

Filed by:

G. Scott Shepherd, Sr. Property Specialist - SBA Communications 134 Flanders Rd., Suite 125, Westborough, MA 01581 508.251.0720 x 3807 - GShepherd@sbasite.com

October 29, 2021

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

RE: Notice of Exempt Modification 39 Nichols Rd., East Haddam, CT

Latitude: 41.521000 Longitude: -72.423200

T-Mobile Site #: CTHA603B_Hardening

Dear Ms. Bachman:

T-Mobile currently maintains ten (10) antennas at the 150-foot level of the existing 177-foot Monopole Tower at 39 Nichols Rd., East Haddam, CT. The tower is owned by SBA Towers IX, LLC. The property is owned by the Town of East Haddam. T-Mobile now intends to add one (1) Generac RD048 Diesel generator to an existing concrete pad within an existing 101' 6"' x 62' fenced in lease area with 12' wide double swing gate. The generator and concrete pad will sit fully within the leased area of the compound and will not require additional space for the supplementary tank.

Ground

Install New:

- (1) Generac 25kw RD048 kw Diesel generator
- (1) RGS conduit for emergency power routed from prop. ATS to existing PPC
- (1) 2" RGS conduit for Ethernet cable for generator controls & Alarms
- (1) 2" RGS conduit for emergency power from prop. generator to proposed ATS
- (1) 1-1/2" RGS conduit for generator heater & Battery charger from existing PPC to prop. generator
- (1) Generac 200A, 120/240v automatic transfer switch to existing H-Frame (install additional unistrut, as required)



Remaining:

- T-Mobile Nextend compact 2416 fiber cabinet
- GPS Antenna on existing Ice bridge
- T-Mobile Ericsson 6102 equip. cabinet to existing concrete pad
- T-Mobile Ice Bridge
- T-Mobile cables routed along existing ice bridge

Remove:

• Existing T-Mobile generator mounted existing concrete pad

Reason for Request / Change in Generator Size and Fuel

In an effort to further enhance network reliability, T-Mobile is proposing to install a diesel-based backup generator, the Generac RD048kw Diesel Generator. T-Mobile is currently in the middle of a National Hardening Project.

The proposed diesel generator measures $103.4^{\circ} \times 35^{\circ} \times 90^{\circ}$ (w/fuel tank: $103.4^{\circ} \times 35^{\circ} \times 91.7^{\circ}$). It will sit fully within the leased area of the compound and will not require additional space for the supplementary tank.

Generac's RD048 kw Diesel Generator carries up to 52 hours of run time with 100% load, 67 hours of run time with a 75% load and 96 hours of run time with a 50% load. It can operate in temperatures of 122 degrees Fahrenheit.

Monitoring, Prevention and Containment Measures

It will be filled by a licensed fuel filling company. The Generac's RD048kw Diesel Generator is fuel efficient, rodent and corrosion resistant, and has a sound attenuated aluminum enclosure with a Rated Load Sound Output at 23ft. of 65dB. It further supports advanced, remote monitoring for diagnostics and control and is installed with a tank alarm system. The Sound Output from the Generac RD048kw meets/exceeds the allowable noise emissions levels for the Town of East Haddam, Middlesex County, which is as follows:

Maximum Continuous Noise Levels (measured in dBA):

The Planning and Zoning Commission, through the site plan review process, shall use the State's Noise Regulations as a guidance document in reviewing proposed U/Z/P&Z/POD/EHPOC&D 4/8/08 24 projects. The Commission should review the State standards and compare these standards to what is appropriate for a rural community.

Noise Pollution – The Connecticut General Statutes, under the Control of Noise Regulations (Title 22a Section 22a-69-1 to 22a-69-7.4), identify the limits of sounds that can be emitted from a specific premises, and what activities are exempt from the Noise Regulations.



Sec. 22a-69-3.5. Noise zone standards:

- (a) No person in a Class C Noise Zone shall emit noise exceeding the levels stated herein and applicable to adjacent Noise Zones: Levels emitted in excess of the values listed above shall be considered excessive noise.
- (b) No person in a Class B Noise Zone shall emit noise exceeding the levels stated herein and applicable to adjacent Noise Zones: Receptor Receptor C B A/Day A/Night Class C Emitter to 70 dBA 66 dBA 61 dBA 51 dBA.

The proposed modification will remain within the existing, fenced-in compound. The new generator and tank will be surrounded by the existing security fence and gate.

Additional safety specifications:

- Automatic Voltage Regulation with Over and Under Protection
- Overspeed Shutdown
- High Tempature Shutdown
- Meets ANSI/IEEE C62.41, SA CSA 22.2, SAE J1349, NFPA 37, 70 99

Revised Construction Drawings and Full Spec Sheets referencing the above are attached herewith.

The revised ground configuration continues to meet all requirements for a Notice of Exempt Modifications. The request remains technically, legally, environmentally, and economically feasible and meets public safety concerns per Connecticut General Statute Section 16-50aa.

There is no environmental impact associated with the revised ground configuration, including, but not limited to, visibility, wetlands and water resources, air quality or noise.

T-Mobile's revised ground configuration:

- Will not have any significant adverse visual impact on the surrounding areas
- Does not affect or alter the existing site with regard to wetlands, water resources or air quality
- The generator would only be used in cases of emergency and would provide backup time of approximately 60 hours in time of need.

The proposed work is not thought to have any substantial adverse environmental impact. Public Need for the additional coverage outweighs any minor environmental effects that would result from the construction, operation, and maintenance of the proposed collocation.

A Map of the Site Showing Nearest Wetlands, depicted in feet, is attached herewith.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. §16.50j-72(b)(2). In accordance with R.C.S.A. § 16.50j-73, a copy of this letter is being sent to the Town of East Haddam's First Selectman, Robert R. Smith



and Chairman Planning & Zoning Commission, Crary H. Brownell and Linda Zemienski (SBA Town Payee contact on file). (Separate notice is not being sent to tower owner, as it belongs to SBA.)

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. §16.50j-72(b)(2).

- 1. The proposed modifications will not result in an increase in the height of the existing structure.
- 2. The proposed modification will not require the extension of the site boundary.
- 3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
- 4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.
- 5. The proposed modification will not cause a change or alteration in the physical or environmental characteristics of the site.
- 6. The existing structure and its foundation can support the proposed loading.

For the foregoing reasons, T-Mobile respectfully submits that the proposed modifications to the above-referenced telecommunication facility constitute an exempt modifications under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

G. Scott Shepherd
Sr. Property Specialist
SBA COMMUNICATIONS CORPORATION
134 Flanders Rd., Suite 125
Westborough, MA 01581
508.251.0720 x3807 + T
508.868.6000 + C
GShepherd@sbasite.com

Attachments

cc: Robert R. Smith, First Selectman / with attachments

Municipal Office Complex, 1 Plains Rd., P.O. Box 385, Moodus, CT 06469

Crary H. Brownell, Chairman Planning & Zoning Commission / with attachments

Municipal Office Complex, 1 Plains Rd., P.O. Box 385, Moodus, CT 06469

Linda Zemienski (SBA Town Payee contact on file) / with attachments

Municipal Office Complex, 1 Plains Rd., P.O. Box 385, Moodus, CT 06469



Exhibit List

Exhibit 1	Check Copy	х
Exhibit 2	FedEx Labels	х
Exhibit 3	Property Card	х
Exhibit 4	Property Map	х
Exhibit 5	Zoning Documents	CSC Docket No. 255 9/23/03
Exhibit 6	Construction Drawings	Chappell 10/15/21
Exhibit 7	Generator Specifications	х
Exhibit 8	Wetlands Map	х

EXHIBIT 1 Copy of Check for filing fee.

EXHIBIT 2

FedEx Labels



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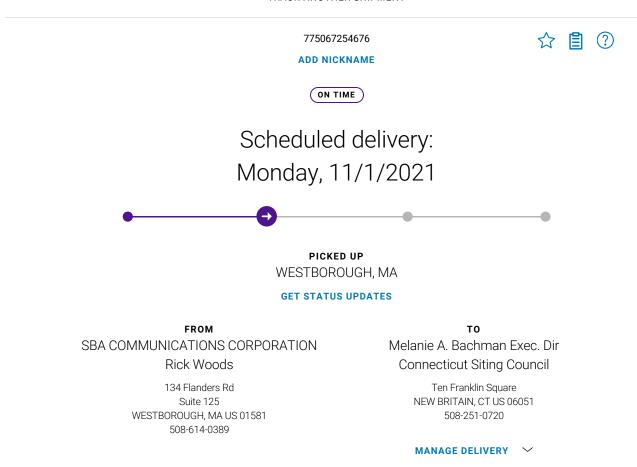
Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

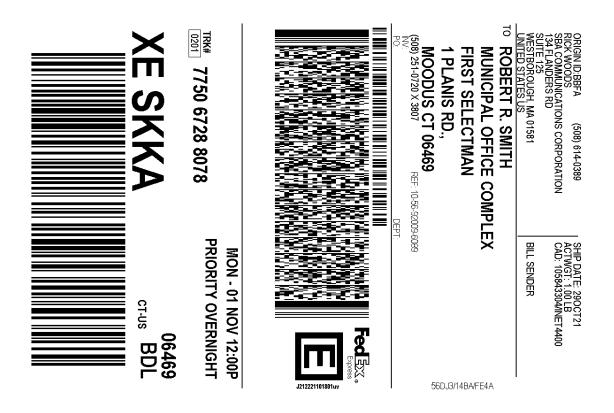
Detailed Tracking Page 1 of 2



TRACK ANOTHER SHIPMENT



	Travel History	Shipment Facts
Travel History		
TIME ZONE Local Scan Time	~	
Friday, October 29, 2021		
2:05 PM	WESTBOROUGH, MA	Picked up Tendered at FedEx Office
11:06 AM		Shipment information sent to FedEx
Shipment Facts		
TRACKING NUMBER	SERVICE	WEIGHT
775067254676	FedEx Priority Overnigh	2 lbs / 0.91 kgs
TOTAL PIECES	TOTAL SHIPMENT	NEIGHT TERMS



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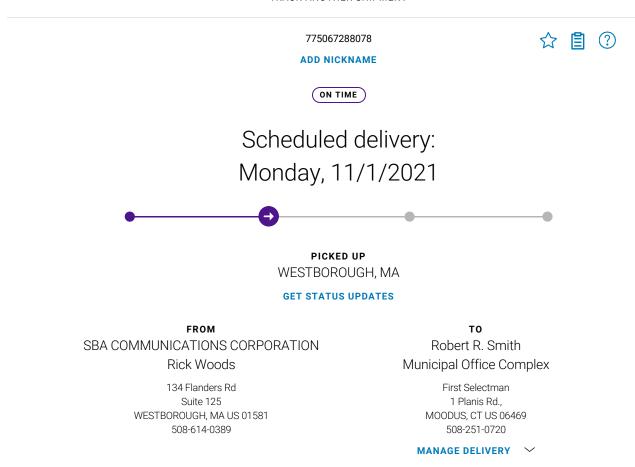
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Detailed Tracking Page 1 of 2



