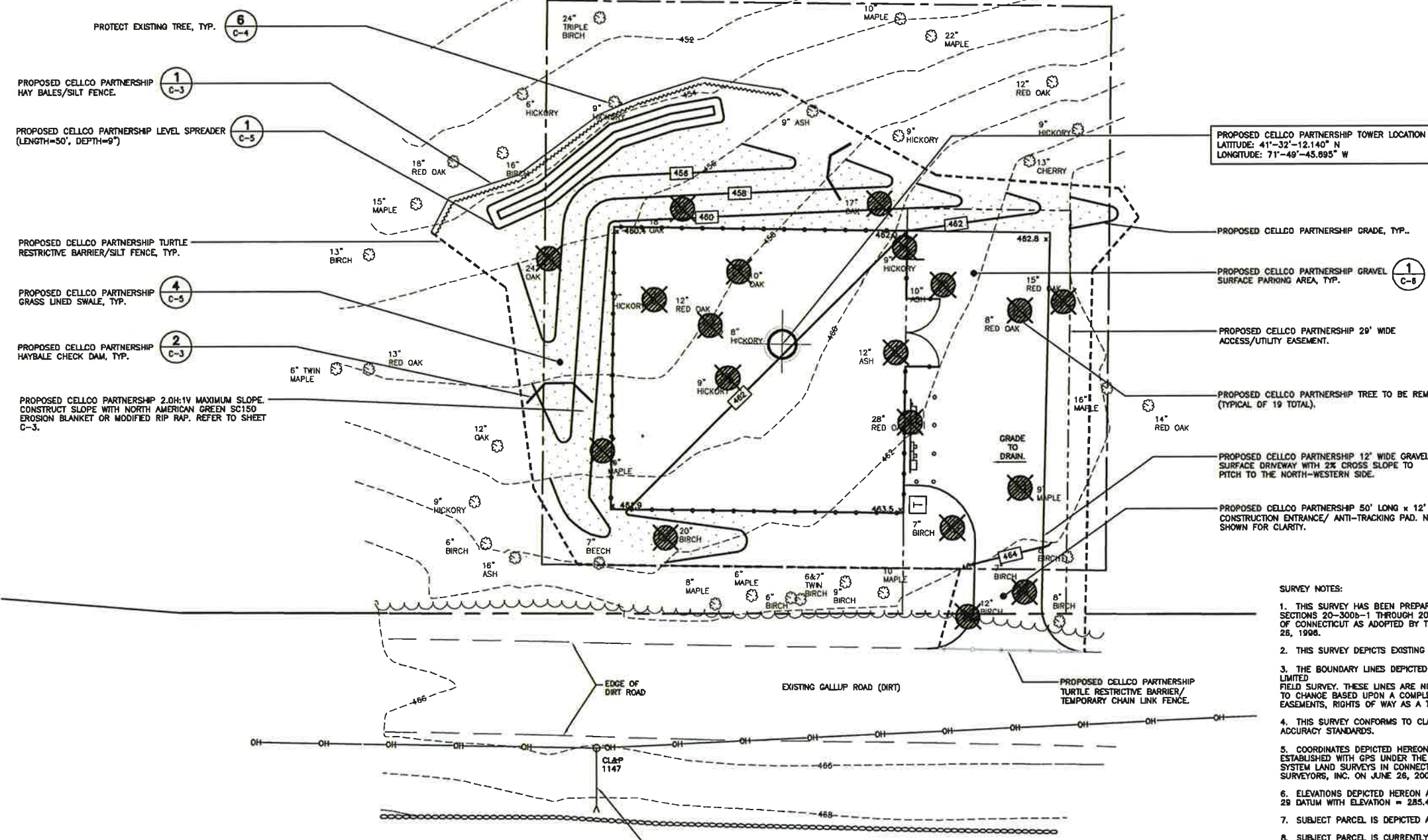
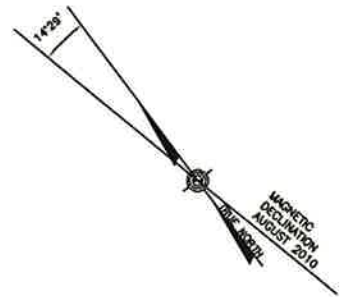
<p>VERIZON WIRELESS WIRELESS COMMUNICATIONS FACILITY <b>PALMER POND</b> GALLUP FARM 53 GALLUP ROAD VOLUNTOWN, CT 06384</p>	<p>DATE: 10/11/13 SCALE: AS NOTED JOB NO. 10093</p>	<p>TITLE SHEET</p>	<p>T-1</p>
--	---	--------------------	------------

REV.	DATE	PREPARED BY	CHECKED BY	DESCRIPTION
0	10/11/13	HR	HR	DATE PLANS - ISSUED FOR CLIENT REVIEW
1	10/17/13	HR	HR	DATE PLANS - ISSUED FOR CLIENT REVIEW

N/F  
BENJAMIN AND BYRON GALLUP  
53 GALLUP ROAD  
VOL. 25 P. 195  
M 14 L 4

SYMBOLS LEGEND	
---	PROPERTY LINE
---	EASEMENT LINE (PROPOSED)
---	DRIVE (EXISTING)
---	ACCESS DRIVE (PROPOSED)
---	LEASE LINE (PROPOSED)
---	CONTOUR LINE
850	GRADING LINE
○	UTILITY POLE
○	EXISTING DECIDUOUS TREE
★	EXISTING CONIFEROUS TREE
○	EXISTING DECIDUOUS TREE TO BE REMOVED
★	EXISTING CONIFEROUS TREE TO BE REMOVED
○	EXISTING DECIDUOUS TREE TO BE PROTECTED DURING CONSTRUCTION
---	SILTATION FENCE/ HAYBALES/ SILTATION FENCE "SANDWICH"
---	SILT FENCE-EROSION & SEDIMENTATION CONTROL
---	FENCE LINE
X	SPOT ELEVATION (PROPOSED)
---	LEASE AREA

ESTIMATED TREE REMOVAL SUMMARY	
TREES PROPOSED TO BE REMOVED IN LOCATION ALONG PROPOSED CELCO PARTNERSHIP 20' WIDE ACCESS EASEMENT	= 8
TREES PROPOSED TO BE REMOVED WITHIN AND AROUND THE PROPOSED CELCO PARTNERSHIP LEASE AREA	= 11
<b>TOTAL TREES PROPOSED TO BE REMOVED</b>	<b>= 19</b>



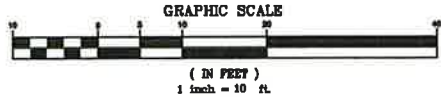
- SURVEY NOTES:**
- THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1998.
  - THIS SURVEY DEPICTS EXISTING CONDITIONS FOR A PROPOSED TELECOMMUNICATIONS SITE.
  - THE BOUNDARY LINES DEPICTED (IF ANY) HEREON ARE COMPILED FROM OTHER MAPS, DEEDS, AND A LIMITED FIELD SURVEY. THESE LINES ARE NOT TO BE CONSTRUED AS A BOUNDARY OPINION AND ARE SUBJECT TO CHANGE BASED UPON A COMPLETE BOUNDARY SURVEY. PROPERTY MAY BE SUBJECT TO ENCUMBRANCES, EASEMENTS, RIGHTS OF WAY AS A TITLE SEARCH MAY DISCLOSE.
  - THIS SURVEY CONFORMS TO CLASS D HORIZONTAL ACCURACY STANDARDS AND CLASS T-2 TOPOGRAPHIC ACCURACY STANDARDS.
  - COORDINATES DEPICTED HEREON REFER TO THE CONNECTICUT COORDINATE SYSTEM (NAD 83) ESTABLISHED WITH GPS UNDER THE GUIDELINES AND SPECIFICATIONS FOR GLOBAL NAVIGATION SATELLITE SYSTEM LAND SURVEYS IN CONNECTICUT AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON JUNE 26, 2008.
  - ELEVATIONS DEPICTED HEREON ARE BASED UPON CONNECTICUT GEODETIC SURVEY STATION 1465 NVD 29 DATUM WITH ELEVATION = 285.492 FEET.
  - SUBJECT PARCEL IS DEPICTED AS LOT 4 ON VOLUNTOWN ASSESSORS MAP 14.
  - SUBJECT PARCEL IS CURRENTLY OWNED BY BENJAMIN AND BYRON GALLUP. VOLUNTOWN LAND RECORDS VOLUME 25 PAGE 195.
  - SUBJECT PARCEL IS IN ZONE X (AREAS DETERMINED TO BE OUTSIDE 500 YEAR FLOOD PLAIN). FLOOD INSURANCE RATE MAP TOWN OF VOLUNTOWN, CONNECTICUT NEW LONDON COUNTY PANEL 10 OF 10 COMMUNITY PANEL NUMBER 090143 0010 B EFFECTIVE DATE: JUNE 3, 1988.
  - SUBJECT PARCEL AREA IS ±261.27 ACRES.

**MAP REFERENCES:**

- "PLANIMETRIC DATA AND PROPERTY MAPS 2010 VOLUNTOWN, CONNECTICUT," SCALE: 1"=200' DATED: JANUARY 2010 BY NEW ENGLAND GEOSYSTEMS, GUILFORD, CONNECTICUT. ASSESSOR MAP NUMBER 14.

TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON  
THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE AND SEAL

**1 SITE PLAN - PROPOSED**  
C-1.1 SCALE: 1"=10'



ALAN S. FENROW LS #70188 DATE

PROFESSIONAL ENGINEER SEAL	DATE	11/11/13	REVISION	1	DESCRIPTION	ISSUED FOR CLIENT REVIEW
	DRAWN BY	CHYO BY				
	CHECKED BY					
	DATE					
	SCALE					
	JOB NO.	10093				
<b>SITE PLAN</b>						
<b>C-1.1</b>						
Sheet No. 2 of 2						

**VERIZON WIRELESS**  
WIRELESS COMMUNICATIONS FACILITY  
**PALMER POND**  
GALLUP FARM  
53 GALLUP ROAD  
VOLUNTOWN, CT 06384

