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November 26, 2014

VIA OVERNIGHT DELIVERY
Hon. Robert Stein, Chairman
and Members of the Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: Docket No. 444
New Cingular Wireless PCS, LLC (AT&T)
Application for Certificate of Environmental Compatibility
and Public Need for a Telecommunications Tower Facility at
Kent Road, New Milford, Connecticut

Dear Chairman Stein and Members of the Siting Council:

On behalf of New Cingular Wireless PCS, LLC ("AT&T"), please accept for review and Council approval this Development Management Plan ("D&M Plan") filing for the captioned Facility as approved in Docket No. 444.

Tower, Compound & Other Equipment
Enclosed are an original and fifteen (15) sets of 11"x 17" sized sets and two full sized sets of construction drawings filed in accordance with the Siting Council's ("Council") Decision and Order dated May 29, 2014 ("Decision and Order"). As per Order Number 1, the D&M Plan incorporates a monopole tower not to exceed 150' above ground level ("AGL"). Also included in the D&M Plan are the details of the associated compound taking into account an approximately 100' shift to the northeast, AT&T's equipment/antennas and specifications for an emergency backup generator and space for future generator of others. The D&M Plan includes site clearing, drainage, and erosion and sedimentation control measures consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control as amended.

Additionally, enclosed are geotechnical information as well as the tower and foundation drawings and a structural letter dated September 29, 2014. For excavation, alternative methods to blasting will be initially utilized. If such alternative methods are unsuccessful, blasting will be utilized and performed in accordance with applicable regulations.

Required Notifications
In accordance with RCSA Section 16-50j-61(d) copies of this filing are being provided to the Town of New Milford. In accordance with the provisions of RCSA Section 16-50j-77, AT&T hereby notifies the Council of its intention to begin site work immediately after Council approval of the D&M Plan. Construction of the tower and other site improvements will commence upon issuance of a local building permit. The supervisor for all construction related matters on this

project is Bryon Morawski of SAI. Mr. Morawski is located at 500 Enterprise Drive, Suite 3A, Rocky Hill, CT 06067 and can be reached by telephone at (860) 513-7223.

We respectfully request that this matter be included on the Council's next available agenda for review and approval.

Thank you for your consideration of the enclosed.

Very truly yours,

Lucia Chiocchio

Lucia Chiocchio

Enclosures

cc: Melanie A. Bachman, Staff Attorney/Acting Executive Director
Michael Perrone, Siting Analyst
Pat Murphy, Mayor of New Milford
Clay Cope, First Selectman Town of Sherman
Michele Briggs, AT&T
Alex Murshetyn, Centerline

CERTIFICATE OF SERVICE

I hereby certify that on this day, an original and fifteen copies of the Docket 444 D&M Plan submission was sent electronically and by overnight delivery to the Connecticut Siting Council with copy to:

Mayor Pat Murphy
New Milford Town Hall
10 Main Street
New Milford, CT 06776
860-355-6010
Mayor@newmilford.org

First Selectman Clay Cope
Sherman Board of Selectman
Mallory Town Hall
9 Rt 39 North
PO Box 39
Sherman, CT 06784
860-355-1139
CCope@townofshermanct.org

Dated: November 26, 2014

Lucia Chiocchio

DESIGN EARTH TECHNOLOGY

P.O. Box 187, Guilford, CT 06437
Phone/Fax: (203) 458-9806 ▪ Email: docdirt@aol.com

GENERAL CIVIL ENGINEERING ▪ GEOTECHNICAL ENGINEERING ▪ HYDROGEOLOGY ▪ HYDROLOGY AND HYDRAULICS ▪ TESTING—SOILS & MATERIALS ▪ CONSTRUCTION ENGINEERING

GEOTECHNICAL AND GEOPHYSICAL TESTING REPORT

PROPOSED AT&T MOBILITY WIRELESS COMMUNICATIONS FACILITY

SITE NUMBER: CT 4067

KENT ROAD (MAP 83, LOT 4)

NEW MILFORD, CONNECTICUT

PREPARED FOR:

CENTEK ENGINEERING, Inc.

STATE OF CONNECTICUT
LAWRENCE J. MARCIK
No. 16255
LICENSED
PROFESSIONAL ENGINEER

L.P.E.

AUGUST 2014

DESIGN EARTH TECHNOLOGY

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August 4, 2014

Mr. Carlo F. Centore, P.E.
Centek Engineering, Inc.
63-2 North Branford Road
Branford, CT 06405

Re: Proposed AT&T Mobility Wireless Communications Facility
Site Number: CT 4067
Kent Road (Map 83, Lot 4)
New Milford, Connecticut 06776
DET Job No. 2014.09

Dear Mr. Centore:

Lawrence J. Marcik, Jr., P.E. dba **Design Earth Technology (DET)** has completed a geotechnical engineering study for the above referenced project. Included in this report is a summary of subsurface conditions, delineation of engineering characteristics of the foundation materials, and the implications of the conditions and characteristics with respect to the design and construction of the proposed communication facility. This report was prepared under our agreement dated July 14, 2014 and your subsequent authorization.

The purpose of this study is to develop geotechnical engineering recommendations for the proposed foundation design. The subsurface investigation and sampling program was conducted by **DET** for the sole purpose of obtaining subsurface information as part of a geotechnical study. No services were performed to evaluate subsurface environmental conditions; however, the client requested that as a courtesy, **DET** log any noticeable non-typical visual and/or odorous conditions from the soil and rock core samples.

