

Filed by:

Elizabeth Jamieson, Site Development Specialist II - SBA Communications 134 Flanders Rd., Suite 125, Westborough, MA 01581 860.605.7808 - EJamieson@sbasite.com

August 11, 2022

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

Notice of Exempt Modification 10 Redwood Ln, Avon, CT 06001

Latitude: 41.772499 Longitude: -72.879999

T-Mobile #: CT11380C_Hardening

Dear Ms. Bachman:

T-Mobile currently maintains nine (9) antennas at the 110-foot level of the existing 105-foot Monopole Tower at 10 Redwood Ln., Avon, CT. The tower is owned by SBA Towers, LLC and the property is owned by the Connecticut Water Company. T-Mobile now intends to add one (1) Generac RD048 Diesel generator to a proposed 4' x 6' concrete pad extension, within an existing fenced in compound.

Planned Modifications:

Ground work only Install New:

- (1) Generac RD048 48kW AC Diesel generator 229 gallon double walled self-contained tank with fuel sensor. Requires two (2) 12-minute run cycles bi-weekly.
- (1) 4' x 6' concrete pad extension

This facility was approved on July 25, 2000, by the Town of Avon Planning and Zoning Commission under Application #3624-3626 for Site Plan and Special Exception. The P&Z approved the removal of the existing 80-foot tower and replace with a 110-foot wireless telecommunications facility. Please see attached.



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 Avon's Town Manager, Brandon Robertson, Hiram Peck III, Dir. Of Planning & Community Development, and Connecticut Water Company as property owner. (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,

Elizabeth Jamieson

Site Development Specialist II

SBA COMMUNICATIONS CORPORATION

134 Flanders Rd., Suite 125

Westborough, MA 01581

860.605.7808 + C

EJamieson@sbasite.com



Exhibit List

Exhibit 1	Check Copy
Exhibit 2	FedEx Labels
Exhibit 3	Property Card
Exhibit 4	Property Map
Exhibit 5	Zoning Documents
Exhibit 6	Construction Drawings
Exhibit 7	Generator Specifications
Exhibit 8	Wetlands Map

Attachments cc:

cc:

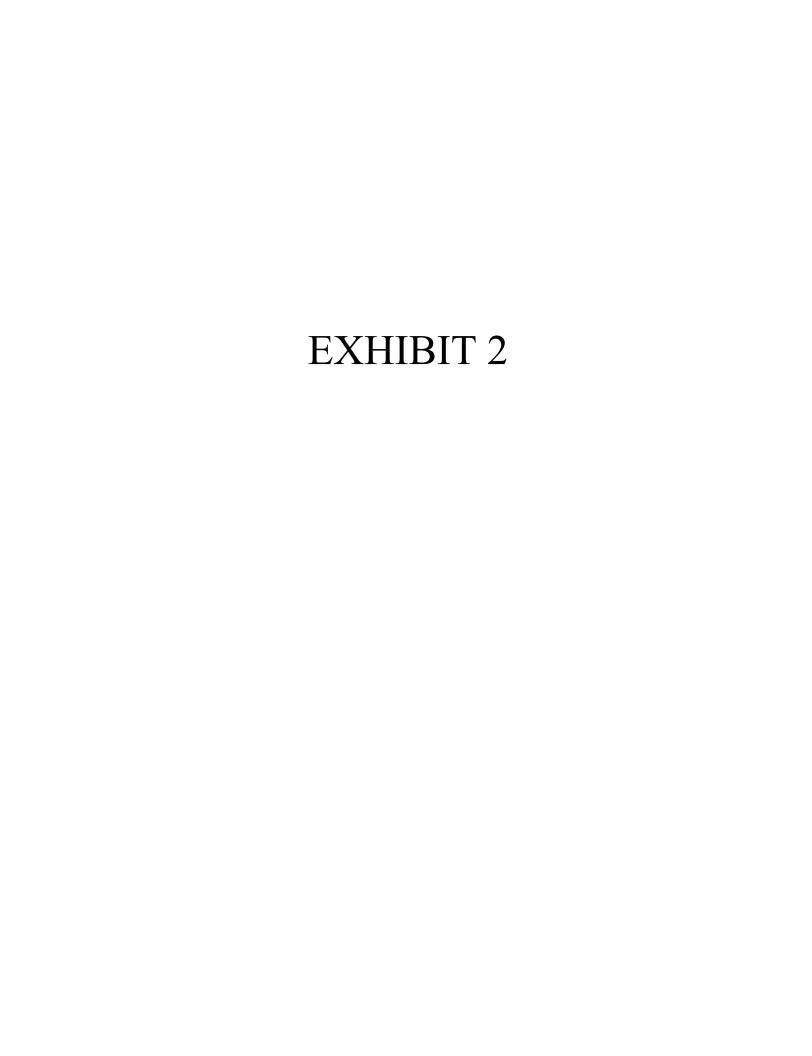
Brandon Robertson, Town Manager/ with attachments Avon Town Hall, 60 West Main St., (Route 44) Avon, CT 06001

Hiram Peck III, AICP, CFM, ZEO, Dir. Of Planning & Community Development / with attachments Avon Town Hall, 60 West Main St., (Route 44) Avon, CT 06001

Connecticut Water Company
93 West Main St., Clinton, CT 06413

EXHIBIT 1

Copy of Check





- 1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
- 2. Fold the printed page along the horizontal line.
- 3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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.