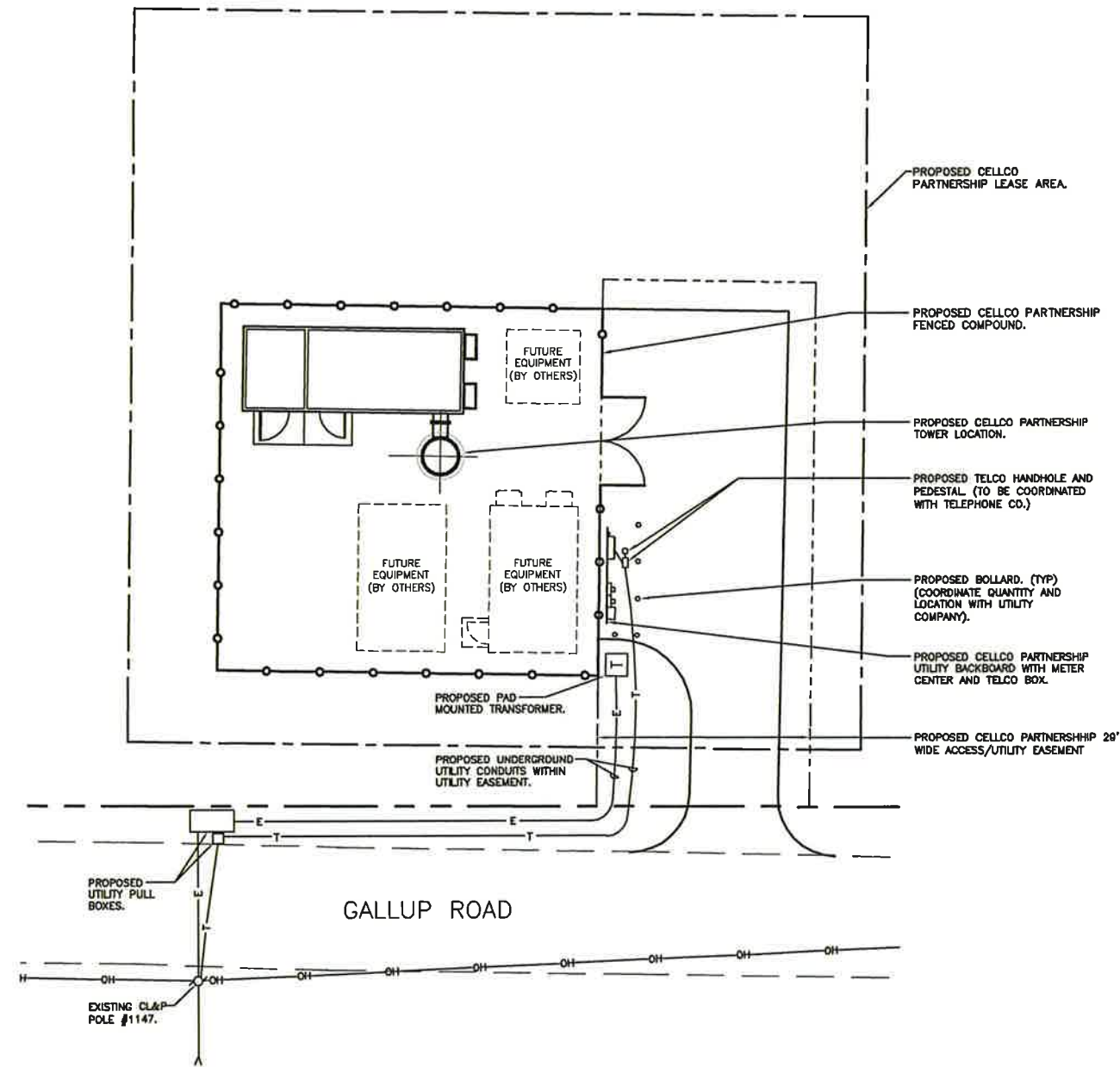
**CENDEX** engineering  
Certified in Solutions  
203 469-0580  
203 469-8887 fax  
632 North Merford Road  
Branford, CT 06405  
www.CenDEXEng.com

**UTILITY NOTES**

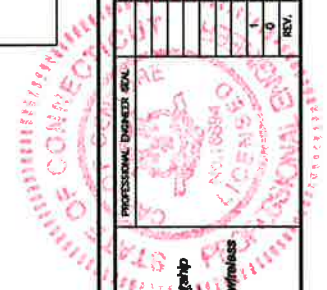
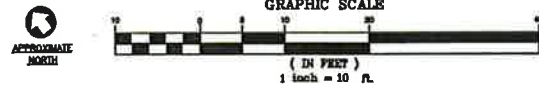
1. COORDINATE WITH OWNER FOR ALL EASEMENT DOCUMENTS.
2. UTILITY ROUTING SHOWN ON THIS PLAN IS SCHEMATIC. CONTRACTOR SHALL COORDINATE FINAL ROUTING WITH RESPECTIVE UTILITY COMPANIES PRIOR TO PERFORMING ANY UTILITY TRENCH WORK. ALL UTILITY CONDUITS AND PULL BOXES SHALL BE LOCATED WITHIN THE PROPOSED ACCESS/UTILITY EASEMENT.
3. UTILITY PULL BOXES/SILODS TO BE TRAFFIC RATED AND INSTALLED IN APPROXIMATE LOCATIONS SHOWN ON THIS PLAN, BUT NOT TO EXCEED 450' INTERVALS. CONTRACTOR TO COORDINATE FINAL PULL BOX LOCATIONS WITH RESPECTIVE LOCAL UTILITY COMPANIES.
4. CONTRACTOR SHALL COORDINATE ALL PERMITS AND PROCEDURES FOR CONDUIT INSTALLATION ALONG STREET.
5. PLAN IS FOR UTILITY ROUTING INFORMATION ONLY. SOME OTHER ELEMENTS NOT SHOWN FOR CLARITY. REFER TO CIVIL DRAWINGS FOR ALL OTHER EXISTING AND PROPOSED SITE INFORMATION.

**ELECTRICAL LEGEND**

SYMBOL	DESCRIPTION
-----	PROPERTY LINE
-----	ACCESS/ UTILITY EASEMENT LINE (PROPOSED)
—OH—	UTILITY LINES (OVERHEAD BY UTILITY CO.)
○	UTILITY POLE
—T—T—	UNDERGROUND COMMUNICATION CONDUIT
—E—E—	UNDERGROUND ELECTRICAL CONDUIT AS INDICATED
○—○	PERIMETER CHAIN LINK FENCE
-----	ROAD



**1** UTILITY ROUTING COMPOUND PLAN  
C-1.2 SCALE: 1" = 10'



Cellco Partnership  
d.b.a. Verizon Wireless

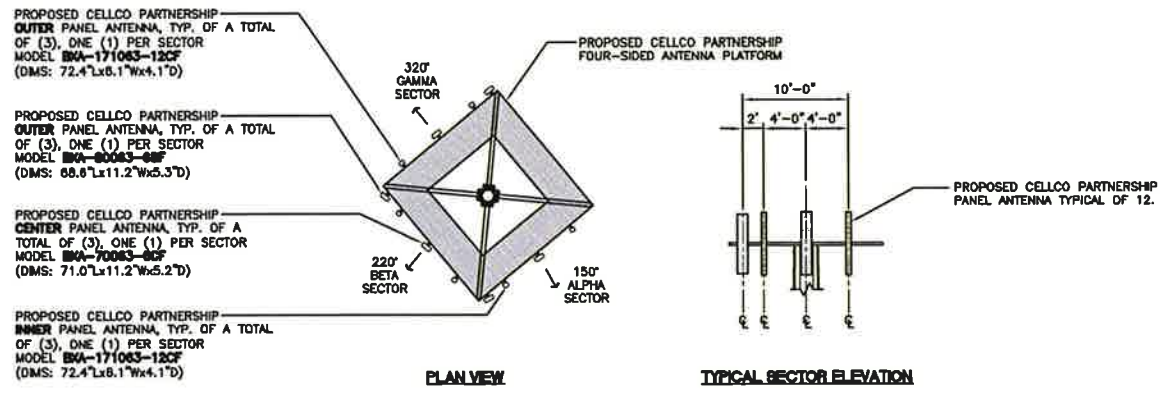
**CENTEX** Engineering Inc.  
203 488-0080  
203 488-8887 Fax  
452 North Merford Road  
Branford, CT 06405  
www.CentexEng.com

**VERIZON WIRELESS**  
WIRELESS COMMUNICATIONS FACILITY  
**PALMER POND**  
GALLUP FARM  
53 GALLUP ROAD  
VOLLTOWN, CT 06384

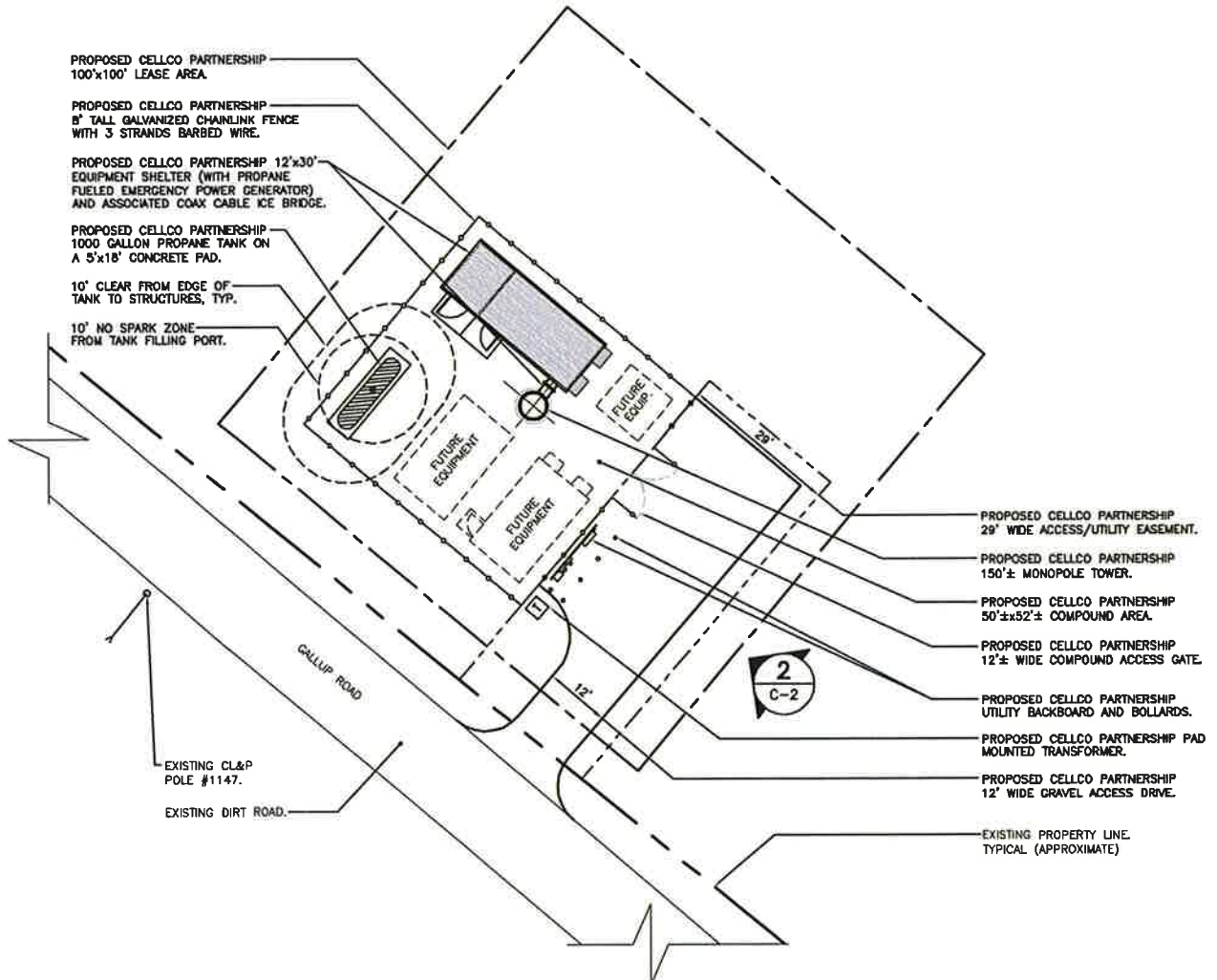
DATE: 10/11/13  
SCALE: AS NOTED  
JOB NO. 10093