TRACK ANOTHER SHIPMENT



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Shipment Facts		
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TOTAL PIECES	TOTAL SHIPMENT	WEIGHT TERMS



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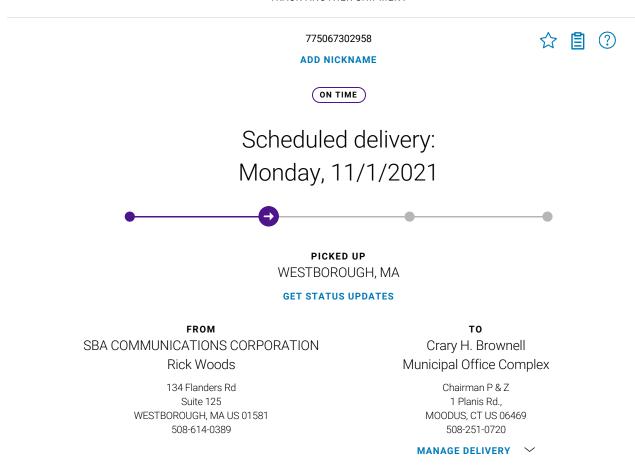
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Detailed Tracking Page 1 of 2



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	Travel History	Shipment Facts
Travel History		
TIME ZONE Local Scan Time	~	
Friday, October 29, 2021		
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11:09 AM		Shipment information sent to FedEx
Shipment Facts		
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775067302958	FedEx Priority Overnigh	ot 0.5 lbs / 0.23 kgs
TOTAL PIECES	TOTAL SHIPMENT V	VEIGHT TERMS



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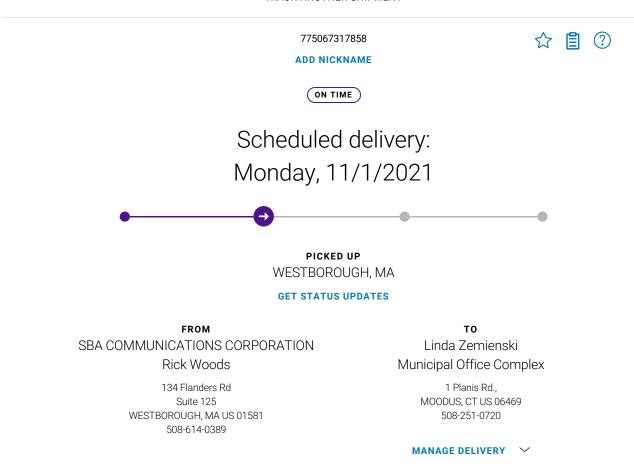
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	Travel History	Shipment Facts
Travel History		
TIME ZONE Local Scan Time	~	
Friday, October 29, 2021		
2:05 PM	WESTBOROUGH, MA	Picked up Tendered at FedEx Office
11:10 AM		Shipment information sent to FedEx
Shipment Facts		
TRACKING NUMBER	SERVICE	WEIGHT
775067317858	FedEx Priority Overnigh	t 0.5 lbs / 0.23 kgs
TOTAL PIECES	TOTAL SHIPMENT W	VEIGHT TERMS

EXHIBIT 3 Property Card

39 NICHOLS RD

Location 39 NICHOLS RD **Mblu** M75/ / L021/ /

Acct# 00416200 Owner EAST HADDAM TOWN OF

Assessment \$598,310 **Appraisal** \$854,720

PID 4621 **Building Count** 3

Current Value

Appraisal					
Valuation Year Improvements Land Total					
2017	\$191,700	\$663,020	\$854,720		
Assessment					
Valuation Year Improvements Land Total					
2017	\$134,190	\$464,120	\$598,310		

Owner of Record

Owner

EAST HADDAM TOWN OF

Co-Owner

TRANSFER STATION-KENNEL

Address

PO BOX 385

MOODUS, CT 06469

Sale Price

Certificate

Book & Page 91/80

Sale Date

05/09/1969

\$0

Ownership History

Ownership History					
Owner Sale Price Certificate Book & Page Sale Date					
EAST HADDAM TOWN OF \$0		91/ 80	05/09/1969		

Building Information

Building 1: Section 1

Year Built:

1982

Living Area:

798

Replacement Cost:

Building Percent Good:

\$44,903 76

Replacement Cost

Less Depreciation:

\$34,100

Building Attributes

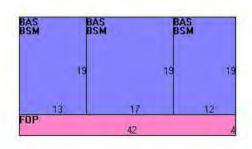
Field	Description
STYLE	Light Industrial
MODEL	Ind/Comm
Grade	С
Stories:	2
Occupancy	1
Exterior Wall 1	Vinyl Siding
Exterior Wall 2	
Roof Structure	Gable
Roof Cover	Asphalt
Interior Wall 1	Drywall
Interior Wall 2	
Interior Floor 1	Concrete
Interior Floor 2	
Heating Fuel	None
Heating Type	None
AC Percent	0
Foundation	N/A
Bldg Use	Exempt Ind
Total Rooms	0
Total Bedrms	0
Total Fixtures	6
% Sprinklers	0
Bsmt Area	0
1st Floor Use:	
Heat/AC	Typical
Frame Type	Wood Frame
Baths/Plumbing	Average
Ceiling/Wall	None
Rooms/Prtns	None / N/A
Wall Height	8
% Comn Wall	0

Building Photo



 $\overbrace{\text{(http://images.vgsi.com/photos/EastHaddamCTPhotos/\00\00\69/03.jpg)}}\\$

Building Layout



 $(http://images.vgsi.com/photos/EastHaddamCTPhotos//Sketches/4621_46.) \\$

Building Sub-Areas (sq ft) <u>Legen</u>			
Code	Description	Gross Area	Living Area
BAS	First Floor	798	798
BSM	Basement	798	0
FOP	Open Porch	168	0
		1,764	798

Building 2 : Section 1

 Year Built:
 2010

 Living Area:
 1,920

 Replacement Cost:
 \$69,696

 Building Percent Good:
 93

Replacement Cost

Less Depreciation: \$64,800

Building Attributes : Bldg 2 of 3		
Field	Description	

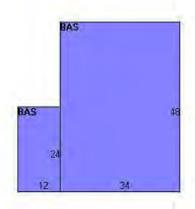
STYLE	Pre-Eng Warehs
MODEL	Ind/Comm
Grade	С
Stories:	1
Occupancy	1
Exterior Wall 1	Pre-Finsh Metl
Exterior Wall 2	
Roof Structure	Shed
Roof Cover	Metal
Interior Wall 1	Minimum
Interior Wall 2	
Interior Floor 1	Concrete
Interior Floor 2	
Heating Fuel	None
Heating Type	None
AC Percent	0
Foundation	Slab
Bldg Use	Industrial
Total Rooms	
Total Bedrms	
Total Fixtures	
% Sprinklers	0
Bsmt Area	
1st Floor Use:	
Heat/AC	None
Frame Type	Steel
Baths/Plumbing	Average
Ceiling/Wall	None
Rooms/Prtns	Average
Wall Height	14
% Comn Wall	

Building Photo



(http://images.vgsi.com/photos/EastHaddamCTPhotos/\00\00\69/04.jpg)

Building Layout



(http://images.vgsi.com/photos/EastHaddamCTPhotos//Sketches/4621_10

Building Sub-Areas (sq ft) <u>Leg</u>			
Code	Description	Gross Area	Living Area
BAS	First Floor	1,920	1,920
		1,920	1,920

Building 3: Section 1

Year Built: 2012 Living Area: 336

Replacement Cost: \$24,157 Building Percent Good: 95

Replacement Cost

Less Depreciation: \$22,900

Building Attributes : Bldg 3 of 3			
Field Description			
STYLE	Kennel		

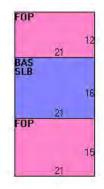
MODEL	Ind/Comm
Grade	С
Stories:	1
Occupancy	1
Exterior Wall 1	Concr/Cinder
Exterior Wall 2	Vinyl Siding
Roof Structure	Gable
Roof Cover	Asphalt
Interior Wall 1	Minimum
Interior Wall 2	
Interior Floor 1	Concrete
Interior Floor 2	
Heating Fuel	Propane
Heating Type	Space Heat
AC Percent	1
Foundation	
Bldg Use	Industrial
Total Rooms	
Total Bedrms	
Total Fixtures	
% Sprinklers	
Bsmt Area	
1st Floor Use:	
Heat/AC	None
Frame Type	Masonry
Baths/Plumbing	None
Ceiling/Wall	None
Rooms/Prtns	None / N/A
Wall Height	7
% Comn Wall	

Building Photo



(http://images.vgsi.com/photos/EastHaddamCTPhotos//default.jpg)

Building Layout



 $(http://images.vgsi.com/photos/EastHaddamCTPhotos//Sketches/4621_10/2006) and the control of t$

Building Sub-Areas (sq ft)			<u>Legend</u>
Code	Description	Gross Area	Living Area
BAS	First Floor	336	336
FOP	Open Porch	567	0
SLB	Slab	336	0
		1,239	336

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use	Land Line Valuation

301E Use Code

Description Exempt Ind

Zone

R2

Neighborhood Alt Land Appr No

Category

Size (Acres) 120.86

Frontage

Depth

Assessed Value \$464,120

Appraised Value \$663,020

Outbuildings

	Outbuildings					<u>Legend</u>
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
PAV1	Paving			31080 S.F.	\$46,600	2
SHD1	Shed			200 S.F.	\$1,800	1
SHD1	Shed			80 S.F.	\$700	3
CNP	Canopy			200 S.F.	\$2,000	3
LNT	Lean To			210 S.F.	\$500	1
PAV1	Paving			8500 S.F.	\$7,700	2
SHD1	Shed			160 S.F.	\$1,500	1
SHD1	Shed			120 S.F.	\$800	1
SHP1	WorkShop Heated			200 S.F.	\$3,000	1
GAZ	Gazebo			250 S.F.	\$5,300	1

Valuation History

Appraisal				
Valuation Year	Improvements	Land	Total	
2020	\$191,700	\$663,020	\$854,720	
2018	\$191,700	\$663,020	\$854,720	
2017	\$191,700	\$663,020	\$854,720	

Assessment			
Valuation Year	Improvements	Land	Total
2020	\$134,190	\$464,120	\$598,310
2018	\$134,190	\$464,120	\$598,310
2017	\$134,190	\$464,120	\$598,310

EXHIBIT 4 Property Map

Google Maps 39 Nichols Rd



Imagery @2021 Maxar Technologies, U.S. Geological Survey, USDA Farm Service Agency, Map data @2021



39 Nichols Rd











Directions

Save

Nearby

Send to your phone

Share



39 Nichols Rd, Moodus, CT 06469



GHCG+84 Moodus, East Haddam, CT

EXHIBIT 5 Zoning Documents

Connecticut Siting Council

Decisions

DOCKET NO. 255 Message Connecticut -Center } Management application for a Certificate of Environmental Compatibility and Public Need } Siting construction, maintenance and the Council operation of a telecommunications facility in } East Haddam, Connecticut.

