ATTACHMENT 3

ATTACHMENT 3(A)

General Facility Description

49 Mountain Avenue North Stonington, Connecticut Owner: Tucker Village LLC 2.24 Acre Parcel

The footprint of the proposed telecommunications facility is located at the western edge portion of a 2.24 acre parcel owned by Tucker Village LLC located at 49 Mountain Avenue in North Stonington. The proposed facility consists of a 45' x 90' compound within a 100' by 100'lease area. The proposed height of the new self-supporting monopole tower is 190' above grade level ("AGL").

AT&T will install up to twelve (12) panel antennas (centerline) at the 187' AGL height of the tower together with an associated 12'x 20' radio equipment shelter at the tower base on a concrete pad within the tower compound. The tower compound would consist of a 40' by 75' area to accommodate AT&T's equipment and provide for future shared use of the facility by other carriers. The tower compound would be enclosed by an 8' foot high chain link fence. Vehicle access to the facility would be provided by a gravel access drive approximately 400' in length. Utility connections will be run underground from Mountain Avenue.

Site Evaluation Report

I. LOCATION

- A. COORDINATES: 41° 30' 16.7" N 71° 52' 55.7" W
- B. GROUND ELEVATION: 474' AMSL
- C. SITE ADDRESS: 49 Mountain Avenue, Connecticut
- D. ZONING WITHIN 1/4 MILE OF SITE: Residential

II. DESCRIPTION

- A. SITE SIZE: 45' by 90' compound
- B. LESSOR'S PARCEL: 2.24
- C. TOWER TYPE/HEIGHT: Monopole/190' AGL
- D. SITE TOPOGRAPHY AND SURFACE: The proposed tower and associated compound are near the top of a slope leading up from Mountain Avenue.
- E. SURROUNDING TERRAIN, VEGETATION, WETLANDS, OR WATER: The surrounding terrain is characterized by rolling hills with ground elevations ranging from 170' AMSL to approximately 534' AMSL. A review of the site together with available site information provided by Federal, State and local databases indicates that the nearest wetlands are over 400' distant from the proposed facility and access drive. No activity is proposed near or directly within the delineated wetland area.
- F. LAND USE WITHIN 1/4 MILE OF SITE: General land use activities directly surrounding the subject parcel include residential uses, wooded and undeveloped land, and various roads and highways, including Route 201.

III. FACILITIES

- A. POWER COMPANY: Connecticut Light and Power
- B. POWER PROXIMITY TO SITE: Electric power will be available for use from Mountain Avenue.
- C. TELEPHONE COMPANY: AT&T
- D. PHONE SERVICE PROXIMITY: Telephone facilities/service will be available from Mountain Avenue.
- E. VEHICLE ACCESS TO SITE: Access to the facility would be provided by a gravel access driveway

- F. OBSTRUCTIONS: None
- G. CLEARING AND FILL REQUIRED: The facility would require the removal of 36 trees above 6" DBH and some clearing of brush. Some fill will be required to properly grade the proposed access drive and compound construction area. Detailed plans would be included in a Development and Management Plan ("D&M" plan) after any approval of the facility which may be issued by the Connecticut Siting Council.

IV. LEGAL

- A. PURCHASE [] LEASE [X]
- B. OWNER: Tucker Village LLC
- C. ADDRESS: 49 Mountain Avenue, North Stonington, Connecticut

Facilities and Equipment Specification

I. TOWER SPECIFICATIONS:

A. MANUFACTURER: To be determined

B. TYPE: Self-Supporting monopole

C. HEIGHT: 190' AGL

DIMENSIONS: Approximately 5' in diameter at the base, tapering to approximately 2' at

the top.

D. LIGHTING: None as set forth in attached FAA report

II. TOWER LOADING:

A. AT&T – up to 12 panel Antennas, along with up to 12 TMA/Diplexers

- a. Model Powerwave P90-14-XLH-RR or equivalent panel antenna
- b. Antenna Dimensions approximately 48"H x 12"W x 6"D
- c. Position on Tower 187' centerline AGL and below
- d. Transmission Lines MFG/Model: Commscope Aluminum; Size 1-5/8"
- B. Future Carriers To be determined

III. ENGINEERING ANALYSIS AND CERTIFICATION:

The tower will be designed in accordance with American National Standards Institute TIA/EIA-222-G "Structural Standards for Steel Antenna Towers and Antenna Support Structures" and the 2003 International Building Code with 2005 Connecticut Amendment. The foundation design would be based on soil conditions at the site. The details of the tower and foundation design will be provided as part of the final D&M plan.

SBA Towers III LLC

WIRELESS COMMUNICATIONS FACILITY

N. STONINGTON 3 - CT11796-S 49 MOUNTAIN AVENUE NORTH STONINGTON, CT

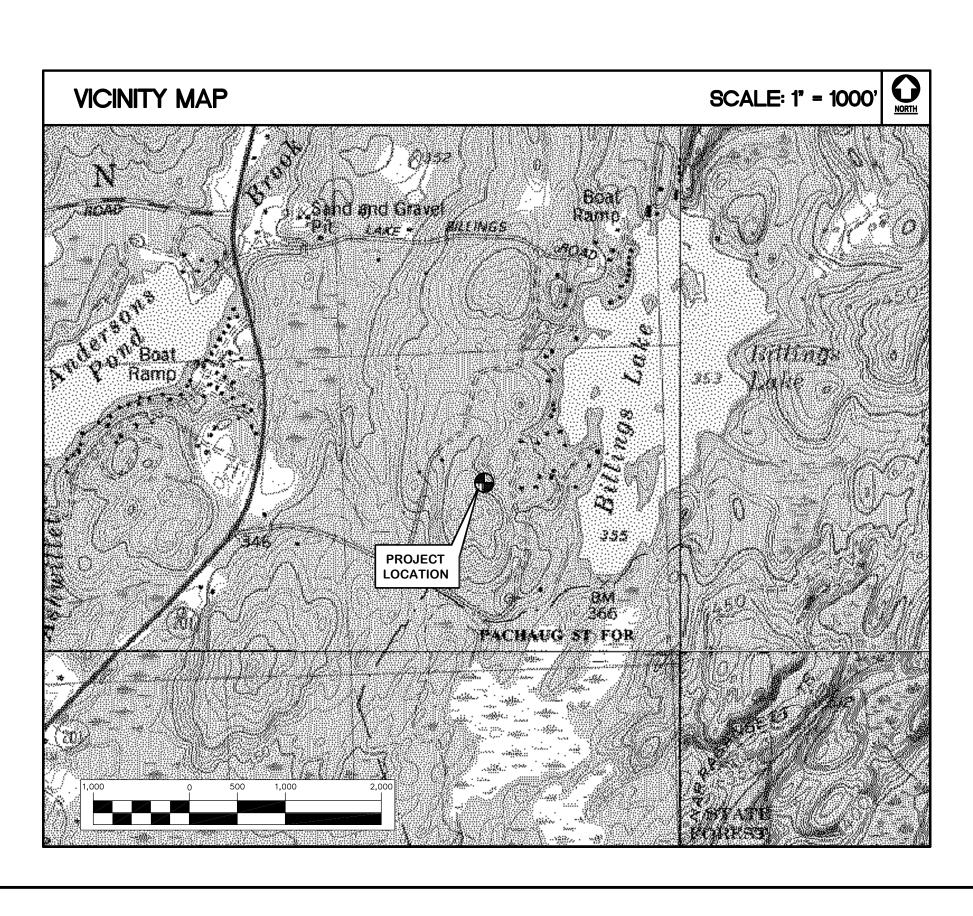
SITE DIRECTIONS		
FROM: ONE RESEARCH DRIVE WESTBOROUGH, MA TO: 49 MOUNTAIN AVENUE NORTH STONINGTON, CON	INECTIC	UT
 START OUT GOING WEST ON RESEARCH DRIVE TOWARD FRIBERG PKWY/ WESTBOROUGH BUSINESS PARK. 	0.0	MI.
- MERGE ONTO MA-9 E/TURNPIKE ROAD.	0.5	MI.
- MERGE ONTO 1-495 S TOWARD I-90/CAPE COD.	1.8	
- MERGE ONTO I-90 W/MASS PIKE VIA EXIT 22 TOWARD SPRINGFIELD/ALBANY.	16.5	MI.
- TAKE THE I-290 E/ I-395 S EXIST, EXIT 10 TOWARD US-20/ WORCHESTER /WORCHESTER AIRPORT.	1.1	MI.
- MERGE ONTO I-395 S TOWARD NORWICH CT (CROSSING INTO CT).	44.0	MI.
- TAKE THE CT-138 / CT-164 EXIT, EXIT 85, TOWARD JEWETT CITY/GRISWOLD.	0.2	MI.
- TURN LEFT ONTO VOLUNTOWN ROAD / CT-138.	4.0	MI.
- TURN RIGHT ONTO GLASGO RD / CT-201.	6.1	MI.
- TURN LEFT ONTO LEGEND WOOD RD.	0.2	
- LEGEND WOOD RD BECOMES ISLAND ROAD.	0.6	
- TURN SLIGHT LEFT ONTO MOUNTAIN AVE.	0.3	MI.

GENERAL NOTES

1. PROPOSED ANTENNA LOCATIONS AND HEIGHTS PROVIDED BY SBA TOWERS II LLC.

SITE INFORMATION

- THE SCOPE OF WORK SHALL INCLUDE:
- 1. THE CONSTRUCTION OF A 45'x90' FENCED WIRELESS COMMUNICATIONS COMPOUND WITHIN A 100'x100' LEASE AREA.
- 2. A 190' STEEL MONOPOLE TOWER IS PROPOSED TO BE LOCATED WITHIN THE PROPOSED FENCED COMPOUND.
- 3. TOTAL ACCESS DRIVE LENGTH IS 420'±. OFF OF MOUNTAIN AVENUE.
- 4. POWER AND TELCO UTILITIES SHALL BE ROUTED UNDERGROUND FROM EXISTING RESPECTIVE DEMARCS ON MOUNTAIN AVENUE R.O.W TO THE PROPOSED UTILITY BACKBOARD LOCATED ADJACENT TO THE PROPOSED FENCED COMPOUND. FINAL DEMARC LOCATION AND UTILITY ROUTING WILL BE VERIFIED/DETERMINED BY LOCAL LITTLY COMPANIES
- 5. FINAL DESIGN FOR TOWER SHALL BE INCLUDED IN THE DEVELOPMENT & MANAGEMENT (D&M) DOCUMENTS.
- 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.
- 9. FOR ADDITIONAL NOTES AND DETAILS REFER TO THE ACCOMPANYING DRAWINGS.

