Robinson+Cole

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Also admitted in Massachusetts

May 8, 2015

Via Hand Delivery

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

Re: Docket No. 456 – Application of Cellco Partnership d/b/a Verizon Wireless for a Certificate of Environmental Compatibility and Public Need for the Construction of a Wireless Telecommunications Facility at 33 Keegan Road, Plymouth, Connecticut

Dear Ms. Bachman:

Prior to the close of the Siting Council's public hearing on Docket No. 56, the applicant's project engineer discussed an alternative access driveway layout that would result in less overall impact on the property. Enclosed are 15 copies of revised project plans showing the revised driveway layout and grading, as well as a memorandum, dated May 7, 2015, describing the new driveway design. We are confident that this modified driveway layout will have less, overall, environmental impact on the parcel.

Cellco would propose to include this driveway layout and provide the Council with additional drainage analyses associated with this new driveway design as a part of the Development and Management ("D&M") Plan, if the Siting Council approves the Docket No. 456 Application. Since the new road layout was discussed in general terms before the close of the public hearing, we do not necessarily believe that the Council needs to reopen its public hearing to formally receive the attached exhibit into the record. If the Council feels otherwise, however, we would ask that the hearing be reopened for the limited purpose of reviewing and discussing the new roadway layout.

13800285-v1

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Melanie A. Bachman May 8, 2015 Page 2

Thank you in advance for your cooperation. If you have any questions or need any additional information, please feel free to contact me.

Sincerely, hmi Kenneth Ć. Baldwin

KCB/dlh Enclosures Copy to: Anthony R. Befera

Carlo F. Centore, PE Elizabeth Jamieson



M E M O R A N D U M

TO:Anthony Befera (Verizon Wireless)FROM:Harry Rochville, EIT	
FROM: Harry Rochville, EIT	
CC: Carlo F. Centore, PE (Centek), Aleksey Tyurin (Verizon), Ken Baldw	in (R&C)
PROJECT: Verizon Wireless – Plymouth West Relo.	
CENTEK PROJ. NUMBER: 13321.000	

On April 21, 2015 we visited the subject site to re-evaluate access road alternatives with the property owner.

An alternate is presented to minimize the rock cut at the initial portion of the access drive and to utilize the mellower existing surface once the steep slope off Keegan Road is overcome. This alternate design efficiently addresses the shortcomings of the original access road design directly off of Keegan Road, which required significant ledge cuts of 12-16 feet for the initial 150 feet of drive and 6-10 feet for the next 150 feet.

The proposed access drive will enter the subject parcel from the northerly portion along Keegan Road at a 35° angle to the south east. This approach enables the ability to utilize the steep (45% grade) slope off Keegan Road to our advantage by having a 20% grade road along the side of the hill and leading to a direct shot to the compound. The ledge cuts for the first 100 feet of access are estimated at 4-10 feet, with fill required for the next 80 feet, creating a bench along the hillside. The remainder of the access drive leading to the compound is on much mellower slopes with grades of 10-13%. At the compound location no retaining wall will be required as the existing surface will be utilized to the greatest extent as possible. To maintain a reasonable compound surface, a maximum 5 foot ledge cut will be required into the top of the ridge.

The existing drainage conditions will be withheld at the compound surface and runoff is minimized by implementing a level spreader along the down side of the compound area. Also, two cross swales with level spreaders will be located along the access drive to further instill existing drainage conditions away from the catch basin on the east side of Keegan Road. One swale will be used along the north side of the access drive for the first 350 feet that will discharge into a proposed catch basin at the access drive entrance. This catch basin will tie into the previously mentioned catch basin on Keegan Road and discharge across the street into existing wetlands as is currently the case. To address a 3% increase in runoff, a rip rap apron for outlet protection at the current discharge location is proposed.