September 23, 2003

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a telecommunications facility including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to Message Center Management (MCM) for the construction, maintenance and operation of a wireless telecommunications facility at the proposed site located on Nichols Road, East Haddam, Connecticut.

The facility shall be constructed, operated, and maintained substantially as specified in the Council's record in this matter, and subject to the following conditions:

- The tower shall be constructed as a monopole, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of AT&T and other entities, both public and private, but such tower shall not exceed a height of 175 feet above ground level.
- 2. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be submitted to and approved by the Council prior to the commencement of facility construction and shall include:
 - a. a detailed site development plan that depicts the location of the access road, compound, tower, and utility line;

- specifications for the tower, tower foundation, antennas, equipment building, and security fence;
- c. construction plans for site clearing, water drainage, and erosion and sedimentation control consistent with the <u>2002 Connecticut Guidelines</u> for Soil Erosion and Sediment Control, as amended.
- 3 The Certificate Holder shall, prior to the commencement of operation, provide the Council worst-case modeling of electromagnetic radio frequency power densities of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall provide a recalculated report of electromagnetic radio frequency power density if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.
- 4. Upon the establishment of any new state or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.
- 5. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing. Upon request, the Certificate Holder shall provide space on its tower for Town of East Haddam antennas at no cost to the Town.
- 6. If the facility does not initially provide wireless services within one year of completion of construction or ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.
- 7. Any antenna that becomes obsolete and ceases to function shall be removed within 60 days after such antennas become obsolete and cease to function.
- 8. Unless otherwise approved by the Council, this Decision and Order shall be void if the facility authorized herein is not operational within one year of the effective date of this Decision and Order or within one year after all appeals to this Decision and Order have been resolved.

Pursuant to General Statutes § 16-50p, we hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in The Hartford Courant.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mall: siting.council@po.sisic.ct.us
Web Site: www.state.ct.us/ese/index.htm

November 10, 2003

Peter J. Tyrroll
Levy & Droney, P.C.
Pond View Corporate Center
74 Batterson Park Road
Farmington, CT 06032

Re:

DOCKET NO. 255 - Message Center Management application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility in East Haddam, Connecticut.

Dear Attorney Tyrrell:

At a public meeting held on October 29, 2003, the Connecticut Siting Council (Council) considered and approved the Development and Management Plan (D&M Plan) for the East Haddam facility.

This approval applies only to the D&M Plan as submitted October 22, 2003. Any other changes to this D&M Plan require advance Council notification and approval. Failure to obtain Council approval before implementing any changes to this D&M plan may result in the Council implementing enforcement proceedings pursuant to General Statutes \$ 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Please notify the Council two weeks prior to the commencement of construction.

Enclosed is a copy of the staff report on the D&M Plan, dated October 29, 2003.

Very truly yours,

Pamela B. Katz, P.E.

Chairman

SDP/laf

c: Parties and Intervenors

Enclosure (1)

16-888 19486 FEAL & DEGLET 000 010 2550 1.

Docket 255: Message Center Management 169 Trowbridge Road East Haddam, Connecticut Development & Management Plan Staff Report October 29, 2003

On September 23, 2003, the Council issued a Certificate of Environmental Compatibility and Public Need to Message Center Management (MCM) for the construction, maintenance, and operation of a cellular telecommunications facility at 169 Trowbridge Road, East Haddam, Connecticut. As required in the Council's Decision and Order, MCM submitted a Development and Management (D&M) Plan for this facility on October 23, 2003.

The site to be developed is on a 127-acre parcel owned by the Town of East Haddam. The property is used for various town purposes including a recycling center, a bulky waste transfer station, and a dog pound. A portion of the property was formerly used as a bulky waste landfill.

The facility compound would consist of a 60-foot by 100-foot area with a gravel surface enclosed by an 8-foot high chain link fence. Electric and telephone services would be brought to the compound via underground conduits that would originate at existing CL&P pole #4771. The facility would share a portion of the dog pound's graveled driveway. A small parking area off this driveway would be created within which the transformer and meter board would be located.

The tower would be built to a height of 175 feet and would be expandable to 195 feet. Because of the possibility of contamination, soil excavated at the site would be stockpiled within a silt fence barrier and tested for proper disposal.

All of the elements of the Council's D&M Plan requirements appear to be in compliance. Staff recommends approval of this Plan.

TOWN OF EAST HADDAM

ZONING AND BUILDING APPLICATION

Your application can not be reviewed until all required information is provided.

Permit # 0601-0404 Location _ 3 Nichol	Rd (Transfer	Station)
No.	Street	
Map # Lot #	19	Lot Size 60 X100 Zone
Owner's Name Message Center Management Mailing Address 40 Woodland St. No. Street Hartford CT Town State Zip.	P.O. Box 06105	e# <u>(860) 547-1444</u>
Contractor Nelson Communications		
Mailing Address P.O. Box 1936 No. Street	P.O. Box	e# _901254
Conway NH Town State Zip	03818 Phone	# (603) 447-8879
PROPOSED Total Sq. Ft. NEW WORK: of New Work 6000 Stories N/A		
SEPARATE PERMITS ARE REQUIRED FOR ELECTRICAL, H		
OPHER APPROVALS OR REVIEWS REQUIRED/RECEIVED Tax Collector Historic Comm. Variance Inland Wetlands Driveway Permit Chatham Health District Fire Marshal	Is any work being don perennial stream and/	PROPOSED WORK No X ne within 75 feet of a lake, pond, river, for soil types designated as poorly drained, alluvial and floodplain? Yes No _X Y-15-04 Date
_XOther_Connecticut Siting Council OFFIC	Agent SE ONLY	-Date
APPROVEDDISAPPROVED Permit Fee Pd Ck# Zoning Official Date	DISAM Building Official DAYS Comments See PLAN 1999 CT ST	PPROVED Permit Fee Pd 1325° Ck# 20516 Date 6/1/04 A REVIAL - Comply with CATE BUILDING CODE -
White: Building Department Yellow: Zoning Department Pink: Assesse	Gold: Applicant W/Con	file exp 2/10/04

EXHIBIT 6

Construction Drawings



By Stephen Roth at 3:12:08 PM, 10/15/2021

APPROVALS			
PROJECT MANAGER:	DATE:	ZONING/SITE ACQ.:	DATE:
CONSTRUCTION:	DATE:	OPERATIONS:	DATE:
RF ENGINEERING:	DATE:	TOWER OWNER:	DATE:

-MOBILE TECHNICIAN SITE SAFETY NOTES

SPECIAL RESTRICTIONS **LOCATION** SECTOR A: ACCESS BY CERTIFIED CLIMBER SECTOR B: ACCESS BY CERTIFIED CLIMBER SECTOR C: ACCESS BY CERTIFIED CLIMBER SECTOR D: ACCESS BY CERTIFIED CLIMBER GPS/LMU: UNRESTRICTED RADIO CABINETS: UNRESTRICTED PPC DISCONNECT: UNRESTRICTED MAIN CIRCUIT D/C: UNRESTRICTED NIU/T DEMARC: UNRESTRICTED

GENERAL NOTES

OTHER/SPECIAL:

LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.

NONE

- THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
- THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE OMNIPOINT REPRESENTATIVE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
- THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED
- THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUMS OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING
- ALL PORTIONS OF THE WORK UNDER THE CONTRACT. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY CONSTRUCTION CONTROL SURVEYS, ESTABLISHING AND MAINTAINING ALL LINES AND GRADES REQUIRED TO CONSTRUCT ALL IMPROVEMENTS
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.

AS SHOWN HEREIN.

THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR

VICINITY MAP

- 13. THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT. DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF
- 14. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT.
- 15. THE CONTRACTOR SHALL NOTIFY THE PROJECT OWNER'S REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE LESSEE/LICENSEE
- 16. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC. ON THE JOB.
- 17. ALL UNDERGROUND UTILITY INFORMATION WAS DETERMINED FROM SURFACE INVESTIGATIONS AND EXISTING PLANS OF RECORD. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO ANY SITE WORK.

AT LEAST 72 HOURS PRIOR TO DIGGING, THE CONTRACTOR IS **REQUIRED TO CALL DIG SAFE AT 811**



CTHA603B

39 NICHOLS ROAD EAST HADDAM, CT 06469 MIDDLESEX COUNTY

SITE NO.: CTHA603B

SITE TYPE: 177'± MONOPOLE

PROJECT TYPE: NATIONAL HARDENING PROJECT

SCALE: 1" = 1000'-0"

DIRECTIONS

MERGE ONTO I-495 NORTH TOWARD MANSFIELD/MARLBORO. TAKE EXIT 33B FOR I-95 SOUTH TOWARD PROVIDENCE RI. TAKE EXIT 6 FOR I-295 SOUTH TOWARD WOONSOCKET/WARWICK. CONTINUE ONTO I-295 SOUTH. USE RIGHT LANE FOR EXIST 9C-A FOR US-6 WEST TOWARD HARTFORD CT. KEEP RIGHT AT FORK & FOLLOW SIGNS FOR JOHNSTON/SCITUATE/FOSTER. MERGE ONTO US-6 WEST. CONTINUE STRAIGHT TO STAY ON US-6 WEST. TAKE SLIGHT LEFT ONTO CONNECTICUT TURNPIKE/GOVERNOR JOHN DAVIS LODGE TURNPIKE & FOLLOW SIGNS FOR I-395 SOUTH/NORWICH. TAKE EXIT ON LEFT FOR I-395 SOUTH. TAKE EXIT 14 TOWARD CT-2 WEST/CT-32 NORTH/HARTFORD/COLCHESTER. TURN RIGHT ONTO WEST TOWN STREET. CONTINUE ONTO FITCHVILLE ROAD/FRANKLIN TURNPIKE/NORWICH-COLCHESTER TURNPIKE. TURN LEFT TO MERGE ONTO CT-2 WEST TOWARD HARTFORD. TAKE EXIT 18 FOR CT-16 TOWARD COLCHESTER/MIDDLETOWN. TURN LEFT ONTO CT-16 WEST/MIDDLETOWN ROAD. TURN LEFT ONTO CT-149 SOUTH. TURN RIGHT ONTO NICHOLS ROAD. SITE IS LOCATED ON THE LEFT HAND SIDE.