SITE UTILITY PLAN

**C-1.2**  
Sheet No. 2 of 2

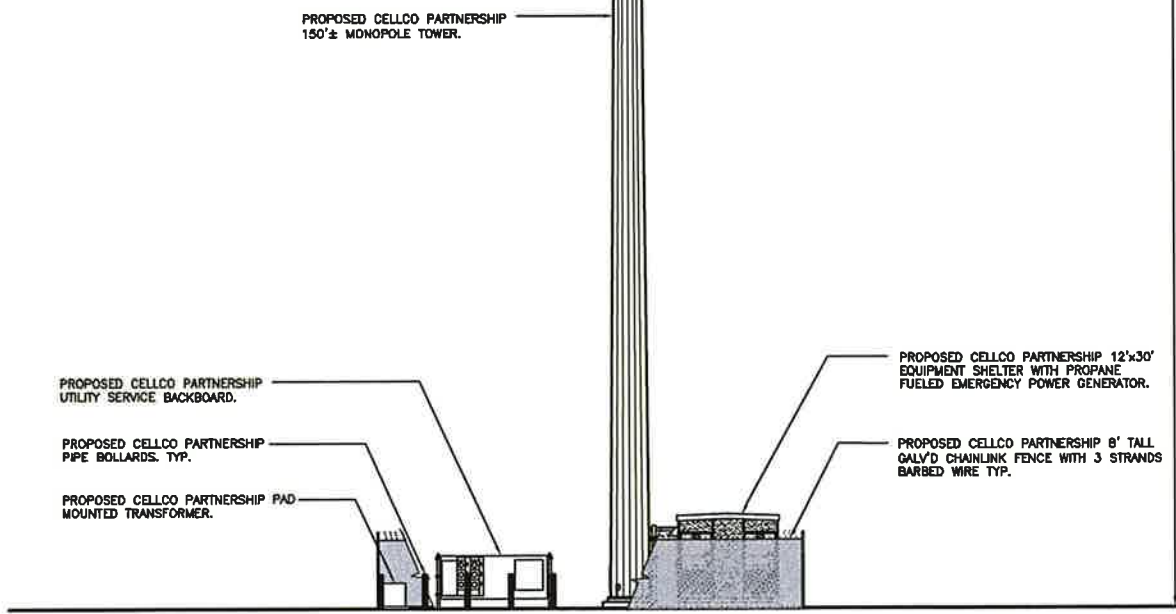
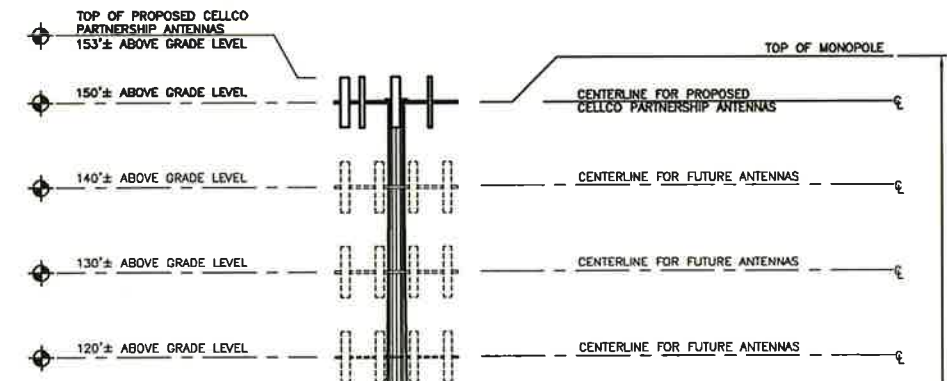


**3 ANTENNA MOUNTING CONFIGURATION**  
 C-2 NOT TO SCALE APPROXIMATE NORTH



**1 COMPOUND PLAN**  
 C-2 SCALE: 1" = 15' APPROXIMATE NORTH

**GRAPHIC SCALE**  
 ( IN FEET )  
 1 inch = 15 ft



**2 EAST ELEVATION**  
 C-2 SCALE: 1" = 10'

**GRAPHIC SCALE**  
 ( IN FEET )  
 1 inch = 10 ft

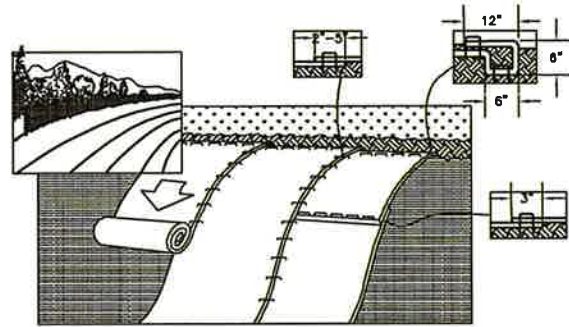


**VERIZON WIRELESS**  
 WIRELESS COMMUNICATIONS FACILITY  
**PALMER POND**  
 GALLUP FARM  
 53 GALLUP ROAD  
 VOLUNTOWN, CT 06384

DATE: 10/11/13  
 SCALE: AS NOTED  
 JOB NO. 10093

COMPOUND PLAN AND ELEVATION

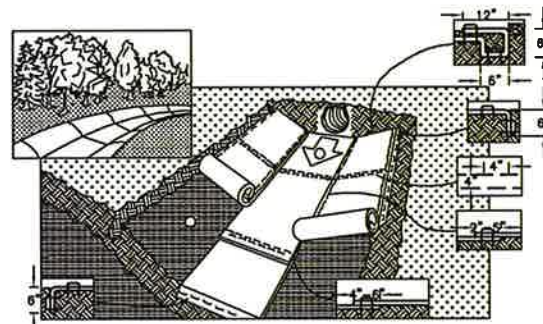
**C-2**  
 Sheet No. 4 of 2



**3 REINFORCEMENT BLANKET INSTALLATION ON SLOPE**  
C-3 NOT TO SCALE

**NOTES:**

1. SLOPE APPLICATIONS:
  - A. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
  - B. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 8" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLE/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
  - C. ROLL THE BLANKET DOWN OR HORIZONTALLY ACROSS THE SLOPE. BLANKET WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL ROLLED EROSION CONTROL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM(TM), STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
  - D. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY A 2"- 5" OVERLAP DEPENDING ON BLANKET TYPE.
  - E. CONSECUTIVE ROLLED EROSION CONTROL BLANKET SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.
- \*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKET.
- F. REFER TO MANUFACTURERS STAPLE GUIDE FOR CORRECT STAPLE PATTERN. MINIMUM 4 SPIKES PER ONE SQ. FT.
2. THE CONTRACTOR SHALL MAINTAIN THE BLANKET UNTIL ALL WORK ON THE CONTRACT HAS BEEN COMPLETED AND ACCEPTED. MAINTENANCE SHALL CONSIST OF THE REPAIR OF AREAS WHERE DAMAGED BY ANY CAUSE. ALL DAMAGED AREAS SHALL BE REPAIRED TO REESTABLISH THE CONDITIONS AND GRADE OF THE SOIL PRIOR TO APPLICATION OF THE COVERING AND SHALL BE REFERTILIZED, RESEEDED, AND REMULCHED AS DIRECTED.



**4 REINFORCEMENT BLANKET INSTALLATION IN CHANNEL**  
C-3 NOT TO SCALE

**NOTES:**

1. CHANNEL APPLICATIONS:
  - A. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
  - B. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP BY 8" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLE/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
  - C. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM(TM), STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
  - D. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"- 6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE BLANKETS.
  - E. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP BY 8" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
  - F. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2"- 5" AND STAPLED TO ENSURE PROPER SEAM ALIGNMENT. PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH(TM) ON THE BLANKET BEING OVERLAPPED.
  - G. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP BY 8" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
  - H. REFER TO MANUFACTURERS STAPLE GUIDE FOR CORRECT STAPLE PATTERN. MINIMUM 4 SPIKES PER ONE SQ. FT. THE CONTRACTOR SHALL MAINTAIN THE BLANKET UNTIL ALL WORK ON THE CONTRACT HAS BEEN COMPLETED AND ACCEPTED. MAINTENANCE SHALL CONSIST OF THE REPAIR OF AREAS WHERE DAMAGED BY ANY CAUSE. ALL DAMAGED AREAS SHALL BE REPAIRED TO REESTABLISH THE CONDITIONS AND GRADE OF THE SOIL PRIOR TO APPLICATION OF THE COVERING AND SHALL BE REFERTILIZED, RESEEDED, AND REMULCHED AS DIRECTED.

**GENERAL CONSTRUCTION / PRE-CONSTRUCTION NOTES**

1. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES, A MANDATORY ON-SITE PRE-CONSTRUCTION MEETING SHALL BE CONDUCTED WITH THE VERIZON WIRELESS CONSTRUCTION MANAGER, CONTRACTOR'S CONSTRUCTION MANAGER, THE PROJECT EROSION AND SEDIMENTATION CONTROL/ENVIRONMENTAL MONITOR AND THE ENGINEER OF RECORD.
2. THE SOUTHERN PROPERTY LINE ADJACENT TO THE PROPOSED ACCESS DRIVE IS STAKED IN FIELD. THE CONTRACTOR SHALL MAINTAIN THE PROPERTY LINE STAKE LOCATIONS DURING THE ENTIRE PERIOD OF CONSTRUCTION. ALL CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED ON THE SUBJECT PROPERTY.

**GENERAL CONSTRUCTION SEQUENCE**

THIS IS A GENERAL CONSTRUCTION SEQUENCE OUTLINE SOME ITEMS OF WHICH MAY NOT APPLY TO PARTICULAR SITES.

1. CUT AND STUMP AREAS OF PROPOSED CONSTRUCTION.
2. INSTALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES AS REQUIRED.
3. REMOVE AND STOCKPILE TOPSOIL. STOCKPILE SHALL BE SEED TO PREVENT EROSION.
4. CONSTRUCT CLOSED DRAINAGE SYSTEM. PRECEPT CULVERT INLETS AND CATCH BASINS WITH SEDIMENTATION BARRIERS.
5. CONSTRUCT ROADWAYS AND PERFORM SITE GRADING, PLACING HAY BALES AND SILTATION FENCES AS REQUIRED TO CONTROL SOIL EROSION.
6. INSTALL UNDERGROUND UTILITIES.
7. BEGIN TEMPORARY AND PERMANENT SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEED OR MULCHED IMMEDIATELY AFTER THEIR CONSTRUCTION. NO AREA SHALL BE LEFT UNSTABILIZED FOR A TIME PERIOD OF MORE THAN 30 DAYS.
8. DAILY, OR AS REQUIRED, CONSTRUCT, INSPECT, AND IF NECESSARY, RECONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT FENCES AND SEDIMENT TRAPS INCLUDING MULCHING AND SEEDING.
9. BEGIN EXCAVATION FOR AND CONSTRUCTION OF TOWERS AND PLATFORMS.
10. FINISH PAVING ALL ROADWAYS, DRIVES, AND PARKING AREAS.
11. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
12. NO FLOW SHALL BE DIVERTED TO ANY WETLANDS UNTIL A HEALTHY STAND OF GRASS HAS BEEN ESTABLISHED IN REGARDED AREAS.
13. AFTER GRASS HAS BEEN FULLY GERMINATED IN ALL SEEDING AREAS, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