The proposed access drive will require removal of 28 trees, opposed to 55 on the original plan. The total cut for the proposed plan is approximately 1,315 CY, with 480 CY of fill being required. The original plan called for approximately 5,520 CY of cut and 1,140 CY of fill due to the extreme cut directly through the slope and retaining wall at the compound. Both the original and proposed plans create a 3% increase in runoff addressed with improvements to the existing outlet.

Please feel free to contact us with any questions.

d.b.a. Verizonwireless WIRELESS COMMUNICATIONS FACILITY PLYMOUTH WEST RELO. 33 KEEGAN ROAD PLYMOUTH, CT 06782

SITE DIRE	CTIONS			
FROM:	99 EAST RIVER DRIVE EAST HARTFORD, CONNECTICUT	TO:	33 KEEGAN ROAD PLYMOUTH, CONNECTICUT	
 Head EAST or Turn LEFT to Take the 1st Turn LEFT to Take the 1st Turn LEFT to Take EXIT 33 Keep LEFT at Merge onto C Turn RIGHT o Take the 3rd Take the 3rd Take the 3rd Take the 1st Slight RIGHT Continue onto Slight LEFT o Turn LEFT o Turn LEFT o 	n E RIVER DR toward DARLIN ST stay on E RIVER DR LEFT onto CONNECTICUT BLVD merge onto 1-84 for CT-72 W toward BRISTOL the fork and merge onto CT-72 CT-72 W nto CT-72 RIGHT onto RIVERSIDE AVE LEFT onto MAIN ST RIGHT onto SCHOOL ST onto PARK ST o TERRYVILLE RD o S RIVERSIDE AVE nto US-6 W/MAIN ST to CT-262 nto KEEGAN RD, and the destinat	2 W ion will t	be on the LEFT	0.3 mi. 400 ft. 0.2 mi. 13.5 mi. 0.3 mi. 0.1 mi. 3.9 mi. 0.4 mi. 259 ft. 0.4 mi. 1.0 mi. 1.2 mi. 0.9 mi. 2.9 mi. 2.9 mi. 0.6 mi. 0.3 mi.

GENERAL NOTES

1. PROPOSED ANTENNA LOCATIONS AND HEIGHTS PROVIDED BY CELLCO PARTNERSHIP.

SITE INFORMATION

THE SCOPE OF WORK SHALL INCLUDE:

- 1. THE CONSTRUCTION OF A 50'x50' FENCED WIRELESS COMMUNICATIONS COMPOUND WITHIN A 100'x100' LEASE AREA.
- 2. A TOTAL OF UP TO TWELVE (12) DIRECTIONAL PANEL ANTENNAS ARE PROPOSED TO BE MOUNTED AT A CENTERLINE ELEVATION OF 140'-0"± AGL ON A 140'-0"± PROPOSED STEEL MONOPOLE TOWER.
- 3. TOTAL ACCESS DRIVE LENGTH IS 470'± OFF OF KEEGAN ROAD VIA A 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. FINAL DESIGN FOR TOWER AND ANTENNA MOUNTS SHALL BE INCLUDED IN THE D&M PLANS.
- 6. THE PROPOSED WIRELESS FACILITY INSTALLATION WILL BE DESIGNED IN ACCORDANCE WITH THE 2003 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2009 CONNECTICUT SUPPLEMENT.
- 7. THERE WILL NOT BE ANY LIGHTING UNLESS REQUIRED BY THE FCC OR THE FAA.
- 8. THERE WILL NOT BE ANY SIGNS OR ADVERTISING ON THE ANTENNAS OR EQUIPMENT.