SHEET INDEX REV. NO. DESCRIPTION TITLE SHEET GN-1 GENERAL NOTES COMPOUND & EQUIPMENT PLANS GENERATOR DETAILS GENERATOR SPECIFICATIONS 0 GENERATOR SPECIFICATIONS 2 ELECTRIC & GROUNDING DETAILS

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE PROJECT OWNER'S REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME

DO NOT SCALE DRAWINGS

STRUCTURAL ENGINEER:

SITE CONTROL POINT:

SCOPE OF WORK

1 GENERATOR

SITE NOTES

INSTALL:1 GENERATOR

THIS IS AN UNMANNED AND RESTRICTED ACCESS TELECOMMUNICATION FACILITY, AND IS

FOR THE PURPOSE OF PROVIDING PUBLIC CELLULAR SERVICE.

POTABLE WATER OR SANITARY SERVICE IS NOT REQUIRED.

BUILDING CODE: 2018 CONNECTICUT STATE BUILDING CODE

ELECTRICAL CODE: 2017 NATIONAL ELECTRICAL CODE

PROJECT SUMMARY

DISCREPANCIES AT THE CONTRACTOR'S EXPENSE

NO OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES REQUIRED.

ADA COMPLIANCE NOT REQUIRED.

STRUCTURES AND ANTENNAS.

SITE NUMBER:

SBA SITE NUMBER:

PROPERTY OWNER:

TOWER OWNER:

ZONING DISTRICT:

STRUCTURE TYPE:

STRUCTURE HEIGHT:

COUNTY:

APPLICANT:

ARCHITECT:

SBA SITE NAME:

SITE ADDRESS:

NOT FOR HUMAN HABITATION. IT WILL BE USED FOR THE TRANSMISSION OF RADIO SIGNAL

CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND CONDITIONS ON JOB

SITE. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK. FAILURE TO NOTIFY THE

ARCHITECT/ENGINEER PLACE THE RESPONSIBILITY ON THE CONTRACTOR TO CORRECT THE

STRUCTURAL CODE: TIA/EIA-222-G STRUCTURAL STANDARDS FOR ANTENNA SUPPORTING

CTHA603B

CT22076-A

39 NICHOLS ROAD

P.O. BOX 385

MIDDLESEX

MONOPOLE

177'±

MOODUS, CT 06469

SBA TOWERS IX, LLC

8501 CONGRESS AVENUE

BOCA RATON, FL 33487

PHONE: 561-226-9523

INDUSTRIAL/COMMERCIAL

T-MOBILE NORTHEAST LLC

MARLBOROUGH, MA 01752

MARLBOROUGH, MA 01752

NORTON, MA 02766

15 COMMERCE WAY, SUITE B

CHAPPELL ENGINEERING ASSOCIATES, LLC.

CHAPPELL ENGINEERING ASSOCIATES, LLC.

LATITUDE: 41.521000° N41°31'15.60"

LONGITUDE: -72.423200° W72°25'23.52"

201 BOSTON POST ROAD WEST, SUITE 101

201 BOSTON POST ROAD WEST, SUITE 101

EAST HADDAM (TROWBRIDGE)

EAST HADDAM, CT 06469

TOWN OF EAST HADDAM

TRANSFER STATION-KENNEL

NEW CONSTRUCTION WILL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES.

• 1 AUTOMATIC TRANSFER SWITCH

• 2 20A-1P BREAKERS

BASED ON INFORMATION PROVIDED BY T-MOBILE REGULATORY COMPLIANCE PROFESSIONALS AND LEGAL COUNSEL, THIS TELECOMMUNICATIONS EQUIPMENT DEPLOYMENT IS CONSIDERED AN <u>ELIGIBLE FACILITY</u> UNDER THE MIDDLE CLASS TAX RELIEF AND JOB CREATION ACT OF 2012, 47 USC 1455(A), SECTION 6409(A), AND IS SUBJECT TO AN ELIGIBLE FACILITY REQUEST, EXPEDITED REVIEW, AND LIMITED/PARTIAL ZONING PRE-EMPTION FOR LOCAL DISCRETIONARY PERMITS (VARIANCE, SPECIAL PERMIT, SITE PLAN REVIEW, OR ADMINISTRATIVE REVIEW).

T-MOBILE NORTHEAST LLC

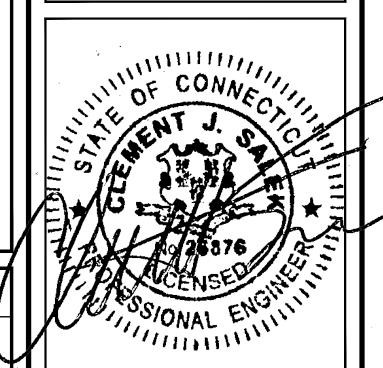
15 COMMERCE WAY, SUITE B NORTON, MA 02766 (508) 286-2700



SBA COMMUNICATIONS CORP. 134 FLANDERS ROAD, SUITE 125 WESTBOROUGH, MA 01581



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



CHECKED BY:

APPROVED BY:

REV.	DATE	DESCRIPTION	BY
	SI	UBMITTALS	

SITE NUMBER: CTHA603B

SHEET TITLE

TITLE SHEET

SHEET NUMBER

SITE ADDRESS: 39 NICHOLS ROAD EAST HADDAM, CT 06469

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GENERAL NOTES:

- 1. FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY: CONTRACTOR - T-MOBILE SUBCONTRACTOR - GENERAL CONTRACTOR (CONSTRUCTION) OWNER - T-MOBILE
 - OEM ORIGINAL EQUIPMENT MANUFACTURER
- 2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
- 3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS. AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
- 4. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL, STATE AND FEDERAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- 5. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
- 6. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- 7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- 8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.
- 9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER, T1 CABLES AND GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY, SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR AND/OR LANDLORD PRIOR TO CONSTRUCTION.
- 10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- 11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY.
- 12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION AND RETURN DISTURBED AREAS TO ORIGINAL CONDITIONS.
- 13. THE SUBCONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE SUBCONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- 14. SUBCONTRACTOR SHALL NOTIFY CHAPPELL ENGINEERING ASSOCIATES, LLC 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING TRENCHES, SEALING ROOF AND WALL PENETRATIONS AND POST DOWNS, FINISHING NEW WALLS OR FINAL ELECTRICAL CONNECTIONS FOR ENGINEERING REVIEW.
- 15. CONSTRUCTION SHALL COMPLY WITH ALL T-MOBILE STANDARDS AND SPECIFICATIONS.
- 16. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- 17. THE EXISTING CELL SITES ARE IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
- 18. IF THE EXISTING CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

SITE WORK GENERAL NOTES:

- 1. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- 2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION.
- 3. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
- 4. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- 5. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
- 6. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
- 7. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- 8. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF ENGINEERING, OWNER AND/OR LOCAL UTILITIES.
- 9. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE AND STABILIZED TO PREVENT EROSION AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
- 10. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
- 11. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE T-MOBILE SPECIFICATION FOR SITE SIGNAGE.

CONCRETE AND REINFORCING STEEL NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.

2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. A HIGHER STRENGTH (400PSI) MAY BE USED. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 381 CODE

3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615. GRADE 60. DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.

4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

CONCRETE CAST AGAINST EARTH.......3 IN. CONCRETE EXPOSED TO EARTH OR WEATHER: #6 AND LARGER2 IN.

#5 AND SMALLER & WWF 1½ IN. CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:

BEAMS AND COLUMNS1½ IN.

SLAB AND WALL

5. A CHAMFER 34" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION

6. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHORS SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO THE MANUFACTURERS RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. EXPANSION BOLTS SHALL BE PROVIDED BY SIMPSON OR APPROVED EQUAL.

7. CONCRETE CYLINDER TIES ARE NOT REQUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS (IBC1905.6.2.3) IN THAT EVENT THE FOLLOWING RECORDS SHALL BE PROVIDED BY THE CONCRETE SUPPLIER;

(A) RESULTS OF CONCRETE CYLINDER TEST PERFORMED AT THE SUPPLIERS PLANT. (B) CERTIFICATION OF MINIMUM COMPRESSIVE STRENGTH FOR THE CONCRETE GRADE SUPPLIED.

FOR GREATER THAN 50 CUBIC YARDS THE GC SHALL PERFORM THE CONCRETE CYLINDER TEST. 8. AS AN ALTERNATIVE TO ITEM 7. TEST CYLINDERS SHALL BE TAKEN INITIALLY AND THEREAFTER FOR EVERY 50 YARDS OF

CONCRETE FROM EACH DIFFERENT BATCH PLANT. 9. EQUIPMENT SHALL NOT BE PLACED ON NEW PADS FOR SEVEN DAYS AFTER PAD IS POURED, UNLESS IT IS VERIFIED BY

STRUCTURAL STEEL NOTES:

1. ALL STEEL WORK SHALL BE PAINTED OR GALVANIZED IN ACCORDANCE WITH THE DRAWINGS AND T-MOBILE SPECIFICATIONS UNLESS OTHERWISE NOTED. STRUCTURAL STEEL SHALL BE ASTM-A-36 UNLESS OTHERWISE NOTED ON THE SITE SPECIFIC DRAWINGS. STEEL DESIGN, INSTALLATION AND BOLTING SHALL BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "MANUAL OF STEEL CONSTRUCTION".

2. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND AWS D1.1 WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 9TH EDITION, PAINTED SURFACES SHALL BE TOUCHED UP.

3. BOLTED CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS (3/4"0) AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE. ALL BOLTS SHALL BE GALVANIZED OR STAINLESS STEEL.

4. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE %" DIA. ASTM A 307 BOLTS (GALV) UNLESS NOTED OTHERWISE.

5. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER REVIEW & APPROVAL ON PROJECTS REQUIRING STRUCTURAL

6. ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.

SOIL COMPACTION NOTES FOR SLAB ON GRADE:

CYLINDER TESTS THAT COMPRESSIVE STRENGTH HAS BEEN ATTAINED.

1. EXCAVATE AS REQUIRED TO REMOVE VEGETATION AND TOPSOIL TO EXPOSE NATURAL SUBGRADE AND PLACE CRUSHED STONE AS REQUIRED.

2. COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR ENGINEER IS ACCEPTABLE.

3. AS AN ALTERNATE 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.

- 4. COMPACTED SUBBASE SHALL BE UNIFORM AND 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 ALTERNATE TO ITEMS 2 AND 3, THE SUBGRADE SOILS WITH 5 PASSES OR A MEDIUM SIZED VIBRATORY PLATE COMPACTOR (SUCH AS BOMAG BPR 30/38) OR HAND-OPERATED SINGLE DRUM VIBRATORY ROLLER (SUCH AS BOMAG BW 55E). AND SOFT AREAS THAT ARE ENCOUNTERED SHOULD BE REMOVED AND REPLACED WITH A WELL-GRADED GRANULAR FILL AND COMPACTED AS STATED ABOVE.