**SOIL EROSION AND SEDIMENT CONTROL SEQUENCE**

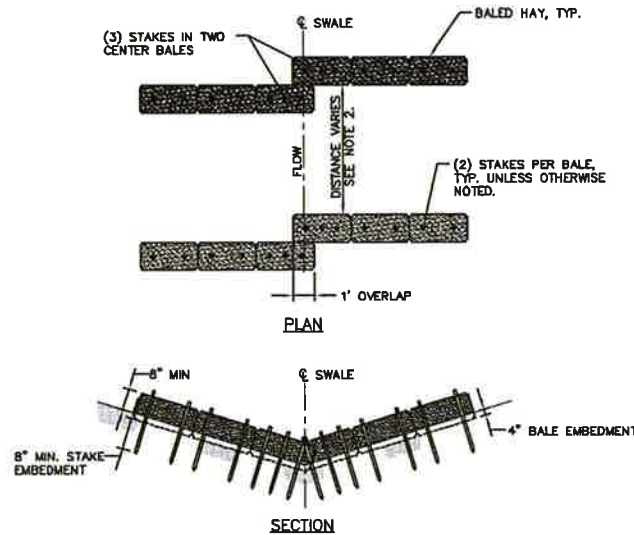
1. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES, SUCH AS CONSTRUCTION ENTRANCE / ANTI TRACKING PAD, SILTATION FENCE, AND SILTATION FENCE / HAY BALE SHALL BE IN PLACE PRIOR TO ANY GRADING ACTIVITY. INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES. MEASURES SHALL BE LEFT IN PLACE AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETED AND/OR AREA IS STABILIZED.
2. THE ENTRANCE TO THE PROJECT SITE IS TO BE PROTECTED BY STONE ANTI TRACKING PAD OF ASTM C-33, SIZE NO. 2 OR 3, OR D.O.T. 2" CRUSHED GRAVEL. THE STONE ANTI TRACKING PAD IS TO BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION PERIOD.
3. THE ENTRANCE TO THE PROJECT SITE IS TO BE PROTECTED BY STONE ANTI TRACKING PAD OF ASTM C-33, SIZE NO. 2 OR 3, OR D.O.T. 2" CRUSHED GRAVEL. THE STONE ANTI TRACKING PAD IS TO BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION PERIOD.
4. LAND DISTURBANCE WILL BE KEPT TO A MINIMUM AND RESTABILIZATIONS WILL BE SCHEDULED AS SOON AS PRACTICAL.
5. ALL SOIL EROSION AND SEDIMENT CONTROL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CONNECTICUT GUIDELINES FOR EROSION AND SEDIMENT CONTROL INCLUDING THE LATEST DATE FROM THE COUNCIL ON SOIL AND WATER CONSERVATION.
6. ANY ADDITIONAL EROSION/SEDIMENTATION CONTROL DEEMED NECESSARY BY TOWN STAFF DURING CONSTRUCTION, SHALL BE INSTALLED BY THE DEVELOPER. IN ADDITION, THE DEVELOPER SHALL BE RESPONSIBLE FOR THE REPAIR/REPLACEMENT/MAINTENANCE OF ALL EROSION CONTROL MEASURES UNTIL ALL DISTURBED AREAS ARE STABILIZED TO THE SATISFACTION OF THE TOWN STAFF.
7. IN ALL AREAS, REMOVAL OF TREES, BUSHES AND OTHER VEGETATION AS WELL AS DISTURBANCE OF THE SOIL IS TO BE KEPT TO AN ABSOLUTE MINIMUM WHILE ALLOWING PROPER DEVELOPMENT OF THE SITE. DURING CONSTRUCTION, EXPOSE AS SMALL AN AREA OF SOIL AS POSSIBLE FOR AS SHORT A TIME AS POSSIBLE.
8. SILTATION FENCE SHALL BE PLACED AS INDICATED BEFORE A CUT SLOPE HAS BEEN CREATED. SEDIMENT DEPOSITS SHOULD BE PERIODICALLY REMOVED FROM THE UPSTREAM SIDES OF SILTATION FENCE. THIS MATERIAL IS TO BE SPREAD AND STABILIZED IN AREAS NOT SUBJECT TO EROSION, OR TO BE USED IN AREAS WHICH ARE NOT TO BE PAVED OR BUILT ON. SILTATION FENCE IS TO BE REPLACED AS NECESSARY TO PROVIDE PROPER FILTERING ACTION. THE FENCE IS TO REMAIN IN PLACE AND BE MAINTAINED TO INSURE EFFICIENT SILTATION CONTROL UNTIL ALL AREAS ABOVE THE EROSION CHECKS ARE STABILIZED AND VEGETATION HAS BEEN ESTABLISHED.
9. SWALE DISCHARGE AREA WILL BE PROTECTED WITH RIP RAP SPLASH PAD/ ENERGY DISSIPATER.
10. ALL FILL AREAS SHALL BE COMPACTED SUFFICIENTLY FOR THEIR INTENDED PURPOSE AND AS REQUIRED TO REDUCE SLIPPING, EROSION OR EXCESS SATURATION.
11. THE SOIL SHALL NOT BE PLACED WHILE IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBGRADE IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING OR PROPOSED SOODING OR SEEDING.
12. AFTER CONSTRUCTION IS COMPLETE AND GROUND IS STABLE, REMOVE SILTS IN THE RIP RAP ENERGY DISSIPATERS. REMOVE OTHER EROSION AND SEDIMENT DEVICES.

**CONSTRUCTION SPECIFICATIONS - SILT FENCE**

1. THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR SILT FENCES.
2. THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 8 INCHES INTO THE GROUND AND THE SOIL COMPACTED OVER THE EMBEDDED FABRIC.
3. WOVEN WIRE FENCE 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 EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED.
6. FENCE POSTS SHALL BE A MINIMUM OF 36 INCHES LONG AND DRIVEN A MINIMUM OF 16 INCHES 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 BUILD UP IN THE SILT FENCE DUE TO DEPOSITION OF SEDIMENT.

**MAINTENANCE - SILT FENCE**

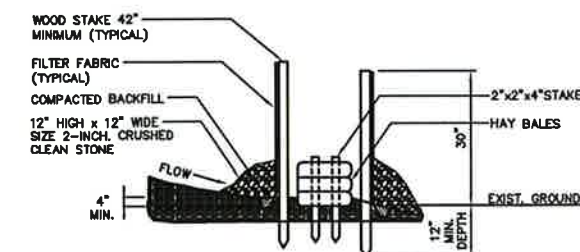
1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
2. IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACHED APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
4. 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 VEGETATED.



**NOTES:**

1. CHECKDAM SHALL BE INSTALLED IN LOCATIONS INDICATED ON SITE PLAN (SHEET C-1.1) IN DRAINAGE SWALE WITH BED WIDTHS OF 2 FEET OR LESS.
2. THE DISTANCE BETWEEN HAYBALE CHECKDAMS SHALL BE DETERMINED BY THE SLOPE OF THE SWALE. CHECKDAMS SHALL BE SET AT EVERY 2 FEET DROP IN SWALE ELEVATION.
3. BALES SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
4. INSTALL 3 STAKES PER BALE WITHIN SWALE BED AREAS.
5. HAYBALES CAN BE SUBSTITUTED WITH EITHER STRAW WATTLE OR COMPOST SOCK/FILTER (E.G., SILTSOXX™ OR APPROVED EQUIVALENT).

**2 TYP. HAYBALE CHECKDAM (NARROW SWALE)**  
C-3 NOT TO SCALE



**1 SILTATION FENCE/HAY BALE SILTATION FENCE 'SANDWICH' EROSION CONTROL**  
C-3 NOT TO SCALE

DATE	10/11/13
SCALE	AS NOTED
JOB NO.	10093
SITE CONSTRUCTION S&E CONTROL NOTES & DETAILS	
<b>C-3</b>	
Sheet No. 3 of 9	

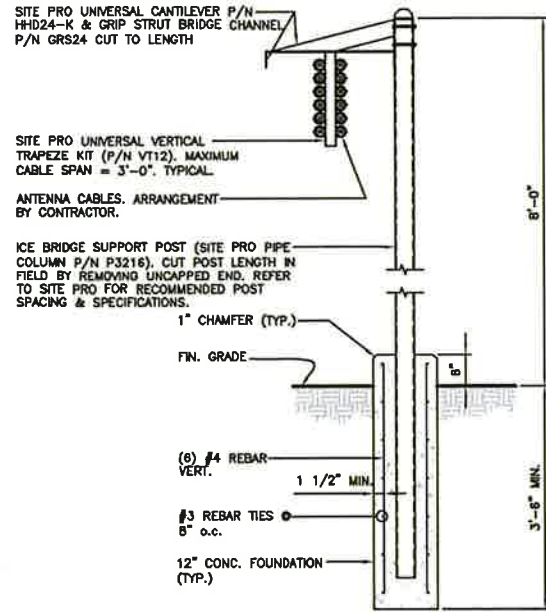
  

PROFESSIONAL ENGINEER SEAL	DATE	DESCRIPTION
	11/17/13	DATE PLANS - ISSUED FOR CLIENT REVIEW
	11/07/13	DATE PLANS - ISSUED FOR CLIENT REVIEW
		DATE

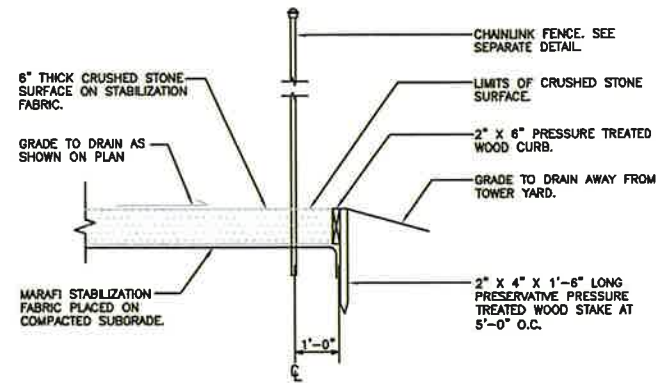
  

**VERIZON WIRELESS**  
WIRELESS COMMUNICATIONS FACILITY  
**PALMER POND**  
GALLUP FARM  
53 GALLUP ROAD  
VOLUNTOWN, CT 06384

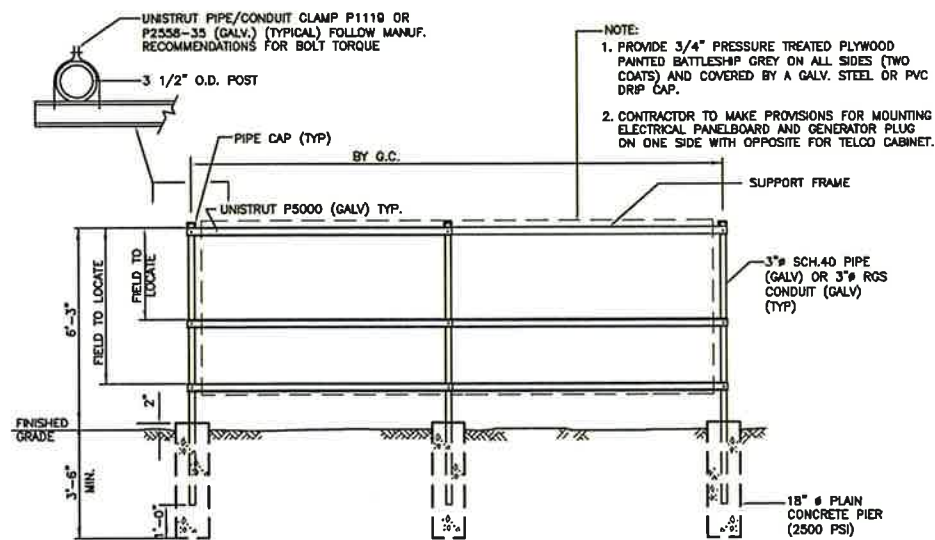
**CENEX** engineering  
Confirmed in Solutions  
203-488-0280  
203-488-8897 Fax  
632 North Ironwood Road  
Branford, CT 06405  
www.CenexEng.com



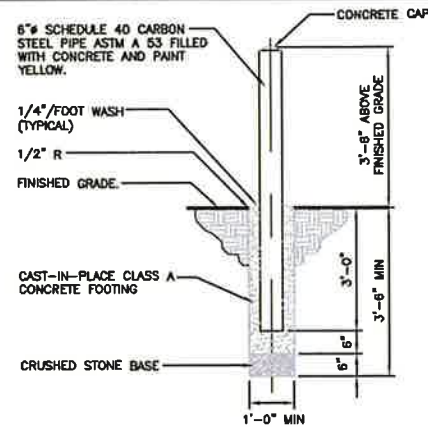
**1 ICE BRIDGE DETAIL**  
C-4 NOT TO SCALE