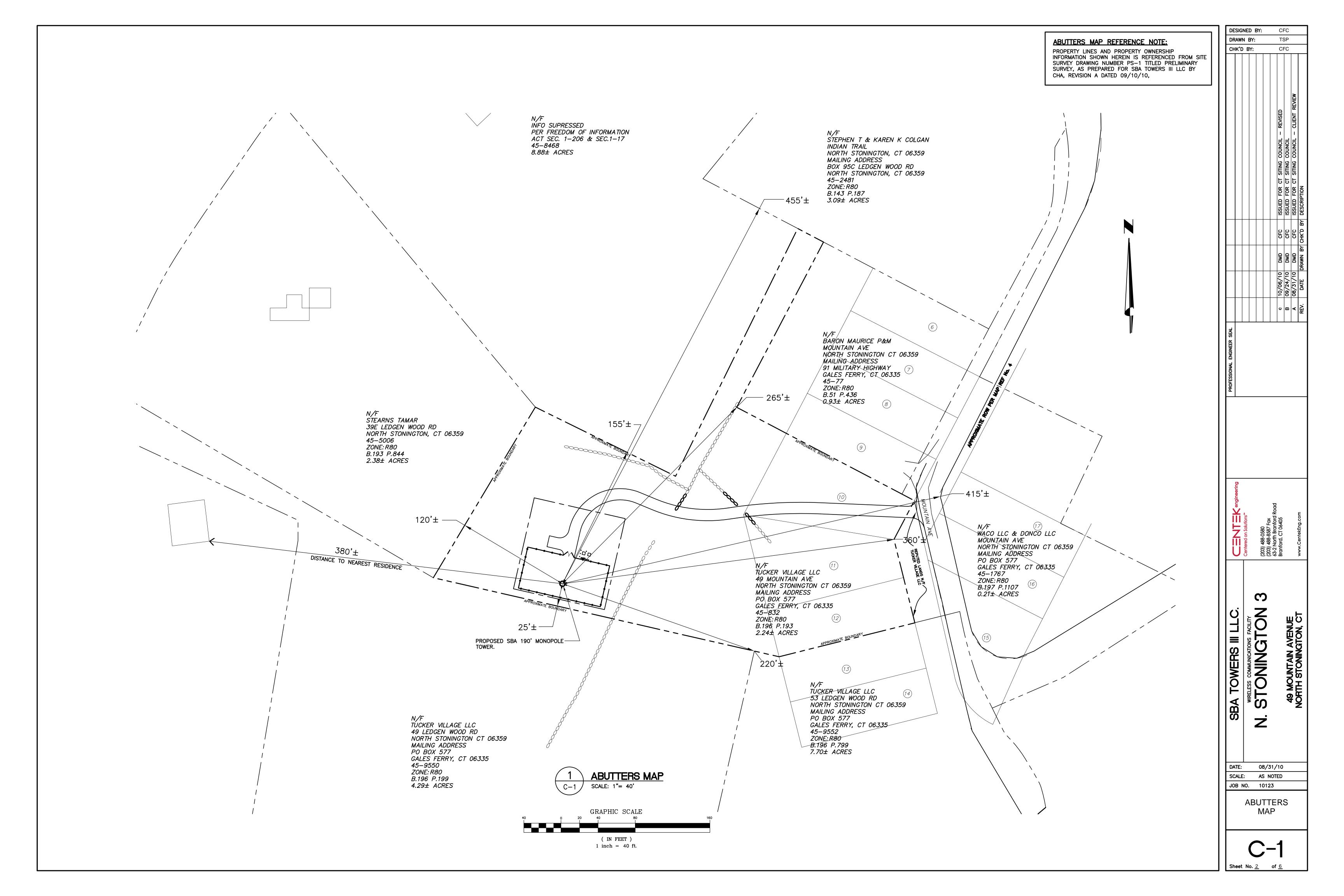


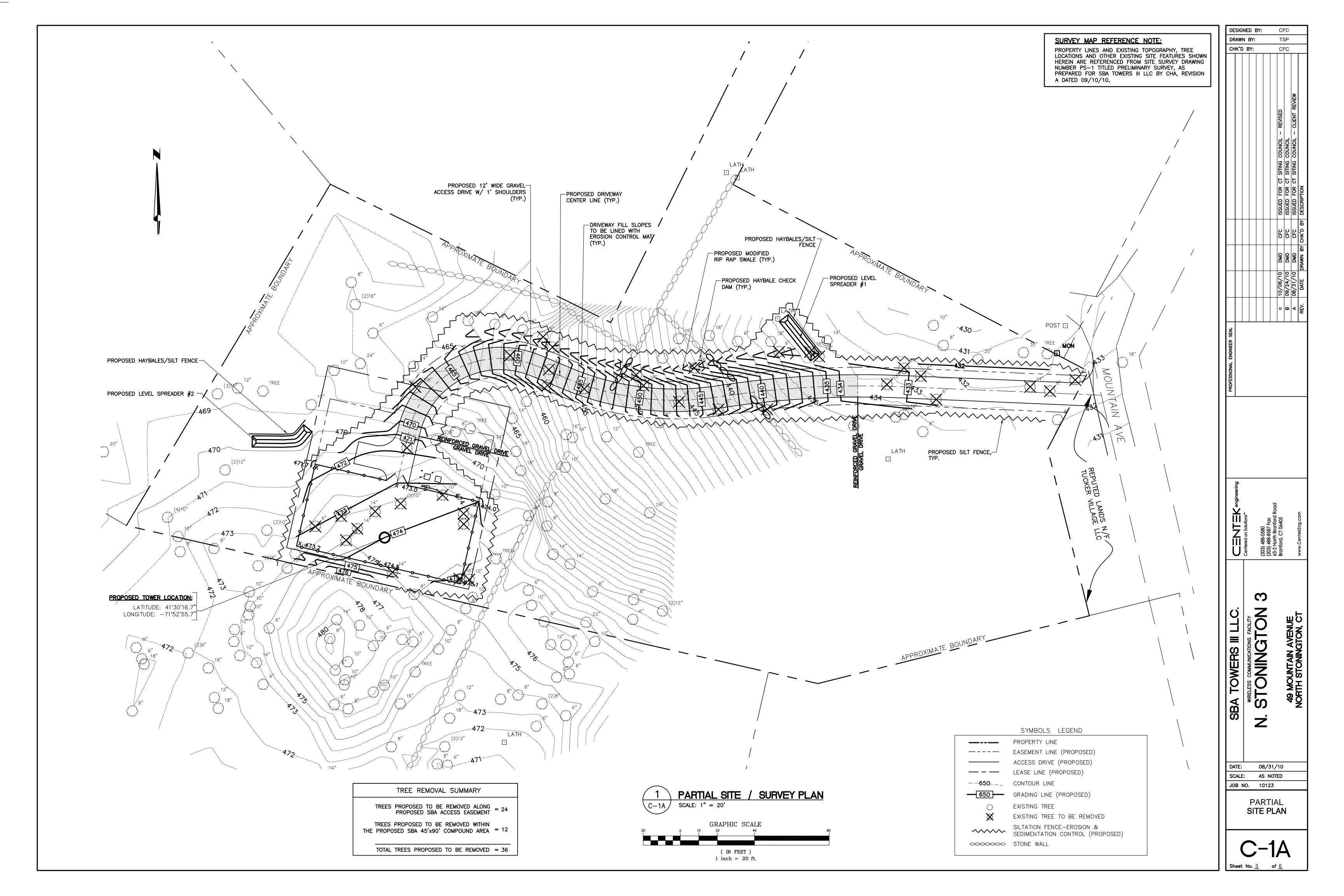
PROJECT SUMMARY					
SITE NAME:	N. STONINGTON 3, CT11796-S				
SITE ADDRESS:	49 MOUNTAIN AVENUE NORTH STONINGTON, CT 06359				
PROPERTY OWNER/ LEASOR:	TUCKER VILLAGE LLC 49 MOUNTAIN ROAD NORTH STONINGTON, CT 06359 PO BOX 577 GALES FERRY, CT 06335				
LESSEE / APPLICANT:	SBA TOWERS III LLC 5900 BROKEN SOUND PARKWAY N.W. BOCA RATON, FL 33487				
ENGINEER:	CENTEK ENGINEERING, INC. 63–2 NORTH BRANFORD ROAD BRANFORD, CT 06405				
TOWER COORDINATES:	LATITUDE: 41°30'16.7" LONGITUDE: 71°52'55.7" AVERAGE GROUND ELEVATION: 475'± A.M.S.L. COORDINATES ARE BASED ON FAA 2C CERTIFICATION CONDUCTED BY CHA, DATED AUGUST 12, 2010.				

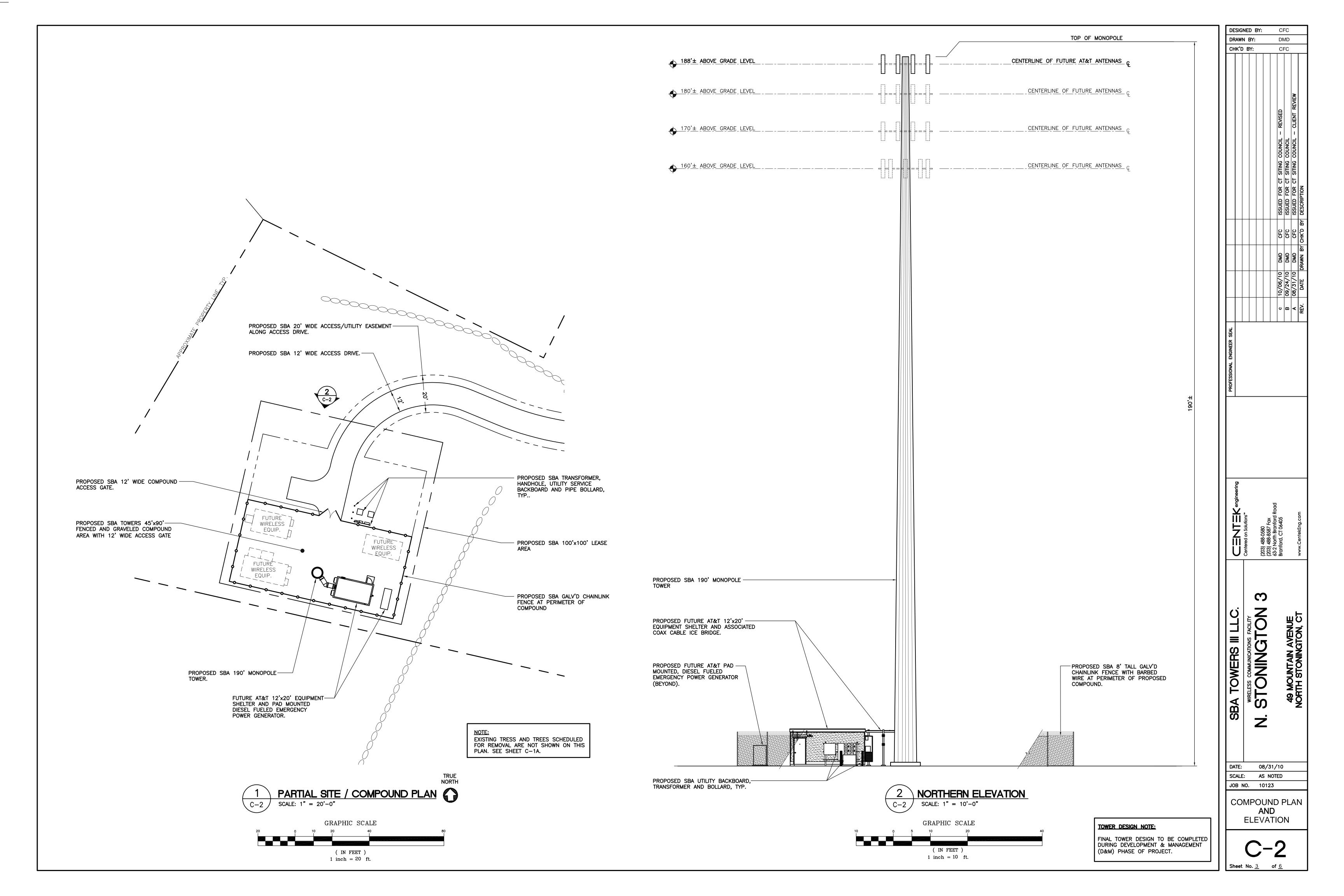
LEGEND	
SYMBOL	DESCRIPTION
	SECTION OR DETAIL NUMBER SHEET WHERE DETAIL/SECTION OCCURS
	ELEVATION NUMBER SHEET WHERE ELEVATION OCCURS