COMPACTION EQUIPMENT:

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

CONSTRUCTION NOTES:

1. FIELD VERIFICATION:

SUBCONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, T-MOBILE ANTENNA PLATFORM LOCATION AND UTILITY TRENCHWORK.

2. COORDINATION OF WORK:

SUBCONTRACTOR SHALL COORDINATE RF WORK AND PROCEDURES WITH CONTRACTOR.

3. CABLE LADDER RACK:

SUBCONTRACTOR SHALL FURNISH AND INSTALL CABLE LADDER RACK, CABLE TRAY AND/OR ICE BRIDGE, AND CONDUIT AS REQUIRED TO SUPPORT CABLES TO THE NEW BTS LOCATION.

ELECTRICAL INSTALLATION NOTES:

1. WIRING, RACEWAY, AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.

2. SUBCONTRACTOR SHALL MODIFY OR INSTALL CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLING TO THE NEW BTS EQUIPMENT. SUBCONTRACTOR SHALL SUBMIT MODIFICATIONS TO CONTRACTOR FOR APPROVAL.

3. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND

- 4. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
- 5. EACH END OF EVERY POWER, GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA, AND MATCH INSTALLATION REQUIREMENTS.
- 6. POWER PHASE CONDUCTORS (I.E., HOTS) SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, ½ INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). PHASE CONDUCTOR COLOR CODES SHALL CONFORM WITH THE NEC AND OSHA.
- 7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).
- 8. PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
- 9. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.

10. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#34 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE

11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.

12. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR #2 AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.

13. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#34 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.

14. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY HARGER (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).

15. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.

16. NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.

17. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.

18. ELECTRICAL METALLIC TUBING (EMT). ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.

19. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE

20. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.

21. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.

22. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION—TYPE AND APPROVED FOR THE LOCATION

23. CABINETS, BOXES AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA,

UL, ANSI/IEEE AND NEC. 24. CABINETS. BOXES AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.

USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.

NOT BLOCKED.

25. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD: SHALL BE PANDUIT TYPE E (OR EQUAL): AND RATED NEMA 1 (OR BETTER) INDOORS. OR NEMA 3R (OR BETTER) OUTDOORS.

26. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.

27. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

28. NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

29. THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.

30. THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

31. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.

32. CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS

T-MOBILE NORTHEAST LLC

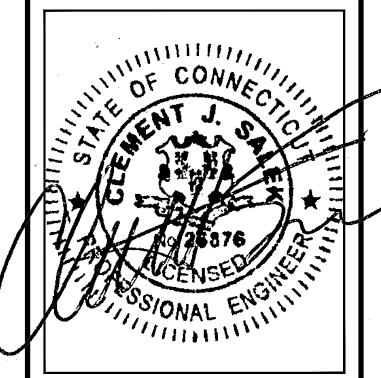
15 COMMERCE WAY, SUITE B NORTON, MA 02766 (508) 286-2700



SBA COMMUNICATIONS CORP. 134 FLANDERS ROAD, SUITE 125 WESTBOROUGH, MA 01581 (508) 251-0720



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



CHECKED BY:

APPROVED BY:

SUBMITTALS REV. DATE RY DESCRIPTION

> SITE NUMBER: CTHA603B

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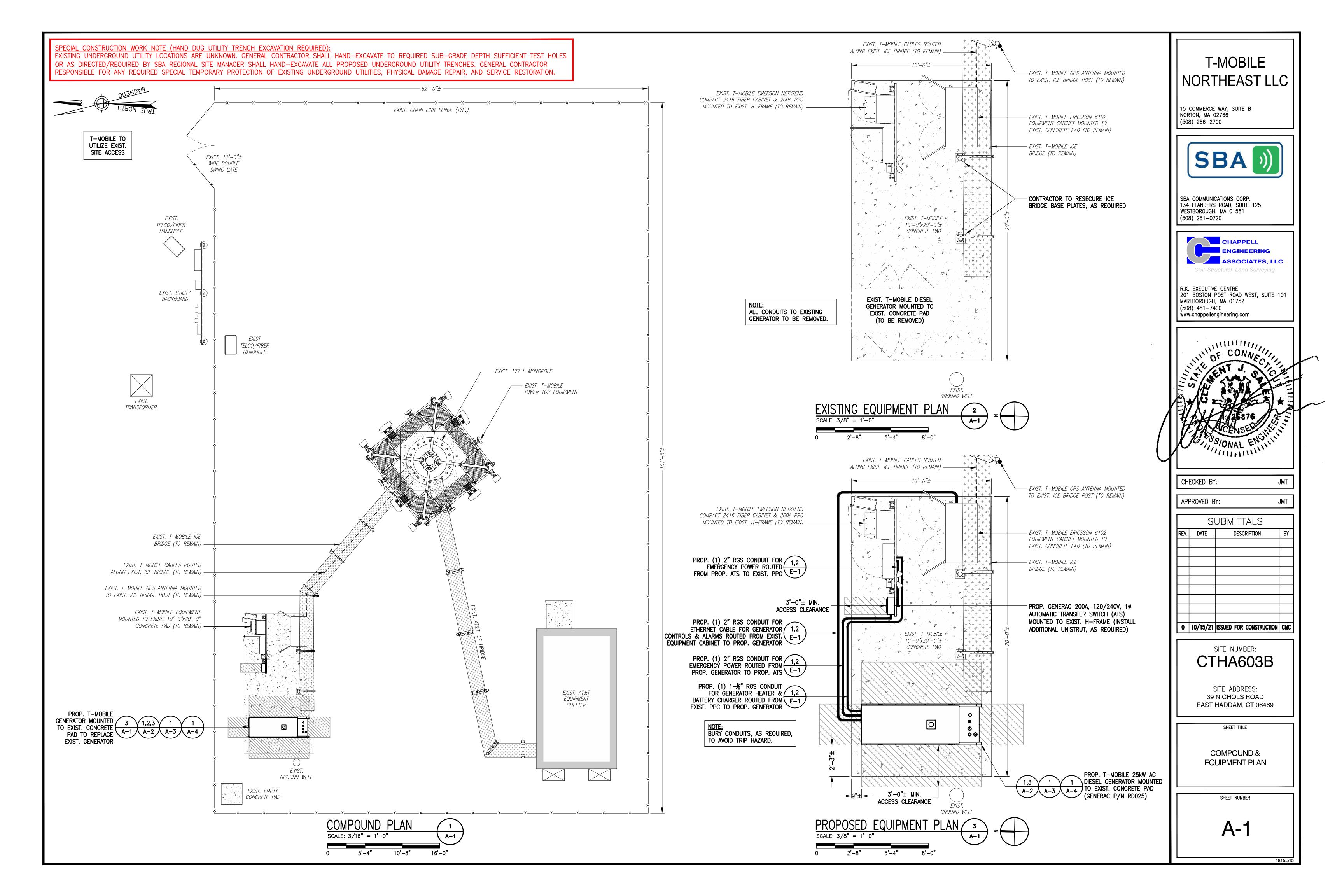
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SHEET TITLE