**5 COMPOUND SURFACING DETAIL**  
C-4 NOT TO SCALE



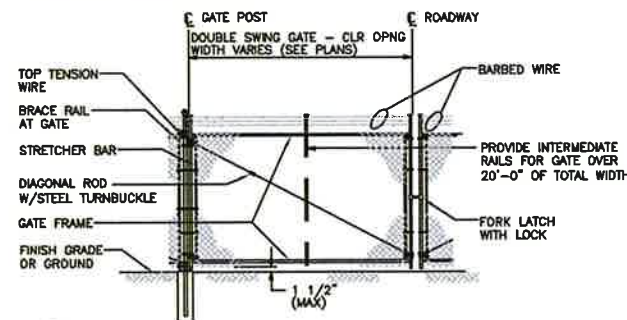
**3 UTILITY SUPPORT FRAME (TYP)**  
C-4 NOT TO SCALE



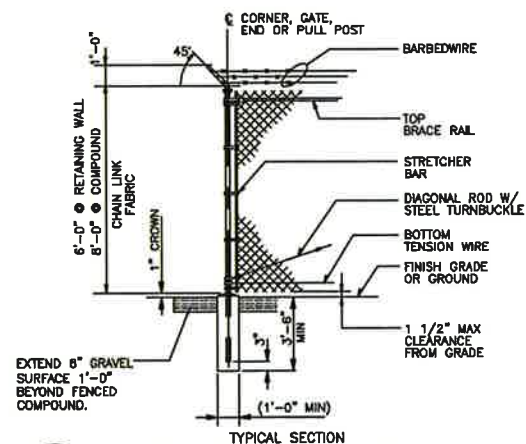
**2 BOLLARD DETAIL**  
C-4 NOT TO SCALE

**WOVEN WIRE FENCE NOTES**

1. GATE POST, CORNER, TERMINAL OR PULL POST 2 1/2" # SCHEDULE 40 FOR GATE WIDTHS UP THRU 6 FEET OR 12 FEET FOR DOUBLE SWING GATE PER ASTM-F1083.
2. LINE POST: 2" # SCHEDULE 40 PIPE PER ASTM-F1083.
3. GATE FRAME: 1 1/2" # SCHEDULE 40 PIPE PER ASTM-F1083.
4. TOP RAIL & BRACE RAIL: 1 1/2" # SCHEDULE 40 PIPE PER ASTM-F1083.
5. FABRIC: 12 GA. CORE WIRE SIZE 2" MESH, CONFORMING TO ASTM-A392.
6. TIE WIRE: MINIMUM 11 GA. GALVANIZED STEEL AT POSTS AND RAILS A SINGLE WRAP OF FABRIC TIE AND AT TENSION WIRE BY HDG RINGS SPACED MAX 24" INTERVALS.
7. TENSION WIRE: 7 GA. GALVANIZED STEEL.
8. BARBED WIRE: DOUBLE STRAND 12-1/2" O.D. TWISTED WIRE TO MATCH W/FABRIC 14 GA., 4 FT. BARBS SPACED ON APPROXIMATELY 5" CENTERS.
9. GATE LATCH: DROP DOWN LOCKABLE FORK LATCH AND LOCK, KEYS ALIKE FOR ALL SITES IN A GIVEN MTA.
10. LOCAL ORDINANCE OF BARBED WIRE PERMIT REQUIREMENT SHALL BE COMPLIED WITH IF REQUIRED.
11. COMPOUND FENCE HEIGHT = 6' VERTICAL + 1' BARBED WIRE VERTICAL DIMENSION.
12. SAFETY FENCE HEIGHT = 6' VERTICAL DIMENSION (NO BARBED WIRE REQUIRED).



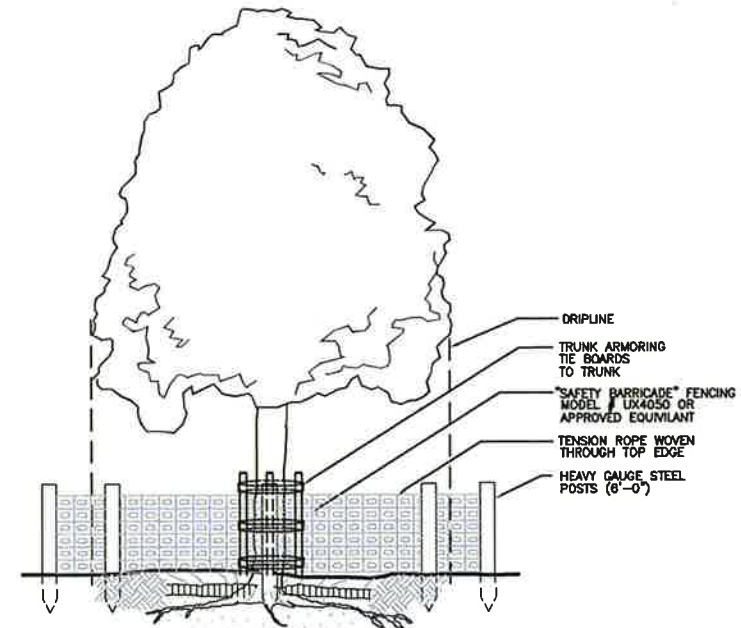
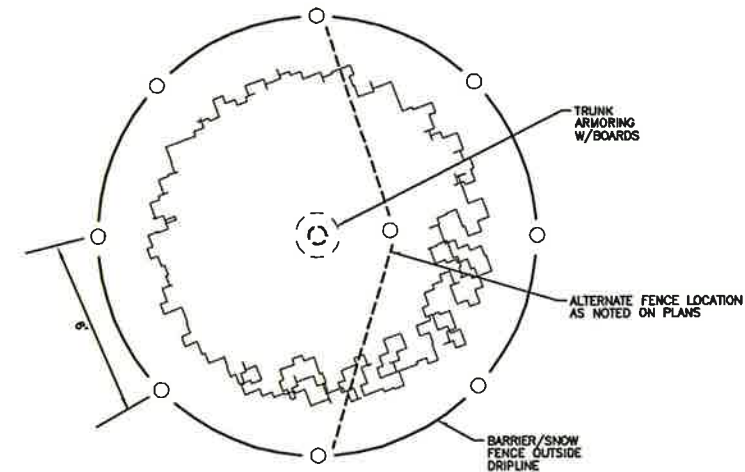
**4A WOVEN WIRE SWING GATE-DOUBLE**  
C-4 NOT TO SCALE



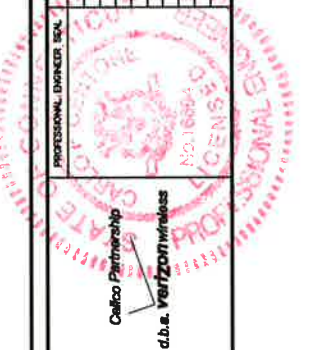
**4 WOVEN WIRE FENCE DETAIL**  
C-4 NOT TO SCALE

**TREE PROTECTION NOTES**

1. ALL TREES SHOWN TO BE RETAINED WITHIN THE LIMITS OF CONSTRUCTION ON THE PLANS, SHALL BE PROTECTED DURING CONSTRUCTION WITH FENCING.
2. TREE PROTECTION FENCES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING, OR GRADING) AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
3. FENCES SHALL COMPLETELY SURROUND THE TREE OR CLUSTERS OF TREES, LOCATED AT THE OUTERMOST LIMITS OF THE TREE BRANCHES (DRIPLINE) OR CRITICAL ROOT ZONE, WHICHEVER IS GREATER; AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROJECT IN ORDER TO PREVENT THE FOLLOWING:
  - 3A. SOIL COMPACTION IN CRITICAL ROOT ZONE AREA RESULTING FROM STORAGE OF EQUIPMENT OR MATERIAL.
  - 3B. CRITICAL ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES OR TRENCHING.
  - 3C. WOUNDS TO EXPOSED ROOTS, TRUNK, OR LIMBS BY MECHANICAL EQUIPMENT.
  - 3D. OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CONCRETE TRUCK CLEANING, AND FIRES.
4. WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE THAT IS CLOSER THAN 5 FEET TO A TREE TRUNK, THE TRUNK SHALL BE PROTECTED BY STRAPPED-ON PLANKING TO A HEIGHT OF 8 FEET (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FENCING PROVIDED.
5. WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN AREAS OF UNPROTECTED ROOT ZONES UNDER THE DRIPLINE OR CRITICAL ROOT ZONE, WHICHEVER IS GREATER, THOSE AREAS SHOULD BE COVERED WITH 4 INCHES OF ORGANIC MULCH TO MINIMIZE SOIL COMPACTION.
6. ALL GRADING WITHIN CRITICAL ROOT ZONE AREAS SHALL BE DONE BY HAND OR WITH SMALL EQUIPMENT TO MINIMIZE ROOT DAMAGE. PRIOR TO GRADING, RELOCATE PROTECTIVE FENCING TO 2 FEET BEHIND THE GRADE CHANGE AREA.
7. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL AND BACKFILLED WITH GOOD QUALITY TOP SOIL WITHIN TWO DAYS. IF EXPOSED ROOT AREAS CANNOT BE BACKFILLED WITHIN 2 DAYS, AN ORGANIC MATERIAL WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION SHALL BE PLACED TO COVER THE ROOTS UNTIL BACKFILL CAN OCCUR.
8. PRIOR TO EXCAVATION OR GRADE CUTTING WITHIN TREE DRIPLINES, A CLEAN CUT SHALL BE MADE WITH A ROCK SAW OR SIMILAR EQUIPMENT, IN A LOCATION AND TO A DEPTH APPROVED BY THE FORESTRY MANAGER, TO MINIMIZE DAMAGE TO REMAINING ROOTS.
9. TREES MOST HEAVILY IMPACTED BY CONSTRUCTION ACTIVITIES WILL BE WATERED DEEPLY ONCE A WEEK DURING PERIODS OF HOT, DRY WEATHER. TREE CROWNS ARE TO BE SPRAYED WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON LEAVES.
10. NO LANDSCAPE TOPSOIL DRESSING GREATER THAN FOUR (4) INCHES SHALL BE PERMITTED WITHIN THE DRIPLINE OR CRITICAL ROOT ZONE OF TREES, WHICHEVER IS GREATER. NO TOPSOIL IS PERMITTED ON ROOT FLARES OF ANY TREE.



