

#### Matt Burke

16 Chestnut Street, Suite 220 Foxboro, MA 02035 Tel (508) 930-0974 Fax (774) 215-5423

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

Re: Notice of Exempt Modification - Emergency Backup Generator 104 Bunker Hill Road, Andover, CT 06232 (FA# 10035387)

Dear Ms. Bachman:

American Telephone and Telegraph Company ("AT&T") currently maintains a wireless telecommunications facility at the above referenced address. AT&T's facility consists of antennas at the 137' level of an existing 178' tower and a 12' x 20' equipment shelter. The tower and AT&T's shelter are located within an existing, fenced-in compound area. The shelter houses AT&T's equipment and space for a back-up generator. AT&T does not currently maintain a generator at this cell site.

In an effort to further enhance multiple tenants' network reliability, AT&T intends to modify its facility by installing a new diesel-fueled generator outside in a designated 4' x 8' ground space. The generator incorporates a built-in fuel tank as part of the unit. The diesel fuel tanks are double walled for added safety and will be filled by a licensed fuel filling company. The proposed modification will remain within the existing, fenced-in compound. The new generator and tank with be surrounded by a security fence and gate and will be placed on an existing 6' x 10' concrete pad. (See Facility Compound Plan attached).

Please accept this letter as notification pursuant to R.C.S.A Section 16-50j-73, for construction that constitutes modification pursuant to R.C.S.A Section 16-50j-72(b)(2). In accordance with R.C.S.A Section 16-50j-73, a copy of this submission is being sent to the Town of Andover. A copy of this submission is also being sent to Leon and Benjamin Price, the property owners on which the tower is located.

#### AT&T's Proposed Wireless Modifications Constitute An "Exempt Modification"

The proposed modification to the above mentioned Facility constitutes an exempt modification of an existing facility provided for in R.C.S.A Section 16-50j-72(b)(2) and Council regulations promulgated pursuant thereto.

- 1) The proposed modification will not result in an increase in the height of the existing tower.
- 2) The generator and attached fuel tank will remain entirely within the limits of the leased area. The modifications therefore, will not require the extension of the boundary.
- 3) The proposed modification does not increase the noise levels at the boundary by six (6) decibels or more under normal conditions. Proposed modification is only used during emergency power failure.
- 4) The installation of a new generator and attached fuel tank will not change, in any way, radio frequency (RF) emissions at the facility.
- 5) The facility has received all municipal zoning approvals and building permits. (Regs., Conn. State Agencies Section 16-50j-72))

For all the foregoing reasons, American Telephone and Telegraph Company respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitutes an exempt modification under R.C.S.A Section 16-50j-72(b)(2)

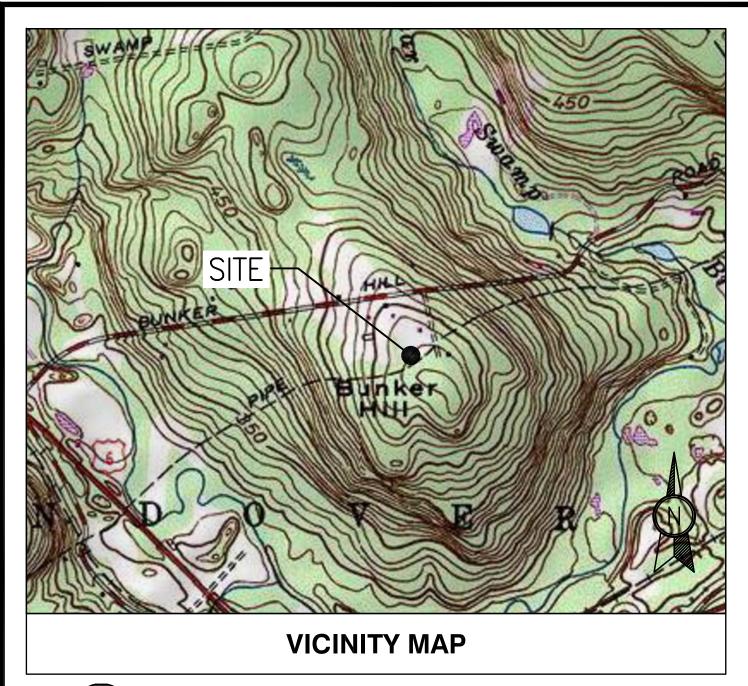
Respectfully submitted,

#### Matt Burke 508.930.0974

On behalf of AT&T c/o Tower Resource Management, Inc. 16 Chestnut Street, Suite 220 Foxboro, MA 02035

cc: Town of Andover, CT Leon and Benjamin Price Exhibit 1

Site Plan





# BACKUP POWER PROJECT

SITE IDENTIFICATION **SITE NUMBER: 10035387** SITE NAME: ANDOVER - BUNKER HILL

SITE ADDRESS: 104 BUNKER HILL ROAD **ANDOVER, CT 06232** 



ENGINEERING

R.K. EXECUTIVE CENTRE 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752

(508)481-7400 www.chappellengineering.com

TOWER RESOURCE MANAGEMENT 30 LYMAN STREET WESTBOROUGH, MA 01581 PHONE: (508) 389-1731 www.trmcom.com

AT&T MOBILITY 550 COCHITUATE ROAD SUITES 13 & 14 FRAMINGHAM, MA 01701

10035387

ANDOVER -

BUNKERHILL

104 BUNKER HILL ROAD ANDOVER, CT 06232

TITLE SHEET

VICINITY MAP &

**GENERAL INFO** 

REVISION:

SITE NUMBER:

ASSOCIATES, LLC

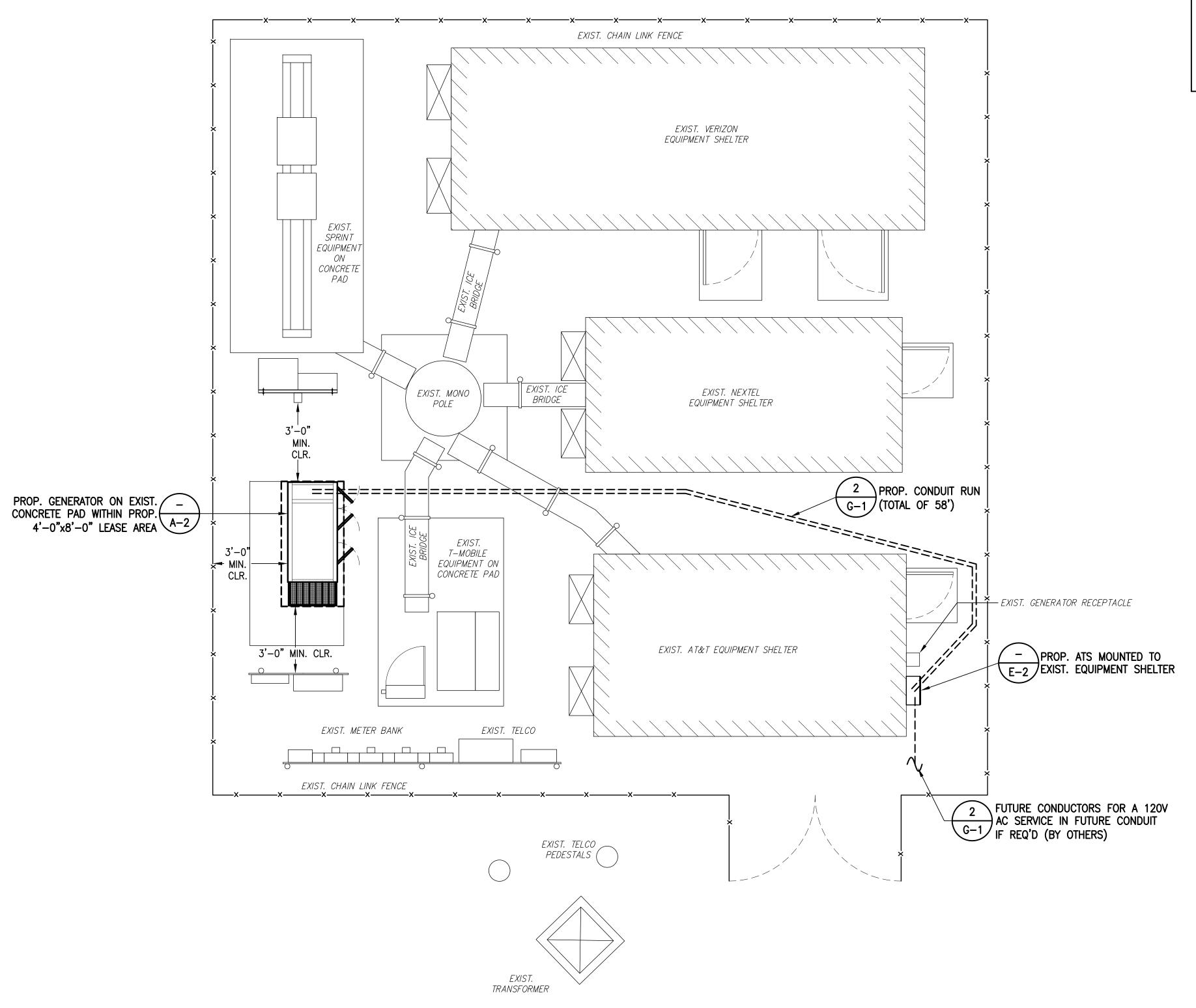
**LOCAL MAP** 

# Know what's below. Call before you dig.

# PROJECT DESCRIPTION THE PROPOSED PROJECT INCLUDES PLACING A 50 KW GENERATOR WITHIN AN EXISTING CELLULAR TOWER COMPOUND.