- 1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
- 2. Fold the printed page along the horizontal line.
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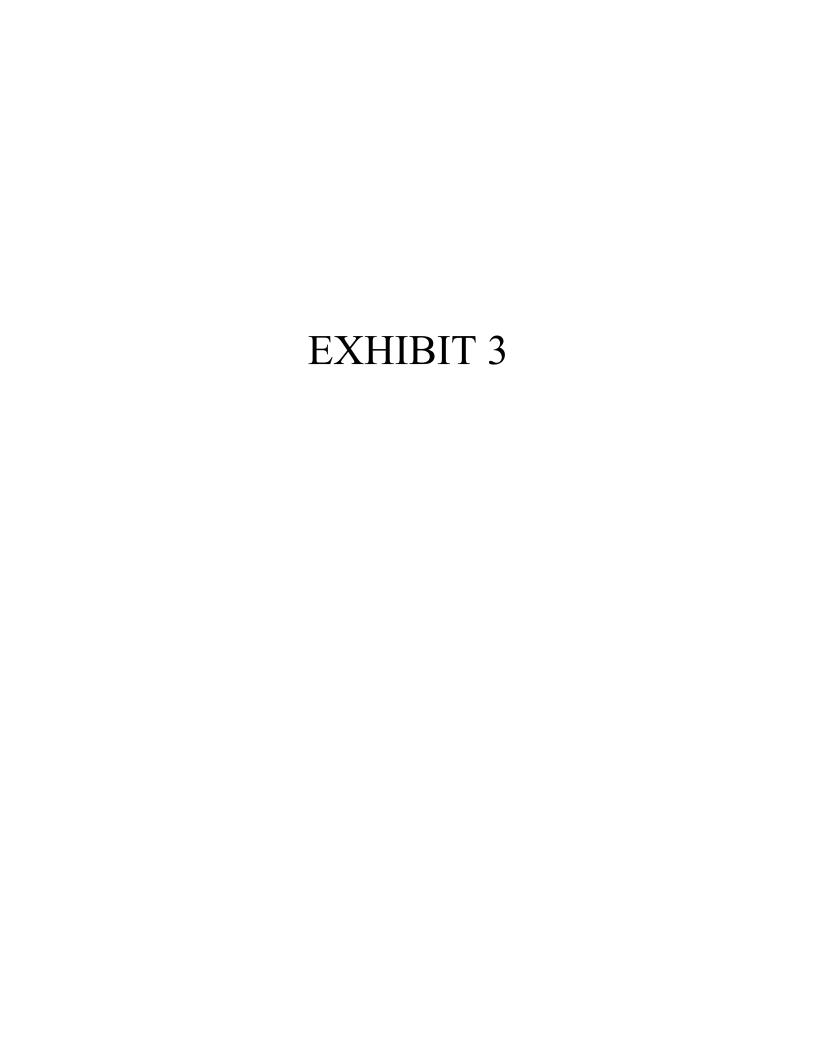
- 1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
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Card 01 of 01 card

Net assessment

Town of Avon Indetermined Property Card

Property at 00010 REDWOOD LANE

Prop ID 3680010

Printed 14-Feb-2019 10:35 PM Design and Layout (C) Right/Angles

Owner name: AVON WATER COMPANY
Second name: C/O CONNECTICUT WATER CO
Address: 93 WEST MAIN STREET

City/state: CLINTON CT Zip: 06413

Location Information

Map:	Clerk map:	
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Lot: 3680010 Neigh.: FW Zone: Vol: 218 Page: 362

Assessments Exemptions Last sale

Assmt category Qty Amount Exempt Cat Amount Sale date: 02-Feb-1989 Pub Util Land 1.00 7,000 Sale price:

Sale valid:
Values

Mkt value :

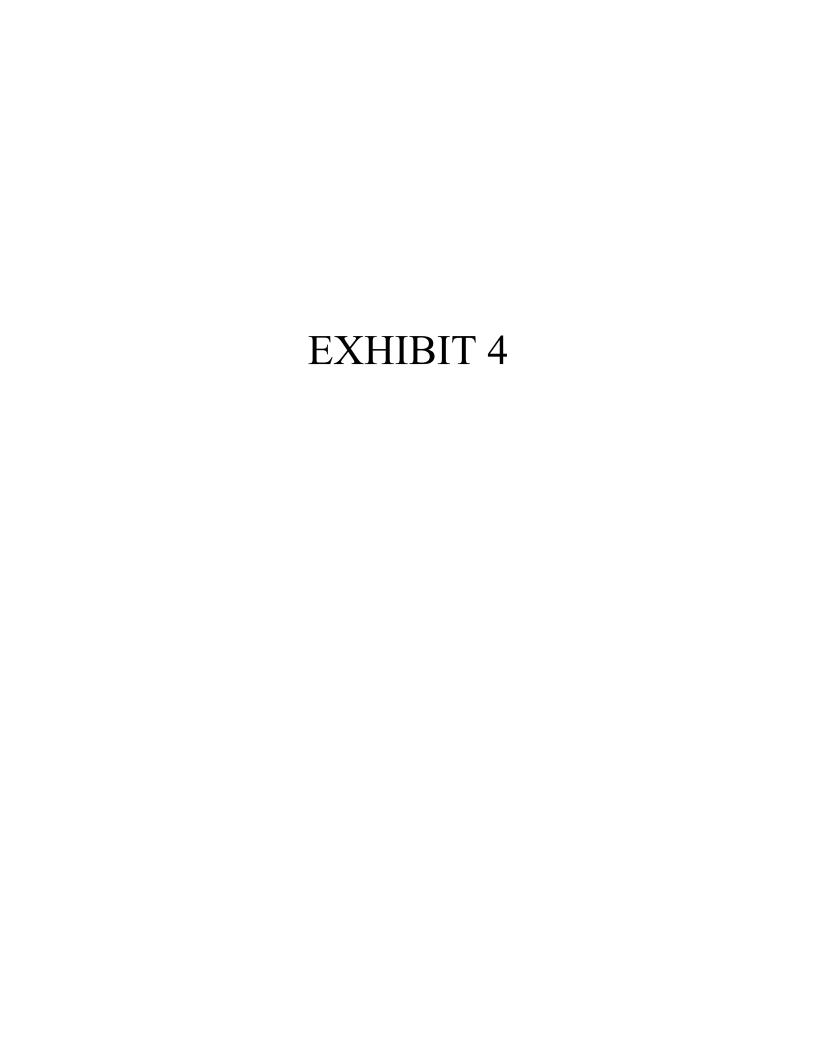
Assmt/sale:

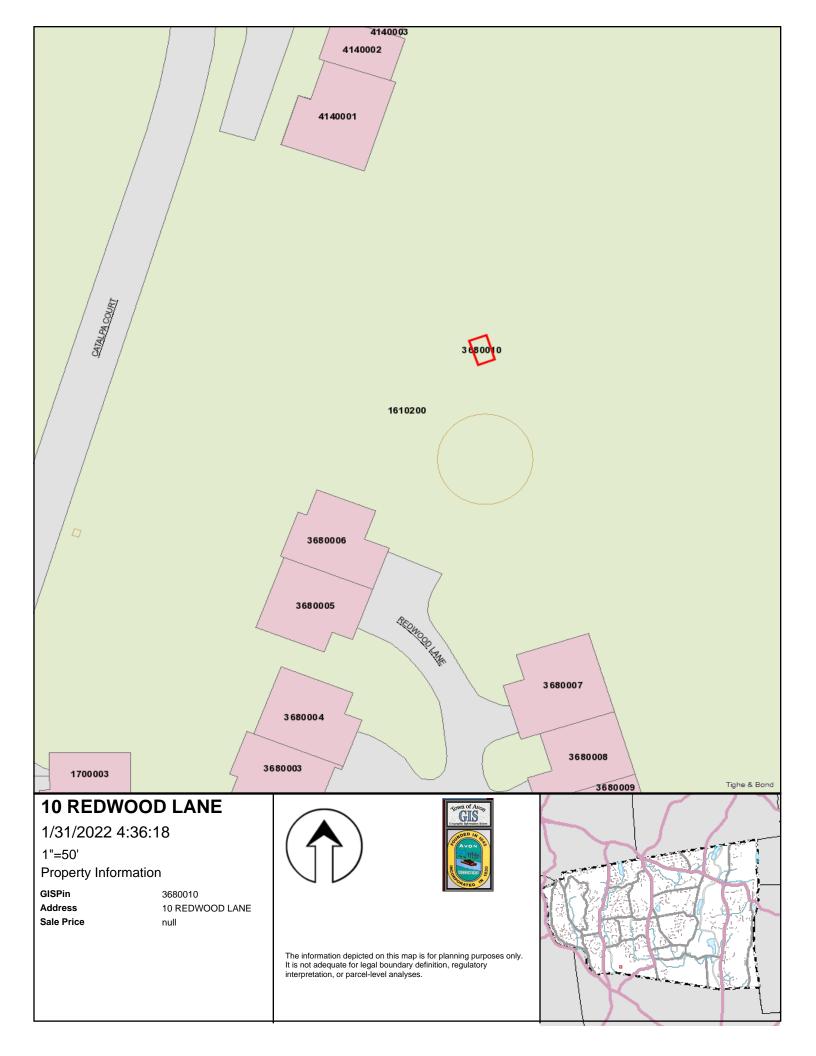
Cost value: 10,000

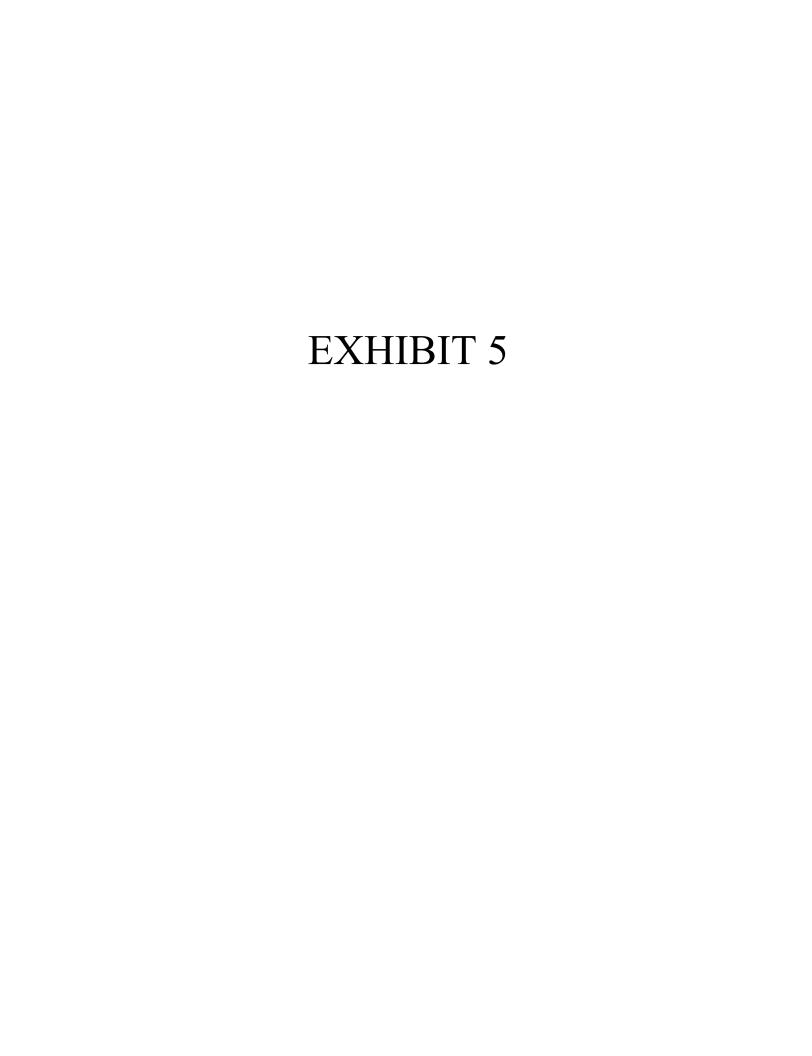
Summary Utilities Sales ratios
Total assessments 7,000 Water None Cost/sale:
Total exemptions Sewer None Mkt/sale:

None

7,000 Gas









TC JN AVON

Site Name: AVON

Site #: 4275-009/0014 98

60 West Main St. Avon, CT 06001-3743

POLICE, FIRE & MEDICAL EMERGENCY - 911

TOWN MANAGER'S OFFICE

Tel. (860) 409-4300 Fax (860) 409-4368

ACCOUNTING

Tel. (860) 409-4339 Fax (860) 409-4366

ASSESSOR'S OFFICE

Tel. (860) 409-4335 Fax (860) 409-4366

BUILDING DEPARTMENT

Tel. (860) 409-4316 Fax (860) 409-4364

COLLECTOR OF REVENUE

Tel. (860) 409-4306 Fax (860) 677-8428

ENGINEERING DEPARTMENT

Tel. (860) 409-4322 Fax (860) 409-4364

FINANCE DEPARTMENT

Tel. (860) 409-4339

Fax (860) 409-4366

FIRE MARSHAL Tel. (860) 409-4319

Fax (860) 409-4364

LANDFILL

281 Huckleberry Hill Rd. Tel. (860) 673-3677

PLANNING & ZONING

Tel. (860) 409-4328

Fax (860) 409-4364

POLICE DEPARTMENT

Tel. (860) 409-4200

Fax (860) 409-4206

Tel. (860) 409-4348

Fax (860) 409-4368

PUBLIC LIBRARY

281 Country Club Road Tel. (860) 673-9712 Fax (860) 675-6364

PUBLIC WORKS

11 Arch Road

Tel. (860) 678-6151

Fax (860) 673-0338

RECREATION AND PARKS

Tel. (860) 409-4332

Fax (860) 409-4366 Cancellation (860) 409-4365

REGISTRAR OF VOTERS

Tel. (860) 409-4350

Fax (860) 409-4368

SOCIAL SERVICES

Tel. (860) 409-4346 Fax (860) 409-4366

TOWN CLERK

Tel. (860) 409-4310

Fax (860) 677-8428

TDD HEARING IMPAIRED

Tel. (860) 409-4361