**6 TREE PROTECTION DETAIL**  
C-4 NOT TO SCALE



CENEX  
and  
merging  
Continued on "Junction"

(203) 488-0080  
(203) 488-0087 fax  
432 North Wood Road  
Branford, CT 06408  
www.CenexEng.com

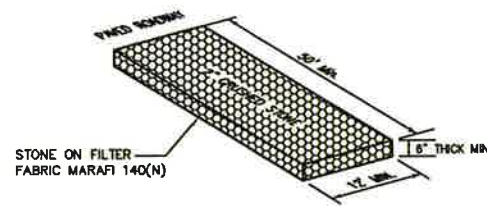
VERIZON WIRELESS  
WIRELESS COMMUNICATIONS FACILITY  
**PALMER POND**  
GALLUP FARM  
53 GALLUP ROAD  
VOLLANTOWN, CT 06384

DATE: 10/11/13  
SCALE: AS NOTED  
JOB NO. 10093

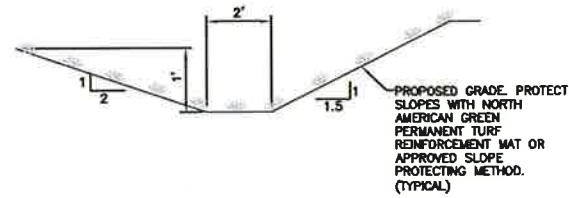
SITE DETAILS

C-4  
Sheet No. 4 of 4

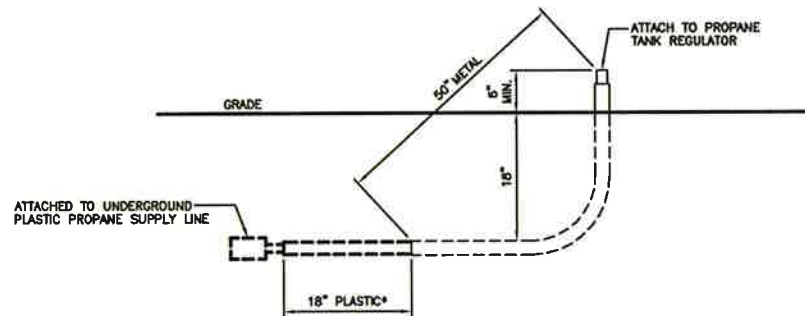




**3 CONSTRUCTION ENTRANCE ANTI-TRACKING PAD**  
C-5 NOT TO SCALE



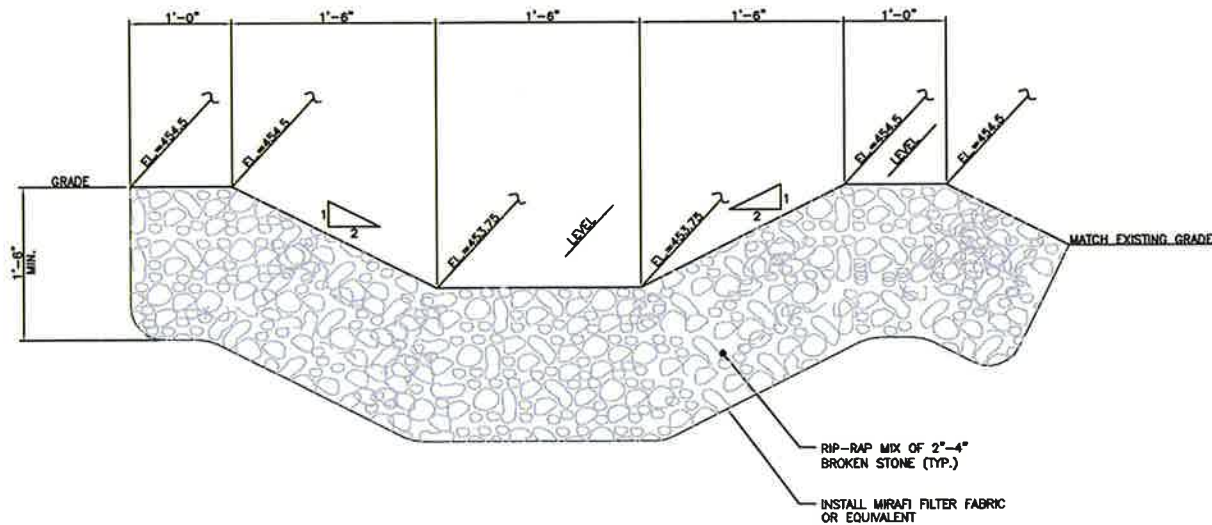
**4 TYPICAL SWALE SECTION**  
C-5 NOT TO SCALE



**NOTES:**

- \*PLASTIC PROPANE SUPPLY LINE MUST BE PROTECTED WITH CONDUIT IF IT CAN NOT BE BURIED 18" OR MORE DEEP WITH SAND TO PROTECT IT (AT LEAST 1" OF SAND AROUND THE PIPE REQUIRED FOR PLASTIC)
- POLYETHYLENE PIPE AND TUBING AND THERMOPLASTIC COMPRESSION-TYPE MECHANICAL FITTINGS SHALL BE INSTALLED OUTSIDE UNDERGROUND WITH A MINIMUM 18 IN. (460mm) OF COVER. THE COVER SHALL BE PERMITTED TO BE REDUCED TO 12 IN. (300mm) IF EXTERNAL DAMAGE TO THE PIPE OR TUBING IS NOT LIKELY TO RESULT. IF A MINIMUM OF 12 IN. (300mm) OF COVER CANNOT BE MAINTAINED, THE PIPING SHALL BE INSTALLED IN CONDUIT OR BRIDGED (SHELD). UNDERGROUND POLYETHYLENE PIPING SYSTEMS SHALL REQUIRE ASSEMBLED ANODELESS RISERS TO TERMINATE ABOVE GROUND. THE HORIZONTAL PORTION OF RISERS SHALL BE BURIED AT LEAST 12 IN. (300mm) BELOW GRADE AND THE CASING MATERIAL USED FOR THE RISERS SHALL BE PROTECTED AGAINST CORROSION.

**2 PROPANE SUPPLY LINE DETAIL**  
C-5 SCALE: 1" = 1'-0"



**1 LEVEL SPREADER TYPICAL SECTION**  
C-5 NOT TO SCALE

**ENVIRONMENTAL NOTES**

**RED BAT AND SILVER-HAIRED BAT PROTECTION PROGRAM**

THE CONSTRUCTION AREA IS LOCATED IN PROXIMITY TO RED BAT (*LASIURUS BOREALIS*) AND SILVER-HAIRED BAT (*LASIONYCTERIS NOCTIVAGANS*) HABITAT, BOTH LISTED AS STATE SPECIAL CONCERN SPECIES. THE FOLLOWING PROTECTIVE MEASURES WILL AVOID UNINTENTIONAL DISTURBANCE AND POSSIBLE MORTALITY TO RED BAT OR SILVER-HAIRED BAT AS A RESULT OF CONSTRUCTION ACTIVITIES FOR THE SITE IMPROVEMENTS PROPOSED. WITH ADHERENCE TO THIS RED BAT AND SILVER-HAIRED BAT PROTECTION PROGRAM, THE PROPOSED DEVELOPMENT AT THIS PROPERTY WILL NOT HAVE AN ADVERSE EFFECT ON THESE RARE SPECIES.

TREE CLEARING RESTRICTION: TREE CLEARING ACTIVITIES SHALL BE COMPLETED BETWEEN NOVEMBER 1 AND APRIL 1 TO AVOID POTENTIAL IMPACT TO BAT ROOSTING HABITAT THROUGH THE REMOVAL OF POSSIBLE ROOSTING TREES PRIOR TO THE START OF THE BAT'S ACTIVE ROOSTING SEASON (APRIL 1 TO NOVEMBER 1). IF TREE CLEARING HAS NOT BEEN COMPLETED PRIOR TO APRIL 1, CONSTRUCTION ACTIVITIES SHALL BE SEASONALLY RESTRICTED FROM OCCURRING DURING THE BAT'S ACTIVE ROOSTING SEASON (APRIL 1 TO NOVEMBER 1).

**EASTERN BOX TURTLE PROTECTION PROGRAM**

THE CONSTRUCTION AREA IS LOCATED IN PROXIMITY TO EASTERN BOX TURTLE (*TERRAPENE C. CAROLINA*) HABITAT, A STATE SPECIAL CONCERN SPECIES. THE FOLLOWING PROTECTIVE MEASURES WILL AVOID UNINTENTIONAL MORTALITY TO EASTERN BOX TURTLE AS A RESULT OF CONSTRUCTION ACTIVITIES FOR THE SITE IMPROVEMENTS PROPOSED. WITH ADHERENCE TO THIS EASTERN BOX TURTLE PROTECTION PROGRAM, THE PROPOSED DEVELOPMENT AT THIS PROPERTY WILL NOT HAVE AN ADVERSE EFFECT ON THIS RARE SPECIES.

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 EASTERN BOX TURTLE'S ACTIVE PERIOD (APRIL 1 TO NOVEMBER 1). ALL-POINTS TECHNOLOGY CORPORATION, P.C. ("APT") WILL SERVE AS THE ENVIRONMENTAL MONITOR FOR THIS PROJECT TO ENSURE THAT THE EASTERN BOX TURTLE PROTECTION MEASURES ARE IMPLEMENTED PROPERLY. 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 AT (860) 984-9515 AND AT DGUSTAFSON@ALLPOINTSTECH.COM.

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

**1. ISOLATION MEASURES**

- 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 EASTERN BOX TURTLES.
- 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.
- 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.
- 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.
- 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.
- NO EQUIPMENT, VEHICLES OR CONSTRUCTION MATERIALS SHALL BE STORED OUTSIDE OF BARRIER FENCING.

**2. CONTRACTOR EDUCATION:**

- 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 EASTERN BOX 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.
- ALSO STRESSED IN THE EDUCATION SESSION WILL BE MEANS TO DISCRIMINATE BETWEEN THE SPECIES OF CONCERN AND OTHER NATIVE SPECIES TO AVOID UNNECESSARY, FALSE ALARMS.
- THE CONTRACTOR WILL BE PROVIDED WITH CELL PHONE AND EMAIL CONTACTS FOR APT ENVIRONMENTAL MONITOR STAFF TO IMMEDIATELY REPORT ANY ENCOUNTERS WITH EASTERN BOX TURTLE. POSTER MATERIALS WILL BE PROVIDED BY APT TO THE CONTRACTOR FOR POSTING ON THE JOB SITE TO MAINTAIN WORKER AWARENESS, ALONG WITH ANY VISITORS, TO THE SENSITIVE ENVIRONMENTAL NATURE OF THE JOB SITE.

**3. PROTECTIVE MEASURES**

- A THOROUGH COVER SEARCH OF THE CONSTRUCTION AREA WILL BE PERFORMED BY AN APT ENVIRONMENTAL MONITOR FOR EASTERN BOX TURTLE PRIOR TO AND FOLLOWING INSTALLATION OF SILT FENCING TO REMOVE ANY SPECIES FROM THE WORK ZONE PRIOR TO THE INITIATION OF CONSTRUCTION ACTIVITIES.
- PRIOR TO THE START OF CONSTRUCTION EACH DAY, THE CONTRACTOR SHALL SEARCH THE ENTIRE WORK AREA FOR EASTERN BOX TURTLE.
- IF EASTERN BOX 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.
- 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.
- 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**

- 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 EASTERN BOX TURTLE WILL BE INCLUDED IN THE REPORTS.
- FOLLOWING COMPLETION OF THE CONSTRUCTION PROJECT, APT WILL PROVIDE A SUMMARY REPORT TO CDEEP DOCUMENTING THE MONITORING AND MAINTENANCE OF THE BARRIER FENCE AND OBSERVATIONS OF ANY EASTERN BOX TURTLE ENCOUNTERED.