Cellco Partnership



- SITE NAM SITE ADDF
- PROPERT
- LESSEE/
- VERIZON
- LEGAL/RE
- TOWER C

SHEET INDEX		
SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	2
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PROJECT SUMMARY

E:	PLYMOUTH WEST RELO.
RESS:	33 KEEGAN ROAD PLYMOUTH, CT 06782
Y OWNER:	STEVEN A. WESTALL 41 KEEGAN ROAD PLYMOUTH, CT 06782
TENANT:	CELLCO PARTNERSHIP d.b.a. VERIZON WIRELESS 99 EAST RIVER DRIVE EAST HARTFORD, CT 06108
SITE ACQUISITION CONTACT:	ALEKSEY TYURIN CELLCO PARTNERSHIP (860) 803–8213
EGULATORY COUNSEL:	KENNETH C. BALDWIN, ESQ. CELLCO PARTNERSHIP (860) 803–8213
OORDINATES:	LATITUDE 41°–39'–42.334" LONGITUDE 73°–02'–44.321" GROUND ELEVATION: 826.4'± A.M.S.L.
	COORDINATES AND GROUND ELEVATION REFERENCED FROM FAA 1-A SURVEY CERTIFICATION AS PREPARED BY MARTINEZ COUCH AND ASSOCIATES LLC, DATED JUNE 5, 2014, REVISED JANUARY 21, 2015.







MISCELLANEOUS SITE INFORMATION

DISTANCE TO NEAREST OFF SITE RESIDENCE*	=	215 ' ±
DISTANCE TO NEAREST MUNICIPALITY (THOMASTON, CT)*	=	4,010'±
ACCESS LENGTH OFF KEEGAN RD.	=	470 ' ±
NUMBER OF RESIDENTIAL STRUCTURES WITHIN 1000' OF TOWER	=	11±
TOTAL NUMBER OF TREES TO BE REMOVED	=	28
DISTANCE TO NEAREST PROPERTY LINE*	=	36 ' ±