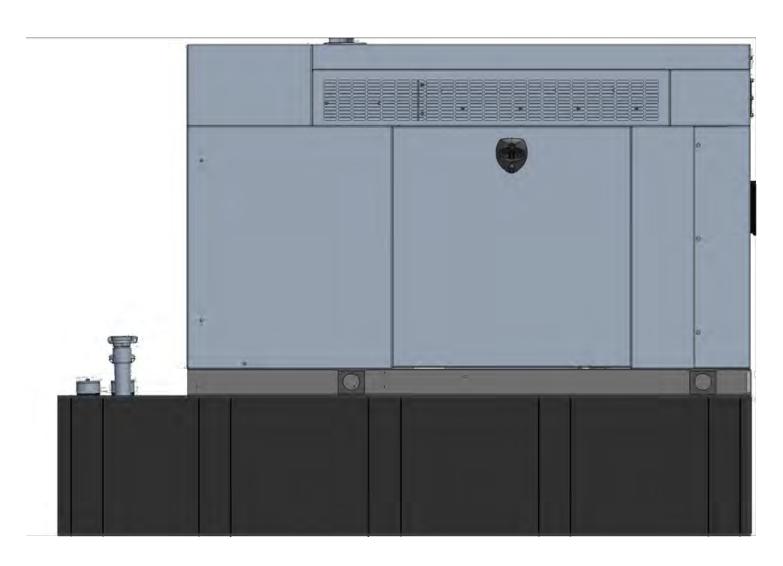
GENERAL NOTES

SHEET NUMBER

GN-1



NOTE:
GENERATOR DIESEL TANK TO
BE FILLED BY CONTRACTOR



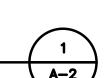
GENERAC RD025 25kW AC DIESEL GENERATOR

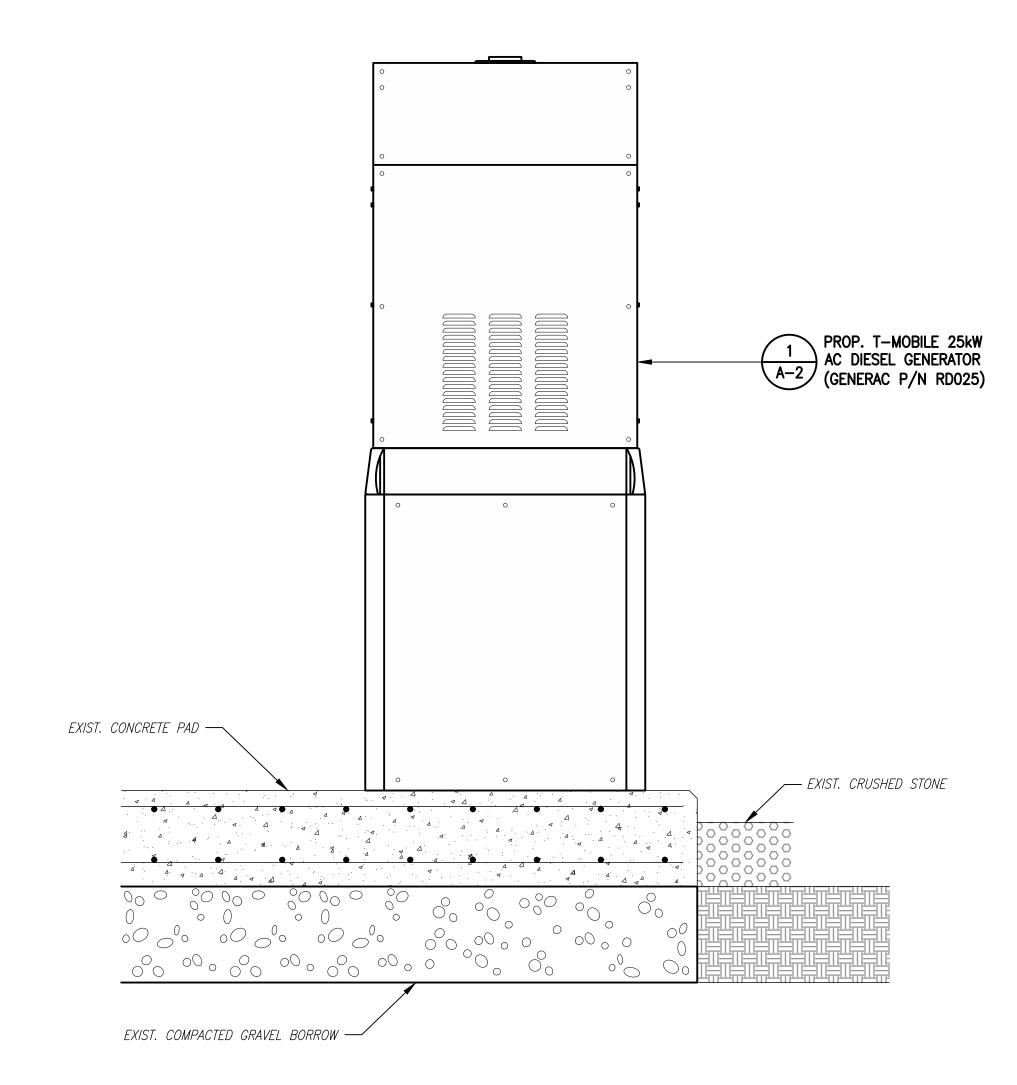
DIMENSIONS: 103.4"L x 35.0"W x 91.7"H

WEIGHT: 2,946 lbs

QUANTITY: TOTAL OF 1

GENERATOR DETAIL





GENERATOR PAD DETAIL SCALE: NTS

2 A-2

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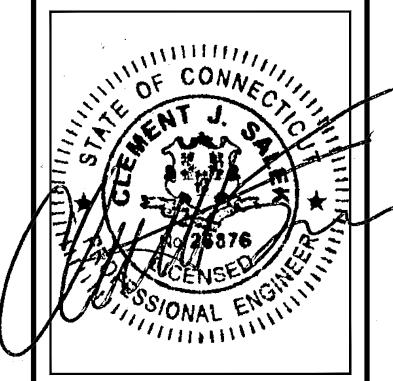
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201 BOSTON POST ROAD WEST, SUITE 101
MARLBOROUGH, MA 01752
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APPROVED BY: J

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REV.	DATE	DESCRIPTION	BY
0	10/15/21	ISSUED FOR CONSTRUCTION	CMC

SITE NUMBER:
CTHA603B

SITE ADDRESS: 39 NICHOLS ROAD EAST HADDAM, CT 06469

SHEET TITLE

GENERATOR DETAILS

SHEET NUMBER

A-2

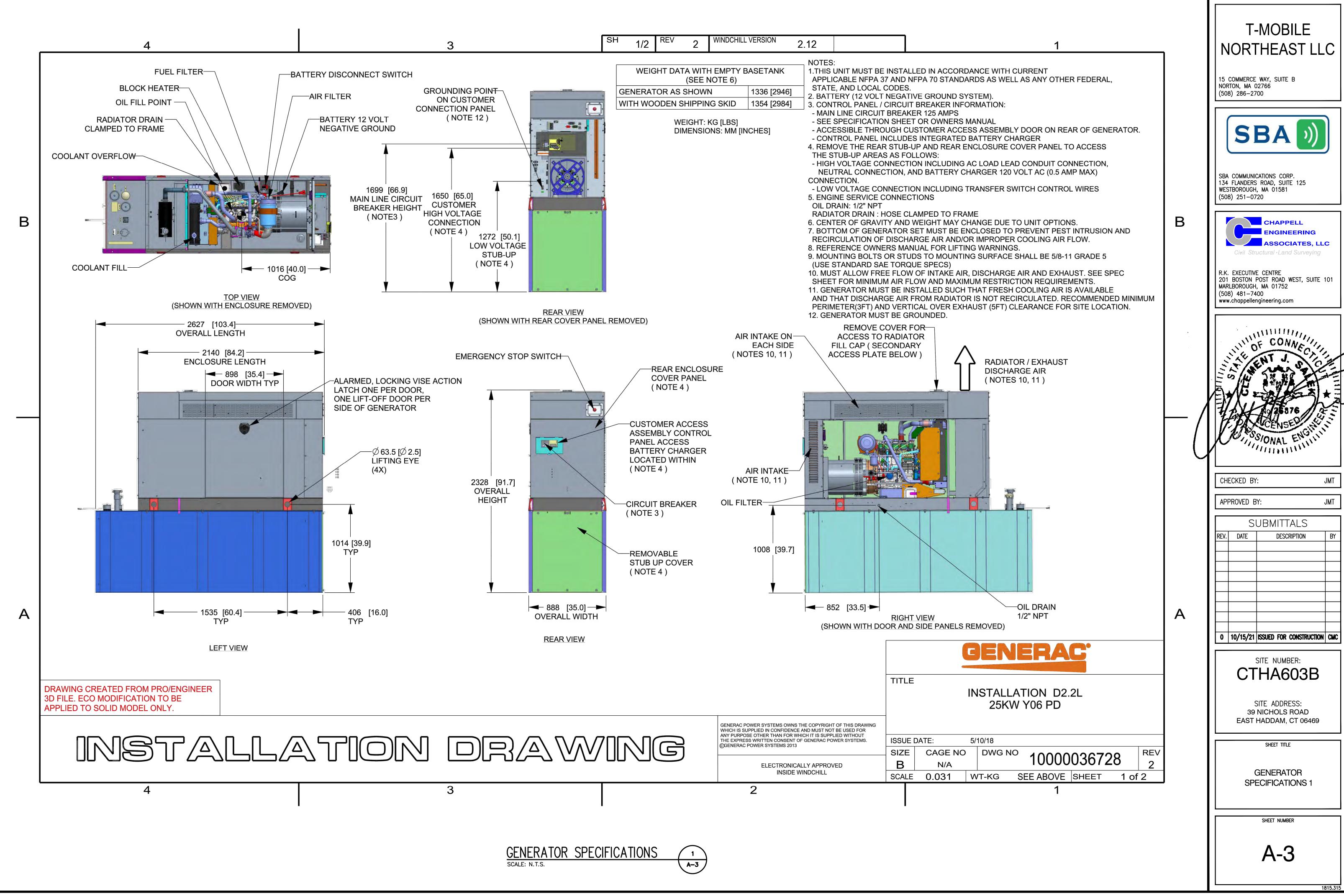
PROP. GENERATOR

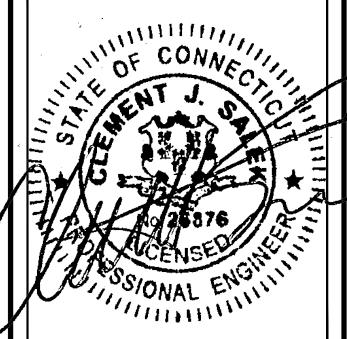
EXIST. CONCRETE SLAB

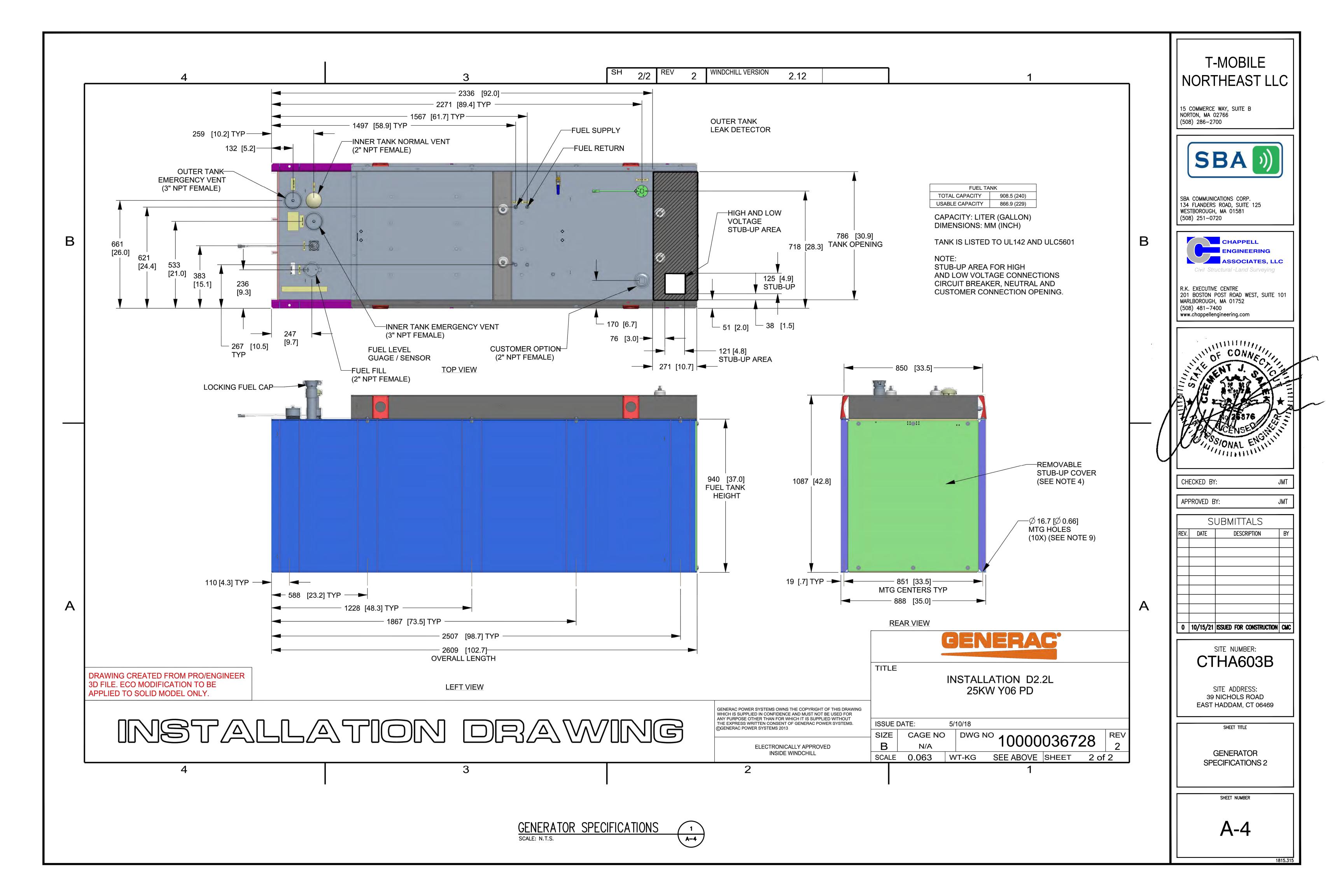
PROP. ½"Ø HILTI KWK BOLT TZ STAINLESS
STEEL ANCHOR BOLT WITH 2" MIN.
EMBEDMENT IN CONCRETE 1CC—ESR—1917,
LARR 25701, EACH CORNER PER
MANUFACTURER'S SPECIFICATIONS (TYP.)
(SPECIAL INSPECTION REQUIRED)

GENERATOR MOUNTING DETAIL
SCALE: N.T.S.