PROJECT TEAM	PROJECT SUMMARY	PROJECT NOTES	SHEET INDEX		
NGINEER: CHAPPELL ENGINEERING ASSOCIATES, LLC 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752	GEOGRAPHIC COORDINATES:  LATITUDE: N 41° 44' 16.04"  LONGITUDE: W 72° 20' 59.26"	THE FACILITY IS UNMANNED  2. A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE	SHEET DESCRIPTION:	REV: DATE:	BY:
508-481-7400		3. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE	T-1 TITLE SHEET, VICINITY MAP & GENERAL INFORMATION	1 01/27/14	CAW
		4. NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED	A-1 SITE PLAN	1 01/27/14	CAW SITE ADD
PPLICANT:  AT&T MOBILITY  FEO. COOLUITUATE DOAD	CODE BLOCK: CT BUILDING CODE: 2009 INTERNATIONAL BUILDING CODE	5. HANDICAP ACCESS IS NOT REQUIRED	A-2 CONCRETE PAD DETAILS	1 01/27/14	CAW 104
550 COCHITUATE ROAD SUITES 13 & 14 FRAMINGHAM, MA 01701			E-1 GENERATOR WIRING DIAGRAM	1 01/27/14	CAW
			E-2 ELECTRICAL DETAILS	1 01/27/14	CAW
USTOMER REPRESENTATIVE:			E-3 GENERTOR CONTROL & ALARM WIRING	1 01/27/14	CAW
SABRE INDUSTRIES PEGGY POOR MARKET LEAD — AT&T NE GENERATOR PROGRAM 13010 MORRIS ROAD, 6TH FLOOR, BLDG 1 ALPHARETTA, GA 30004	AT&T OPS FOR POWER CUT OVER:  NEED 24 HOUR NOTICE  TO OPEN A TAP TICKET  DIAL: 1-800-638-2822		G-1 GROUNDING & TRENCH DETAILS	1 01/27/14	
770-990-0137	SELECT OPTION 1, THEN OPTION 2	PROJECT LOCATION DIRECTIONS			
ANDLORD:  ATC — AMERICAN TOWER  C/O SPECTRASITE  100 REGANCY FOREST DRIVE, SUITE 400  CARY, NC 27511	MUX NOTE:  CONTRACTOR TO VERIFY EXISTING MUX LOCATION. IF MUX LOCATION IS OUTSIDE OF AT&T EQUIPMENT AREA, CONTRACTOR IS TO FIELD VERIFY THE PRESENCE OF EMERGENCY BACK—UP SERVICE IS NOT PRESENT.	- TAKE I-90 WEST TOWARDS SPRINGFIELD/ALBANY NY - TAKE EXIT 9 TO MERGE ONTO I-84 TOWARDS US-20			ENGINEER  DRAWN BY:  CHECKED BY:  DATE DRAWN:  CEA JOB NUM
CONTRACTOR IS TO ROUTE NEW SERVICE FROM AT&T EQUIPMENT AREA.  POWER COMPANY:  CONNECTICUT LIGHT & POWER  P.O. BOX 270  HARTFORD, CT 06141		<ul> <li>TURN LEFT ONTO LEWIS HILL ROAD</li> <li>TURN RIGHT ONTO CT-31S/MAIN STREET</li> <li>TURN RIGHT ONTO LAKE STREET</li> <li>CONTINUE ONTO CROSS STREET</li> <li>TURN LEFT ONTO SOUTH STREET</li> <li>TAKE THE FIRST RIGHT ONTO BUNKER HILL ROAD</li> <li>DESTINATION WILL BE ON THE LEFT</li> </ul>			DRAWING TO TO THE TOTAL TO THE
(800) 286-2000					DRAWING N

# TRUE NORTH WAGNETIC



SITE PLAN

A-1

# NOTES:

- 1. A SITE VISIT/SURVEY WAS NOT CONDUCTED BY CHAPPELL ENGINEERING ASSOCIATES.

  SITE PLAN REFERENCED FROM DRAWINGS ENTITLED "ANDOVER BUNKER HILL" BY HUDSON DESIGN GROUP, DATED 10/27/08.
- ELECTRICAL CONTRACTOR SHALL MAINTAIN ALL MANUFACTURER'S REQUIRED CLEARANCES FOR GENERATOR AND AUTOMATIC TRANSFER SWITCH.
- 3. CONTRACTOR TO VERIFY EXISTING MUX LOCATION. IF MUX LOCATION IS OUTSIDE OF AT&T EQUIPMENT AREA, CONTRACTOR IS TO FIELD VERIFY THE PRESENCE OF EMERGENCY BACK—UP SERVICE IS NOT PRESENT. CONTRACTOR IS TO ROUTE NEW SERVICE FROM AT&T EQUIPMENT AREA.
- 4. CONTRACTOR TO MAINTAIN 3'-0" MINIMUM WORKING CLEARANCE ON ALL SIDES OF GENERATOR. CONTRACTOR TO CONTACT ENGINEER IF 3'-0" CLEARANCE CAN NOT BE MAINTAINED.



R.K. EXECUTIVE CENTRE
201 BOSTON POST ROAD WEST,
SUITE 101
MARLBOROUGH, MA 01752
(508)481-7400
www.chappellengineering.com

Givil Structural Land Surveying



TOWER RESOURCE MANAGEMENT
30 LYMAN STREET
WESTBOROUGH, MA 01581
PHONE: (508) 389-1731
www.trmcom.com



AT&T MOBILITY 550 COCHITUATE ROAD SUITES 13 & 14 FRAMINGHAM, MA 01701

SITE NUMBER:

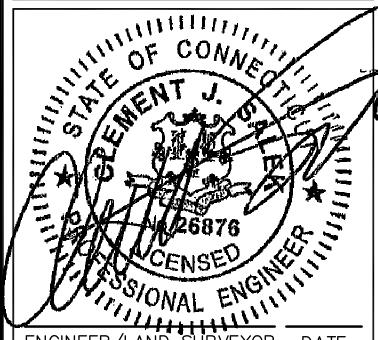
10035387

SITE NAME:

ANDOVER -BUNKERHILL

SITE ADDRESS:

104 BUNKER HILL ROAD ANDOVER, CT 06232



ENGINEER/LAND SURVEYOR DAT

DRAWN BY:	CAW
CHECKED BY:	JMT
DATE DRAWN:	01/27/14
CEA JOB NUMBER:	1337.014

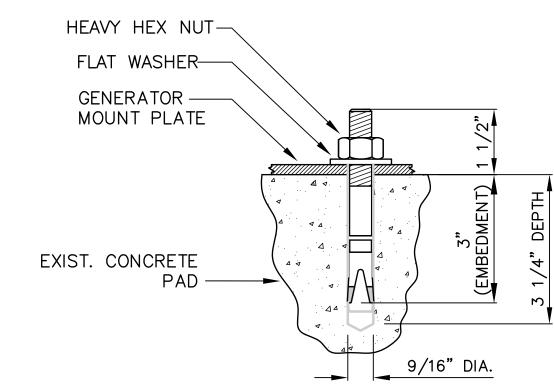
DRAWING TITLE:

SITE PLAN

DRAWING NO:	REVISION:
A-1	1

QTY	SIZE	TOTAL LENGTH	TOTAL WEIGHT	TVDE		BENDING DIAGRAM
REQ'D.	SIZE	TOTAL LENGTH	(LBS)	TYPE	DIMENSION	
20	1/2"	4 1/2" LONG WITH		HILTI"	A= 4 1/2"	
		2 7/8" THREAD		KWIK BOLT		
				EXPANSION		<del>\</del>
0	#4	9'-9 1/2"	78	ANCHOR	A= 9'-9 1/2"	
0	#4	7'-9 1/2"	94		A= 7'-9 1/2"	
0	#4	7'-9 3/8"	21	STRAIGHT	A= 7'-9 3/8"	A
0	#4	2'-7 1/2"	11		A= 2'-7 1/2"	1
0	#4	0'-5 5/8"	2	_	A= 0'-5 5/8"	
 STA	NDARD	REBAR SIZES &	WEIGH	TS		
BAR NO	D LBS	PER FT. DIA. IN	CHES	GRADE		
4	.6	6676 .50	0	60		

A-2



SCALE: NOT TO SCALE

### "HILTI" KWIK BOLT 3 EXPANSION ANCHOR NOTES:

- BOLTS CAN BE INSTALLED 2 DAYS AFTER POURING CONCRETE PROVIDED THE KWIK BOLTS ARE ONLY TIGHTENED TO A SNUG TIGHT CONDITION.
- 2. APPLY "HILTI" HIT-RE 500-SD EPOXY TO ALL GAPS TO PREVENT WATER/MOISTURE BUILD-UP.