SITE DESCRIPTION

The project site is located off of Kent Road (Rt. U.S. 7) in New Milford, Connecticut. The project location is shown on the attached "Location Plan, Figure No. 1". The general site area is located near an inlet structure of a hydroelectric facility. This inlet structure directs water from a water transmission canal to a penstock that crosses Kent Road down hill to an electrical power generation facility. The canal receives its water from the Housatonic River at a split north of the intake structure. The proposed cell tower site is located north of the intake structure in a non-developed portion of the site which is wooded with trees, brambles, poison ivy and low groundcover. Surface relief at the site is somewhat significant with elevations ranging from about El. 330 at Kent Road to El. 370 at its high point near the proposed tower.

PROJECT DESCRIPTION

The proposed project consists of the installation and the site development for a new monopole wireless communications tower with the addition of wireless equipment housed in shelters.

SUBSURFACE EXPLORATION

Associated Borings Company, Inc. performed the subsurface exploration work on July 21st of 2014. Locations of the subsurface exploration are shown on Figure No. 2 and logs have been included in Appendix A. The subsurface exploration program consisted of a total of one (1) boring and four (4) bedrock verification probes (Power Drill Soundings). All subsurface penetrations were conducted in the area of the proposed AT&T Mobility Wireless tower foundation. The center of tower location was staked-out by others.

Boring B-1 was drilled just next to the proposed center of tower. The boring was advanced using hollow stem auger technique to 2.5' below existing grade where bedrock was encountered. Rock coring was performed from 2.5' to 22.5' below grade where coring was terminated.

Bedrock verification probes (Power Drill Soundings) were drilled in the vicinity of the proposed tower foundation. All probes were advanced to refusal which is "assumed" to be possible bedrock or a large boulder. Probe refusals ranged from 3.0' to 6.5' below existing ground surface. The probes were observed to be drilled through some weather bedrock, this weather bedrock may not be removed with a mid-size excavator as the probes were drilled using solid stem auger with carbide tipped teeth.

The rock cores in borings B-1 were drilled using a standard NQ-2 size core bit resulting in the diameter of core sample being about ± 2". The coring was conducted using a standard wet core boring technique.

Bedrock verification probes were drilled using solid stem auger technique.

Standard Penetration Tests (SPT) of the soil were not performed in boring B-1 due to depth to bedrock (2.5').

Logs of the bedrock verification probes (Power Drill Soundings) and boring are included in Appendix A. See attached photo No. 1 of the boring/coring process.

RESISTIVITY TESTING

In place soil resistivity testing was conducted by **DET** personnel on August 3, 2014 within the vicinity of the proposed tower. Two (2) test sections were established in an "approximate" north-south direction, and two (2) test sections were established in an "approximate" east-west direction. Approximate test section locations are illustrated in Figure 2. All test sections were tested up to an electrode "A" spacing of 40 feet. Test results yielded resistivity values within acceptable ranges for the given soil/rock types and moisture conditions typically found in the

New England geology. It should be noted, however, that resistivity measurements are strongly influenced by local variations in surface conductivity caused by soil/rock weathering, soil/rock moisture content, soil temperature, rugged topography and existing subsurface manmade conductive materials. Attempts were made (where possible) during field operations to minimize some of these effects on the test results. Results of the resistivity tests are summarized in Table No. 1 with detailed calculations shown in Appendix B. See attached photograph of a typical resistivity test.

LABORATORY TESTING

The laboratory testing program consisted of three (3) Unconfined Compressive Strength of Intact Rock Core Samples taken from boring B-1. Laboratory test data is attached in Appendix C.

SUBSURFACE CONDITIONS

Proposed Tower and Compound Area

Based upon our review of the testing program in the area of the proposed tower foundation and compound area the site is covered with a somewhat very shallow layer of soil consisting of a topsoil layer underlain by silty subsoil, underlain by a glacial till. This silty subsoil and till generally consists of boulders, cobbles, gravel, sand, silt, clay in varying proportions and underlain by bedrock. The topsoil, subsoil, and till layers (total of all soil layers) varies from near surface to 2.5 feet deep from existing grades as observed in the boring and varies from 3' to 6.5' in the probes. Groundwater was not found in the boring and probes at the time of drilling.

As indicated above, the bedrock surface at the site varies from "near the ground surface" to 6.5 feet below ground surface in the area tested. According to the "Bedrock Geological Map of Connecticut", by John Rodgers dated 1985, the bedrock at the site is classified as Stockbridge Marble which is white to light-gray dolomite marble and schist. A geologist was not retained to log the core samples obtained so no determination of specific rock type was made but visually the rock samples are white in color. To assess the engineering properties of the bedrock, rock cores were conducted in boring B-1. The rock cores were reviewed by this writer to determine "Rock Quality Designation" (RQD). The RQD values were conducted to measure the rock core quality of fracture frequency. The results of RQD varied from 25 to 93 at boring B-1. The average of all RQD tests was 61. For specific results of RQD, see Appendix C. The bedrock Rock Quality Classification ranges from poor to excellent with the average being fair.

Uni-axial compressive strength of rock core samples were conducted on three (3) rock core samples with strengths of 5,200 psi, 10,900 psi, and 9,600 psi (avg. 8,566 psi). For specific compressive strength results, see Appendix C.