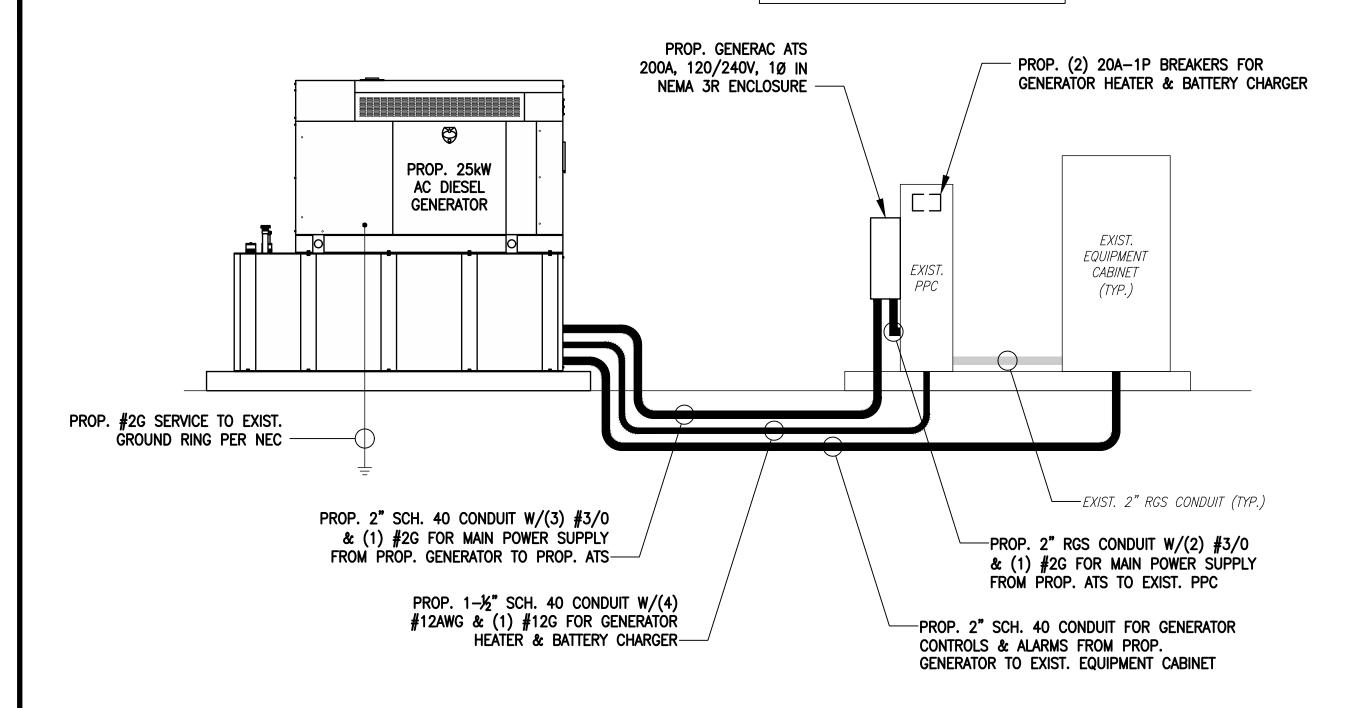






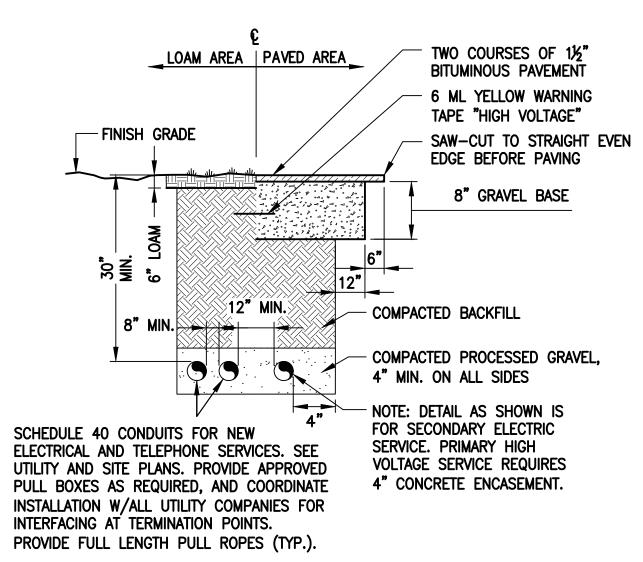


NOTE: CUT BACK (E) MAIN POWER CONDUIT, AS REQUIRED, & RECOONECT TO (P) ATS.



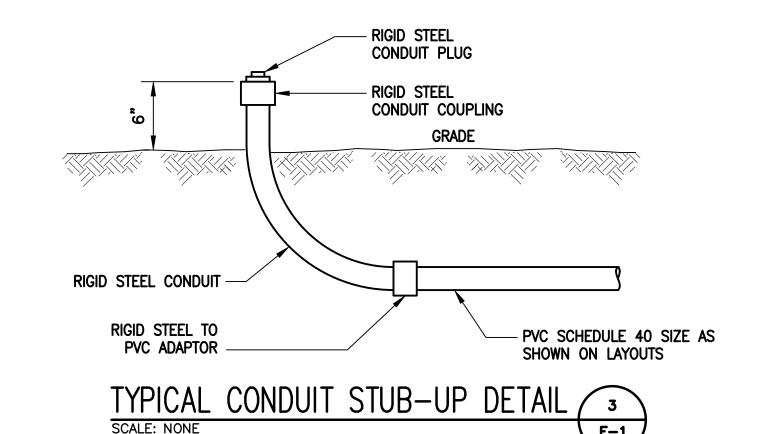
ONE-LINE POWER DIAGRAM

SCALE: NOT TO SCALE



SCALE: NOT TO SCALE

E-1



T-MOBILE NORTHEAST LLC

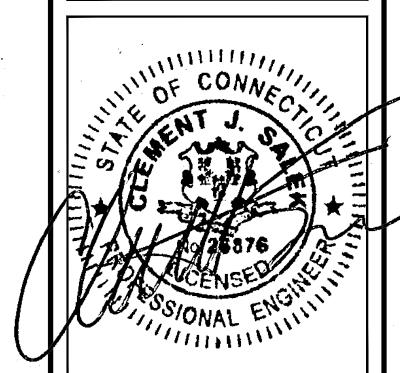
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SITE NUMBER: CTHA603B

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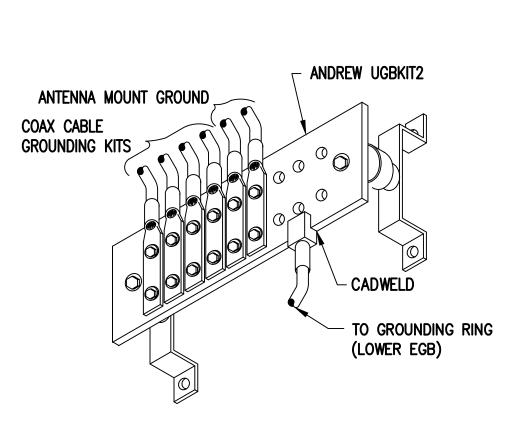
SHEET TITLE

ELECTRIC & GROUNDING DETAILS

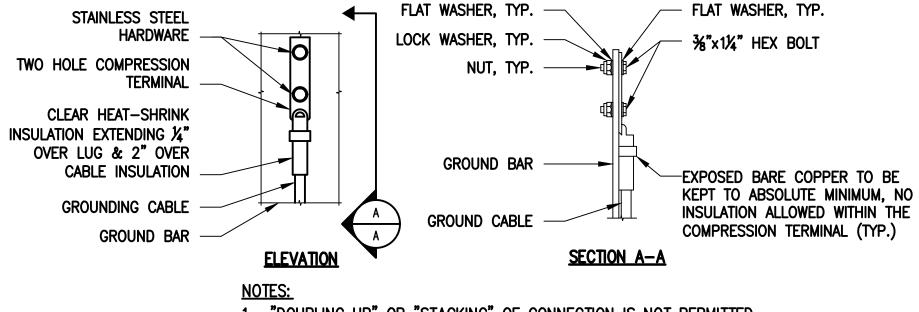
SHEET NUMBER

ELECTRICAL AND GROUNDING NOTES OR SCHEDULE 80 PVC (AS PERMITTED BY CODE) AND WHERE REQUIRED IN LIQUID TIGHT FLEXIBLE METAL OR NONMETALLIC CONDUITS.

- 1. ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.
- 2. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS.
- 3. THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION INCLUDING INCIDENTAL WORK TO PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.
- 4. GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND IS RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.
- 5. ELECTRICAL AND TELCO WIRING OUTSIDE A BUILDING AND EXPOSED TO WEATHER SHALL BE IN WATER TIGHT GALVANIZED RIGID STEEL CONDUITS
- 6. BURIED CONDUIT SHALL BE SCHEDULE 40 PVC.
- 7. ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, THWN, OR THININSULATION.
- 8. RUN ELECTRICAL CONDUIT OR CABLE BETWEEN ELECTRICAL UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE PPC AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE. COORDINATE INSTALLATION WITH UTILITY COMPANY.
- 9. RUN TELCO CONDUIT OR CABLE BETWEEN TELEPHONE UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE TELCO CABINET AND BTS CABINET AS INDICATED ON THIS DRAWING PROVIDE FULL LENGTH PULL ROPE IN INSTALLED TELCO CONDUIT. PROVIDE GREENLEE CONDUIT MEASURING TAPE AT EACH END.
- 10. WHERE CONDUIT BETWEEN BTS AND PROJECT OWNER CELL SITE PPC AND BETWEEN BTS AND PROJECT OWNER CELL SITE TELCO SERVICE CABINET ARE UNDERGROUND USE PVC, SCHEDULE 40 CONDUIT. ABOVE THE GROUND PORTION OF THESE CONDUITS SHALL BE PVC CONDUIT.
- 11. ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NEMA 3R ENCLOSURE.
- 12. PPC SUPPLIED BY PROJECT OWNER.
- 13. GROUNDING SHALL COMPLY WITH NEC ART. 250. ADDITIONALLY, GROUNDING, BONDING AND LIGHTNING PROTECTION SHALL BE DONE IN ACCORDANCE WITH "T-MOBILE BTS SITE GROUNDING STANDARDS".
- 14. GROUND COAXIAL CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURERS COAX CABLE GROUNDING KITS SUPPLIED BY PROJECT
- 15. USE #6 COPPER STRANDED WIRE WITH GREEN COLOR INSULATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND #2 SOLID TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE DRAWING.
- 16. ALL GROUND CONNECTIONS TO BE BURNDY HYGROUND COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
- 17. ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE, EXCEPT AS OTHERWISE INDICATED. GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLE. ALWAYS MAKE AT LEAST 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY. BOND ANY METAL OBJECTS WITHIN 6 FEET OF PROJECT OWNER EQUIPMENT OR CABINET TO MASTER GROUND BAR OR GROUNDING
- 18. CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.
- 19. APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS.
- 20. CONTRACTOR SHALL PROVIDE AND INSTALL OMNI DIRECTIONAL ELECTRONIC MARKER SYSTEM (EMS) BALLS OVER EACH GROUND ROD AND BONDING POINT BETWEEN EXIST. TOWER/ MONOPOLE GROUNDING RING AND EQUIPMENT GROUNDING RING.
- 21. CONTRACTOR SHALL TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION. 5 OHMNS MINIMUM RESISTANCE REQUIRED.
- 22. CONTRACTOR SHALL CONDUCT ANTENNA, COAX, AND LNA RETURN-LOSS AND DISTANCE- TO-FAULT MEASUREMENTS (SWEEP TESTS) AND RECORD RESULTS FOR PROJECT CLOSE OUT.