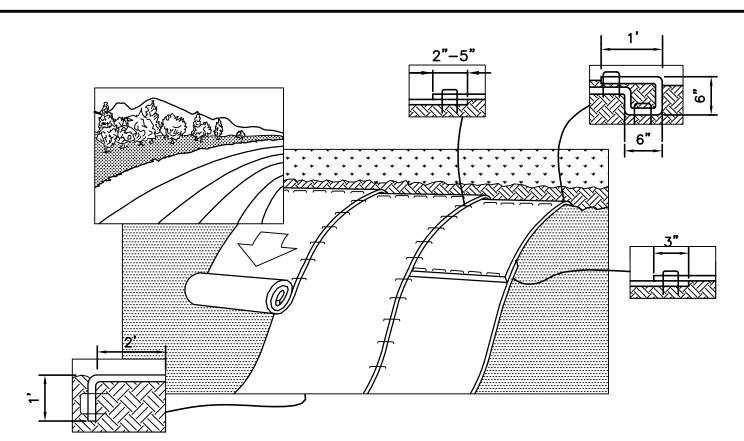
SHE	SHEET INDEX					
SHT. NO.	DESCRIPTION	REV. NO.				
T-1	TITLE SHEET	С				
C-1	ABUTTERS MAP	С				
C-1A	PARTIAL SITE PLAN	С				
C-2	COMPOUND PLAN AND ELEVATION	С				
C-3	SITE DETAILS AND NOTES	С				
C-4	SITE DETAILS	С				

	AWI						DI	MD =C		
							ISSUED FOR CT SITING COUNCIL - REVISED		ISSUED FOR CT SITING COUNCIL - CLIENT REVIEW	DRAWN BY CHK'D BY DESCRIPTION
							CFC	CFC	CFC	зү снк'р в
									OMD 0	
							10/06/10	09/24/10	08/31/10	DATE
7							O	a	∢	REV.
PROFESSIONAL ENGINEER SEAL										
		Centered on Solutions**		0830 887 (50C)	(203) 488-8587 Fax	63-2 North Branford Road	Branford, CT 06405		1 -	www.CenfekEng.com
CBA TOWEBS III I O		VII II SA SINOITA SINO	MINELESS COMMONICATIONS FACILITY					A MO MOTINITY OF		NORIH SLONINGLON, CI
SC	TE: :ALE			AS	B/3 S N	IOT				
	7	ΓI	TL	.E	S	Η	Εſ	ΞT	-	
Sh	eet	N	o. <u></u>			of	6			









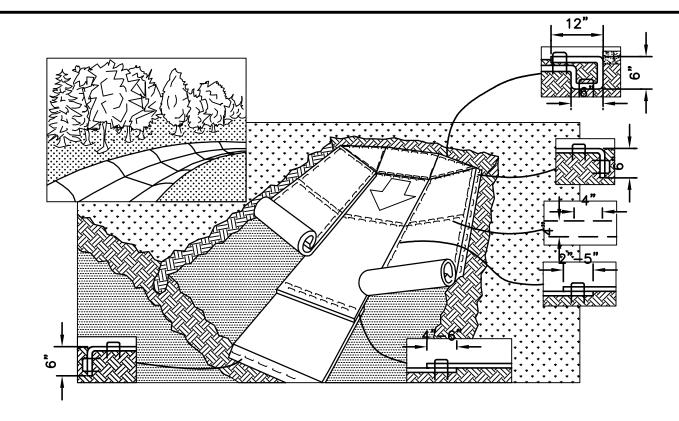
A. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.

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 f 6" DEEP BY f 6"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
- * IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKET.
- F. THE EDGE OF THE BLANKET IS TO EXTEND A MINIMUM 24 INCHES BEYOND THE TOE OF THE SLOPE AND ANCHORED BY PLACING THE STAPLES/STAKES IN A 12 INCH DEEP x 6 INCH WIDE ANCHOR TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12 INCH APART IN THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING (STONE OR SOIL MAY BE USED AS BACKFILL).
- G. 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 RE-ESTABLISH THE CONDITIONS AND GRADE OF THE SOIL PRIOR TO APPLICATION OF THE COVERING AND SHALL BE REFERTILIZED, RESEEDED, AND REMULCHED AS DIRECTED.

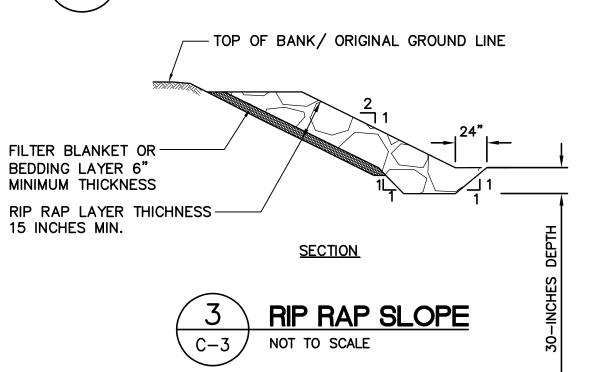


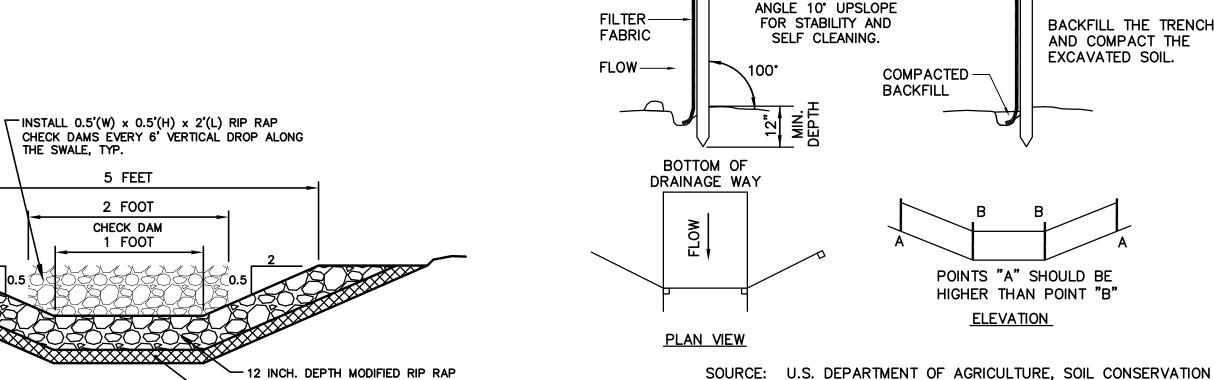


CHANNEL APPLICATIONS: A. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.

- B. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" 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 6" 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 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- H. REFER TO MANUFACTURES 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







SERVICE, STORRS, CONNECTICUT PLACEMENT AND CONSTRUCTION SILTATION FENCE

C-3NOT TO SCALE

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 CONTROL SOIL EROSION.
- 6. INSTALL UNDERGROUND UTILITIES.

REGARDED AREAS.

EMBEDDED FABRIC.

SEDIMENT.

- 7. 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 MORE THAN 30
- 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 MEASURES.

CONSTRUCTION SPECIFICATIONS - SILT FENCE

- 1) THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR
- 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, SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED.
- 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
- 7) INCHES. MAINTENANCE SHALL BE PERFORMED AS NEEDED TO PREVENT BUILD UP IN THE SILT FENCE DUE TO DEPOSITION OF

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.
- 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. 4) THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACHED APPROXIMATELY ONE—HALF THE HEIGHT OF THE BARRIER.

WOOD STAKE 42"

FILTER FABRIC

CLEAN STONE

(TYPICAL)

MINIMUM (TYPICAL)

COMPACTED BACKFILL

12" HIGH x 12" WIDE -

SIZE 2-INCH. CRUSHED

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.

SOIL EROSION AND SEDIMENT CONTROL SEQUENCE

- A. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES, SUCH AS CONSTRUCTION ENTRANCE— ANTI-TRACKING PAD, SILTATION FENCE, AND SILT SOCK 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.
- 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 CT. D.O.T. 2" CRUSHED GRAVEL. THE STONE ANTI-TRACKING PAD IS TO BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION
- LAND DISTURBANCE WILL BE KEPT TO A MINIMUM AND RESTABILIZATIONS WILL BE SCHEDULED AS SOON AS
- D. 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 CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION.
- 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 OR CONN. DEP
- F. 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.
- 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.
- SWALE DISCHARGE AREA WILL BE PROTECTED WITH RIP RAP SPLASH PAD/ ENERGY DISSIPATER.
- ALL FILL AREAS SHALL BE COMPACTED SUFFICIENTLY FOR THEIR INTENDED PURPOSE AND AS REQUIRED TO REDUCE SLIPPING, EROSION OR EXCESS SATURATION.
- 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 SEEDING.
- AFTER CONSTRUCTION IS COMPLETE AND GROUND IS STABLE, REMOVE SILTS IN THE RIP RAP ENERGY DISSIPATERS. REMOVE OTHER EROSION AND SEDIMENT

RIP RAP SLOPES

PREPARE THE SUBGRADE FOR RIP RAP, BEDDING, FILTER OR GEOTEXTILE TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE IN 12-INCHES LIFTS TO 95% OF STANDARD PROCTOR DENSITY. REMOVE BRUSH, TREES, STUMPS, AND OTHER OBJECTIONABLE MATERIAL.

FILTER BLANKET OR BEDDING

IMMEDIATELY AFTER SLOPE PREPARATION, INSTALL THE FILTER OR BEDDING MATERIALS. SPREAD THE FILTER OR BEDDING MATERIALS IN A UNIFORM LAYER TO THE SPECIFIED DEPTH.

STONE PLACEMENT

IMMEDIATELY AFTER PLACEMENT OF THE FILTER BLANKET, BEDDING, PLACE THE RIP RAP TO ITS FULL COURSE THICKNESS IN ONE OPERATION SO THAT IT PRODUCES A DENSE WELL GRADED MASS OF STONE WITH A MINIMUM OF VOIDS. THE DESIRED DISTRIBUTION OF STONES THROUGHOUT THE MASS MAY BE OBTAINED BY SELECTIVE LOADING AT THE QUARRY, CONTROLLED DUMPING OF SUCCESSIVE LOADS DURING THE FINAL PLACING, OR BY A COMBINATION OF THESE METHODS. DO NOT PLACE RIP RAP IN LAYERS OR USE CHUTES OR SIMILAR METHODS TO DUMP THE RIP RAP WHICH ARE LIKELY TO CAUSE SEGREGATION OF THE VARIOUS STONES

TAKE CARE NOT TO DISLODGE THE UNDERLYING MATERIAL WHEN PLACING THE STONES. WHEN PLACING RIP RAP ON A FILTER FABRIC TAKE CARE NOT TO DAMAGE THE FABRIC. IF DAMAGE OCCURS, REMOVE AND REPLACE THE DAMAGED SHEET FOR LARGE STONE, 12 INCHES OR GREATER, USE A 6 INCH LAYER OF FILTER OR BEDDING MATERIAL TO PREVENT DAMAGE TO THE MATERIAL FROM PUNCTURE.

ENSURE THE FINISHED SLOPE IS FREE OF POCKETS OF SMALL STONES OR CLUSTERS OF LARGE STONES. HAND PLACING MAY BE NECESSARY TO ACHIEVE THE REQUIRED GRADES AND A GOOD DISTRIBUTION OF STONE SIZES. ENSURE THE FINAL THICKNESS OF THE RIP RAP BLANKET IS WITHIN PLUS OR MINUS 0.25 OF THE SPECIFIED THICKNESS.

INSPECTED PERIODICALLY TO DETERMINE IF HIGH FLOWS HAVE CAUSED SCOUR BENEATH THE RIP RAP OR FILTER BLANKET MATERIALS. REMOVE TREES THAT DEVELOP IN THE PROTECTED SLOPES.