July 27, 2000

Mr. Thomas F. Flynn III

SBA Inc.

80 Eastern Boulevard

Glastonbury, CT 06033

Dear Mr. Flynn:

At a meeting held on Tuesday, July 25, 2000, the Planning and Zoning Commission of the Town of Avon voted as follows:

App. #3624 - The Avon Water Company, owner, SBA Inc., applicant, request for Special Exception under Section IV.A.4.a. of Avon Zoning Regulations to remove existing 80-foot tower and replace with a 110-foot wireless telecommunications facility, 10 Redwood Lane in Farmington Woods, Assessor's Map 17, Parcel 7, in a R-30 Zone. APPROVED WITH CONDITIONS

App. #3626 - The Avon Water Company, owner, SBA Inc., applicant, request for Site Plan Approval to remove existing tower and replace with 110foot wireless telecommunications facility, 10 Redwood Lane in Farmington Woods, Assessor's Map 17, Parcel 7, in a R-30 Zone. APPROVED WITH CONDITIONS.

The Commission approved App. #3624 subject to the following conditions:

- The color of the tower shall be matte gray. 1.
- The applicant shall post a bond in the amount of \$50,000 to provide for 2. removal of the tower if the tower is inactive for a period of one year or if the Town Engineer determines that it is a hazard.
- Approval is for 5 antenna clusters on the tower and ancillary cabinets and 3. sheds. Any modest changes in antenna appearance or structure or in structures on the ground may be approved by the Town Planner. If the Town Planner so chooses, such changes may be brought to the Commission for approval.