Givil Structural Land Surveying

R.K. EXECUTIVE CENTRE 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752 (508)481 - 7400www.chappellengineering.com



TOWER RESOURCE MANAGEMENT 30 LYMAN STREET WESTBOROUGH, MA 01581 PHONE: (508) 389-1731 www.trmcom.com



AT&T MOBILITY 550 COCHITUATE ROAD SUITES 13 & 14 FRAMINGHAM, MA 01701

SITE NUMBER:

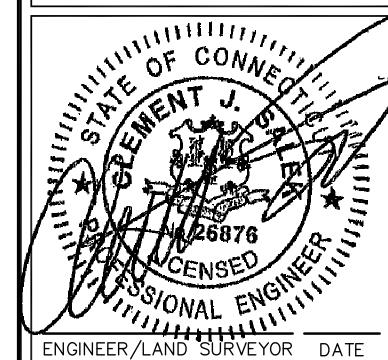
10035387

<u>SITE NAME:</u>

ANDOVER -BUNKERHILL

SITE ADDRESS:

104 BUNKER HILL ROAD ANDOVER, CT 06232

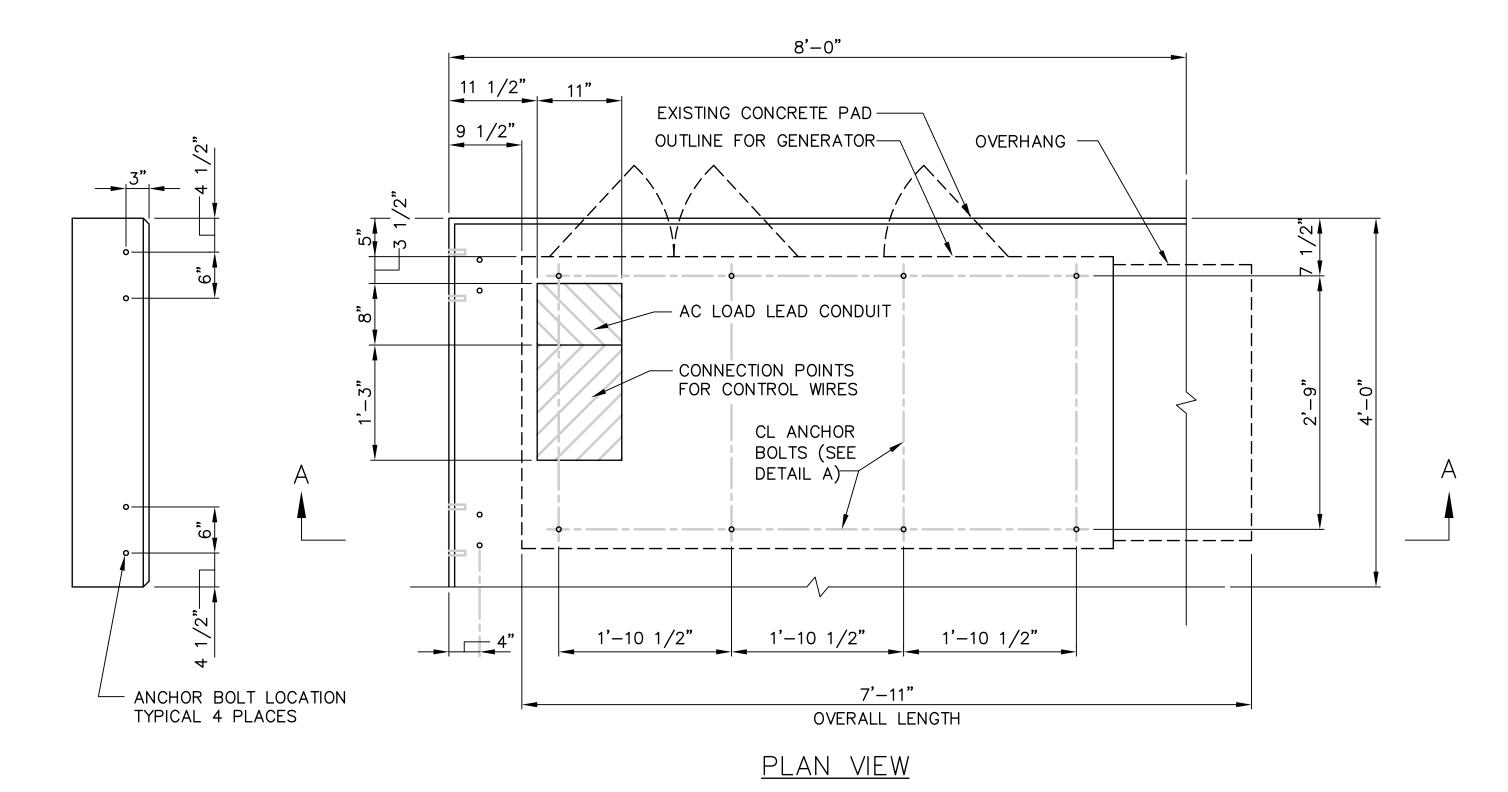


DRAWN BY: CAW JMT CHECKED BY: 01/27/14 DATE DRAWN: CEA JOB NUMBER: 1337.014

DRAWING TITLE:

CONCRETE PAD DETAILS

**REVISION:** DRAWING NO: A-2



# <u>DESIGN</u>

- MAXIMUM DESIGN BASIC WIND SPEED
  - (3—SECOND GUST): - 135 MPH FOR GENERATOR MODELS SD050
- AND SD080.
- 115 MPH FOR GENERATOR MODELS SD130 AND SD150.

# CONCRETE SLAB (GENERATOR FOUNDATION)

# CONCRETE AND REINFORCING STEEL NOTES:

1. ALL CONCRETE CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE AMERICAN CONCRETE INSTITUTE (ACI 318-95) BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AND (ACI 301) STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACIW301, ACIW318, ASTM A184 AND ASTM A185.

SCALE: NOT TO SCALE

- 2. MINIMUM ALLOWABLE CONCRETE COMPRESSIVE STRENGTH SHALL BE 4000 PSI AT 28 DAYS WHEN TESTED IN ACCORDANCE WITH THE AMERICAN SOCIETY FOR TESTING AND MATERIALS METHODS STANDARDS ASTM C172, ASTM C31 AND ASTM C39 UNLESS NOTED OTHERWISE.
- 3. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDING WIRE FABRIC SHALL CONFORM TO ASTM A185 WELDED STEEL FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNLESS NOTED OTHERWISE.
- 4. DETAILING SHALL BE ACCORDANCE WITH THE MANUAL OF STANDARD PRACTICE OF DETAILING REINFORCED CONCRETE STRUCTURES (ACI STD-315-92).
- 5. CHAMFER ALL EXPOSED EDGES OF CONCRETE 3/4" IN ACCORDANCE WITH ACI 301 SECTION 4.2.2 UNLESS OTHERWISE NOTED.
- 6. REINFORCING STEEL SHALL BE IN ACCURATELY PLACED AND ADEQUATELY SECURED IN POSITION. LOCATION OF REINFORCEMENT SHALL BE INDICATED ON THE DRAWINGS. CONCRETE COVER SHALL BE 3" MINIMUM.
- 7. TOP OF FOUNDATION TO HAVE A "BRUSH FINISH".
- 8. EXPOSED FINISHED SURFACE IS NOT TO HOLD WATER.
- 9. ALL SURFACES ARE TO BE CLEANED OF ANY RESIDUAL CONCRETE FROM SPLASHING OR SPILLS.