GEOTECHNICAL DESIGN CONSIDERATIONS

Tower Foundation

It is recommended that the proposed tower be supported on a spread footing (mat foundation) bearing on suitable, competent (sound) rock. For these foundations, an allowable bearing pressure of 10 tons per square foot is recommended for the design. These allowable loading pressures can be increased by $^1/_3$ for seismic or wind loading. Settlement of the tower should be negligible if founded directly on (sound) bedrock.

All proposed foundations **must** bear on competent (sound) rock. The bottom of the excavation is to be carried down below any weathered and fractured rock to obtain competent (sound) rock bearing. If the Contractor over-excavates and/or over-blasts and competent (sound) rock is not obtained at the proposed bottom of foundation elevation, the Contractor shall excavate down to competent (sound) rock and remove all of the loose material and fill excavation to the proposed bottom of footing with 3,000 psi concrete (lean concrete).

Competent (Sound) Rock is defined as where no fragmentation is produced under heavy hammer blows or rock will not break down with the use of a single-tooth ripper on a D-8 Caterpillar Power Bulldozer or equal force.

All foundations that bear on sound bedrock shall have the following preparations (See Figure 3 for additional details):

⇒ Bedrock bearing surface shall be cleaned of any soil, loose rock fragments and any unsuitable bearing material. The bearing surface is to be air blown clean and/or swept clean.

⇒ Bedrock bearing surface shall be level.

⇒ Bedrock bearing surface to be observed by geotechnical engineer for approval.

As a result of the required seismic and wind loading, towers typically have portions of their foundation that undergo uplift and lateral loading. To address these issues, to resist this uplift and lateral loading, and to reduce the foundation size, **DET** recommends rock anchors. A pre-stress rock anchor system is to be used for design. A pre-stress rock anchor system is superior to the non-prestress system in that the prestressing of rock anchors minimizes foundation movement when stress is applied. Foundations are not allowed to move under constantly changing loading conditions. This will result in reducing the potential for long term fatigue of the rock anchor system.

The rock anchor system we recommend is the DYWIDAG System or approval equal. DYWIDAG rock anchors are post-tensioned tendons installed in drilled holes for which at least the entire bond length is located in suitable rock. The anchor force is transmitted to the rock by bond between the grout body and the rock. The following information is for general consideration, but **DE**T recommends that the design of these anchors should be a joint effort between **DET** (geotechnical engineer) and the structural engineer.

⇒ All rock anchors are to be designed in accordance with the publication entitled, *Recommendations for Prestressed Rock and Soil Anchors,* by Post-Tensioning Institute lasted edition.

⇒ The anchor bolt system shall be corrosion protection "Class 1" (double corrosion protection) unless others conduct an environmental study to determine the aggressivity of the host soil/rock system.

⇒ The load carrying capacity of each anchor is to be verified by load testing after installation and prior to being placed in service.

⇒ The anchor system is to be designed using permanent anchor design criteria.

⇒ The working bond stress along the interface between rock and grout to be used for design shall be 75 psi.

⇒ The rock anchor pull-out cone has an angle of 30° with the center of the anchor and total cone angle of 60°. The resulting rock anchor pull-out cone must be evaluated for global stability when single and/or multiple anchors are used.

⇒ The point where the cone starts is taken at the midway distance of the bonded length.

Given the empirical nature of the design of these rock anchors, it is advisable that **DET** be retained to assist in the design of the rock anchor system.

Equipment Shelter

A spread footing is considered appropriate for the subsurface conditions at the proposed equipment shelter with the following foundation preparation requirements.

1. Remove all topsoil, subsoil and till material down to bedrock. Remove bedrock and loose bedrock as required, to provide a level surface to construct the spread footing
2. If bedrock/till is over-excavated, use compacted ½" size crushed stone to fill and level the area. Note: Crushed stone leveling course **can not** be used in the tower foundation construction as it is to bear on sound bedrock.

With this foundation preparation requirements, use allowable bearing pressure of 2 tons per square foot for foundation design of the spread footing. Settlement of the spread footing will be negligible. The bottom of footing needs to be at least 42" below outside grades for frost protection.

EARTHQUAKE DESIGN (SEISMIC)

Seismic design requirements for the State of Connecticut are based on the Connecticut State Building Code, which incorporates the Seismic design Category approach from the International Building Code. The seismic design Category determination is based on a few category factors. One such category is the "Site Classification (soil type)". From our test borings, we consider that the site subsurface conditions match the General Description of "Rock". The site classification is therefore "B".

For transfer of ground shear into the natural rock, the friction factor between the concrete and natural rock deposit can be 0.60.

The proposed foundation is to bear on sound bedrock. This sound bedrock will not liquefy during a seismic event and needs not be addressed in the foundation design.

Passive earth pressure is not typically used in resisting sliding of structures due to the potential of this earthen material being removed in the future. If this material can be guaranteed to remain in place for the life of the structure, the following design parameters can be used for design:

⇒ Dry unit weight of gravel backfill soil should be 125 pound per cubic foot (pcf).
⇒ Ultimate passive earth pressure coefficient ($K_p = 3.0$)
⇒ A factor of safety of 3 is to be used in the design to obtain "allowable" passive pressure from ultimate passive pressure.