* DISTANCES TAKEN FROM CENTER OF TOWER

	SYMBOLS LEGEND
	PROPERTY LINE
	EASEMENT LINE (PROPOSED)
	EXISTING ROAD
	ACCESS DRIVE (PROPOSED)
	LEASE AREA (PROPOSED)
650	CONTOUR LINE
650	GRADING LINE
¢	UTILITY POLE
ŝ	EXISTING DECIDUOUS TREE
\sum	EXISTING CONIFEROUS TREE
\bigotimes	EXISTING DICIDUOUS TREE TO BE REMOVED
\otimes	EXISTING CONIFEROUS TREE TO BE REMOVED
~~~~~	COMPOST FILTER SOCK/STRAW WATTLE
	EXISTING TREE LINE
<b></b>	FENCE LINE
×	SPOT ELEVATION (PROPOSED)
00000	EXISTING STONE WALL
₩F# 1–04	WETLAND BOUNDARY
$\sim \sim \sim$	SILTATION FENCE
TLC	TOP LEDGE CUT
BLC	BOTTOM LEDGE CUT

#### SURVEY NOTES

THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300B-1 THRU 20-300B-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES – "MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ENDORSED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPT. 26, 1996. IT IS A BOUNDARY & TOPOGRAPHIC MAP AND IS BASED UPON A DEPENDENT RESURVEY CONFORMING TO HORIZONTAL ACCURACY CLASS A-2 AND A VERTICAL ACCURACY OF CLASS T-2 AND IS INTENDED TO BE USED TO DEPICT A PROPOSED TELECOMMUNICATION SITE.

VERTICAL DATUM IS BASED ON NGVD 29.

COORDINATES REFER TO NAD 83.

PARCEL OWNER OF RECORD: STEVEN A. WESTALL M.A.: 41 KEEGAN ROAD PLYMOUTH, CT 06782

PARCEL AREA =  $12.4 \pm$  ACRES.

PARCEL ID: MAP 547, BLOCK 65 LOT 16A-1 PLYMOUTH ASSESSOR'S OFFICE.

PARCEL LIES WITHIN A RA1 ZONING DISTRICT.

DIVISION LINE BETWEEN LOTS 16A-1 & 16 IS BASED ON CORRECTED PLOT PLAN SKETCH SHOWING CURRENT PARCEL DIVISION LINE FOUND IN PLYMOUTH ZONING DEPARTMENT.

PARCEL IS NOT IN A FLOOD HAZARD ZONE ON THE FLOOD INSURANCE RATE MAP, TOWN OF PLYMOUTH, LITCHFIELD COUNTY, CONNECTICUT, PANEL 3 OF10, COMMUNITY PANEL NUMBERS 0901138 0003 C, MAP REVISED NOVEMBER 6, 1998, BY FEDERAL EMERGENCY MANAGEMENT AGENCY.

NOT ALL IMPROVEMENTS SHOWN.

MAP REFERENCES

1) MAP SHOWING PROPERTY OF HOLLY M. WESTALL SOUTH STREET EXTENSION PLYMOUTH, CONN. SCALE: 1'=50', DATED: SEPT. 22, 1983. BY MATTSON ASSOCIATES LAND SURVEYORS & CIVIL ENGINEERS.

2) MAP SHOWING PROPERTY OF STEVEN A. WESTALL SOUTH STREET EXTENSION PLYMOUTH, CONN. SCALE: 1"=100', DATED: JULY 30, 1986. BY MATTSON ASSOCIATES LAND SURVEYORS & CIVIL ENGINEERS. THIS MAP WAS NOT FOUND IN THE PLYMOUTH LAND RECORDS, PLANNING OR ZONING DEPARTMENTS.

3) PROPERTY SURVEY MAP SHOWING REVISIONS TO LOT LINES PONDVIEW SUBDIVISION LOTS 1-1, 1-7, & 1-9 TERENCE FOLEY SOUTH STREET AND KEEGAN ROAD PLYMOUTH, CONN. SCALE 1" = 100' DATED: APRIL 22, 1999, BY ROBERT GREEN ASSOCIATES L.L.C. SURVEYORS & ENGINEERS.

#### TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON

THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE AND SEAL



TRUE NORTH  $\mathbf{\Omega}$ PROPOSED CELLCO PARTNERSHIP LTE ----RRU MOUNTED TO THE LTE ANTENNA MAST. TYP. OF (1) PER SECTOR, TOTAL OF (3), MODEL: **RŘH2x40–07–U** 20' (DIMS: 20.0"H × 17.0"W × 10.0"D) TALPHA SECTOR PROPOSED CELLCO PARTNERSHIP PROPOSED CELLCO PARTNERSHIP -ANTENNA, TYP. OF TWO (2) PER AWS MAIN DISTRIBUTION BOX, SECTOR, TOTAL OF SIX (6), TYP. OF A TOTAL OF (1) MOUNTED 230° GAMMA MODEL: HBX-6517DS-VTM TO MONOPOLE RING MOUNT (BELOW), (DIMS: 74.9"L x 6.5"W x 3.3"D) MODEL: **DB-T1-6Z-8AB-0Z** SECTOR (DIMS: 24"H × 24"W × 10"D) - PROPOSED CELLCO PARTNERSHIP ANTENNA, TYP. OF TWO (2) PER PROPOSED CELLCO PARTNERSHIP -140° SECTOR. TOTAL OF SIX (6), BETA AWS RRU MOUNTED TO THE AWS MODEL: LNX-6514DS-VTM SECTOR ANTENNA