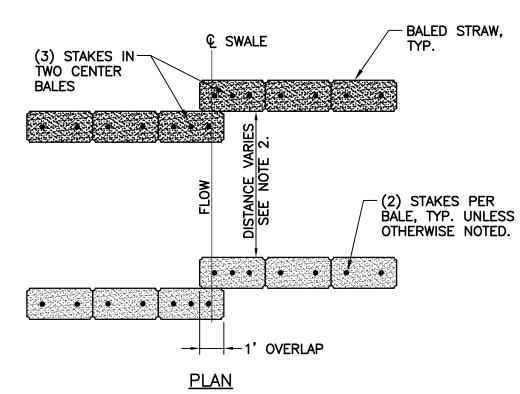
<u>MATERIALS TO BE MAINTAINED ON SITE FOR IMMEDIATE USE</u> 100 LF. SILT FENCE ON POST; SLEDGE HAMMER;

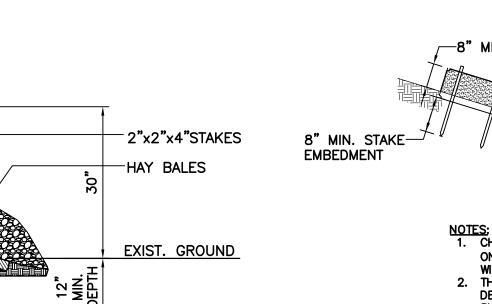
3 SHOVELS: 5 SILT BAGS;

100 TONS OF RIP RAP; 500 SQ.FT. OF EROSION MAT / BLANKET WITH STAPLES; DIGITAL CAMERA; REPORT BOOK.

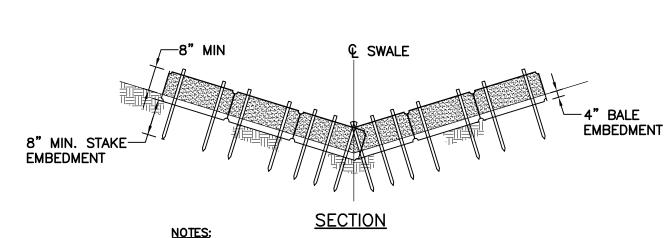
MODIFIED RIP RAP

STONE SIZE	% OF MAS
10" AND OVER	0
6" TO 10"	30-50
4" TO 6"	30-50
2" TO 4"	20-30
1" TO 2"	10-20
LESS THAN 1"	0-10
<u> </u>	





SILTATION FENCE/HAY BALE SILTATION FENCE "SANDWICH" **EROSION CONTROL**



- NOTES:

 1. CHECKDAM SHALL BE INSTALLED IN LOCATIONS INDICATED

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



DWD DWD | o | oo | ∢ | 3 STONINGTON 08/31/10 SCALE: AS NOTED JOB NO. 10123 SITE DETAILS AND NOTES

DESIGNED BY:

DRAWN BY:

CHK'D BY:

CFC

DMD

CFC

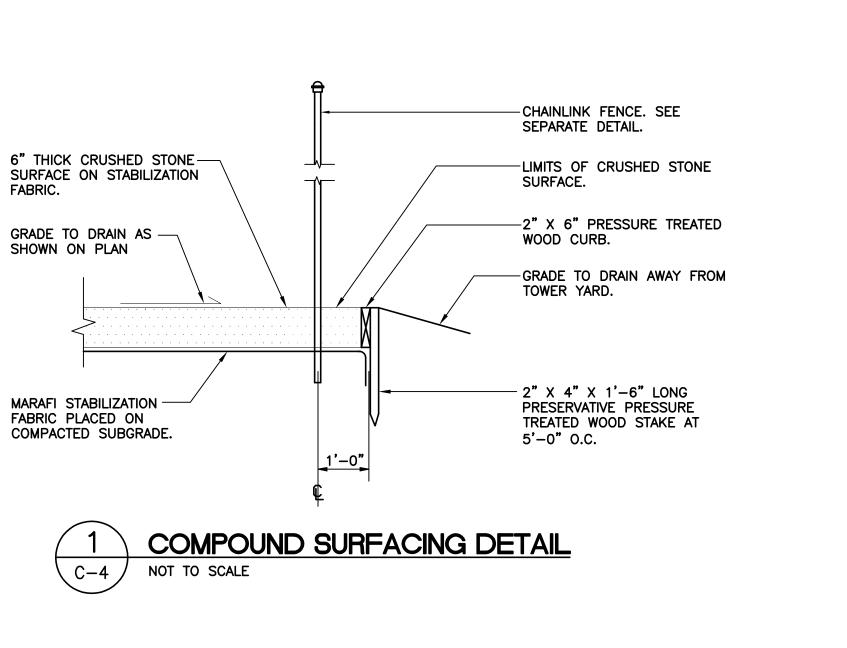
- PROPOSED DRIVEWAY - 12 INCH. DEPTH MODIFIED RIP RAP NONWOVEN GEOTEXTILE MIRAFI N-SERIES

NOT TO SCALE

C-3

DRAINAGE SWALE

C-3NOT TO SCALE



STONE ON FILTER FABRIC MARAFI

C-4

LOCATE

FINISHED GRADE

FIELD LOCA

CONSTRUCTION ENTANCE

-PIPE CAP (TYP)

- UNISTRUT P5000 (GALV) TYP.

ANTI-TRACKING PAD

NOT TO SCALE

-UNISTRUT PIPE/CONDUIT

FOR BOLT TORQUE

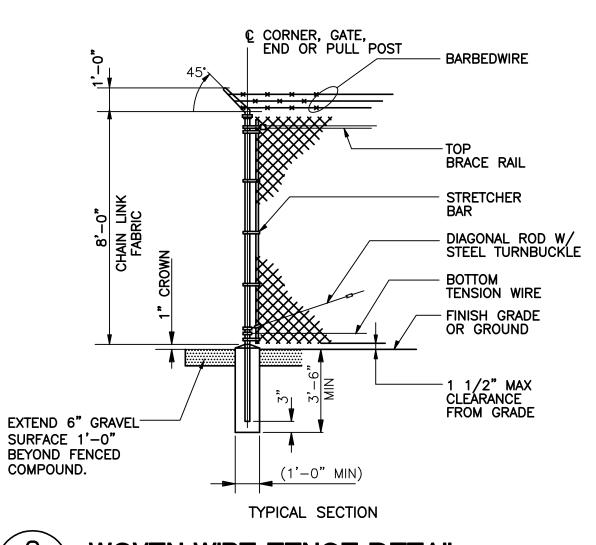
— 3 1/2" O.D. POST

CLAMP P1119 OR P2558-35

(GALV.) (TYPICAL) FOLLOW

MANUF. RECOMMENDATIONS

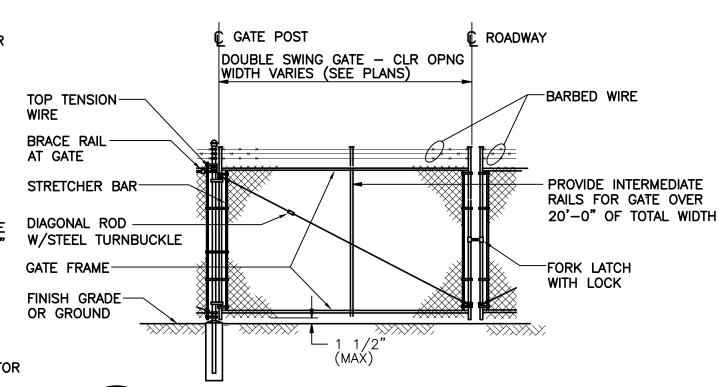
140(N)



WOVEN WIRE FENCE NOTES

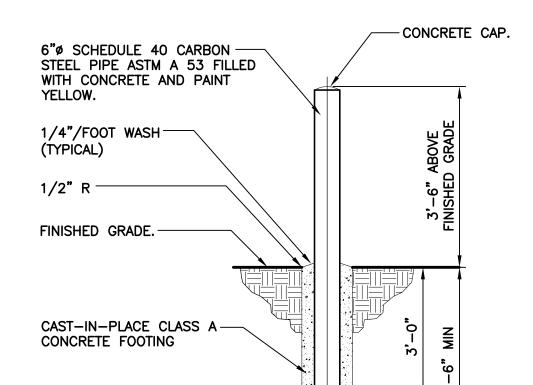
- 1. GATE POST, CORNER, TERMINAL OR PULL POST 2 1/2" Ø SCHEDULE 40 FOR GATE WIDTHS UP THRU 6 FEET OR 12 FEET FOR DOUBLE SWING GATE PER ASTM-F1083.
- 2. LINE POST: 2" Ø SCHEDULE 40 PIPE PER ASTM-F1083.
- 3. GATE FRAME: 1 1/2" Ø SCHEDULE 40 PIPE PER ASTM-F1083.
- 4. TOP RAIL & BRACE RAIL: 1 1/2" Ø SCHEDULE 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 HOG 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 PT. BARBS SPACED ON APPROXIMATELY 5" CENTERS.
- 9. GATE LATCH: DROP DOWN LOCKABLE FORK LATCH AND LOCK, KEYED ALIKE FOR ALL SITES IN A GIVEN MTA.
- 10. LOCAL ORDINANCE OF BARBED WIRE PERMIT REQUIREMENT SHALL BE COMPLIED WITH IF REQUIRED.
- 11. HEIGHT = 8' VERTICAL + 1' BARBED WIRE VERTICAL DIMENSION.

-4 INCH THICK PROCESS



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

WOVEN WIRE FENCE DETAIL NOT TO SCALE



1'-0" MIN

BOLLARD DETAIL

NOT TO SCALE

1. PROVIDE 3/4" PRESSURE TREATED PLYWOOD

2. CONTRACTOR TO MAKE PROVISIONS FOR

GENERATOR PLUG ON ONE SIDE WITH

OPPOSITE FOR TELCO CABINET.

MOUNTING ELECTRICAL PANELBOARD AND

PAINTED BATTLESHIP GREY ON ALL SIDES (TWO

SUPPORT FRAME

(GALV) (TYP)

3"ø SCH.40 PIPE (GALV) OR 3"ø RGS CONDUIT

.18" Ø PLAIN

(2500 PSI)

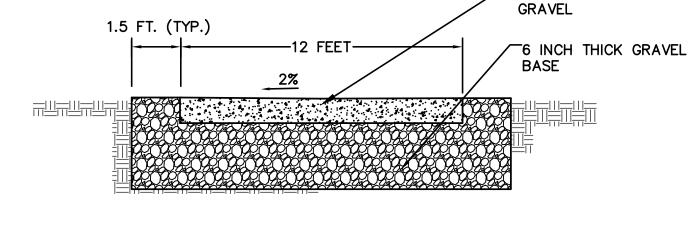
CONCRETE PIER

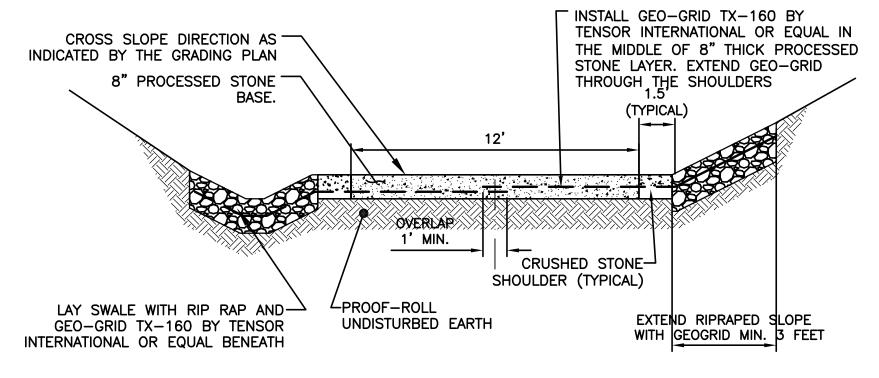
COATS) AND COVERED BY A GALV. STEEL OR

CRUSHED STONE BASE -

C-4

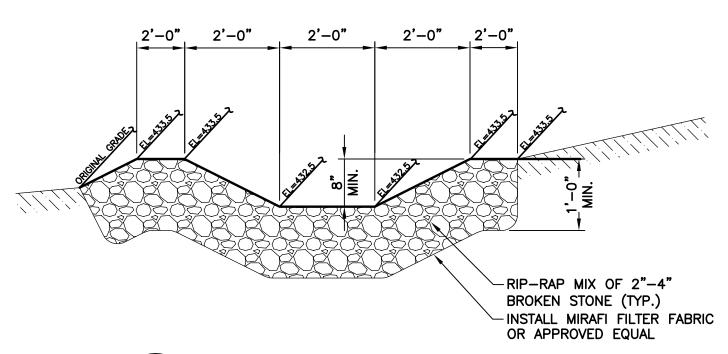
PVC DRIP CAP.