The Commission approved App. #3626 subject to the following condition:

Approval is for 5 antenna clusters on the tower and ancillary cabinets and sheds. Any
modest changes in antenna appearance or structure or in structures on the ground may be
approved by the Town Planner. If the Town Planner so chooses, such changes may be
brought to the Commission for approval.

In addition, please note that the Commission has adopted a standard condition of approval relating to inspections of the property as may be necessary, which is as follows: Until the final permanent certificate of occupancy is issued, Town staff members, officials, and consultants as designated by the Town Planner or the Chairman shall be authorized and permitted to conduct inspections upon the property.

Please note that prior to your Special Exception becoming effective, a certified copy must be filed with the Town Clerk. The fee is \$13 per page. Please return the enclosed Grant of Special Exception to this office for the Chairman's signature along with the recording fee (check should be payable to Town of Avon). No building permit shall be issued until this certification has been returned and the 15-day appeal period has expired.

Upon compliance with the foregoing conditions, the Chairman of the Planning and Zoning Commission has been authorized to sign the mylar maps for filing. This letter of approval shall be reproduced on the mylars. Please submit 1 set of fixed-line photo mylars and 4 copies. Please include a signature block for the Chairman's signature (sample enclosed).

Please note that this approval is valid for one year from the date of approval unless construction is in progress or unless an extension of time has been granted by the Commission. It is the applicant's responsibility to apply for renewal.

Sincerely yours,

Jean Frey, Clerk

Jean Frey

Planning and Zoning Commission

Enclosures

CERTIFIED MAIL 7099 3400 0010 2712 1020

cc: Building Official Town Engineer

Assessor

The Avon Water Company

APPROVED BY THE PLANNING AND ZONING COMMISSION OF THE TOWN OF AVON AT ITS MEETING ONAND SIGNED BY CHAIRMAN	
ACCORDING TO CGS SEC. 8-3i, ALL WORK IN CONNECTION WITH THE ABOVE SITE PLAN SHALL BE COMPLETED WITHIN FIVE (5) YEARS	1

Signature Block For Site Plan Approval:

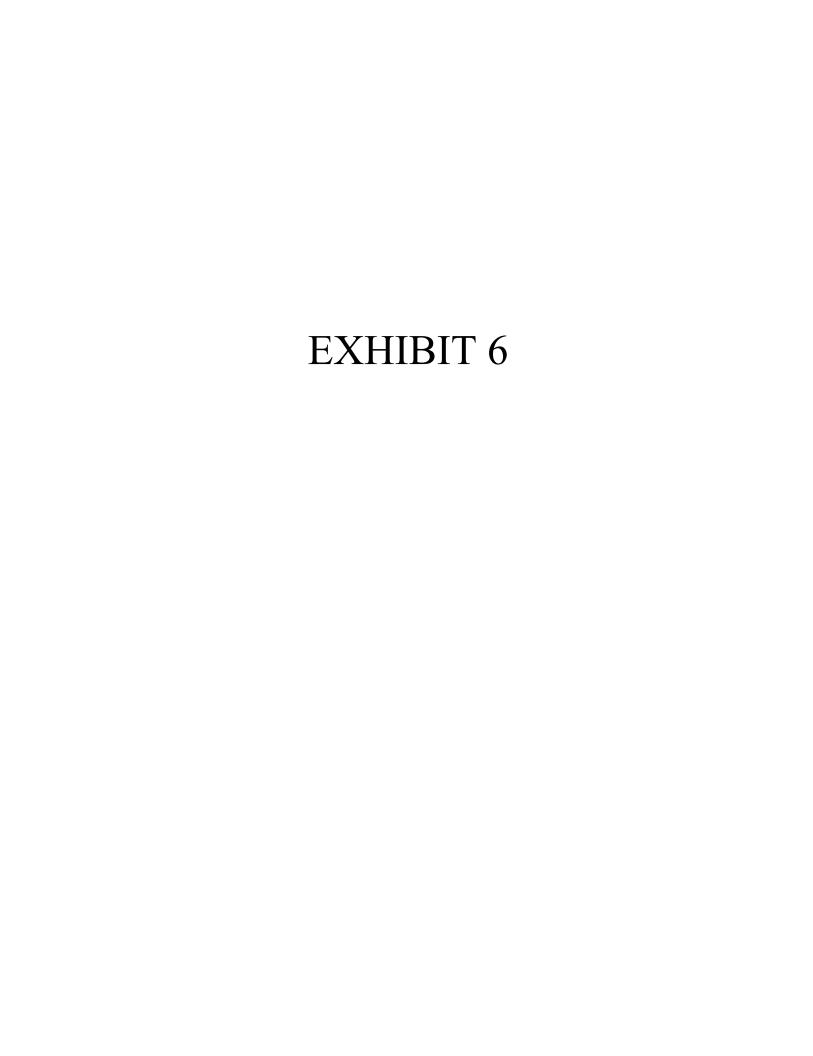
Signature block to go on each sheet.