### SOIL COMPACTION NOTES FOR SLAB ON GRADE:

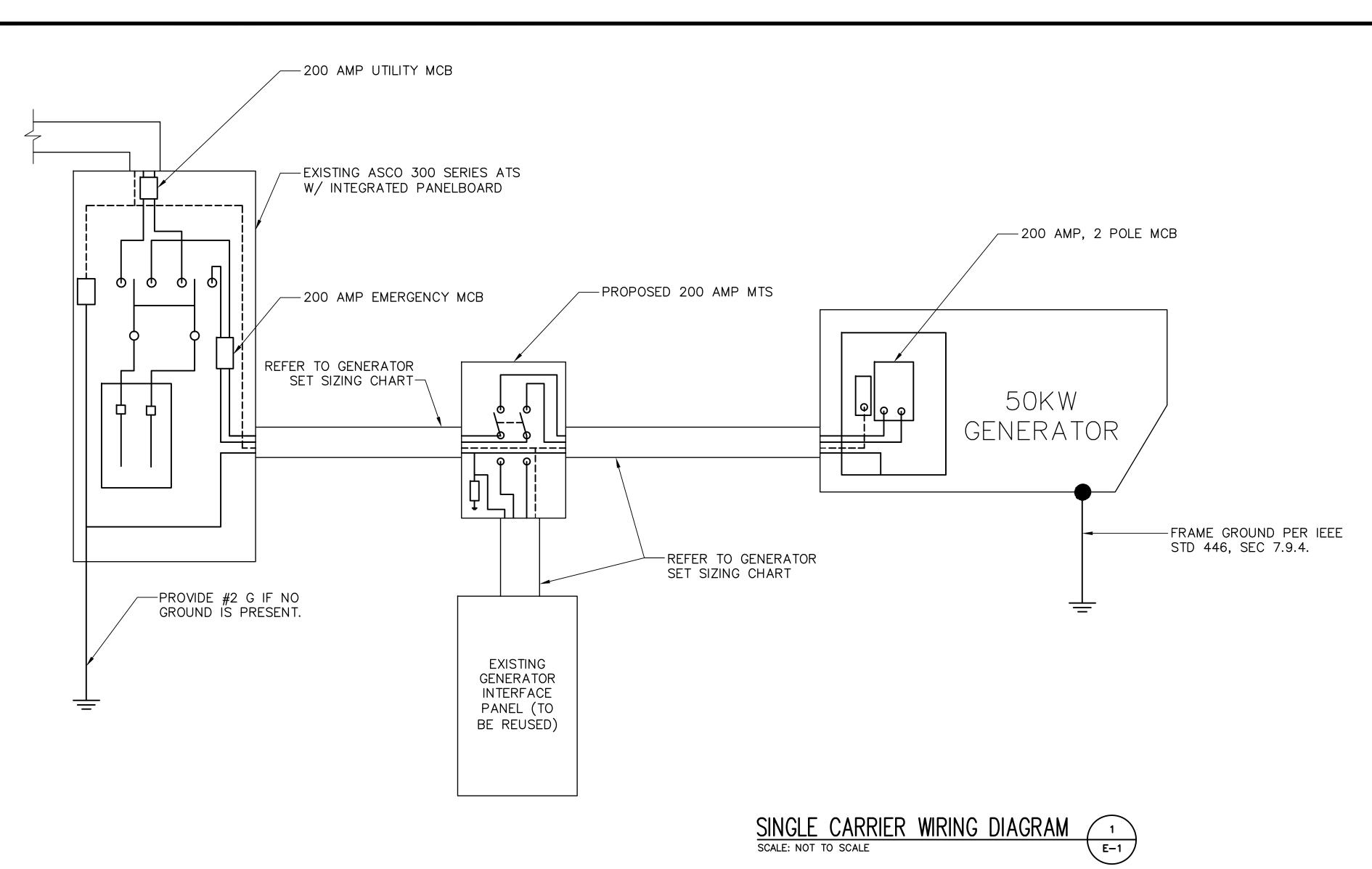
- 1. EXCAVATE AS REQUIRED TO REMOVE VEGETATION & TOPSOIL, EXPOSE UNDISTURBED NATURAL SUB GRADE AND PLACE CRUSHED STONE AS REQUIRED.
- 2. COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEO TECHNICAL OR ENGINEER IS ACCEPTABLE.
- 3. AS AN ALTERNATIVE TO INSPECTION AND WRITTEN CERTIFICATION, THE "UNDISTURBED SOIL" BASE SHALL BE COMPACTED WITH "COMPACTION EQUIPMENT", LISTED BELOW, TO AT LEAST 90% MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM D 1557 METHOD C.
- COMPACTED SUB BASE SHALL BE UNIFORM & LEVELED. PROVIDE 6" MINIMUM CRUSHED STONE OR GRAVEL COMPACTED IN 3" LIFTS ABOVE COMPACTED SOIL. GRAVEL SHALL BE NATURAL OR CRUSHED WITH 100% PASSING 1" SIEVE.
- 5. AS AN ALTERNATIVE TO ITEMS 2 AND 3 PROOF ROLL THE SUB GRADE SOILS WITH 5 PASSES OF A MEDIUM SIZED VIBRATORY PLATE COMPACTOR (SUCH AS BOMAG BPR 30/38) OR HAND-OPERATED SINGLE DRUM VIBRATORY ROLLER (SUCH AS BOMAG BW 55E). ANY SOFT AREAS THAT ARE ENCOUNTERED SHOULD BE REMOVED AND REPLÀCED WITH A WELL-GRADED GRANULAR FILL AND COMPACTED AS STATED ABOVE.

## COMPACTION EQUIPMENT:

A-2

1. HAND OPERATED DOUBLE DRUM, VIBRATORY ROLLER, VIBRATORY PLATE COMPACTOR OR JUMPING JACK COMPACTOR.

MUX NOTE: CONTRACTOR TO VERIFY EXISTING MUX LOCATION. IF MUX LOCATION IS OUTSIDE OF AT&T EQUIPMENT AREA, CONTRACTOR IS TO FIELD VERIFY THE PRESENCE OF EMERGENCY BACK-UP SERVICE IS NOT PRESENT. CONTRACTOR IS TO ROUTE NEW SERVICE FROM AT&T EQUIPMENT AREA.



#### NOTES:

- 1. ALL UNDERGROUND CABLE TO BE BURIED AT 36" MIN. SHIELD TAPED AT 12" AND STUBBED OUT OF GROUND IN SCH 40 PVC CONDUIT.
- 2. LOW VOLTAGE CONTROL WIRE PROVIDED BY MONITORING PROVIDER IN SEPARATE 1/2" CONDUIT FROM ATS TO GENERATOR.
- 3. BTS SITES: THE TENANT CONTRACTOR TO COMPLETE CUSTOMER ELECTRICAL CONDUIT TO CUSTOMER METER PER STANDARD COLLOCATION INSTALL.
- 4. TENANT CONTRACTOR HAS NOTHING TO INSTALL OR COMPLETE FOR ATC SHARED GEN DURING CUSTOMER COLLOCATION ON ATC TOWER.
- 5. ATC SHARED GEN INSTALL IS COMPLETED AFTER CUSTOMER TOWER COLLOCATION IS COMPLETE WITH LOAD ON CUSTOMER METER.
- 6. ALL CONDUCTORS ARE SIZED FOR COPPER, BUT ALUMINUM CONDUCTORS ARE ALLOWED FOR FEEDERS PROVIDED THEY ARE UPSIZED PER NEC TABLE 310.16.
- 7. ALL ELECTRICAL WORK SHALL BE PER THE NATIONAL ELECTRICAL CODE (NFPA 70) AND ALL APPLICABLE LOCAL
- 8. MAINTAIN 36" CLEAR WORKSPACE IN FRONT OF METER, TRANSFER SWITCH, GENERATOR, PANELS, ETC.
- 9. 800A PANEL HAS A COMMON NEUTRAL BUS. NEUTRALS BACK TO EACH CARRIER METER ARE SIZED ACCORDING TO THE DISTRIBUTION PANEL BRANCH BREAKER RATING. NEUTRAL IS BONDED AT THE PRIMARY SERVICE MAIN BONDING JUMPER ONLY.
- 10. GENERATOR CONTROLS AND SENSORS SHALL HAVE GFCI SENSING CAPABILITY PER NEC 700-6(D).

MUX NOTE:

CONTRACTOR TO VERIFY EXISTING MUX LOCATION. IF MUX LOCATION IS OUTSIDE OF AT&T EQUIPMENT

AREA, CONTRACTOR IS TO FIELD VERIFY THE PRESENCE OF EMERGENCY BACK-UP SERVICE IS NOT PRESENT. CONTRACTOR IS TO ROUTE NEW

SERVICE FROM AT&T EQUIPMENT AREA.