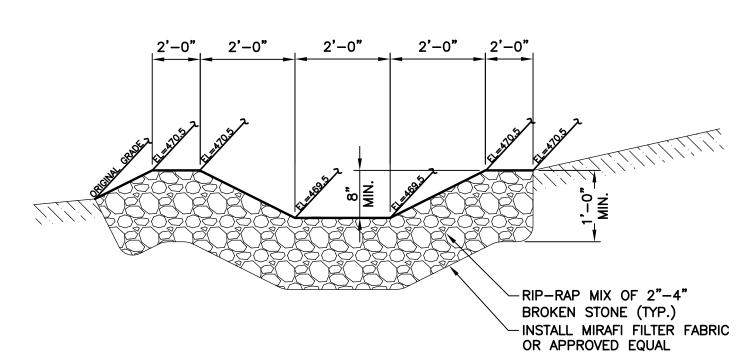




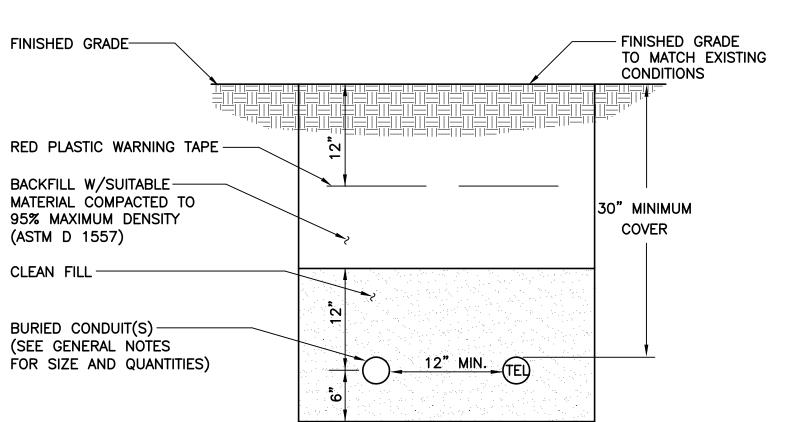




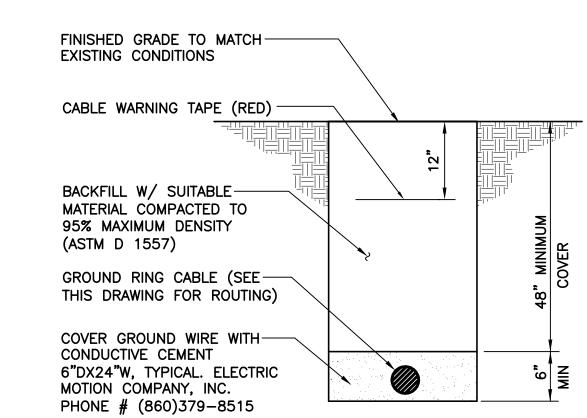








LEVEL SPREADER #2 - SECTION NOT TO SCALE



1. BACK FILL SHALL NOT CONTAIN ASHES, CINDERS, SHELLS,

TYPICAL BURIAL GROUND CABLE DETAIL NOT TO SCALE

	FROZEN MATERIAL, LOOSE DEBRIS OR STONES LARGER THAN 2" IN MAXIMUM DIMENSION.
2.	WHERE EXISTING UTILITIES ARE LIKELY TO BE ENCOUNTERED, CONTRACTOR SHALL HAND DIG AND PROTECT EXISTING UTILITIES.

SITE DETAILS

08/31/10

AS NOTED

SCALE:

JOB NO. 10123

က

STONINGTON

49 MOUNTAIN AVENUE NORTH STONINGTON, C'

DESIGNED BY:

DRAWN BY:

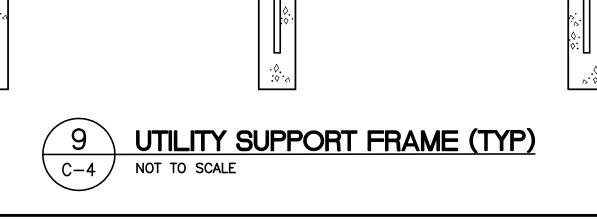
CHK'D BY:

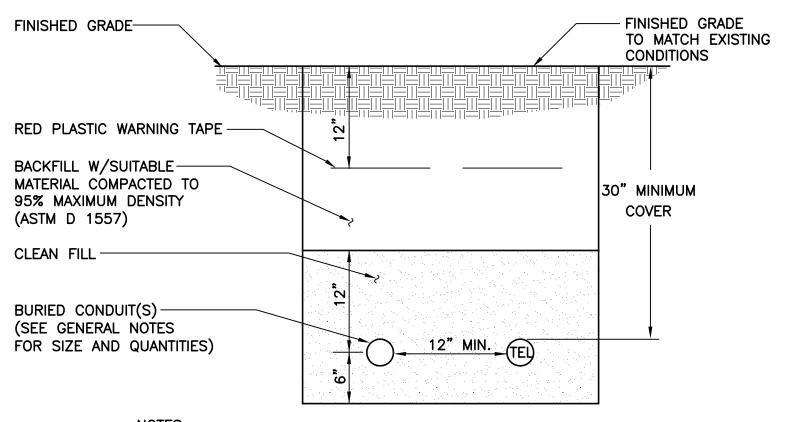
CFC

DMD

CFC

DWD DWD





1. 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.

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

TYPICAL ELECTRICAL/TEL TRENCH DETAIL NOT TO SCALE

ATTACHMENT 3(B)

Environmental Assessment Statement

I. PHYSICAL IMPACT

A. WATER FLOW AND QUALITY

No water flow and/or water quality changes are anticipated as a result of the construction or operation of the proposed facility. The construction and operation of the tower and related site improvements will have no effect on any off-site watercourses or waterbodies, and the equipment associated with the facility will discharge no pollutants to area surface or groundwater systems. The distance from the proposed project where ground disturbance would occur to the nearest wetland is over 400', with no activity occurring directly within the delineated wetland area. Thus, the proposed project will not directly impact any wetland's hydrologic functional role. Moreover, Best Management Practices to control storm water and soil erosion during construction will be implemented.

B. AIR QUALITY

Under ordinary operating conditions, the equipment that would be used at the proposed facility would emit no air pollutants of any kind. A generator for emergency power is proposed which will have de minimus emissions associated with its operation.

C. LAND

Some minimal clearing and grading may be necessary in the compound area and access drive. The remaining land of the lessor would remain unchanged by the construction and operation of the facility.

D. NOISE

The equipment to be in operation at the facility would not emit noise other than that provided by the operation of the installed heating, air-conditioning and ventilation system. Some construction related noise would be anticipated during facility construction, which is expected to take approximately four to six weeks. Temporary power outages could involve sound from an emergency generator.

E. POWER DENSITY

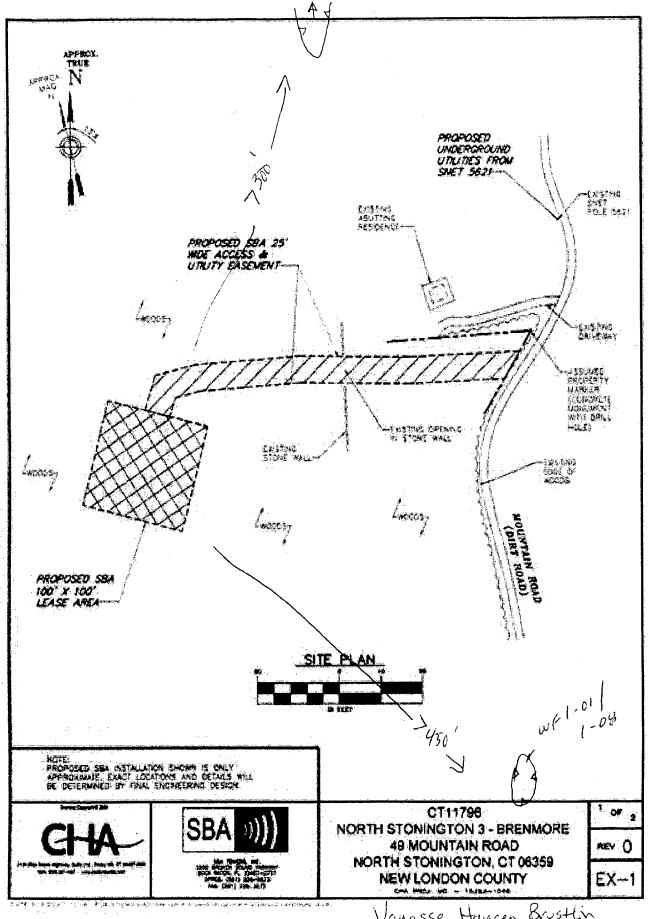
The cumulative worst-case calculation of power density from AT&T's operations at the facility would be 3.5% of the MPE standard. Attached is a copy of a Power Density Report indicating same.

F. VISIBILITY

The potential visual impact of the proposed monopole was determined by preparation of the attached Visual Analysis Report. The potential visibility was assessed within an approximate two (2) mile radius using a computer-based, predictive view shed model and in-field visual analysis. The monopole would be visible to approximately 104 acres within the 8,042-acre study area. The majority of year-round views would occur over open water and along their immediate shorelines. No views are anticipated from the portion of the Narragansett Trail within the Study Area.

II. SCENIC, NATURAL, HISTORIC & RECREATIONAL VALUES

The parcel on which the facility is located and immediate surrounding areas exhibit no scenic, natural, historic or recreational characteristics which are unique. The Connecticut State Historic Preservation Officer ("SHPO") has been contacted and is reviewing the site currently. The Connecticut Department of Environmental Protection ("CTDEP") Natural Diversity Database ("NDDB") maps for the proposed site have been reviewed. Attached is a letter from the Connecticut Department of Environmental Protection confirming that no nearby threatened or endangered species are known and accordingly no impact on these species is anticipated.



Vanasse Hangen Bristlin WETLAND SKETCH 07/16/10 DEG Tony Wells C Squared Systems 65 Dartmouth Drive, Unit A3 Auburn, NH 03032 603-644-2800 Tony.Wells@csquaredsystems.com



June 17, 2011

Connecticut Siting Council

Subject: New Cingular Wireless, North Stonington, CT

Dear Connecticut Siting Council:

C Squared Systems has been retained by New Cingular Wireless to investigate the RF Power Density at the proposed site located in North Stonington, CT.

Calculations were done in accordance with FCC OET Bulletin 65. These worst-case calculations assume that all transmitters are simultaneously operating at full power and pointing directly at the ground. The calculation point is 6 feet above ground level to model the RF power density at the head of a person standing at the base of the tower.

Location	Carrier	Antenna Centerline Height Above Ground Level (Ft.)	Operating Frequency (MHz)	Number of Trans.	Effective Radiated Power (ERP) Per Transmitter (Watts)	Power Density (mw/cm ²)	Limit	% FCC MPE Limit General Public/ Uncontrolled
	AT&T UMTS	190	880	1	500	0.0053	0.5867	0.91%
	AT&T UMTS	190	1900	1	500	0.0053	1.0000	0.53%
Ground Level	AT&T GSM	190	880	3	296	0.0094	0.5867	1.61%
	AT&T GSM	190	1900	1	427	0.0045	1.0000	0.45%
							Total	3.50%

Summary: Under worst-case assumptions, the RF Power Density at the proposed site located in North Stonington, CT will not exceed 3.50% of the FCC MPE limit for General Public/Uncontrolled Environments.