GEOTECHNICAL CONSTRUCTION CONSIDERATIONS

General

This section provides comments related to foundation construction and other geotechnical aspects of the project. It will aid personnel responsible for preparation of Contract Plans and Specifications and those involved with the actual construction and construction monitoring. The contractor **must** evaluate potential construction problems on the basis of his own knowledge and experience in the area and on the basis of similar projects in other localities, taking into consideration his own proposed construction methods and procedures. The contractor shall visit the site to become familiar with the topography, the rock out-cropping, and other features that will affect their work. There are many areas of exposed bedrock the contractor should be aware of.

Excavation

Materials to be excavated are expected to be topsoil, subsoil, till and bedrock in the proposed compound area; hence excavation is expected to be very difficult when excavating bedrock. Bedrock is "**just below ground surface**" to about 6.5' below ground surface in the compound area, so most excavations below this depth will be within the bedrock. This will be a **major site issue** for the contractor. It is anticipated that blasting will be required for rock excavation. Controlled blasting procedures are recommended. Blasting specifications should limit blast vibrations, air blast overpressure, and provide criteria for perimeter control. As an alternative to blasting, methods such as core cracker, hydraulic impact and hydraulic splitting have a track record of reducing vibration and air blast. Pre and post construction surveys of the surrounding structure should be performed to minimize damage claims.

Site soils are not expected to be stable on steep slopes for any appreciable length of time. It is recommended that un-braced excavations be laid back to a field determined safe slope. Temporary excavations should be laid back or braced to OSHA requirements.

Dewatering/Groundwater

Normal groundwater levels are expected to be below the proposed excavation. However, rainwater may enter excavation and groundwater may seep in at the interface between the rock and soil. Therefore, dewatering is expected to be limited to pumping of surface runoff, precipitation that enters the excavation, and localized groundwater seeps. It is anticipated that dewatering will be performed by localized sump techniques, if needed.

Materials

Gravel backfill is material used to backfill the foundation/retaining walls and is to be obtained from off-site borrow sources. This material shall consist of inert material that is hard, durable stone and coarse stone, free from loam and clay, surface coatings and deleterious materials. These materials shall conform to the following gradation requirements (using washed sieve analysis):

Sieve Size	Percent Finer by Weight
1-1 1/2"	100
¾"	45 – 80
¼"	25 – 60
No. 10	15 – 45
No. 40	5 – 25
No. 100	0 – 10
No. 200	0 – 5

Placement and Compaction of Foundation Backfill

A. All backfill materials shall be placed in horizontal layers not exceeding 6". Each layer shall be spread evenly and thoroughly blade mixed during spreading to ensure uniformity of material in each layer. Each layer shall be evenly compacted with an approved hand operated compactor, making a minimum of at least five (5) passes.

B. In no case shall fill be placed over frozen material or snow. No fill material shall be placed, spread, or compacted during unfavorable weather conditions where soil moisture precludes achievement of the specified compaction. When the work is interrupted by heavy rains or snow, fill operations shall not be resumed until the moisture content and the density of the previously placed fill are as specified.

C. Gravel fill shall be compacted in individual layers (not exceeding 6") to 95% maximum dry density using ASTM D1557.

LIMITATIONS

Explorations
The analysis and recommendations submitted in this report are based in part upon the data obtained from a limited number of widely spaced subsurface explorations. The nature and extent of variations between these explorations may not become evident until construction excavation. If variations then appear evident, it will be necessary to re-evaluate the recommendations of this report at that time.

The soil profiles described and shown in this report are generalized and are intended to convey trends in subsurface conditions. The boundaries between strata and bedrock are approximate and generalized. They have been developed by data that is limited in number and widely spaced.

Water level readings have been observed in the drill holes at times and under conditions stated on the boring logs and in this report. This data has been reviewed, analyzed, and interpretations made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, temperature, time of the year and other factors not evident at the time measurements were taken.

Designer Review
In the event that any changes in the design or location of the monopole or proposed site development, the conclusions and recommendations contained in this report shall not be considered valid unless these changes are reviewed by this office and conclusions of this report modified.

Construction
It is recommended that Design Earth Technology retained to provide geotechnical field monitoring services based on familiarity with the subsurface conditions, design concepts and specifications, technical expertise, and experience in monitoring of site development construction.

Use of This Report
This report has been prepared for specific application and use of the proposed AT&T Mobility Wireless Tower to be located off of Kent Road, New Milford, Connecticut and is in accordance with generally accepted soil and foundation engineering practices. No other warranty expressed or implied is made.