MAST. TYP. OF (1) PER (DIMS: 72.7"L x 11.9"W x 7.1"D) SECTOR, TOTAL OF (3). MODEL: RRH2x60-AWS - PROPOSED CELLCO PARTNERSHIP PCS (DIMS: 36.7"H x 10.6"W x 5.8"D) RRU MOUNTED TO THE PCS ANTENNA MAST. TYP. OF A TOTAL OF THREE (3), ONE (1) PER SECTOR, <u>PLAN VIEW</u> MODEL: **RRH2x60–PCS** (DIMS: 21.5"H x 12.0"W x 7.4"D) ANTENNA MOUNTING CONFIGURATION 3 SCALE: 1/8" = 1'C-2 / PROPOSED CELLCO PARTNERSHIP ----- $140' \pm$  MONOPOLE TOWER. PROPOSED CELLCO PARTNERSHIP 12'x30' EQUIPMENT SHELTER (WITH DIESEL FUELED EMERGENCY POWER GENERATOR) AND ASSOCIATED ANTENNA CABLE ICE BRIDGE. PROPOSED CELLCO PARTNERSHIP -LIMITS OF LEDGE CUT. ±25' FUTURE CARRIER EQUIPMENT AND -ASSOCIATED ANTENNA CABLE ICE BRIDGE LOCATION, TYP. L_____  $\begin{array}{|c|c|c|c|} \hline \textbf{A} & \textbf{PROPOSED} & \textbf{CELLCO} & \textbf{PARTNERSHIP} \\ \hline \textbf{C-5} & \textbf{12'} \pm & \textbf{WIDE} & \textbf{COMPOUND} & \textbf{ACCESS} & \textbf{GATE.} \end{array}$ ----는 늬 | || PROPOSED CELLCO PARTNERSHIP 8' TALL GALVANIZED CHAINLINK FENCE WITH 3 STRANDS BARBED WIRE. PROPOSED CELLCO PARTNERSHIP — UTILITY BACKBOARD, PAD MOUNTED C-5 TRANSFORMER AND BOLLARDS. ____ 0 PROPOSED CELLCO PARTNERSHIP  $100' \pm x100' \pm$  LEASE AREA. 7 C-5 PROPOSED CELLCO PARTNERSHIP STAGGERED DOUBLE ROW OF WHITE PINE TREES @ 6' O.C. 6 PROPOSED CELLCO PARTNERSHIP -C-5 12' WIDE GRAVEL ACCESS DRIVE. 12' PROPOSED CELLCO PARTNERSHIP -20' WIDE ACCESS/UTILITY EASEMENT. 20' APPROXIMATE NORTH COMPOUND PLAN SCALE: 1" = 10' C-2



Sheet No. 4



MODIFIED RIP RAP SIZE CHART		
STONE SIZE	% OF MASS	
10" AND OVER	0	
6" TO 10"	30-50	
4" TO 6"	30-50	
2" TO 4"	20-30	
1" TO 2"	10-20	
LEES THAN 1"	0-10	

# GENERAL CONSTRUCTION / PRE-CONSTRUCTION NOTES

PRIOR TO COMMENCEMNENT OF ANY CONSTRUCTION ACTIVITIES, A MANDITORY 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

#### 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 SEEDED 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 SILITATION FENCES AS REQUIRED TO

BEGIN TEMPORARY AND PERMANENT SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDED OR MULCHED IMMEDIATELY AFTER THEIR CONSTRUCTION. NO AREA SHALL BE LEFT UNSTABILIZED FOR A TIME PERIOD OF

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

13. AFTER GRASS HAS BEEN FULLY GERMINATED IN ALL SEEDED AREAS, REMOVE ALL TEMPORARY EROSION CONTROL

## 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. LAND DISTURBANCE WILL BE KEPT TO A MINIMUM AND RESTABILIZATIONS WILL BE SCHEDULED AS SOON AS

4. 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

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.

6. 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.

7. 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.

8. SWALE DISCHARGE AREA WILL BE PROTECTED WITH RIP RAP SPLASH PAD/ ENERGY DISSIPATER.

9. ALL FILL AREAS SHALL BE COMPACTED SUFFICIENTLY FOR THEIR INTENDED PURPOSE AND AS REQUIRED TO REDUCE SLIPPING, EROSION OR EXCESS SATURATION.

10. 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 SODDING OR

11. 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

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

MAINTENANCE SHALL BE PERFORMED AS NEEDED TO PREVENT BUILD UP IN THE SILT FENCE DUE TO DEPOSITION OF

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. 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.





	770
	760
	750
	740
	730
3-	720 -20

