Sincerely,

Anthony Wells Managing Partner

anthony wells



Issued Date: 09/17/2010

Clinton Papenfuss SBA Towers 5900 Broken Sound Parkway NW Boca Raton, FL 33487

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Antenna Tower CT 11796-S

Location: North Stonington, CT Latitude: 41-30-16.70N NAD 83

Longitude: 71-52-55.70W

Heights: 194 feet above ground level (AGL)

669 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

	At least 10 days prior to start of construction (7460-2, Part I)
X	Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking and/or lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 03/17/2012 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO

SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (816) 329-2508. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2010-ANE-838-OE.

Signature Control No: 129750163-131033972

(DNE)

Vee Stewart Specialist

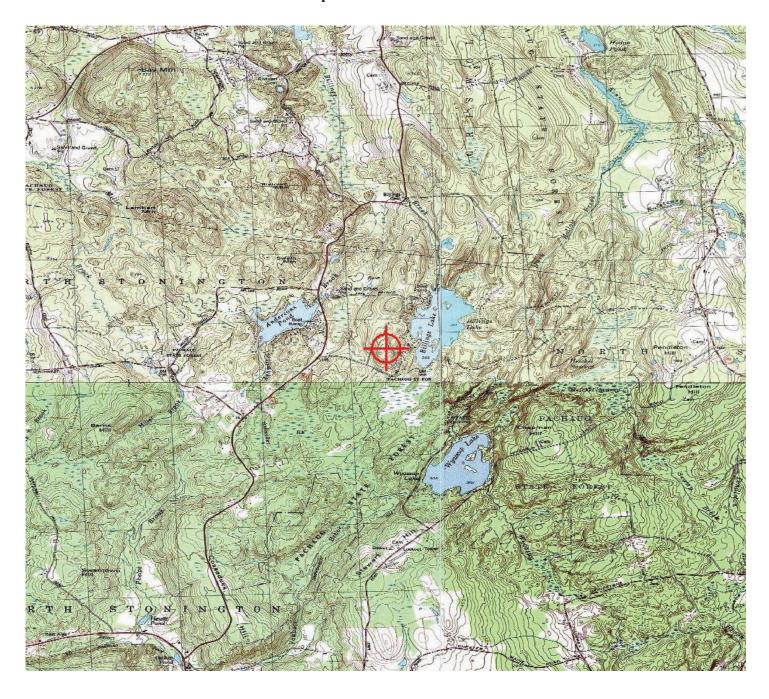
Attachment(s) Frequency Data Map(s)

cc: FCC

Frequency Data for ASN 2010-ANE-838-OE

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
698	806	MHz	1000	W
806	824	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	W
896	901	MHz	500	W
901	902	MHz	7	W
930	931	MHz	3500	W
931	932	MHz	3500	W
932	932.5	MHz	17	dBW
935	940	MHz	1000	W
940	941	MHz	3500	W
1850	1910	MHz	1640	W
1930	1990	MHz	1640	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W

TOPO Map for ASN 2010-ANE-838-OE



ATTACHMENT 3(C)

Visual Resource Evaluation Report

Proposed Wireless Telecommunications Facility

North Stonington 3

49 Mountain Avenue North Stonington, CT

Prepared for



Prepared by

VHB/Vanasse Hangen Brustlin, Inc.54 Tuttle PlaceMiddletown, CT 06457

September 2010

Visual Resource Evaluation

SBA Towers II LLC seeks approval from the Connecticut Siting Council for a Certificate of Environmental Compatibility and Public Need to construct a wireless telecommunications facility ("Facility") to be located on property at 49 Mountain Avenue ("Host Property") in the town of North Stonington, Connecticut. This Visual Resource Evaluation was conducted to approximate the visibility of the proposed Facility within a two-mile radius of the Site ("Study Area"). Attachment A contains a map that depicts the location of the proposed Facility and the limits of the Study Area. Also contained in Attachment A is a photograph of the proposed Facility location.

Project Introduction

The proposed Facility includes the construction of a 190-foot tall monopole designed to support up to four antenna platforms with associated ground equipment to be located within a fenced enclosure at the base of the tower. Based on information provided by the project engineer, Clough Harbor Associates, LLP, the proposed Facility is located at approximately 475 feet above mean sea level (AMSL). Access to the Facility would be provided via a proposed gravel driveway off Mountain Avenue.

Site Description and Setting

Identified in the Town of North Stonington land records as Map 2734/Block 75/Lot 9552, the host property consists of approximately 34.48 acres of wooded, undeveloped land. Land use within the general vicinity of the host property is mainly comprised of low-density residential development, much of which is seasonal, and undeveloped woodlands. In total, the Study Area features approximately 27 linear miles of roadways, including segments of Route 201.

The topography within the Study Area is generally characterized by gently rolling hills with ground elevations that range from 170 feet AMSL to approximately 534 feet AMSL. The Study Area contains approximately 252 acres of surface water that includes Billings Lake located approximately 0.20-mile to the east of the proposed Facility; Anderson Pond located 0.61-mile to the northwest; and Wyassup Lake located roughly 0.95-mile to the southeast. The tree cover within the Study Area consists mainly of mixed deciduous hardwood species that occupy approximately 7,214 acres of the 8,042-acre study area (90%). The average tree canopy height throughout the Study Area was estimated to be approximately 65 feet.

METHODOLOGY

To evaluate the visibility associated with the proposed Facility, VHB used the combination of a predictive computer model and in-field analysis. The predictive model provided a preliminary assessment of potential visibility throughout the entire study area, including private property and other areas inaccessible for direct observations. A "balloon float" and Study Area reconnaissance were subsequently conducted for field verification to back-check the initial computer modeling results, to obtain location and height representations, and to provide photographic documentation from publicly accessible areas. A description of the procedures used in the analysis is provided below.

Visibility Analysis

VHB uses ArcGIS® Spatial Analyst, a computer modeling tool developed by Environmental Systems Research Institute, Inc., to calculate the areas from which at least the top of the proposed Facility is expected to be visible. Project- and Study Area-specific data were incorporated into the computer model, including Facility height, its ground elevation, underlying and surrounding topography and existing vegetation. Information used in the model included Connecticut LiDAR¹-based digital elevation data and model and a digital forest (or tree canopy) layer developed for the Study Area. The LiDAR-based Digital Elevation Model (DEM) represents ten-foot spatial resolution elevation information for the state of Connecticut that was derived through the spatial interpolation of airborne LiDARbased data collected in the year 2000 and has a horizontal resolution of ten (10) feet. The data was edited in 2007 and made available by the University of Connecticut through its Center for Land Use Education and Research (CLEAR). To create the forest layer, mature trees and woodland areas depicted on aerial photographs (ranging in dates from 2004 to 2008) were manually digitized (hand traced) in ArcGIS®, creating a geographic data layer for inclusion in the computer model. The black and white, digital aerial photographs, obtained from the Connecticut Department of Transportation, were flown in the spring of 2004 and selected for use in this analysis because of their image quality and depiction of pre-leaf emergence (i.e., "leaf-off") conditions. These photographs are half-foot pixel resolution. The more recent aerial photographs (2006 and 2008) were overlaid and evaluated to identify any new development resulting in the removal of trees.

Once the specific data layers were entered, the ArcGIS® Spatial Analyst Viewshed tool was applied to achieve an estimate of locations where the proposed Facility could be visible. First, only topography was used as a possible visual constraint; the tree canopy was omitted to evaluate potential visibility with no intervening vegetative screening. The initial omission of

¹ LiDAR is an acronym for Light Detection and Ranging. It is a technology that utilized lasers to determine the distance to an object or surface. LiDAR is similar to radar, but incorporates laser pulses rather than sound waves. It measures the time delay between transmission and reflection of the laser pulse.

this data layer resulted in an excessively conservative prediction, but it provided an opportunity to identify areas within potential direct lines of sight of the Facility.

The forest data layer was then overlaid and built into the DEM, using a conservative average tree canopy height of 50 feet, to establish a baseline assessment of intervening vegetation. The resultant preliminary viewshed map was used during the in-field activities (described further below) to compare the outcome of the initial computer modeling with observations of the balloon float to identify deviations. Information obtained from the field reconnaissance was ultimately incorporated into the model to refine the viewshed map.

The average tree canopy height, in this case 65 feet, was determined based on information collected in the field using a combination of a hand-held laser range finder and comparative observations. The revised average tree canopy height of 65 feet was then incorporated into the model and the results displayed on the viewshed map. The forested areas were overlaid on the DEM with a height of 65 feet added to the base elevation and the visibility within the Study Area calculated.

As a final step, the forested areas were extracted from the areas of visibility, using a conservative assumption that a person standing within the forest will not be able to view the proposed Facility beyond a distance of approximately 500 feet. Depending on the density of the intervening tree canopy and understory of the surrounding woodlands, it is assumed that some locations within this distance could provide visibility of at least portions of the proposed Facility at any time of the year. In "leaf-on" conditions, this distance may be overly conservative for most locations. However, for purposes of this analysis, it was reasoned that forested land beyond 500 feet of the proposed Facility would consist of light-impenetrable trees of a uniform height.

Also included on the map is a data layer, obtained from the State of Connecticut Department of Environmental Protection ("CTDEP"), which depicts various land and water resources such as parks and forests, recreational facilities, dedicated open space, CTDEP boat launches and other categories. In addition, based on a review of the Connecticut Walk Book (East Addition), the Narragansett Trail, part of the Connecticut Blue Blaze trail system, traverses the Study Area. These portions of the trail are depicted on the attached viewshed map. Lastly, based on both a review of published information and discussions with municipal officials in North Stonington it was determined that there are no state or locally-designated scenic roadways located within the Study Area.

Balloon Float and Study Area Reconnaissance

On August 11, 2010 Vanasse Hangen Brustlin Inc., (VHB) conducted a balloon float to further evaluate the potential viewshed within the Study Area. The balloon float consisted of raising and maintaining an approximate four-foot diameter, helium-filled weather balloon at the proposed site location at a height of 190 feet. A second balloon was tethered at 160 feet AGL. Once the balloons were secured, VHB staff conducted a drive-by reconnaissance along the roads located within the Study Area and accessed Billings Lake, Anderson Pond and

Wyassup Lake in order to evaluate the results of the preliminary viewshed map and to document where the balloon was, and was not, visible above and/or through the tree canopy. During the balloon float, the temperature was approximately 85 degrees Fahrenheit with calm wind conditions and mostly sunny skies.

Photographic Documentation

During the balloon float, VHB personnel conducted visual reconnaissance within the Study Area to inventory those areas where the balloon was and was not visible. The balloons were photographed from a number of different vantage points to document the actual view towards the proposed Facility. The locations of the photos are described below:

View	Location	Orientation	Dist. To Site	Visibility
1	Billings Lake	Southwest	<u>+</u> 0.50-Mile	Year-Round
2	Billings Lake	Southwest	<u>+</u> 0.45-Mile	Year-Round
3	Billings Lake	Southwest	<u>+</u> 0.55-Mile	Year-Round
4	Billings Lake	Southwest	<u>+</u> 0.33-Mile	Year-Round
5	Wyassup Lake	Northwest	<u>+</u> 1.36-Mile	Year-Round
6	Anderson Pond	Southeast	<u>+</u> 0.83-Mile	Year-Round
7	Anderson Pond	Southeast	<u>+</u> 0.76-Mile	Year-Round
8	Adjacent to #589 Route 201	Southeast	<u>+</u> 0.99-Mile	Non-Visible
9	Adjacent to #62L Patricia Avenue	Southeast	<u>+</u> 0.75-Mile	Non-Visible
10	Northwest Corner Road	Northeast	<u>+</u> 1.26-Mile	Non-Visible
11	Route 201 at Michael Street Cemetery	East	<u>+</u> 0.46-Mile	Year-Round
12	Cedar Drive	East	<u>+</u> 0.10-Mile	Year-Round
13	Legend Wood Road	Northeast	<u>+</u> 0.23-Mile	Year-Round
14	Island Road	Northwest	<u>+</u> 0.21-Mile	Non-Visible
15	Mountain Avenue adjacent to proposed site	Southwest	<u>+</u> 0.07-Mile	Non-Visible
	access			

Photographs of the balloon from the view points listed above were taken with a Nikon D-80 digital camera body and Nikon 18 to 135 mm zoom lens. For the purposes of this report, the lens was set to 50mm. "The lens that most closely approximates the view of the unaided human eye is known as the normal focal-length lens. For the 35 mm camera format, which gives a 24x36 mm image, the normal focal length is about 50 mm."