Application #	3624
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TOWN OF AVON, CONNECTICUT

GRANT OF VARIANCE AND SPECIAL EXCEPTION

On the application ofSBA_Inc.
the Planning and Zoning Commission of the Town of Avon, Connecticut, did grant a
Variance
X Special Exception
effective on the 25th day of July , 20 00, in relation
to the following property:
Street Address: 10 Redwood Lane
Description of Premises:
Assessor's Aerial Map No. 17
Lot No. 7
Owner of Record: The Avon Water Company
Volume 218 Page 362
Avon Land Records
This grant is made in accordance with the provisions of Section
the regulations of the Commission. The applicant was granted the right to:
remove existing 80-foot tower and replace with a 110-foot wireless
telecommunications facility subject to conditions.
Certified this, 20,
By
Chairman, Planning and Zoning Commission



SBA AVON/RT 177

10 REDWOOD LANE AVON, CT 06001 HARTFORD COUNTY

SITE NO.: CT11380C

SITE TYPE: 110'± MONOPOLE

PROJECT TYPE: NATIONAL HARDENING PROJECT

SHEET INDEX

DESCRIPTION

GENERAL NOTES

GENERATOR DETAILS

COMPOUND & EQUIPMENT PLANS

GENERATOR SPECIFICATIONS 1

GENERATOR SPECIFICATIONS 2

ELECTRIC & GROUNDING DETAILS

TITLE SHEET

SHEET NO.

GN-1

T-MOBILE TECHNICIAN SITE SAFETY NOTES

DATE:

DATE:

DATE:

LOCATION

SPECIAL RESTRICTIONS

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

OTHER/SPECIAL: NONE

GENERAL NOTES

APPROVALS

CONSTRUCTION:

RF ENGINEERING:

PROJECT MANAGER:

- 1. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL 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.
- 2. 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.
- 3. 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.
- 4. 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
- 5. 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.
- 6. 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.
- 7. 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.
- 8. 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.
- 9. 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.
- 10. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY CONSTRUCTION CONTROL SURVEYS, ESTABLISHING AND MAINTAINING ALL LINES AND GRADES REQUIRED TO CONSTRUCT ALL IMPROVEMENTS AS SHOWN HEREIN.
- 11. 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.
- 2. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR

SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.

ZONING/SITE ACQ.:

OPERATIONS:

TOWER OWNER:

DATE:

DATE:

DATE:

- 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 ANY NATURE.
- 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 REPRESENTATIVE.
- 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



VICINITY MAP SCALE: 1" = 1000'-0"

DIRECTIONS

FROM COMMERCE WAY TRAVELING NE TOWARDS N BOUNDARY RD/S WASHINGTON ST, CONTINUE ONTO S. WASHINGTON ST TO TAKE A RIGHT ONTO MA-123 E, TURN LEFT TO MERGE ONTO I-495 N TOWARD MANSFIELD, MARLBORO, FOLLOW I-495 N, I-90 W AND I-84 TO STATE HWY 508 IN FARMINGTON, TAKE EXIT 39 FROM I-84, TAKE CT-4 TO CATALPA CT IN AVON, CONTINUE ONTO STATE HWY 508, STATE HWY 508 TURNS SLIGHTLY RIGHT AND AND BECOMES CT-4 W, TURN RIGHT ONTO CT-167 N, TURN RIGHT ONTO CT-167 N, TURN LEFT ONTO HERITAGE DR, TURN RIGHT TO STAY ON HERITAGE DR, TURN LEFT ONTO BYRON DR, TURN RIGHT ONTO CATALPA CT, DESTINATION WILL BE ON THE RIGHT

PROJECT SUMMARY

ELECTRICAL CODE: 2017 NATIONAL ELECTRICAL CODE

DISCREPANCIES AT THE CONTRACTOR'S EXPENSE.

FOR THE PURPOSE OF PROVIDING PUBLIC CELLULAR SERVICE.

POTABLE WATER OR SANITARY SERVICE IS NOT REQUIRED.

BUILDING CODE: 2018 CONNECTICUT STATE BUILDING CODE

NO OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES REQUIRED.

ADA COMPLIANCE NOT REQUIRED.

STRUCTURES AND ANTÉNNAS.

SITE NOTES

REV.

NO.

0

SITE NUMBER:	CT11380C
SITE NAME:	SBA AVON/RT 177
SBA SITE NUMBER:	CT01498-S
SBA SITE NAME:	AVON
SITE ADDRESS:	10 REDWOOD LANE AVON, CT 06001
PROPERTY OWNER:	AVON WATER COMPANY; C/O CONNECTICUT WATER CO. 93 WEST MAIN STREET CLINTON, CT 06413
TOWER OWNER:	SBA TOWERS, LLC

SCOPE OF WORK

• 1 AUTOMATIC TRANSFER SWITCH

<u>INSTALL</u>

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

NEW CONSTRUCTION WILL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES.

1 GENERATOR

• 2 20A-1P BREAKERS

8501 CONGRESS AVENUE
BOCA RATON, FL 33487
PHONE: 561–226–9523

COUNTY:

HARTFORD

ZONING DISTRICT:

RESIDENTIAL R–30

STRUCTURE TYPE:

MONOPOLE

STRUCTURE HEIGHT:

110'±

APPLICANT: T-MOBILE NORTHEAST LLC
15 COMMERCE WAY, SUITE B
NORTON, MA 02766

ARCHITECT: CHAPPELL ENGINEERING ASSOCIATES, LLC.
201 BOSTON POST ROAD WEST, SUITE 101
MARLBOROUGH, MA 01752

STRUCTURAL ENGINEER: CHAPPELL ENGINEERING ASSOCIATES, LLC.
201 BOSTON POST ROAD WEST, SUITE 101
MARLBOROUGH, MA 01752

SITE CONTROL POINT: LATITUDE: 41.772160° N41°46'19.78" LONGITUDE: -72.879960° W72°52'47.86"

DO NOT SCALE DRAWINGS

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.