CHAPPELL	
ENGINEERING	
ASSOCIATES, LL	.(

R.K. EXECUTIVE CENTRE 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752 (508)481 - 7400www.chappellengineering.com

Givil Structural Land Surveying



TOWER RESOURCE MANAGEMENT 30 LYMAN STREET WESTBOROUGH, MA 01581 PHONE: (508) 389-1731 www.trmcom.com



AT&T MOBILITY 550 COCHITUATE ROAD SUITES 13 & 14 FRAMINGHAM, MA 01701

SITE NUMBER:

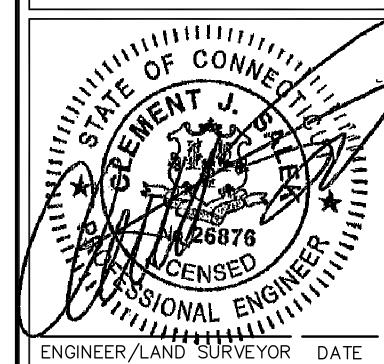
10035387

<u>SITE NAME:</u>

ANDOVER -BUNKERHILL

SITE ADDRESS:

104 BUNKER HILL ROAD ANDOVER, CT 06232



CAW DRAWN BY:

JMT CHECKED BY: 01/27/14 DATE DRAWN: CEA JOB NUMBER: 1337.014

**DRAWING TITLE:** 

GENERATOR WIRING DIAGRAM

DRAWING NO: REVISION: E-1

#### FEEDER SIZING CHART FOR GENERATOR SIZE OF INLINE FEEDER SIZES FROM GEN SET BREAKER PRIME RATING MAIN BREAKER SIZE SERVING GEN SET SIZE | VOLTS - PHASE BREAKER (AT KW - AMPS TO DISTRIBUTION PANEL / ATS. ANCHOR TENANT: GENERATOR) 200A 2-P C/B INTEGRAL TO 3#3/0, 1#6G, IN 2"C 120/240V - 1-PH 48KW - 200A 200A 50KW GEN SET

# NOTES:

- 1. SERVICE VOLTAGE FOR EACH CARRIER IS 120/240 1—PHASE, AND SERVICE SIZES ARE TYPICAL 200A PER CARRIER.
- 2. DISTRIBUTION PANEL IS 800A, 120/240V 1—PHASE, WITH 200A C/B FOR THE LISTED CARRIER OUTPUT. PANEL HAS (3) 200A BREAKER SPACES FOR FUTURE CARRIERS.
- 3. AUTOMATIC TRANSFER SWITCH (ATS) ARE 200A 2-POLES, 120/240V 1-PHASE WITH SOLID NEUTRAL PER CARRIER.
- 4. ALL ELECTRICAL EQUIPMENT IS NEMA 3R RATED
- 5. THE GENERATOR ELECTRICAL LOADS ARE ADEQUATE FOR THE CONNECTED LOADS. 6. ALL EQUIPMENT FURNISHED SHALL BE PROVIDED WITH EQUIPMENT RATED TO WITHSTAND FAULT CURRENT AVAILABLE AT
- PROJECT SITE. 7. ALL WIRE AND PANEL BUSSING SHALL BE COPPER UNLESS ALLOWED ELSEWHERE IN THIS DOCUMENT SET, WIRE SIZES ARE BASED ON COPPER.
- 8. A NEW SET OF PLANS WILL BE PROVIDED AND SUBMITTED FOR ADDITIONAL CARRIERS.
- 9. ALL WORK SHALL CONFORM WITH THE CURRENT VERSION OF THE NEC AND ALL OTHER APPLICABLE CODES.
- 10. FIRST OVER-CURRENT PROTECTION DEVICE IS INTEGRAL TO GENERATOR. FEEDER SIZES INDICATED IN TABLE ABOVE ARE DOWNSTREAM OF THE FIRST OVER-CURRENT PROTECTION DEVICE.
- 11. INLINE BREAKER AT GENERATOR IS FACTORY INSTALLED, AND IS THE MANUFACTURER'S RECOMMENDED SIZE.

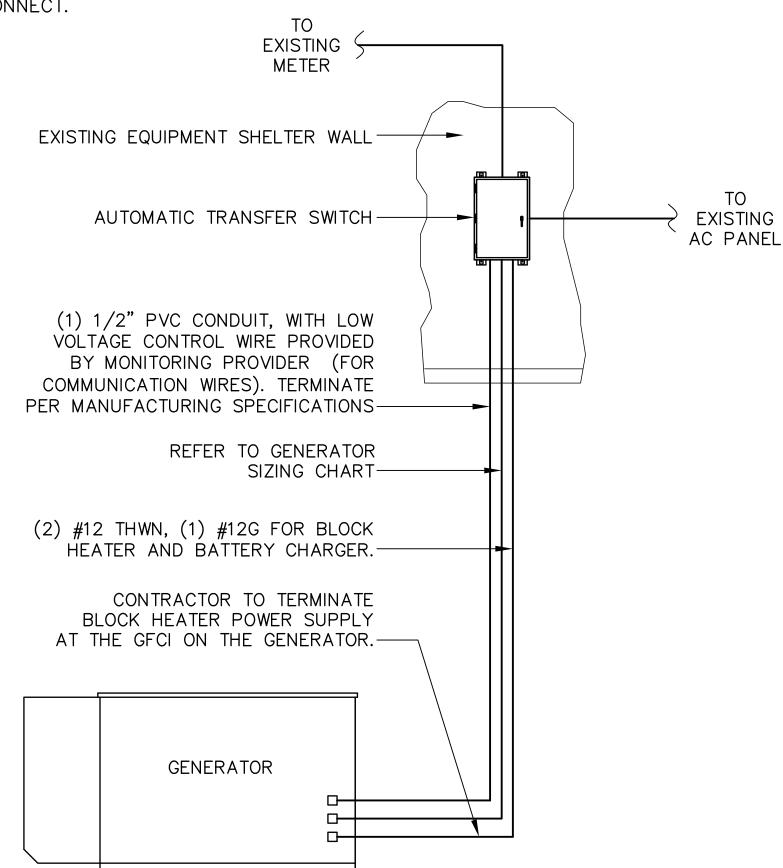
GENERATOR SET SIZING CHARTS E-1 SCALE: NOT TO SCALE

MUX NOTE:

AREA, CONTRACTOR IS TO FIELD VERIFY THE SERVICE FROM AT&T EQUIPMENT AREA.

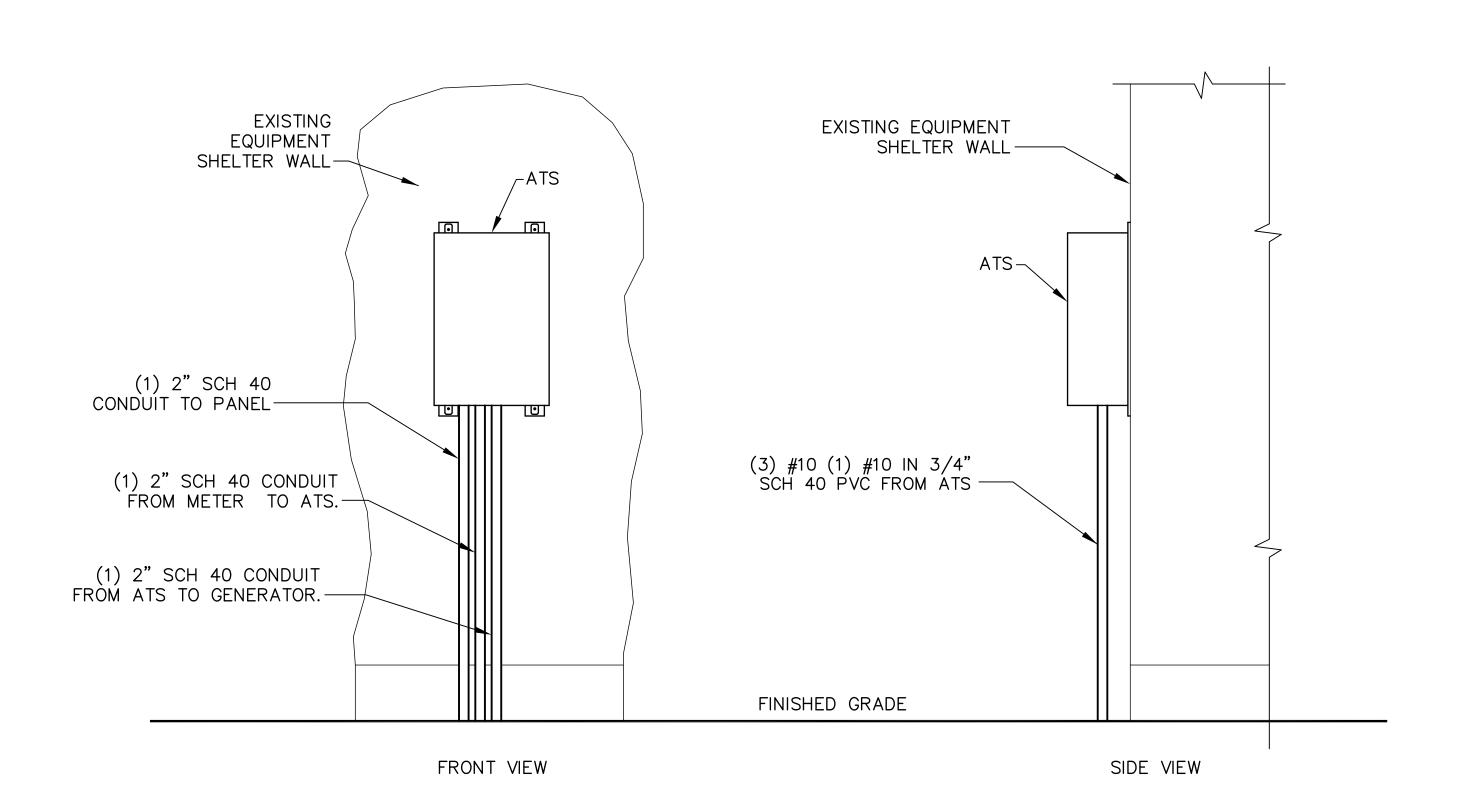
CONTRACTOR TO VERIFY EXISTING MUX LOCATION. IF MUX LOCATION IS OUTSIDE OF AT&T EQUIPMENT PRESENCE OF EMERGENCY BACK-UP SERVICE IS NOT PRESENT. CONTRACTOR IS TO ROUTE NEW