The locations of the photographic points are recorded in the field using a hand-held GPS receiver and are subsequently plotted on the maps contained in the attachments to this document.

¹ Warren, Bruce. *Photography*, West Publishing Company, Eagan, MN, c. 1993, (page 70).

Photographic Simulation

Photographic simulations were generated for the representative locations where the balloon was visible during the in-field activities. The photographic simulations portray a scaled rendering of the proposed Facility from these locations, with four wireless service providers represented. Using field data, site plan information and 3-dimension (3D) modeling software, a spatially referenced model of the site area was generated. Geographic coordinates (latitude and longitude) were collected in the field for all of the photograph locations via GPS and later used to generate virtual camera positions within the spatial 3D model. Photo simulations were then created using a combination of renderings generated in the 3D model and photo rendering software programs. The balloon was included in the photographs to provide a visual marker and to cross-reference the height and proportions of the proposed Facility. A photolog map and the simulations are contained in Attachment A.

_

CONCLUSIONS

Based on this analysis, areas from where the proposed 190-foot monopole would be visible above the tree canopy comprise approximately 104 acres within the 8,042- acre Study Area. As depicted on the attached viewshed map (included as Attachment B), the majority of year-round visibility associated with the proposed Facility occurs over open water on portions of Billings Lake (approximately 65 acres), Anderson Pond (approximately 13 acres) and Wyassup Lake (approximately 11 acres) and along their immediate shorelines. The viewshed map also depicts areas of limited year-round visibility along select portions of Cedar Drive, Legend Woods Road and Route 201. VHB estimates that at least partial year-round views of the proposed Facility may be achieved from portions of approximately 12 residential properties within the Study Area. Overall, year-round visibility is limited to these areas by the intervening topography and vegetation contained within the Study Area. No views are anticipated from the portion of the Narragansett Trail contained within the Study Area.

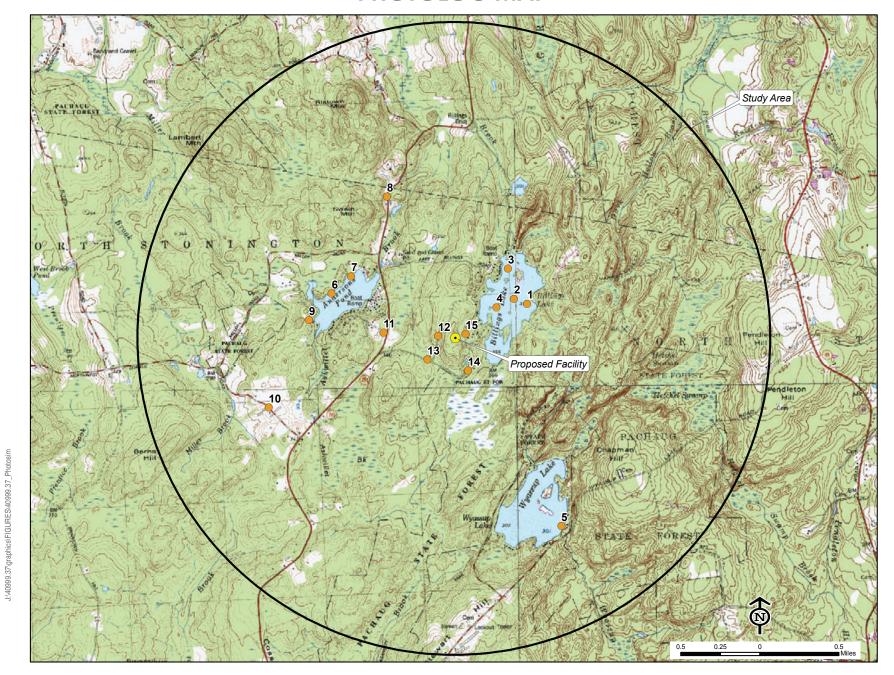
The viewshed map also depicts several additional areas where seasonal (i.e. during "leaf off" conditions) views are anticipated. These areas comprise approximately 32 acres and are located within the general vicinity of the proposed Facility and along the western shoreline of Billings Lake, adjacent to areas of potential year-round visibility. VHB estimates that limited seasonal views of the proposed Facility may be achieved from portions of approximately 6 additional residential properties.

The approximate number of residential properties where potential views of the proposed Facility may be achieved is provided in the table below:

Location	Number of Residential Properties With Potential Year-Round (Leaf-On) Visibility	Number of Residential Properties With Potential Seasonal (Leaf-Off) Visibility				
Billings Lake	1	-				
Cedar Drive	3	2				
Coal Pit Road	-	3				
Island Road	1	-				
Mountain Avenue	1	1				
Murphy Road	3	-				
Wyassup Road	3	-				
TOTAL:	12	6				

Attachment A

Photolog Documentation Map, Project Area Photograph, Balloon Float Photographs and Photographic Simulations