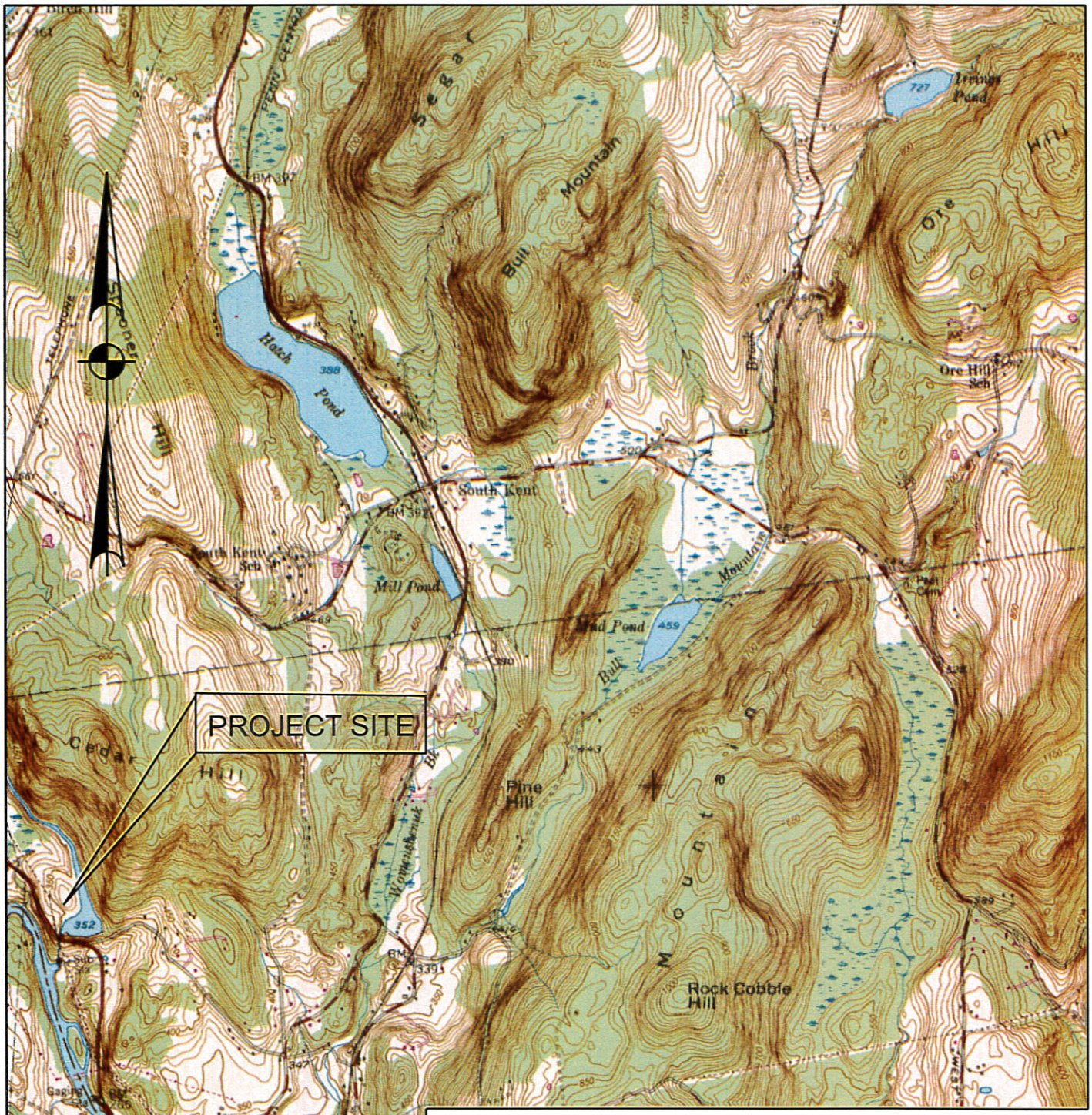
If you have any questions regarding the above information, please call.

Sincerely,

DESIGN EARTH TECHNOLOGY

Lawrence J. Marcik, Jr., P.E.

FIGURES



JOB TITLE: GEOTECHNICAL REPORT FOR A PROPOSED AT&T MOBILITY WIRELESS COMMUNICATIONS FACILITY AT SITE NUMBER: CT 4067, KENT ROAD (MAP 83, LOT 4) NEW MILFORD, CONNECTICUT

PREPARED FOR:

CENTEK ENGINEERING, INC.

DATE: AUGUST 4, 2014

SCALE: NTS

SOURCE:
U.S.G.S. QUADRANGLE
KENT

DESIGN EARTH TECHNOLOGY
P.O. Box 187 • Guilford, CT 06437
Phone/Fax: (203) 458-9806
Email: docdirt@aol.com