SPECIAL ZONING NOTE:

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 <u>ELIGIBLE FACILITY REQUEST</u>, 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

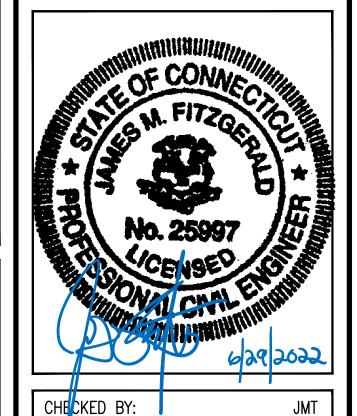
15 COMMERCE WAY, SUITE B NORTON, MA 02766 (508) 286-2700



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



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



APPROVED BY: JMT

	SUBMITTALS				
		JDMITTALS			
REV.	DATE	DESCRIPTION	BY		
0	05/31/22	ISSUED FOR CONSTRUC	TION JRV		

SITE NUMBER:
CT11380C

SITE ADDRESS: 10 REDWOOD LANE AVON, CT 06001

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1

1815.49

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 REQUIREMENTS
- 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:
- 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 CYLINDER TESTS THAT COMPRESSIVE STRENGTH HAS BEEN ATTAINED.

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 (¾"ø) 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 STEFL
- 6. ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.

SOIL COMPACTION NOTES FOR SLAB ON GRADE:

- 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.
- 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 SPECIFIED.
- 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 USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
- 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.
- 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 NOT BLOCKED.

T-MOBILE NORTHEAST LLC

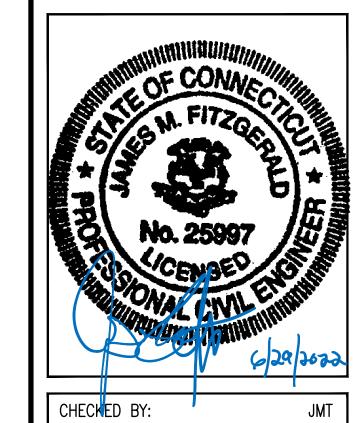
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APPROVED BY: JMT