PHOTOGRAPHIC DOCUMENTATION



PROPOSED PROJECT AREA



PHOTOGRAPHIC DOCUMENTATION





PHOTOGRAPHIC SIMULATION





PHOTOGRAPHIC DOCUMENTATION





PHOTOGRAPHIC SIMULATION

























































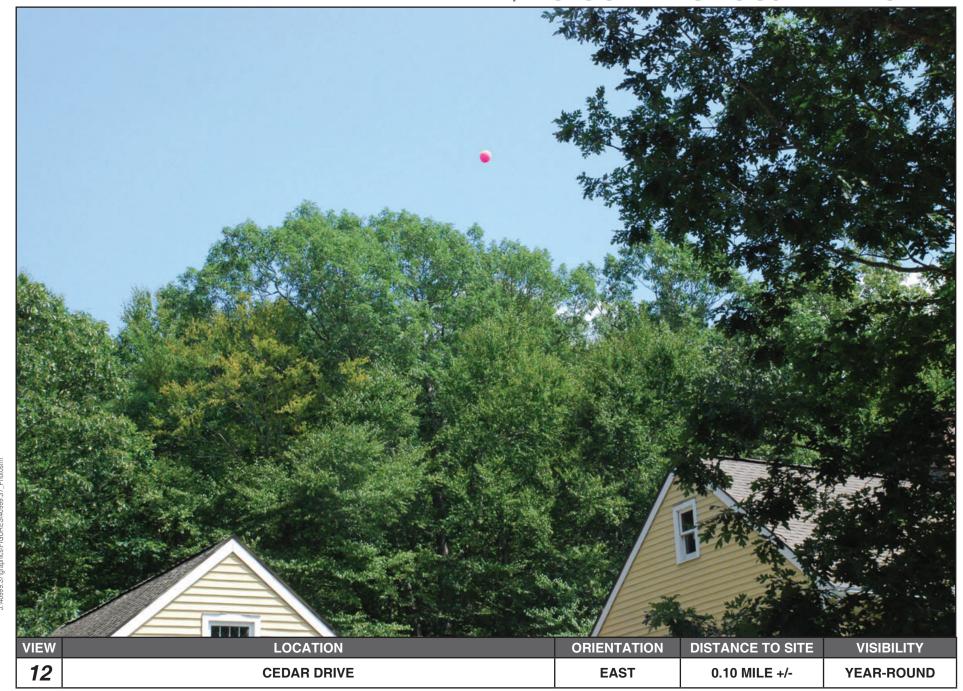






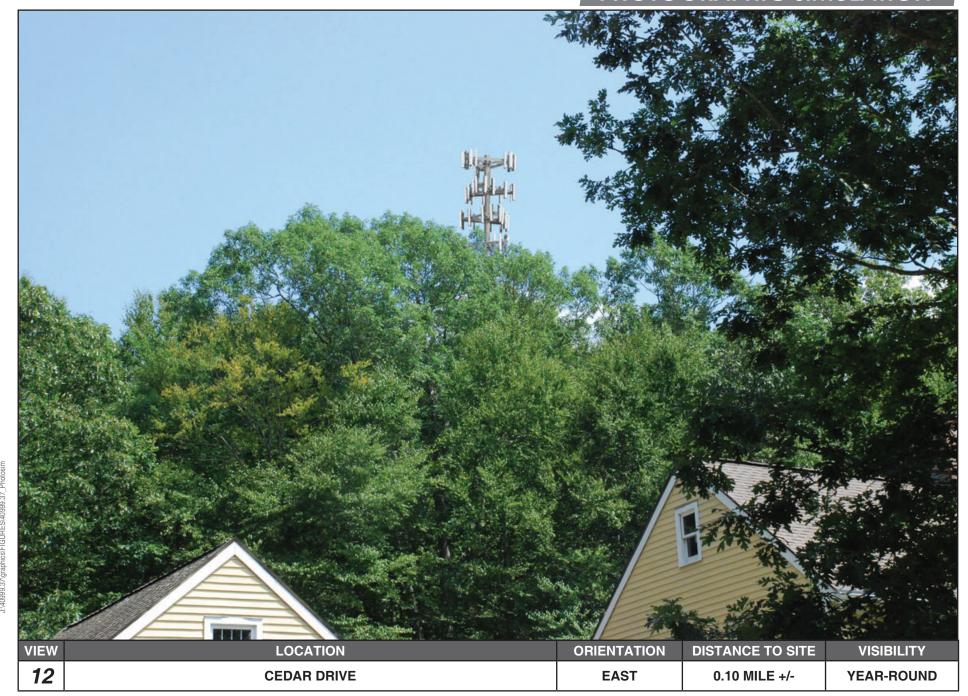






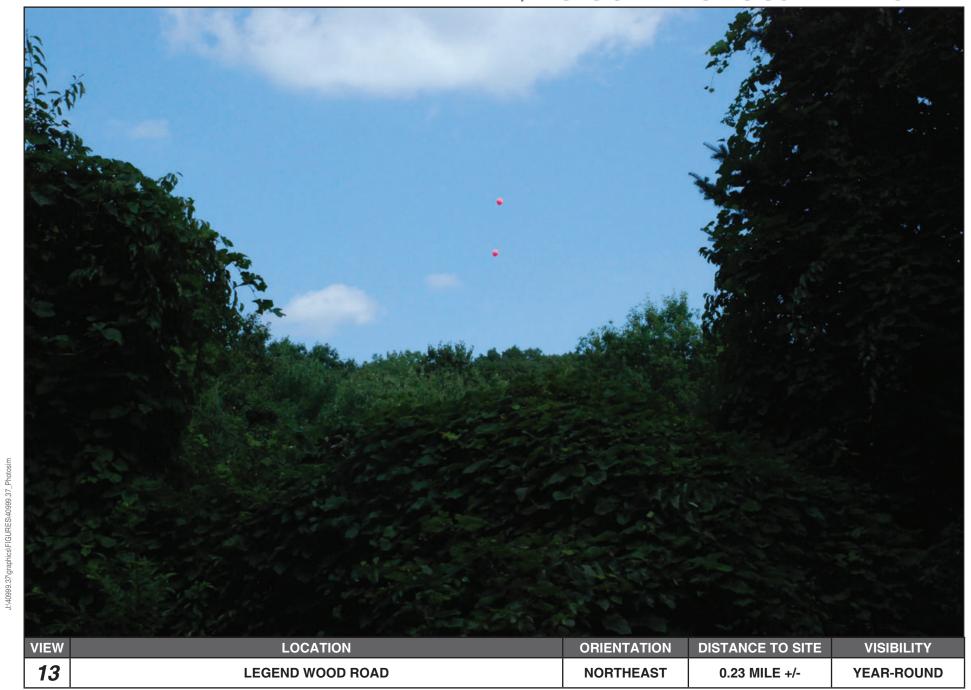






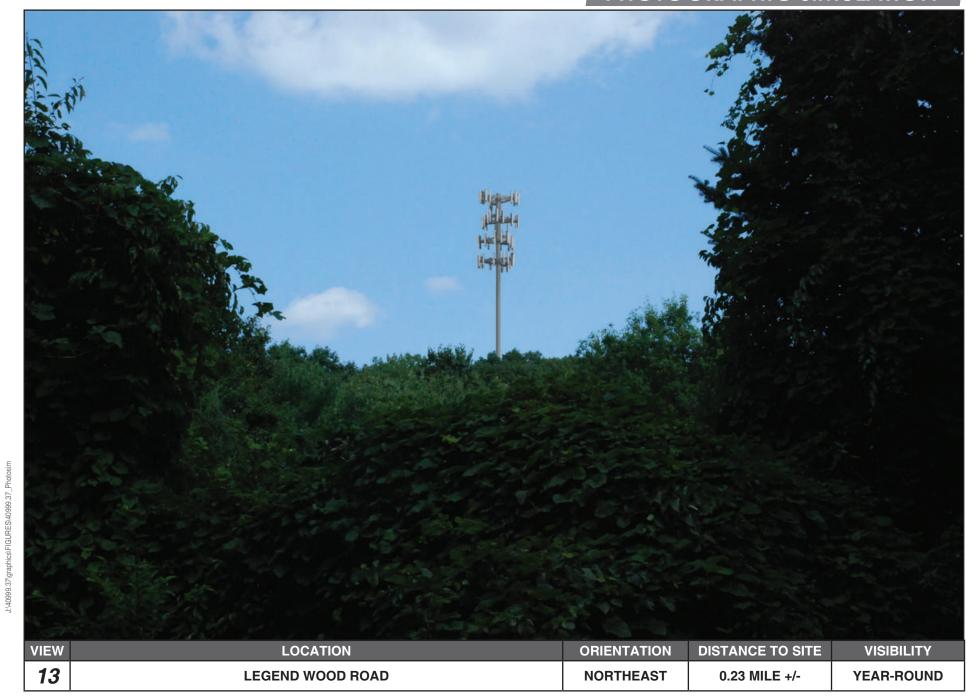






















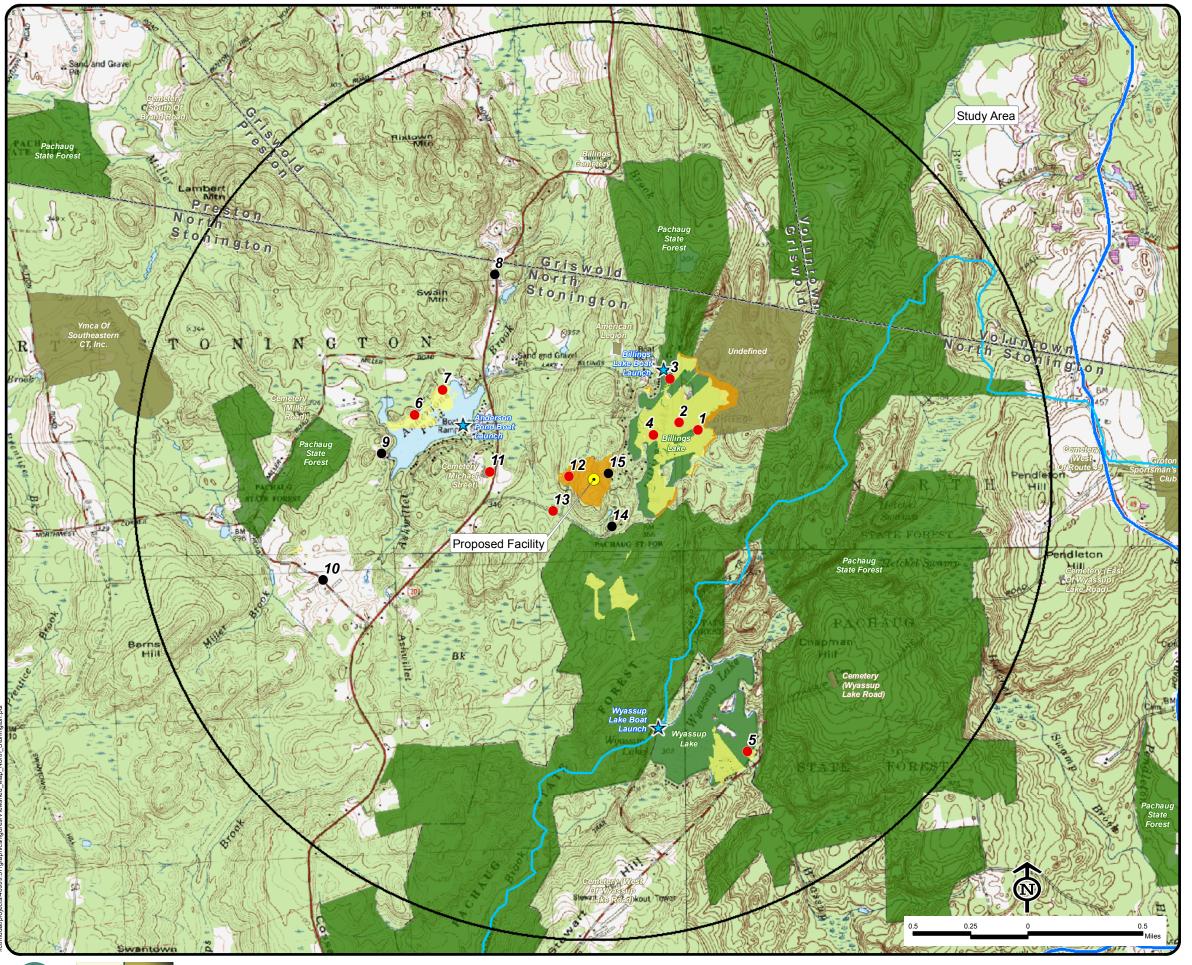






Attachment B

Viewshed Map



Viewshed Analysis SBA Towers II, LLC Telecommunications Facility North Stonington 3 49 Mountain Avenue North Stonington, Connecticut

- Viewshed analysis conducted using ESRI's Spatial Analyst.
- Proposed Facility height is 190 feet.
- Existing tree canopy height estimated at 65 feet.
- Study Area is comprised of a two-mile radius surrounding the proposed facility and includes 8,042 acres of land.

DATA SOURCES:

- Digital elevation model (DEM) derived from Connecticut LiDAR-based Digital Elevation Data (collected in 2000) with a 10-foot spatial resolution produced by the University of Connecticut and the Center for Land Use Education and Research (CLEAR); 2007
- Forest areas derived from 2008 digital orthophotos with 1-meter pixel resolution; digitized by VHB, 2010
- Base map comprised of Jewett City, Ashaway (1984), Old Mystic (1983), and Voluntown (1975) USGS Quadrangle Maps
- Municipal and Private Open Space data layer provided by CT DEP, 1997
- Federal Open Space data layer provided by CT DEP, 2004
 CT DEP Property data layer provided by CT DEP, April 2010
- CT DEP Protected Open Space Mapping (POSM) data layer provided by CT DEP, Dec 2009
- CT DEP boat launches data layer provided by CT DEP, Dec 2009
- Scenic Roads layer derived from available State and Local listings

Map Compiled August, 2010

Legend

Proposed Tower Location

Photographs - August 11, 2010 Balloon is not visible

Balloon visible above trees

Seasonal Visibility Area

Year-Round Visibility Area (Approximately 104 acres)

Protected Municipal and Private Open Space (CT DEP, 1997) Cemetery

Preservation Conservation

Existing Preserved Open Space Recreation

General Recreation School

Uncategorized

CT DEP Property (CT DEP, May 2010)

State Forest State Park DEP Owned Waterbody

State Park Scenic Reserve Historic Preserve

Natural Area Preserve Fish Hatchery

Flood Control Other

State Park Trail Water Access

Wildlife Area Wildlife Sanctuary

Federal Open Space (CT DEP, 2004) Boat Launches (CT DEP, Dec 2009)

Scenic Road (State and Local)

Narragansett Trail (CT Blue Blaze)

—— Town Line







ATTACHMENT 3(D)



February 7, 2011

David Bahlman

Division Director
Deputy State Historic Preservation Officer

Historic Preservation and Museum Division

One Constitution Plaza Second Floor Hartford, Connecticut 06103

860.256.2800 860.256.2763 (f) Ms. Coreen Kelsey Environmental Coordinator VHB, Inc. 54 Tuttle Place

Middletown, CT 06457

Subject: Revised Comments on the Proposed SBA Towers II LLC

Telecommunications Facility, 49 Mountain Avenue, North

Stonington, Connecticut.

Dear Ms. Kelsey:

The State Historic Preservation Office has reviewed the supplementary information you have provided concerning the referenced project. SBA Towers proposes the construction of a ~190-foot tall monopole tower and associated ground facilities within a ~45-foot by ~90 foot fence-enclosed compound area. The tower will be constructed approximately 500 feet the east of Mountain Avenue within a densely wooded area atop a hill overlooking Billings Lake to the east. Access to the site will be provided by a new 12-foot wide gravel roadway.

SHPO reviewed the project previously and recommended that an archaeological reconnaissance survey be completed to identify any potentially significant archaeological resources that might be affected by the construction. Heritage Consultants, LLC (Heritage) recently completed the requested survey, which included subsurface testing of the proposes tower site and ground facilities. No potentially significant archaeological resources were identified during the survey and Heritage recommends no additional investigations. Based on the information submitted to our office, it appears that the archaeological survey was completed in accordance with SHPO's *Environmental Review Primer for Connecticut's Archaeological Resources*. We concur with Heritage's professional opinion that further archaeological investigations for this project are not warranted. SHPO believes that the proposed telecommunications facility at 49 Mountain Avenue will have no effect on historical or archaeological resources listed in, or eligible for listing in, the National Register of Historic Places.

This office appreciates the opportunity to have reviewed and commented upon the proposed undertaking. This comment is provided in accordance with the National Historic Preservation Act. For further information, please contact Daniel Forrest, Staff Archaeologist, at (860) 256-2761 or daniel.forrest@ct.gov.





Kelsey – Proposed Telco Tower at 49 Mountain Ave, North Stonington, CT February 7, 2011 (Page 2/2)

Sincerely,

David Bahlman

Deputy State Historic Preservation Officer

cc: Knowles/MPTN-THPO



STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Natural Resources
Wildlife Division
79 Elm Street, Sixth Floor
Hartford, CT 06106
Natural Diversity Data Base

September 17, 2010

Ms. Coreen Kelsey Vanasse Hangen Brustlin, Inc. 54 Tuttle Place Middletown, CT 06457

Re: Proposed New Wireless Telecommunications Facility, SBA Towers, CT11796-S/North Stonington 3, 49 Mountain Ave, N. Stonington, CT

Dear Ms. Kelsey:

I have reviewed Natural Diversity Data Base maps and files regarding the area delineated on the map you provided for the proposed new wireless telecommunications facility, SBA Towers, CT11796-S/North Stonington 3, 49 Mountain Ave, N. Stonington, CT. According to our information, there are no extant populations of Federal or State Endangered, Threatened or Special Concern Species that occur on this property.

Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Environmental Protection's Natural History Survey and cooperating units of DEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substitutes for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available.

Please contact me if you have further questions at (860) 424-3592. Thank you for consulting the Natural Diversity Data Base. Also be advised that this is a preliminary review and not a final determination. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to DEP for the proposed site.

Sincerely,

Hather Williams for Down McKay Dawn M. McKay

Biologist/Environmental Analyst

Cc: NDDB File # 18011

DMM/hpw

SEP 22 2010

VANASSE HANGEN BRUSTLIN, INC.

(Printed on Recycled Paper)
79 Elm Street • Hartford, CT 06106-5127
www.ct.gov/dep
An Equal Opportunity Employer