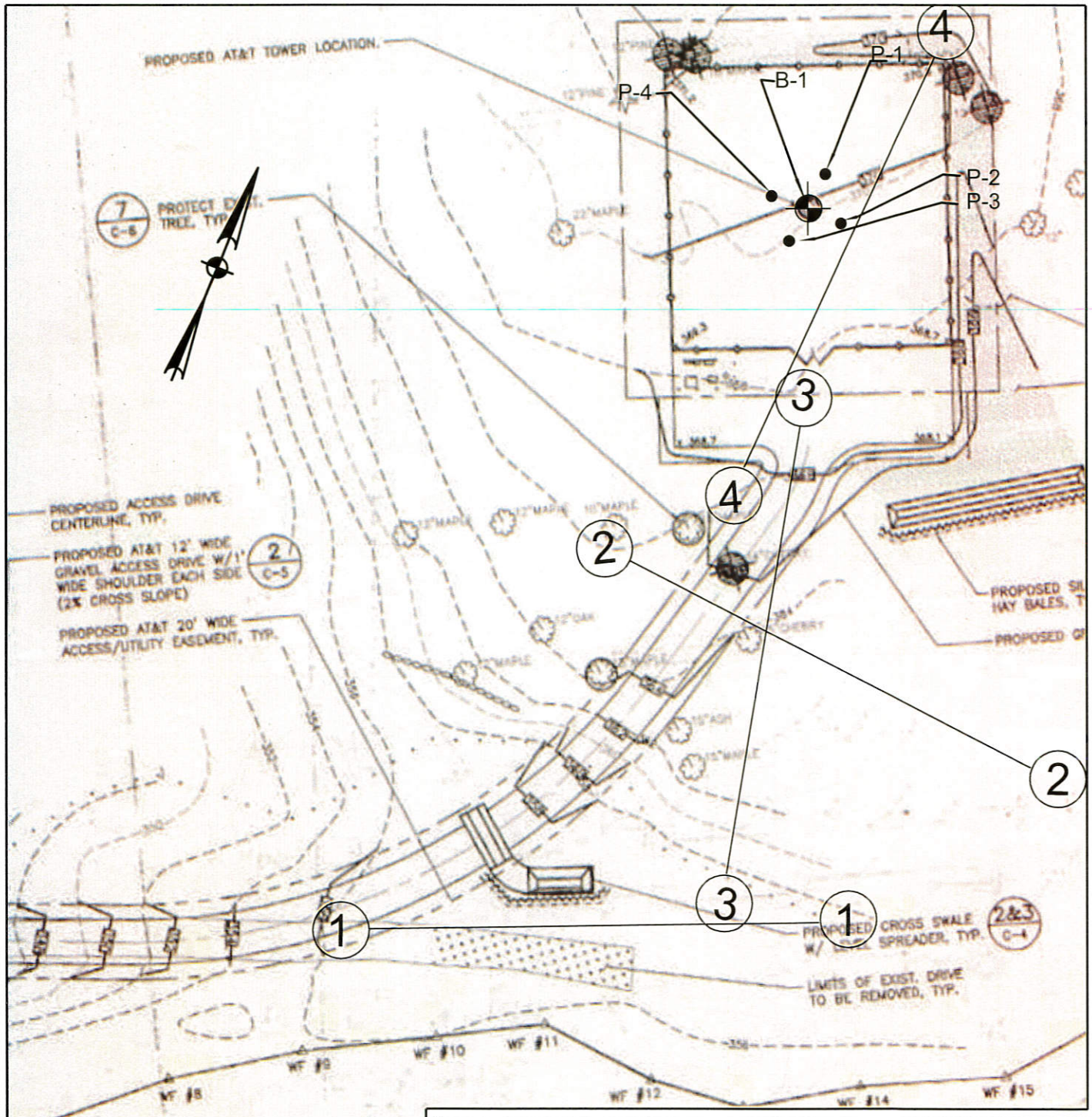
PROJECT No.: 2014-09

DRAWN: LJM

FIGURE No.: 1

FIGURE TITLE: LOCATION PLAN

CAD FILE: Location Plan



LEGEND

B-1 — TYPICAL BORING

P-1 — TYPICAL BEDROCK PROBE

1 — SECTION NUMBER RESISTIVITY TESTING

JOB TITLE: GEOTECHNICAL REPORT FOR A PROPOSED AT&T MOBILITY WIRELESS COMMUNICATIONS FACILITY AT SITE NUMBER: CT 4067, KENT ROAD (MAP 83, LOT 4) NEW MILFORD, CONNECTICUT

PREPARED FOR:

CENTEK ENGINEERING, INC.

DATE: AUGUST 4, 2014

SCALE: 1" = 40' +/-

PROJECT No.: 2014-09

DRAWN: LJM

FIGURE No.: 2

CAD FILE: Figures

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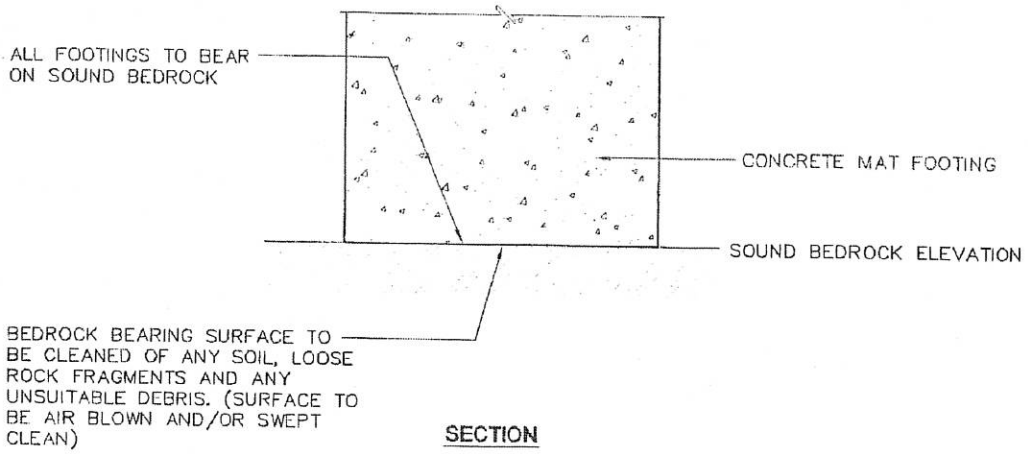
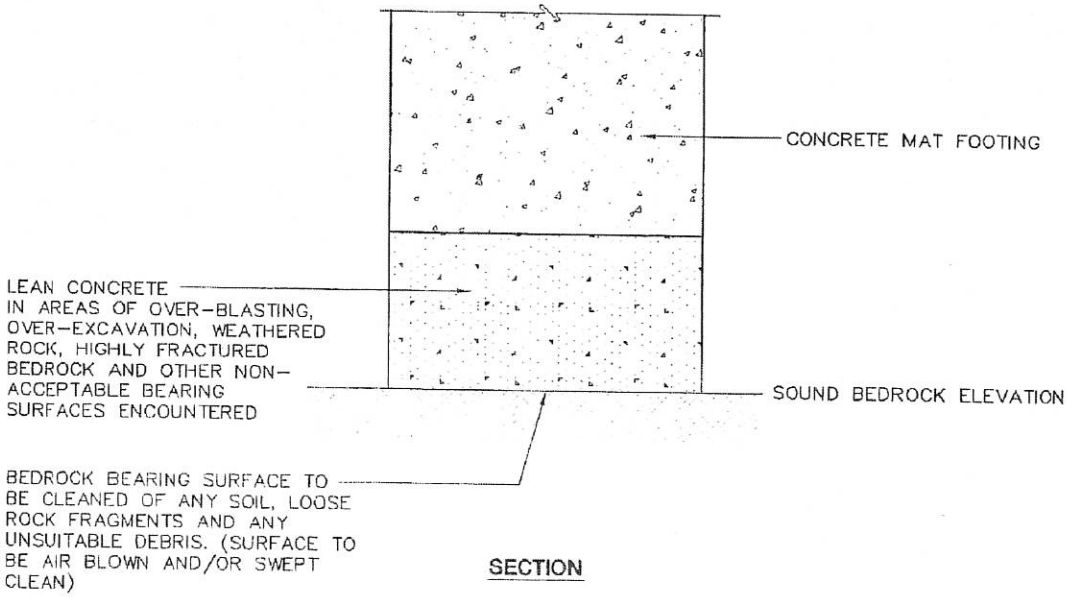
FIGURE TITLE: SKETCH OF LOCATIONS OF SUBSURFACE EXPLORATIONS