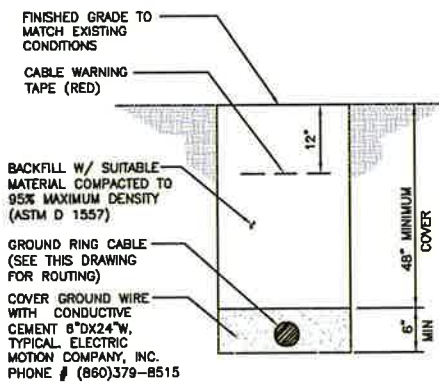


California Partnership  
d.b.a. VerZotti Wireless

CENTEX engineering  
Consulting & Solutions  
2030 488-0080  
2030 488-0007 for  
432 North Broad Road  
Norwalk, CT 06850  
www.CentexEng.com

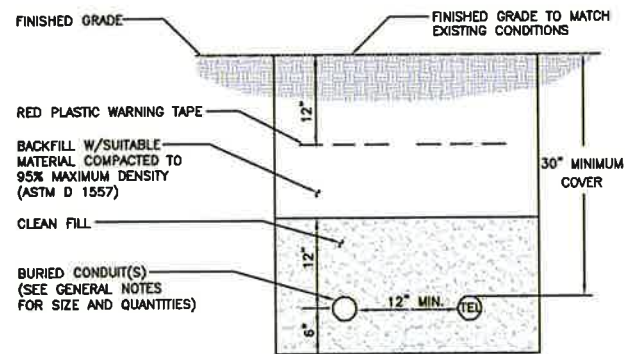
VERIZON WIRELESS  
WIRELESS COMMUNICATIONS FACILITY  
**PALMER POND**  
GALLUP FARM  
53 GALLUP ROAD  
VOLLTOWN, CT 06384

DATE:	10/11/13
SCALE:	AS NOTED
JOB NO.:	10093
SITE DETAILS AND ENVIRONMENTAL NOTES	
<b>C-5</b>	
Sheet No. <u>2</u>	of <u>3</u>



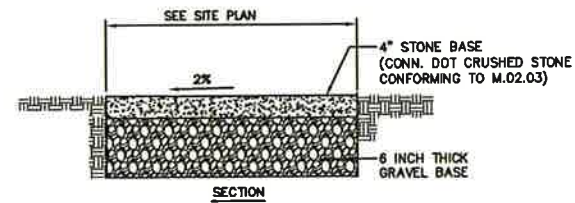
- NOTES:**
- BACK FILL SHALL NOT CONTAIN ASHES, CINDERS, SHELLS, FROZEN MATERIAL, LOOSE DEBRIS OR STONES LARGER THAN 2" IN MAXIMUM DIMENSION.
  - WHERE EXISTING UTILITIES ARE LIKELY TO BE ENCOUNTERED, CONTRACTOR SHALL HAND DIG AND PROTECT EXISTING UTILITIES.

**7 TYPICAL BURIAL GROUND CABLE DETAIL**  
C-6 NOT TO SCALE

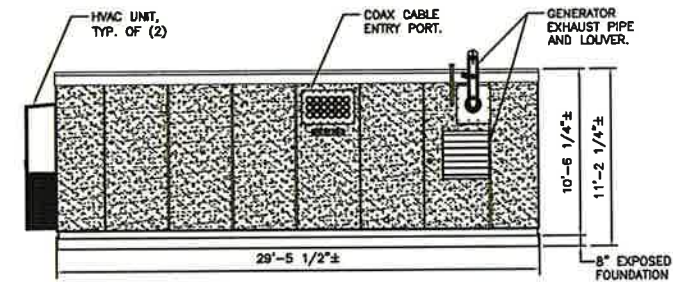


- NOTES:**
- THE CLEAN FILL SHALL PASS THROUGH A 3/8" MESH SCREEN AND SHALL NOT CONTAIN SHARP STONES. OTHER BACKFILL SHALL NOT CONTAIN ASHES, CINDERS, SHELLS, FROZEN MATERIAL, LOOSE DEBRIS OR STONES LARGER THAN 2" IN MAXIMUM DIMENSION.
  - WHERE EXISTING UTILITIES ARE LIKELY TO BE ENCOUNTERED, CONTRACTOR SHALL HAND DIG AND PROTECT EXISTING UTILITIES.

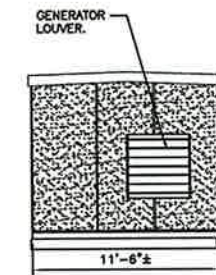
**6 TYPICAL ELECTRICAL/TEL TRENCH DETAIL**  
C-6 NOT TO SCALE



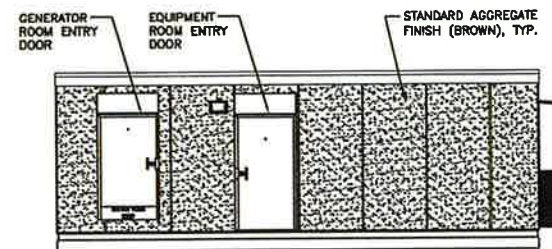
**1 GRAVEL SURFACE PARKING AREA AND ACCESS DRIVE**  
C-6 NOT TO SCALE



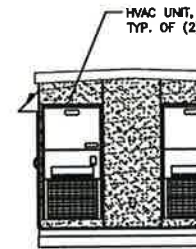
**3 NORTHERN SHELTER ELEVATION**  
C-6 SCALE: 3/16" = 1'-0"



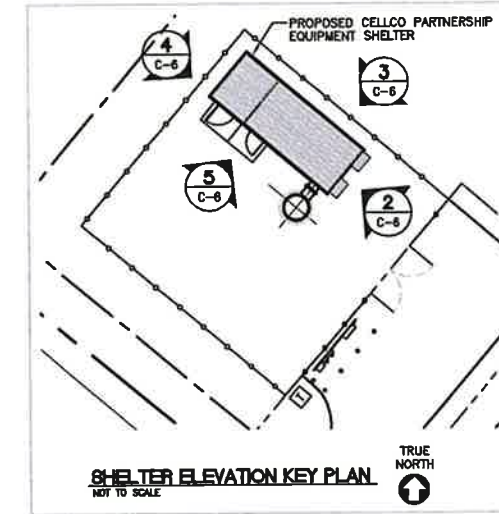
**4 WESTERN SHELTER ELEVATION**  
C-6 SCALE: 3/16" = 1'-0"



**5 SOUTHERN SHELTER ELEVATION**  
C-6 SCALE: 3/16" = 1'-0"



**2 EASTERN SHELTER ELEVATION**  
C-6 SCALE: 3/16" = 1'-0"



**SHELTER ELEVATION KEY PLAN**  
NOT TO SCALE



Cellco Partnership  
d.b.a. Verizon Wireless

**CENTER** engineering  
Communications Solutions  
203 486-0880  
(203) 486-0887 Fax  
82 Northwood  
Meriden, CT 06460  
www.CenterEng.com

**VERIZON WIRELESS**  
WIRELESS COMMUNICATIONS FACILITY  
**PALMER POND**  
GALLUP FARM  
53 GALLUP ROAD  
VOLLTOWN, CT 06384

DATE: 10/11/13  
SCALE: AS NOTED  
JOB NO. 10093

SITE DETAILS  
AND SHELTER  
ELEVATIONS

**C-6**

Sheet No. 2 of 2

ISSUED FOR CLIENT REVIEW

DATE: 11/17/13  
REV: 0  
DATE: 11/07/13  
REV: 1

DESCRIPTION: DAM PLANS

DATE: 11/17/13  
REV: 0  
DATE: 11/07/13  
REV: 1

DESCRIPTION: DAM PLANS

DATE: 11/17/13  
REV: 0  
DATE: 11/07/13  
REV: 1

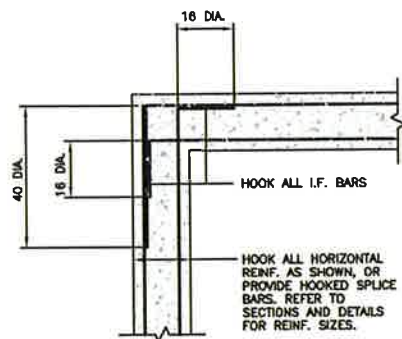
DESCRIPTION: DAM PLANS

DATE: 11/17/13  
REV: 0  
DATE: 11/07/13  
REV: 1

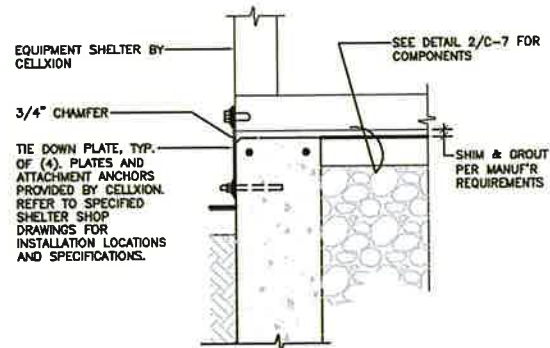
DESCRIPTION: DAM PLANS

DATE: 11/17/13  
REV: 0  
DATE: 11/07/13  
REV: 1

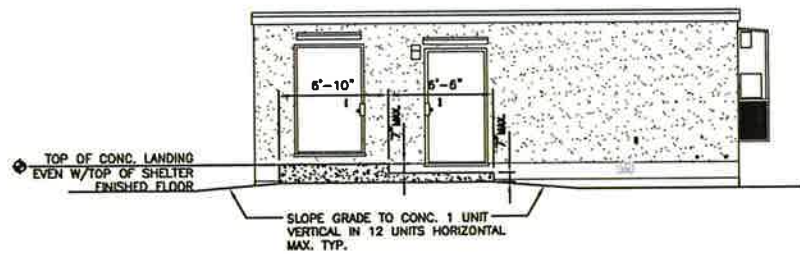
DESCRIPTION: DAM PLANS



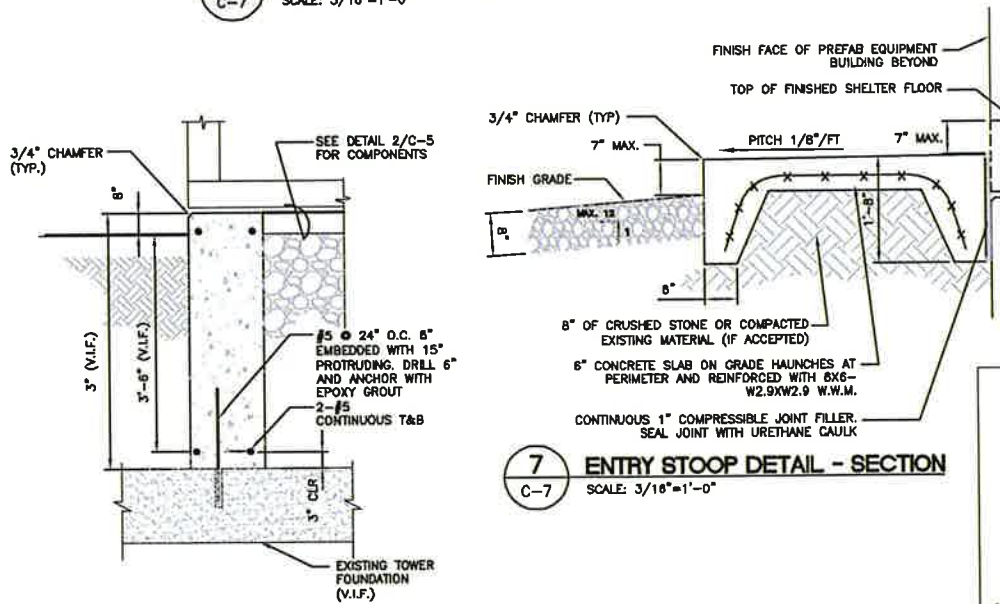
**3 PLAN DETAIL**  
C-7 NOT TO SCALE



**4 BUILDING TIE DOWN**  
C-7 SCALE: 1"=1'-0"



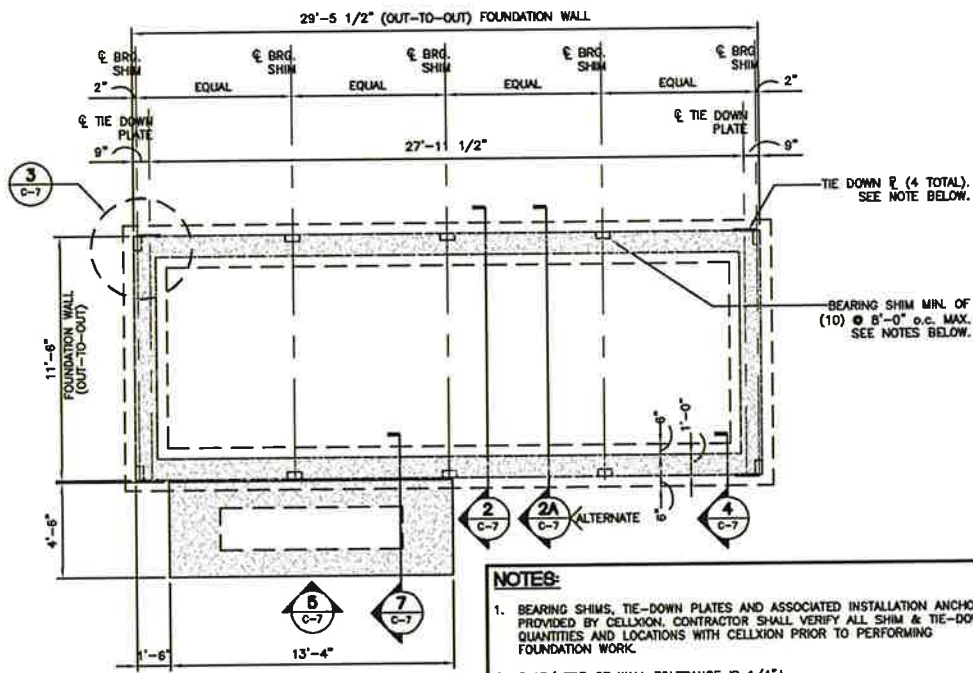
**5 ENTRY STOOP DETAIL - ELEVATION**  
C-7 SCALE: 3/16"=1'-0"