NOTE: UTILITY POWER FEEDS SHALL BE CONNECTED TO THE TRANSFER SWITCH FROM THE LOAD SIDE OF THE EXISTING SERVICE DISCONNECT. NO MODIFICATIONS SHALL BE MADE ON THE LINE SIDE OF THE EXISTING SERVICE DISCONNECT.



DISCONNECT POWER FEED FROM EXISTING METER TO EXISTING SHELTER. ROUTE NEW FEEDERS (SIZED BELOW) FROM METER TO NEW TRANSFER SWITCH AND BACK. RECONNECT NEW RETURN FEED FROM TRANSFER SWITCH TO SUPPLY POWER (UTILITY AND BACK-UP POWER) TO EXISTING SHELTER.





AUTOMATIC TRANSFER SWITCH LAYOUT  $\frac{2}{E-2}$ SCALE: NOT TO SCALE



Givil Structural Land Surveying

R.K. EXECUTIVE CENTRE 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752 (508)481 - 7400www.chappellengineering.com



TOWER RESOURCE MANAGEMENT 30 LYMAN STREET WESTBOROUGH, MA 01581 PHONE: (508) 389-1731 www.trmcom.com



AT&T MOBILITY 550 COCHITUATE ROAD SUITES 13 & 14 FRAMINGHAM, MA 01701

SITE NUMBER:

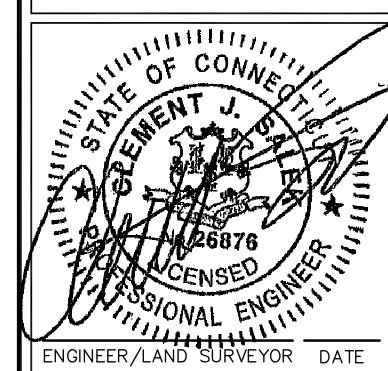
10035387

SITE NAME:

ANDOVER -BUNKERHILL

SITE ADDRESS:

104 BUNKER HILL ROAD ANDOVER, CT 06232



CAW DRAWN BY: CHECKED BY: JMT DATE DRAWN: 01/27/14 CEA JOB NUMBER: 1337.014

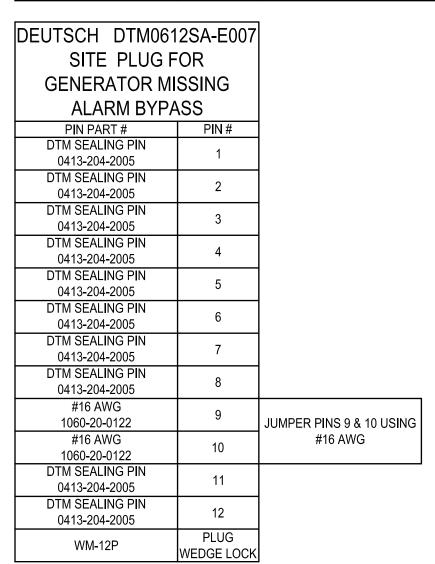
DRAWING TITLE:

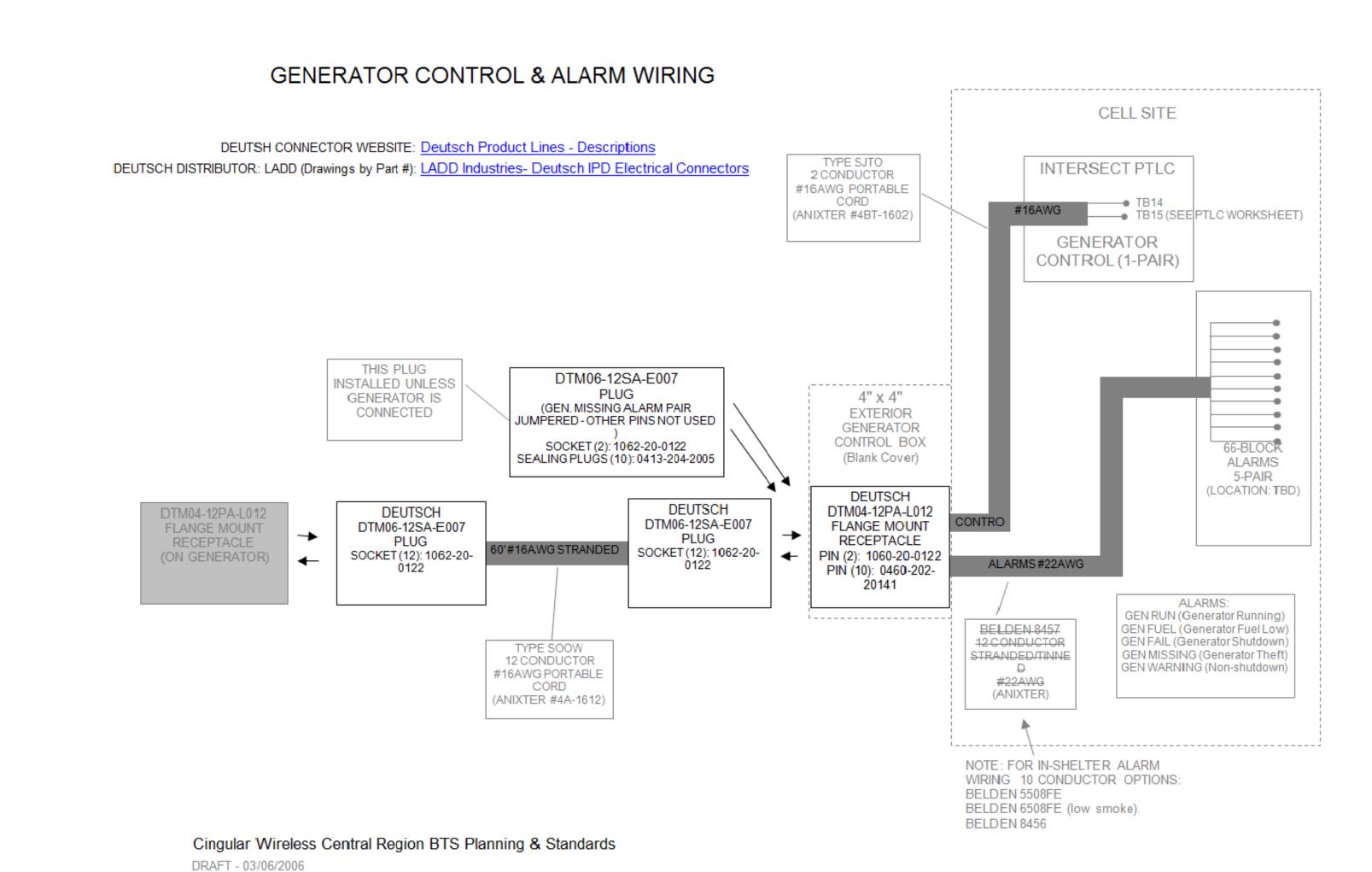
ELECTRICAL DETAILS

l	DRAWING NO:	REVISION:
	E-2	1

			NERATOR CONTRO						
Distributor for Deutsch connectors		•	0)-223-1236 melissaw@laddinc.c	om	L.A	ADD website:	LADD Industries- Deutsch IPD Electrical Cor	nectors	
GENERATOR FUNCTION	DEUTSCH DTM0412PA-L012 SITE RECEPTACLE FOR GENERATOR ALARMS & CONTROL		CONNECTING CABLE				SITE CONNECTIONS	NOTES	
	SOCKET PART #	PIN#	TYPE & PART #		SIZE	COLOR			
(CONTROL)	#16 AWG 1062-20-0122	1	SJTO (2 Conductor)		#16 AWG	BLACK	AUTO TRANSFER SWITCH ENGINE CONTROL LEADS (FOR CINGULAR STANDARD:	"CLOSE" ENGINE	
AUTOMATIC START/STOP	#16 AWG 1062-20-0122	2	ANIXTER #4BT-1602		#16 AWG	WHITE	INTERSECT/ASCO USE TB 14 & 15 - SEE CONTROL WIRING WORKSHEET)	START (N	
(ALARM) GENERATOR RUNNING	#22 AWG 0462-201-20141	3	(10 Conductor) BELDEN 8456			#22 AWG	BLACK	SITE EXTERNAL ALARM BLOCK	"CLOSE"
	#22 AWG 0462-201-20141	4		#22 AWG WHITE (GENERATOR RUNNII	(GENERATOR RUNNING-MAJOR)	ALARM (NO)			
(ALARM) GENERATOR LOW FUEL	#22 AWG 0462-201-20141	5			#22 AWG	RED	SITE EXTERNAL ALARM BLOCK	"CLOSE" =	
	#22 AWG 0462-201-20141	6		(10 Conductor) BELDEN 8456		#22 AWG	GREEN	(GENERATOR LOW FUEL-CRITICAL)	(NO)
(ALARM) GENERATOR FAIL - MAJOR	#22 AWG 0462-201-20141	7				#22 AWG	BROWN	SITE EXTERNAL ALARM BLOCK	"CLOSE" ALARM
[SHUTDOWN]	OENERATORY ALE-WASON		#22 AWG	BLUE	(GENERATOR FAIL - CRITICAL)	(NO)			
(ALARM) GENERATOR MISSING [THEFT]	#22 AWG 0462-201-20141	9			#22 AWG	ORANGE	SITE EXTERNAL ALARM BLOCK	"OPEN" =	
	#22 AWG 0462-201-20141	10			#22 AWG	YELLOW	(GENERATOR MISSING - MAJOR)	(NC)	
(ALARM) GENERATOR WARNING - MINOR [NON-SHUTDOWN]	#22 AWG 0462-201-20141	11			#22 AWG	PURPLE	SITE EXTERNAL ALARM BLOCK	"CLOSE" ALARM	
	#22 AWG 0462-201-20141	12			#22 AWG	GRAY	(GENERATOR WARNING - MAJOR)	(NO)	
NA	WM-12S	RECEPTACLE WEDGE LOCK	NA		NA	NA	NA	NA	

	60' GENERA	TOR ALARM & CONTROL CABLE MAT	ERIALS LIS	ST		
DEUTSCH DTM0612SA-E007 CABLE PLUG FOR GENERATOR ALARMS & CONTROL		CONNECTING CABLE	DEUTS	DEUTSCH DTM0612SA-E007 CABLE PLUG FOR GENERATOR ALARMS CONTROL		
PIN PART#	PIN#	TYPE & PART #	PIN#	PIN PART #		
#16 AWG 1060-20-0122	1		1	#16 AWG 1060-20-0122		
#16 AWG 1060-20-0122	2		2	#16 AWG 1060-20-0122		
#16 AWG 1060-20-0122	3	60' SOOW 12 conductor #16 AWG Generator Alarm Cable ANIXTER #4A-1612	3	#16 AWG 1060-20-0122		
#16 AWG 1060-20-0122	4		4	#16 AWG 1060-20-0122		
#16 AWG 1060-20-0122	5		5	#16 AWG 1060-20-0122		
#16 AWG 1060-20-0122	6		6	#16 AWG 1060-20-0122		
#16 AWG 1060-20-0122	7		7	#16 AWG 1060-20-0122		
#16 AWG 1060-20-0122	8		8	#16 AWG 1060-20-0122		
#16 AWG 1060-20-0122	9		9	#16 AWG 1060-20-0122		
#16 AWG 1060-20-0122	10		10	#16 AWG 1060-20-0122		
#16 AWG 1060-20-0122	11		11	#16 AWG 1060-20-0122		
#16 AWG 1060-20-0122	12		12	#16 AWG 1060-20-0122		
WM-12P	PLUG WEDGE LOCK	NA	PLUG WEDGE LOCK	WM-12P		







R.K. EXECUTIVE CENTRE 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752 (508)481 - 7400www.chappellengineering.com



TOWER RESOURCE MANAGEMENT 30 LYMAN STREET WESTBOROUGH, MA 01581 PHONE: (508) 389-1731 www.trmcom.com



AT&T MOBILITY 550 COCHITUATE ROAD SUITES 13 & 14 FRAMINGHAM, MA 01701

SITE NUMBER:

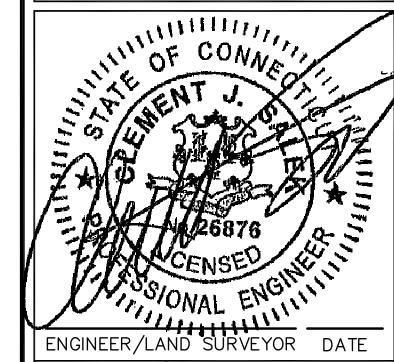
10035387

SITE NAME:

ANDOVER -BUNKERHILL

SITE ADDRESS:

104 BUNKER HILL ROAD ANDOVER, CT 06232



CAW DRAWN BY:

JMT CHECKED BY: DATE DRAWN: 01/27/14 CEA JOB NUMBER: 1337.014

DRAWING TITLE:

GENERTOR CONTROL & ALARM WIRING

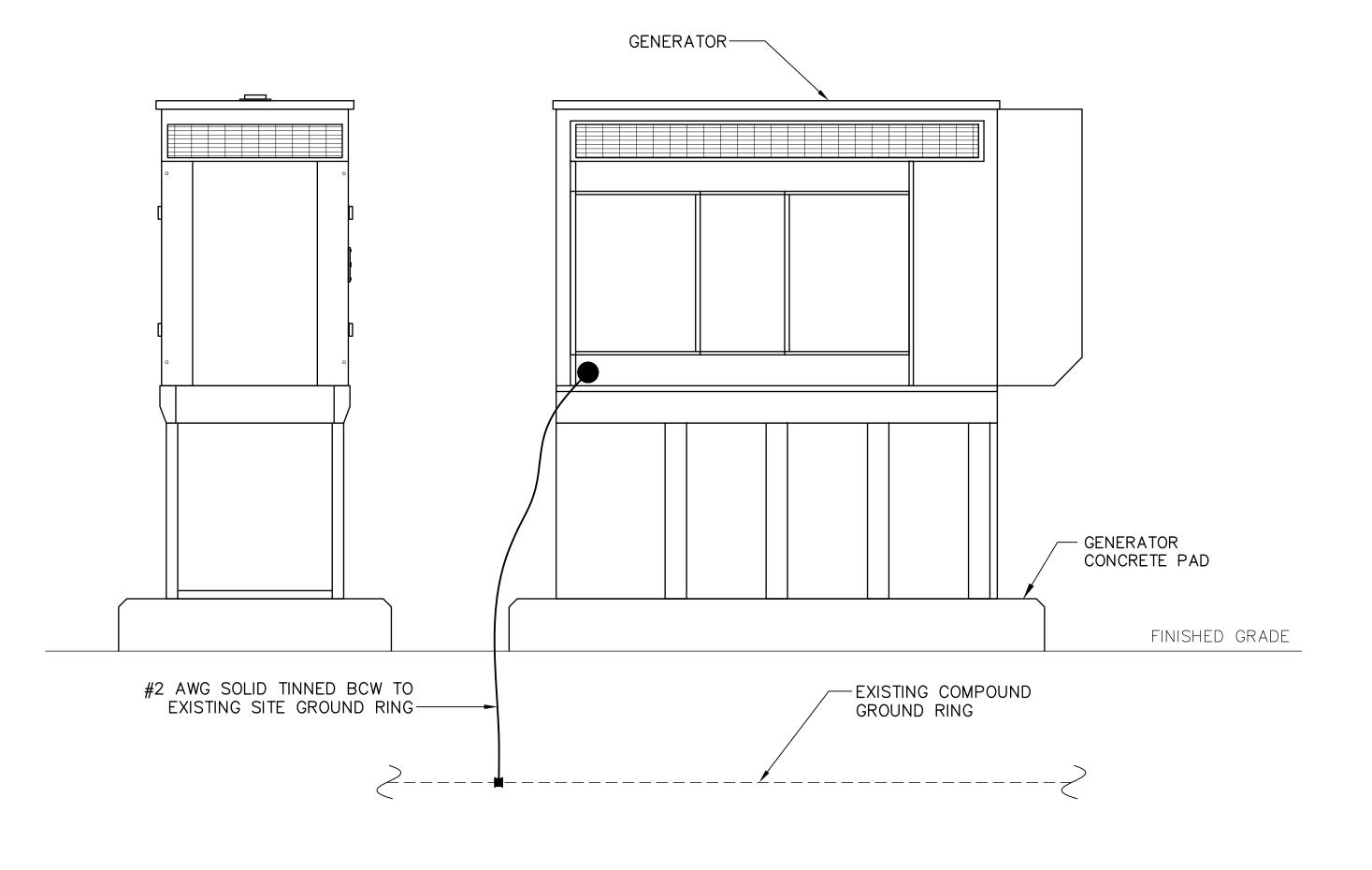
DRAWING NO:	REVISION:
E-3	1

**MUX NOTE:** 

CONTRACTOR TO VERIFY EXISTING MUX LOCATION. IF MUX LOCATION IS OUTSIDE OF AT&T EQUIPMENT AREA, CONTRACTOR IS TO FIELD VERIFY THE PRESENCE OF EMERGENCY BACK-UP SERVICE IS NOT PRESENT. CONTRACTOR IS TO ROUTE NEW SERVICE FROM AT&T EQUIPMENT AREA.