FOUNDATION BEARING SURFACE PREPARATION AT DESIGNED ELEVATIONS

NOT TO SCALE



FOUNDATION BEARING SURFACE PREPARATION WHERE SOUND BEDROCK IS LOWER THAN DESIGNED ELEVATION

NOT TO SCALE

JOB TITLE: GEOTECHNICAL REPORT FOR A PROPOSED AT&T MOBILITY WIRELESS COMMUNICATIONS FACILITY AT SITE NUMBER: CT 4067, KENT ROAD (MAP 83, LOT 4) NEW MILFORD, CONNECTICUT

PREPARED FOR:

CENTEK ENGINEERING, INC.

DATE: AUGUST 4, 2014

SCALE: NTS

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PROJECT No.: 2014-09

DRAWN: LJM

FIGURE No.: 3

FIGURE TITLE: FOUNDATION DETAILS

CAD FILE: Figures

TABLES

TABLE 1

PROPOSED AT&T MOBILITY WIRELESS TOWER
SITE NUMBER: CT 4067
KENT ROAD (MAP 83, LOT 4)
NEW MILFORD, CT

IN-SITU SOIL RESISTIVITY RESULTS[1]

ELECTRODE SPACING (ft)	Section No. 1	2	3	4
5	23,363	1,532	132,518	133,571
10	46,151	208,160	194,564	201,266
20	90,388	326,700	324,401	334,359
30	116,049	386,064	428,577	432,598
40	144,774	415,172	446,578	504,028

NOTES: 1. Resistivity values indicated are in OHM-CM

2. [1]Test completed using Wenner Four Probe Method with a Det 2/2 Auto Earth Tester as manufactured by Avo, Inc.

APPENDICES

APPENDIX A

Jaime Lloret	TEST BORING REPORT		SHEET 1 OF 1
DRILLER Larry Marcik, Jr.	ASSOCIATED BORINGS CO., INC. 119 MARGARET CIRCLE, NAUGATUCK, CT 06770 Tel (203) 729-5435 Fax (203) 729-5116		CME-45B
INSPECTOR			DRILLING EQUIPMENT Design Earth Technology
SOILS ENGINEER	PROJECT NAME: Cell Tower Kent Road		CLIENT
Surface Elevation:	PROJECT NUMBER:		
Date Started: 7/21/2014	LOCATION: Gaylordsville, Connecticut		Hole No. **B-1**
Date Finished: 7/21/2014	Groundwater Observations		Line & Station
AT None ' AFTER 0 HRS	Offset		
AT ' AFTER HRS	N Coordinate		
	E. Coordinate		

	Auger	Casing	Sampler	Core Bar
Type	HSA		SS	NQ-2
Size I. D.	3 1/4 in		2 in	
Hammer			140 lb	Bit
Fall			30 in	

DEPTH	Casing blows per foot	SAMPLE DEPTH IN FEET FROM - TO	NO.	PEN. INCH	REC. INCH	TYPE	BLOWS PER 6 INCHES ON SAMPLER 0 - 6	6 - 12	12-18	18-24	STRATA CHANGE: DEPTH, ELEV.	FIELD IDENTIFICATION OF SOIL, REMARKS (INCL. COLOR, LOSS OF WASH WATER, ETC.)
											12"	Topsoil
		2.5 - 7.5	1	60	36	C					2.5	Br. M-F Silty Sand
												Cored Run # 1 From 2.5 feet to 7.5 feet Recovery - 36" RQD = 15/60 = 25%
5												
		7.5 - 12.5	2	60	38	C					7.5	Cored Run # 2 From 7.5 feet to 12.5 feet Recovery - 38" RQD = 25/60 = 41%
10												
		12.5 - 17.5	3	60	56	C					12.5	Cored Run #3 From - 12.5 feet to 17.5 feet Recovery - 56" RQD = 51/60 = 85%
15												
		17.5 - 22.5	4	60	56	C					17.5	Cored Run # 4 From - 17.5 feet to 22.5 feet Recovery - 56" RQD = 56/60 = 93%
20											22.5	End of Boring - 22.5
25												
30												
35												
40												