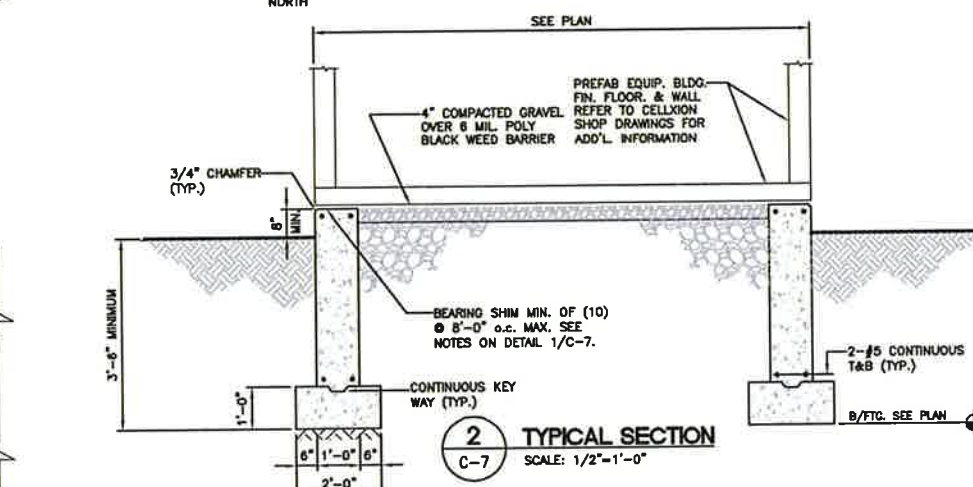
**7 ENTRY STOOP DETAIL - SECTION**  
C-7 SCALE: 3/16"=1'-0"

**6 FOUNDATION OVER TOWER FOUNDATION**  
C-7 SCALE: 3/4"=1'-0"

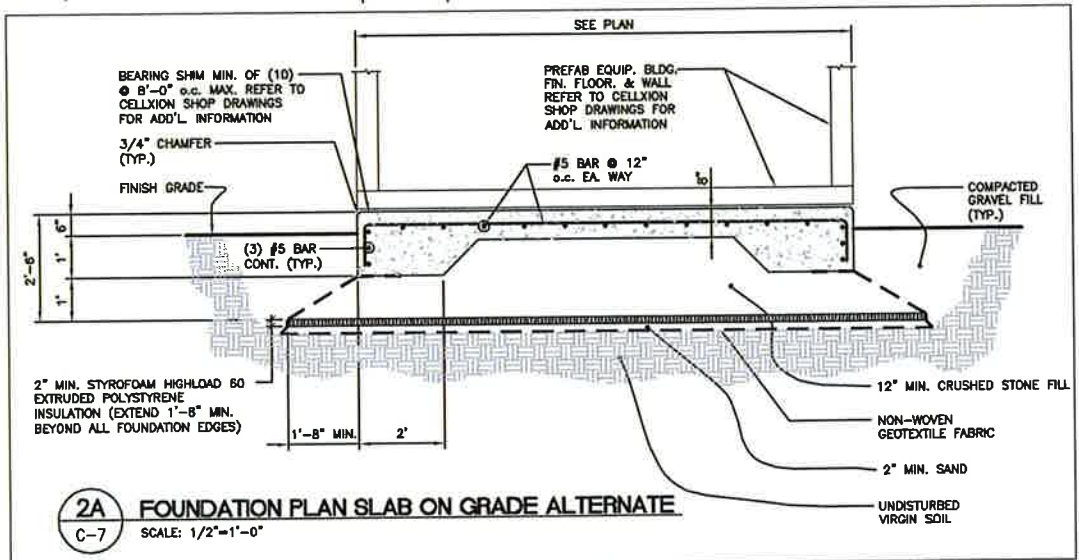
EQUIPMENT SHELTER BY CELLXION. VERIFY ALL SHELTER DIMENSIONS, EQUIPMENT DIMENSIONS, EQUIPMENT LOCATIONS AND UTILITY OPENINGS WITH BUILDING SHOP DRAWINGS PRIOR TO COMMENCEMENT OF WORK.



**1 FOUNDATION PLAN**  
C-7 SCALE: 1/4"=1'-0"  
APPROX. GRID NORTH



**2 TYPICAL SECTION**  
C-7 SCALE: 1/2"=1'-0"



**2A FOUNDATION PLAN SLAB ON GRADE ALTERNATE**  
C-7 SCALE: 1/2"=1'-0"

**FOUNDATION NOTES:**

- IF ANY FIELD CONDITIONS EXIST WHICH PRECLUDE COMPLIANCE WITH THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND SHALL NOT PROCEED WITH ANY AFFECTED WORK.
- DIMENSIONS AND DETAILS SHALL BE CHECKED AGAINST THE PRE MANUFACTURED EQUIPMENT BUILDING SHOP DRAWINGS.
- THE CONTRACTOR SHALL VERIFY AND COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS, SLEEVES AND ANCHOR BOLTS AS REQUIRED BY ALL TRADES.
- REFER TO DRAWING T1 FOR ADDITIONAL NOTES AND REQUIREMENTS.

**SITE NOTES:**

- THE CONTRACTOR SHALL CALL UTILITIES PRIOR TO THE START OF CONSTRUCTION.
- ACTIVE EXISTING UTILITIES, WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY PRIOR TO PROCEEDING. SHOULD ANY UNCOVERED EXISTING UTILITY PRECLUDE COMPLETION OF THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- ALL RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED OFF SITE AND BE LEGALLY DISPOSED, AT NO ADDITIONAL COST.
- THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE EQUIPMENT AND TOWER AREAS.
- 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.
- THE AREAS OF THE COMPOUND DISTURBED BY THE WORK SHALL BE RETURNED TO THEIR ORIGINAL CONDITION.
- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
- IF ANY FIELD CONDITIONS EXIST WHICH PRECLUDE COMPLIANCE WITH THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND SHALL PROCEED WITH AFFECTED WORK AFTER CONFLICT IS SATISFACTORILY RESOLVED.
- DIMENSIONS AND DETAILS SHALL BE CHECKED AGAINST THE PRE MANUFACTURED EQUIPMENT BUILDING SHOP DRAWINGS.
- THE CONTRACTOR SHALL VERIFY AND COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS, SLEEVES AND ANCHOR BOLTS AS REQUIRED BY ALL TRADES.

**COMPACTED GRAVEL FILL:**

- COMPACTED GRAVEL FILL SHALL BE FURNISHED AND PLACED AS A FOUNDATION FOR STRUCTURES, WHERE SHOWN ON THE CONTRACT DRAWINGS OR DIRECTED BY THE ENGINEER.
- GRAVEL SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 11.02.02 OF THE CONNECTICUT D.O.T. STANDARD SPECIFICATIONS. ADMIXTURES AND SURFACE PROTECTIVE MATERIALS USED TO PREVENT THE GRAVEL FROM FREEZING MUST MEET THE APPROVAL OF THE ENGINEER. THE LARGEST STONE SIZE SHALL BE 3-1/2 INCHES.
- SAMPLES OF THE MATERIAL TO BE USED SHALL BE DELIVERED TO THE JOB SITE 5 DAYS PRIOR TO ITS INTENDED USE SO IT MAY BE TESTED FOR APPROVAL.
- AFTER ALL EXCAVATION HAS BEEN COMPLETED, GRAVEL SHALL BE DEPOSITED IN LAYERS NOT EXCEEDING EIGHT (8) INCHES IN DEPTH OVER THE AREAS. IN EXCEPTIONAL CASES, THE ENGINEER MAY PERMIT THE FIRST LAYER TO BE THICKER THAN EIGHT (8) INCHES. EACH LAYER SHALL BE LEVELED OFF BY SUITABLE EQUIPMENT. THE ENTIRE AREA OF EACH LAYER SHALL BE COMPACTED BY USE OF APPROVED VIBRATORY, PNEUMATIC-TIRED OR TREAD-TYPE COMPACTION EQUIPMENT. COMPACTION SHALL BE CONTINUED UNTIL THE DRY DENSITY OVER THE ENTIRE AREA OF EACH LAYER IS NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY, ACHIEVED BY AASHTO T-99 METHOD C. THE MOISTURE CONTENT OF THE GRAVEL SHALL NOT VARY BY MORE THAN 3% FROM ITS OPTIMUM MOISTURE CONTENT. NO SUBSEQUENT LAYER SHALL BE DEPOSITED UNTIL THE SPECIFIED COMPACTION IS ACHIEVED FOR THE PREVIOUS LAYER. IF NECESSARY TO OBTAIN THE REQUIRED COMPACTION, WATER SHALL BE ADDED AND GENTLE PUDDLING PERFORMED IF AUTHORIZED. COMPACTED GRAVEL FILL SHALL BE PREVENTED FROM FREEZING BY USE OF APPROVED ADMIXTURES OR BY USE OF APPROVED PROTECTIVE MATERIALS ON THE SURFACE, OR BOTH.

**CONCRETE AND REINFORCING STEEL NOTES:**

- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318.
- ALL CONCRETE SHALL BE NORMAL WEIGHT, 6% AIR ENTRAINED WITH A MAXIMUM SLUMP OF 4", AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED BARS. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 WELDED STEEL WIRE FABRIC. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD UNLESS OTHERWISE INDICATED.
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS OTHERWISE NOTED ON THE 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.
- ALL EXPOSED EDGES OF CONCRETE TO RECEIVE A 3/4" CHAMFER IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
- CONCRETE EQUIPMENT PAD TO RECEIVE A BRUSHED FINISH.
- 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 DURING DRILLING WITHOUT PRIOR REVIEW BY THE ENGINEER.



Calico Partnership  
c.d.a. Verizon Wireless  
CENTEK engineering  
203 494-0880  
203 494-8887 Fax  
652 North Branch Road  
Branford, CT 06405  
www.CentekEng.com

VERIZON WIRELESS  
WIRELESS COMMUNICATIONS FACILITY  
**PALMER POND**  
GALLUP FARM  
53 GALLUP ROAD  
VOLUNTOWN, CT 06394

DATE: 10/11/13  
SCALE: AS NOTED  
JOB NO. 10093

SHELTER FOUND. PLAN, DETAILS AND NOTES

**C-7**  
Sheet No. 9 of 9