SCALE: NOT TO SCALE



"DOUBLING UP" OR "STACKING" OF CONNECTION IS NOT PERMITTED. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS. 3. CADWELL DOWNLEADS FROM UPPER EGB, LOWER EGB AND MGB.

SCALE: NOT TO SCALE

EXHIBIT 7

Generac RD025 25 KW 25kw Diesel Specifications

Standby Power Rating 25 kW, 31.25 kVA, 60 Hz







Image used for illustration purposes only

Codes and Standards

Not all codes and standards apply to all configurations. Contact factory for details.



UL2200, UL508, UL489, UL142



CSA 22.2





BS5514 and DIN 6271



SAE J1349



NFPA 37, 70, 99



ISO 3046, 8528, 9001



NEMA ICS1, ICS10, MG1, 250, ICS6, AB1



an National Standards Institute ANSI/IEEE C62.41

Powering Ahead

For over 50 years, Generac has led the industry with innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac's gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial application under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

RD025 | 2.2L | 25 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

Standard Features

ENGINE SYSTEM

- Cold Weather Kit
- Oil Drain Extension
- Heavy Duty Air Cleaner
- Fan Guard
- Stainless Steel Flexible Exhaust Connection
- · Factory Filled Oil & Coolant
- Critical Exhaust Silencer

GENERATOR SET

- Sound Attenuated Aluminum Enclosure
- Internal Genset Vibration Isolation
- · Separation of Circuits High/Low Voltage
- Wrapped Exhaust Piping
- Standard Factory Testing
- 5 Year Limited Warranty
- Ready to Accept Full Load in <10 Seconds
- E-Stop

Electrical System

- Battery Charging Alternator
- Battery Cables
- Battery Tray
- Rubber-Booted Engine Electrical Connections
- Solenoid Activated Starter Motor
- Smart Battery Charger

ALTERNATOR SYSTEM

- Class H Insulation Material
- 2/3 Pitch
- Skewed Stator
- Sealed Bearings
- Low Temperature Rise (>120°C)
- Low THD (<5%)

Cooling System

GENERAC[®]

INDUSTRIAL

- Closed Coolant Recovery System
- · Factory-Installed Radiator
- 50/50 Ethylene Glycol Antifreeze
- Radiator Drain Extension
- Can Operate at up to 122°F (50°C) Ambient Temperature

Fuel System

- · Fuel Lockoff Solenoid
- · Primary Fuel Filter
- Stainless Steel Fuel Lines

TANKS

- 24 Hour Run Time Tank
- UL142 Listed Tank

CONTROL SYSTEM



Evolution ™ Controller

- Two-Line Plain Text LCD Display
- Programmable Start Delay Between 10-30 seconds
- 10 second Engine Start Sequence
- 5 second Engine Warm Up
- 1 minute Engine Cool-Down
- Starter Lock-Out
- Smart Battery Charger
- Automatic Voltage Regulation with Over and Under Protection
- Automatic Low Oil Pressure Shutdown
- Overspeed Shutdown
- High Temperature Shutdown

- Overcrank Protection
- · Safety Fused
- · Failure to Transfer Protection
- Low Battery Protection
- 50 Even Run Log
- Future Set Capable Exerciser
- Incorrect Wiring Protection
- Internal Fault Protection
- · Common External Fault Capability
- Governor Failure Protection

Optional Shipped Loose and Field Install Kits

ENGINE SYSTEM

Base Plug Kit

GENERATOR SET

- O Paint Kit
- O Scheduled Maintance Kit

CONTROL SYSTEM

○ Mobile Link TM and Adapter Kit

TANKS

- O Spill Box
- O 90% Fuel Alarm
- Tank Risers
- O Spill Box Drainback Kit
- O Vent Extension Support Kit
- O 5 Day Run Time Tank

RD025 | 2.2L | 25 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency



APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

\cap	_	_	_		ī
l-	e	n	Θ	ГA	

Make	Perkins
EPA Emission Compliance	Tier 4 Interim
Cylinder #	4
Туре	In-Line
Displacement - in ³ (L)	2.22 (135)
Bore - in (mm)	3.3 (84.0)
Stroke - in (mm)	3.9 (100.0)
Compression Ratio	23.3:1
Intake Air Method	Turbocharged/Aftercooled
Piston Type	Aluminum
Crankshaft Type	Forged Steel
Engine Block Type	Cast Iron

Engine Governing

Governor	Electronic
Frequency Regulation (Steady State)	±0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full Flow Cartridge
Crankcase Capacity with Filters- qt (L)	11.2 (10.6)

Cooling System

Cooling System Type	Closed Recovery
Fan Type	Pusher
Fan Speed- rpm	1,980
Fan Diameter - in (mm)	18.0 (457.2)

Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel
Fuel Specification	ASTM
Fuel Pump Type	Mechanical Engine Driven Gear
Injector Type	Mechanical
Fuel Supply Lin (mm/in)	7.94/0.31 (ID)
Fuel Return Line (mm/in)	4.76/.19 (ID)
Fuel Filtering (microns)	25

Engine Electrical System

System Voltage	12 VDC
Battery Charger Alternator	Standard
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	Generac
Poles	4
Field Type	Rotating
Insulation Class - Rotor	Н
Insulation Class - Stator	Н
Total Harmonic Distortion	<5%
Telephone Interference Factor (TIF)	<50

Standard Excitation	Direct
Bearings	Single Sealed
Coupling	Flexible Disc
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Full Digital
Number of Sensed Phases	2
Regulation Accuracy (Steady State)	±1%

RD025 | 2.2L | 25 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

OPERATING DATA

POWER RATINGS

Standby

GENERAC* | INDUSTRIAL

		•	
Single-Phase 120/480 VAC @0.1pf	25 kW	Amps: 104	
Three-Phase 120/208 VAC @0.8pf	25 kW	Amps: 87	
Three-Phase 120/240 VAC @0.8pf	25 kW	Amps: 75	
Three-Phase 277/480 VAC @0.8pf	25 kW	Amps: 37	

MOTOR STARTING CAPABILITIES (sKVA)

sKVA vs. Voltage Dip at 30%

120/240 V, Single-Phase at 0.4pf	168
120/208 V, Three-Phase at 0.4pf	144
120/240 V, Three-Phase at 0.4pf	125
120/240 V, Three-Phase at 0.4pf	64

FUEL CONSUMPTION RATES*

Percent Load	Diesel gal/hr (L/hr)
25%	0.97 (3.67)
50%	1.37 (5.19)
75%	1.97 (7.46)
100%	2.77 (10.49)

^{*} Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

		Standby
Air Flow (Radiator and Alternator)	ft³/min (m³/min)	2800 (79)
Coolant System Capacity	gal (L)	2.5 (9.5)
Heat Rejection to Coolant	BTU/hr (MJ/hr)	128,638 (135.7)
Max. Operating Ambient Temperature	°F (°C)	122 (50)
Maximum Operating Ambient Temperature (Before Derate)	See Bulletin I	No. 0199270SSD
Maximum Radiator Backpressure	in H ₂ O (kPa)	0.50 (0.12)

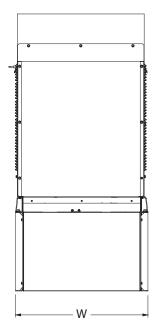
COMBUSTION AIR REQUIREMENTS

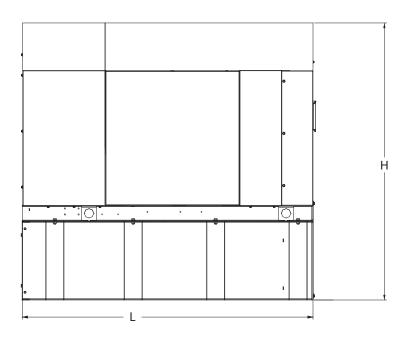
	Standby
Flow at Rated Power ft ³ /min	(m ³ /min) 88 (2.5)

ENGINE			EXHAUST		
		Standby			Standby
Rated Engine Speed	rpm	1,800	Exhaust Flow (Rated Output)	ft³/min (m³/min)	296.6 (8.4)
			Exhaust Temp (Rated Output - Post Silencer)	°F (°C)	930 (499)

EPA Certified Stationary Emergency

DIMENSIONS AND WEIGHTS*





Weights and Dimensions

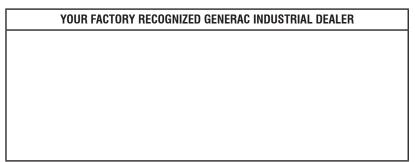
Unit Weight - Ibs	Unit Weight with Skid - Ibs	Dimensions (L x W x H) in
2,811	2,849	84.2 x 35.0 x 91.7

25kW Fuel Consumption	with fuel tank 103.4" 35" x 91.7"
Fuel Tank Gross Total Capacity	240 103.4 33 X 91.7
Fuel Tank Gross Usable Capacity	229
Fuel Tank Net Usable Capacity (Run Hours Based on Net Usable Capacity)	206
Run Hours 100% Load	98
Run Hours 75% Load	125
Run Hours 50% Load	161

Sound Emission Data

Rated Load Sound Output at 23ft - dB(A) 65

^{*} All measurements are approximate and for estimation purposes only. Drawing is for illustration purposes only, not to scale.



Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.

EXHIBIT 8

Map showing nearest wetlands