From Ground Surface to Feet Used Inch Casing Then Inch Casing For Feet

Footage in Earth 2.5 Footage in Rock 20.0 No. of Samples 0 Hole No. **B-1**

SAMPLE TYPE CODING: D = DRIVEN C = CORE A = AUGER UP = UNDISTURBED PISTON

PROPORTIONS USED: TRACE = 1-10% LITTLE = 10-20% SOME = 20-35% AND = 35-50%

Jaime Lloret DRILLER Larry Marcik, Jr. INSPECTOR	TEST BORING REPORT **ASSOCIATED BORINGS CO., INC.** **119 MARGARET CIRCLE, NAUGATUCK, CT 06770** **Tel (203) 729-5435 Fax (203) 729-5116**	SHEET 1 OF 1 CME-45B DRILLING EQUIPMENT Design Earth Technology CLIENT
DATE; 7/21/2014	PROJECT NAME: Cell Tower Kent Road PROJECT NUMBER: LOCATION: Gaylordsville, Connecticut	

POWER DRILL SOUNDING REPORT

Station	Offset	Elev	Probe #	From	To	Remarks: Soil Encountered, Groundwater Depth, Refusal Etc.
			P-1	0.0	6.5	Soil
						Refusal - 6.5 End of Boring - 6.5 G.W.O. - None
			P-2	0.0	3.0	Soil
						Refusal - 3.0 End of Boring - 3.0 G.W.O. - None
			P-3	0.0	4.0	Soil
						Refusal - 4.0 End of Boring - 4.0 G.W.O. - None
			P-4	0.0	3.5	Soil
						Refusal - 3.5 End of Boring - 3.5 G.W.O. - None

PROPORTIONS USED: TRACE = 1-10% LITTLE = 10-20% SOME = 20-35% AND = 35-50%

APPENDIX B

RESISTIVITY DATA

SITE: New Milford, Connecticut (Kent Road-map 83,Lot 4)
DATE: August 4, 2014
SIGNATURE: [signature]

A=(FT)	5	10	20	30	40
FORMULA □ = (OHM-CM)	957.5*R	1915*R	3830*R	5745*R	7660*R
AREA 1 MEASURED R (OHM)	24.4	24.1	23.6	20.2	18.9
AREA 1 CALCULATED (OHM-CM)	23,363	46,151	90,388	116,049	144,774
AREA 2 MEASURED R (OHM)	1.6	108.7	85.3	67.2	54.2
AREA 2 CALCULATED (OHM-CM)	1,532	208,160	326,700	386,064	415,172
AREA 3 MEASURED R (OHM)	138.4	101.6	84.7	74.6	58.3
AREA 3 CALCULATED (OHM-CM)	132,518	194,564	324,401	428,577	446,578
AREA 4 MEASURED R (OHM)	139.5	105.1	87.3	75.3	65.8
AREA 4 CALCULATED (OHM-CM)	133,571	201,266	334,359	432,598	504,028

APPENDIX C

ROCK QUANTITY DESIGNATION

SUMMARY REPORT

PROJECT: Proposed AT&T Mobility Wireless Tower, Kent Road (Map 83, Lot 4), New Milford, Ct.

DET PROJECT NO.: 2014.09

MEASUREMENTS CONDUCTED BY: Lawrence J. Marcik, Jr., P.E.

BORING IDENTIFICATION AND CORE RUN DEPTH (ft)	CORE RUN LENGTH (in)	CORE RECOVERY LENGTH And % (in/%)	RQD (%)
B-1 Run #1 2.5' – 7.5'	60"	36/60	25
B-1 Run #2 7.5' – 12.5'	60"	38/63	41
B-1 Run #3 12.5' – 17.5'	60"	56/93	85
B-1 Run #4 17.5' – 22.5'	60"	56/93	93

UNCONFINED COMPRESSIVE STRENGTH OF INTACT ROCK CORE SPECIMENS

SUMMARY REPORT

PROJECT: Proposed AT&T Mobility Wireless Communications Facility
Kent Road (Map 83, Lot 4), New Milford, Connecticut

DET PROJECT NO.: 2014.09
DATE OF TEST: August 4, 2014
ROCK TYPE: Metamorphic Type Rock
TEST CONDUCTED BY: Lawrence J. Marcik, Jr., P.E.

CORE IDENTIFICATION	LOCATION OF SAMPLE	CORE DIAMETER (in.)	LENGTH OF CORE (in.)	COMPRESSIVE STRENGTH (psi)	TYPE OF FRACTURE
A	B-1, Run #2 Depth ±10'	1.98	4.59	5,200	Columnar
B	B-1, Run #3 Depth ±15'	1.98	4.32	10,900	Columnar
C	B-1, Run #4 Depth ±20'	1.98	4.46	9,600	Columnar

Notes: Not all ASTM procedures and reporting have been meet.

PHOTOGRAPHS

PHOTOGRAPHS

DRILLING BORING No. 1

TYPICAL RESISTIVITY TESTING