#### NOTES:

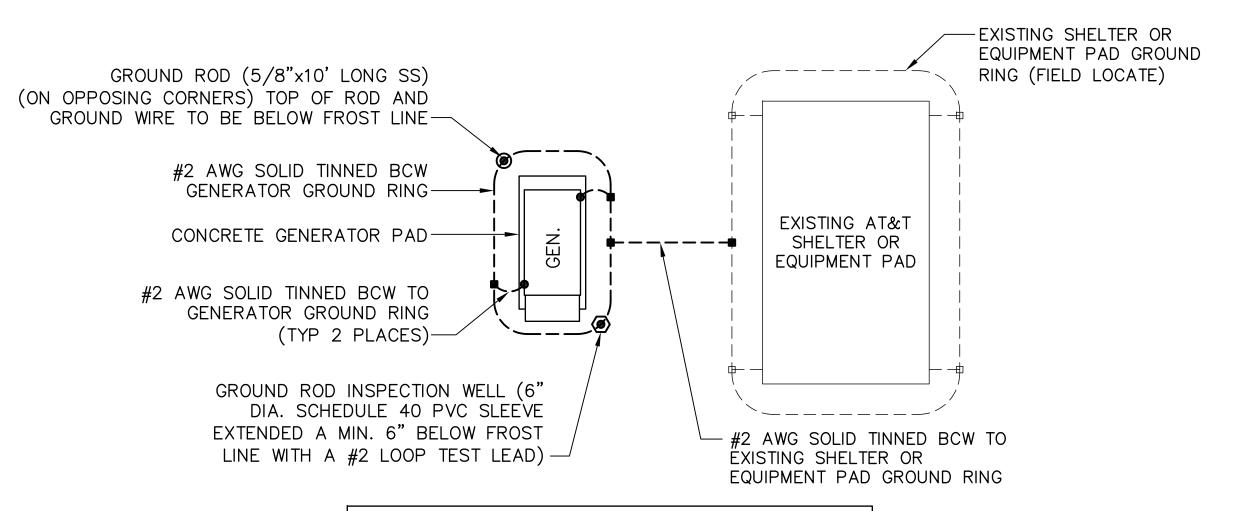
- 1. ELECTRICIAN SHALL VERIFY THAT GENERATOR IS INSTALLED SO THAT ELECTRICAL BACK-FEEDS ARE NOT POSSIBLE.
- 2. GENERATOR SYSTEM SHALL BE SOLIDLY GROUNDED PER NEC 250.020.
- 3. ELECTRICIAN SHALL VERIFY THAT GROUNDING IS INSTALLED SO THAT NO CIRCULATING CURRENTS ARE POSSIBLE SO GROUNDING IS CONNECTED TO EXISTING TOWER GROUND FIELD.
- 4. ALL LIGHTNING GROUNDING SHALL BE FREE OF KINKS AND SHALL HAVE LONG RADIUS BENDS (MINIMUM 8").
- 5. ALL GROUNDING SHOULD BE INSTALLED PER CURRENT NEC, SECTION 250.
- 6. CAD WELD CONNECTION FOR GROUNDING CONDUCTORS BETWEEN PROPOSED AND EXISTING SECTIONS OF FENCE,
- 7. USE #2 AWG SOLID TINNED COPPER WIRE TO EXISTING (2) FENCE POSTS AND CADWELD FROM GENERATOR GROUND RING



GENERATOR ELEVATION

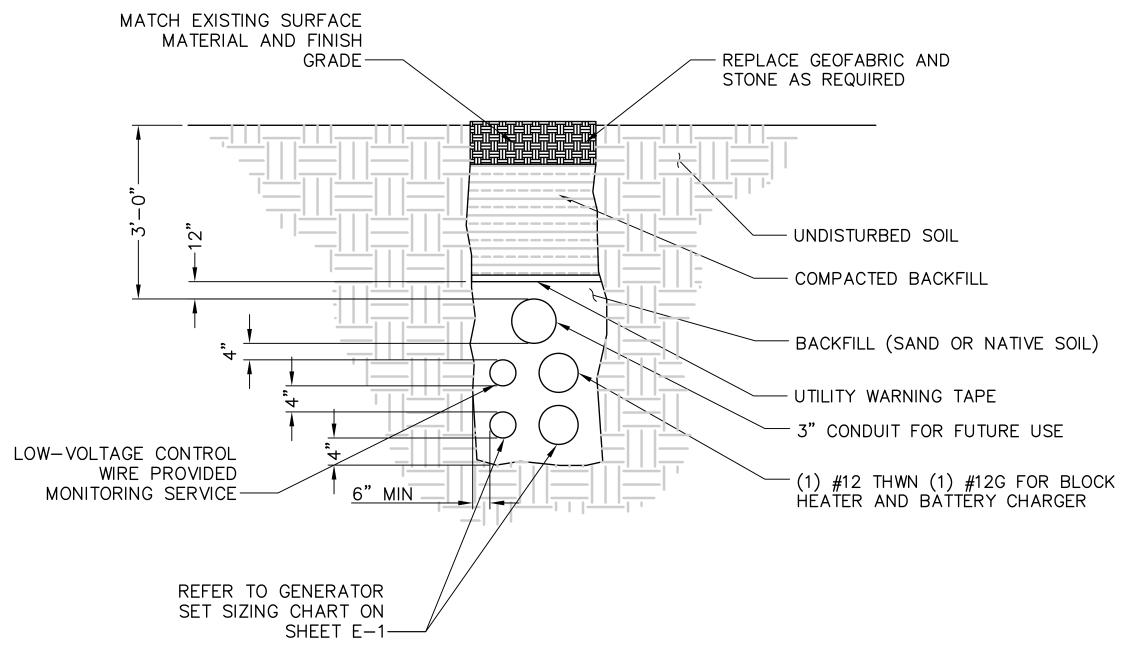
SCALE: NOT TO SCALE

G-1



GROUNDING PLAN SHOWN ABOVE TO BE APPLIED WHEN PROPOSED GENERATOR IS LOCATED MORE THAN 20 FT. FROM AN EXISTING AT&T SHELTER OR EQUIPMENT PAD. FOR ACTUAL ORIENTATION OF PROPOSED GENERATOR WITH THE EXISTING AT&T SHELTER OR EQUIPMENT PAD SEE SITE PLAN DRAWING.

GENERATOR GROUNDING PLAN SCALE: NOT TO SCALE G-1



TRENCH DETAIL G-1 SCALE: NOT TO SCALE



Givil Structural Land Surveying

R.K. EXECUTIVE CENTRE 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752 (508)481 - 7400www.chappéllengineering.com



TOWER RESOURCE MANAGEMENT 30 LYMAN STREET WESTBOROUGH, MA 01581 PHONE: (508) 389-1731 www.trmcom.com



AT&T MOBILITY 550 COCHITUATE ROAD SUITES 13 & 14 FRAMINGHAM, MA 01701

SITE NUMBER:

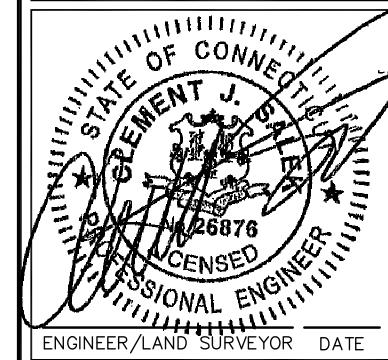
10035387

<u>SITE NAME:</u>

ANDOVER -BUNKERHILL

SITE ADDRESS:

104 BUNKER HILL ROAD ANDOVER, CT 06232



CAW DRAWN BY: JMT CHECKED BY: 01/27/14 DATE DRAWN: CEA JOB NUMBER: 1337.014

DRAWING TITLE:

GROUNDING & TRENCH DETAILS

REVISION: DRAWING NO: G-1