MODIFIED RIP RAP SIZE CHART		
STONE SIZE	% OF MASS	
10" AND OVER	0	
6" TO 10"	30-50	
4" TO 6"	30-50	
2" TO 4"	20-30	
1" TO 2"	10-20	
	0 10	

	0
6" TO 10"	30-50
4" TO 6"	30-50
2" TO 4"	20-30
1" TO 2"	10-20
LEES THAN 1"	0-10











| C

1. BACK FILL SHALL NOT CONTAIN ASHES, CINDERS, SHELLS, FROZEN MATERIAL, LOOSE DEBRIS OR STONES LARGER THAN

2. WHERE EXISTING UTILITIES ARE LIKELY TO BE ENCOUNTERED, CONTRACTOR SHALL HAND DIG AND PROTECT EXISTING UTILITIES.

TYPICAL BURIAL GROUND CABLE DETAIL

FINISHED GRADE TO -

BACKFILL W/ SUITABLE-

MATERIAL COMPACTED TO

95% MAXIMUM DENSITY

GROUND RING CABLE -

COVER GROUND WIRE -

2" IN MAXIMUM DIMENSION.

WITH CONDUCTIVE

CEMENT 6"DX24"W,

TYPICAL. ELECTRIC MOTION COMPANY, INC. PHONE # (860)379-8515

NOT TO SCALE

NOTES:

6

C-6

(SEE THIS DRAWING

MATCH EXISTING

CABLE WARNING

CONDITIONS

TAPE (RED)

(ASTM D 1557)

FOR ROUTING)







FC	DUNDATION NOTES:
1.	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.
2.	DIMENSIONS AND DETAILS SHALL BE CHECKED AGAINST THE PRE MANUFACTURED EQUIPMENT BUILDING SHOP DRAWINGS.
3.	THE CONTRACTOR SHALL VERIFY AND COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS, SLEEVES AND ANCHOR BOLTS AS REQUIRED BY ALL TRADES.
<u>SI</u>	<u>TE NOTES:</u>
1.	THE CONTRACTOR SHALL CALL UTILITIES PRIOR TO THE START OF CONSTRUCTION.
2.	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.
3.	ALL RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED OFF SITE AND BE LEGALLY DISPOSED, AT NO ADDITIONAL COST.
4.	THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE EQUIPMENT AND TOWER AREAS.
5.	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.
6.	THE SUBGRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
7.	THE AREAS OF THE COMPOUND DISTURBED BY THE WORK SHALL BE RETURNED TO THEIR ORIGINAL CONDITION.
8.	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.
9.	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.
10.	DIMENSIONS AND DETAILS SHALL BE CHECKED AGAINST THE PRE MANUFACTURED EQUIPMENT BUILDING SHOP DRAWINGS.
11.	THE CONTRACTOR SHALL VERIFY AND COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS, SLEEVES AND ANCHOR BOLTS AS REQUIRED BY ALL TRADES.
<u>C0</u>	OMPACTED GRAVEL FILL:
1.	COMPACTED GRAVEL FILL SHALL BE FURNISHED AND PLACED AS A FOUNDATION FOR STRUCTURES, WHERE SHOWN ON THE CONTRACT DRAWINGS OR DIRECTED BY THE ENGINEER.
2.	GRAVEL SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE M.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.
3.	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.
4.	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.
<u>C(</u>	DNCRETE AND REINFORCING STEEL NOTES:
1.	ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318.
2.	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.
3.	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.
4.	THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS OTHERWISE NOTED ON THE DRAWINGS: CONCRETE CAST AGAINST EARTH
	CONCRETE EXPOSED TO EARTH OR WEATHER: #6 AND LARGER
	CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND: SLAB AND WALL
5.	ALL EXPOSED EDGES OF CONCRETE TO RECEIVE A 3/4" CHAMFER IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
6.	CONCRETE EQUIPMENT PAD TO RECEIVE A BRUSHED FINISH.
7.	INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT DURING DRILLING WITHOUT PRIOR REVIEW BY THE ENGINEER.

![](_page_12_Figure_3.jpeg)