0	05/31/22	ISSUED FOR CONSTRUCTION	JRV
REV.	DATE	DESCRIPTION	BY
	SI	UBMITTALS	

SITE NUMBER: CT11380C

SITE ADDRESS: 10 REDWOOD LANE AVON, CT 06001

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-1

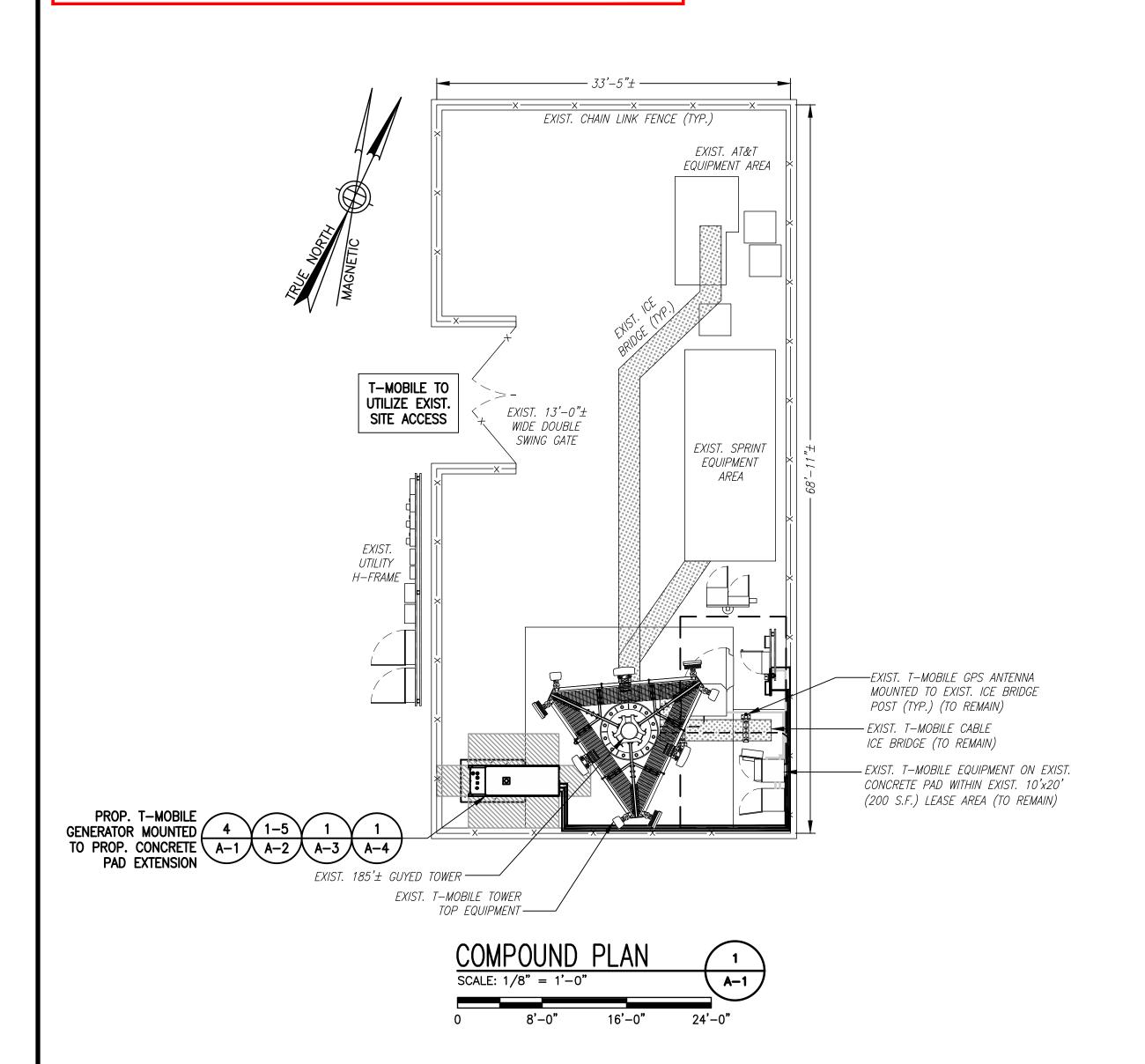
1815

SPECIAL PRE-CONSTRUCTION WORK NOTE (SBA-PROVIDED TOWER STRUCTURAL ANALYSIS SPECIAL EQUIPMENT INSTALLATION REQUIREMENTS):
GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL SPECIAL OR SUPPLEMENTAL ADDITIONAL TOWER-MOUNTED EQUIPMENT PER RECOMMENDATIONS FROM SBA-PROVIDED TOWER STRUCTURAL ANALYSIS FOR ANY SPECIAL SHIELDING OF TOWER TOP EQUIPMENT AND FOR ANY SPECIAL FEEDLINE BUNDLING OR RELOCATION.

SPECIAL CONSTRUCTION NOTE:
GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL ANTENNA MOUNT STRUCTURAL AUGMENTS (STRUCTURAL MODIFICATIONS) AT T-MOBILE'S RAD/VERTICAL EQUIPMENT

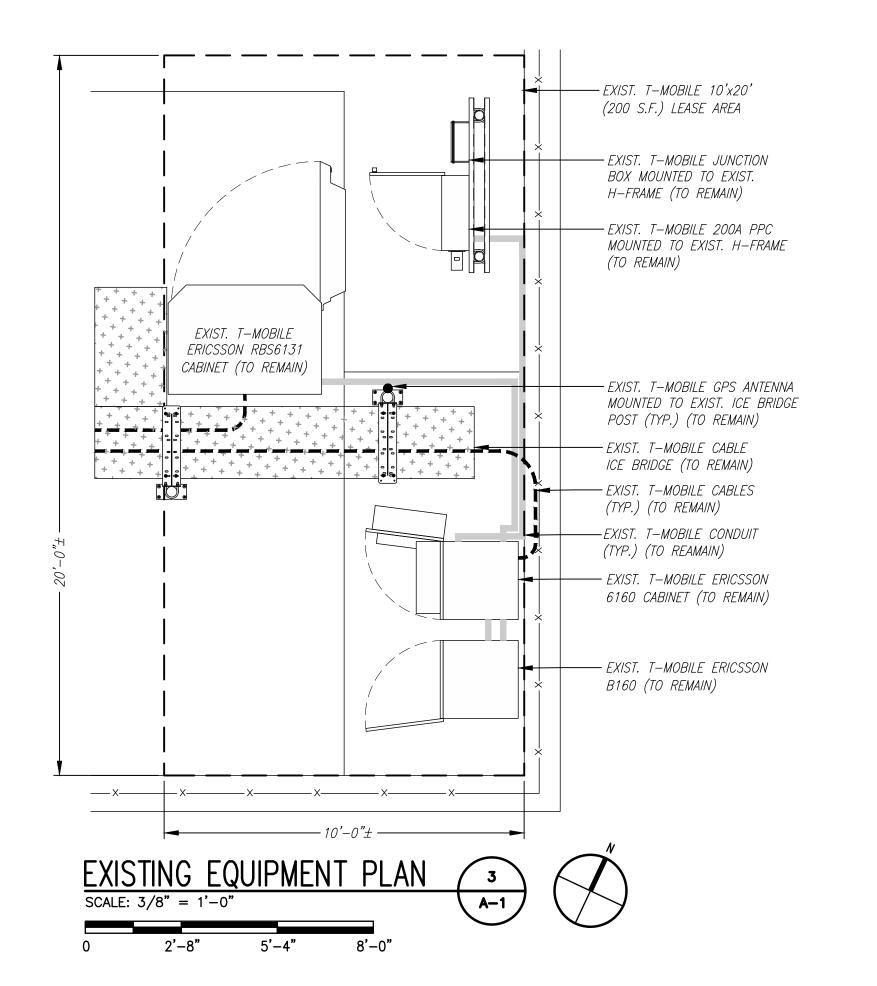
SPACE PER RECOMMENDATIONS FROM SBA-PROVIDED ANTENNA MOUNT STRUCTURAL

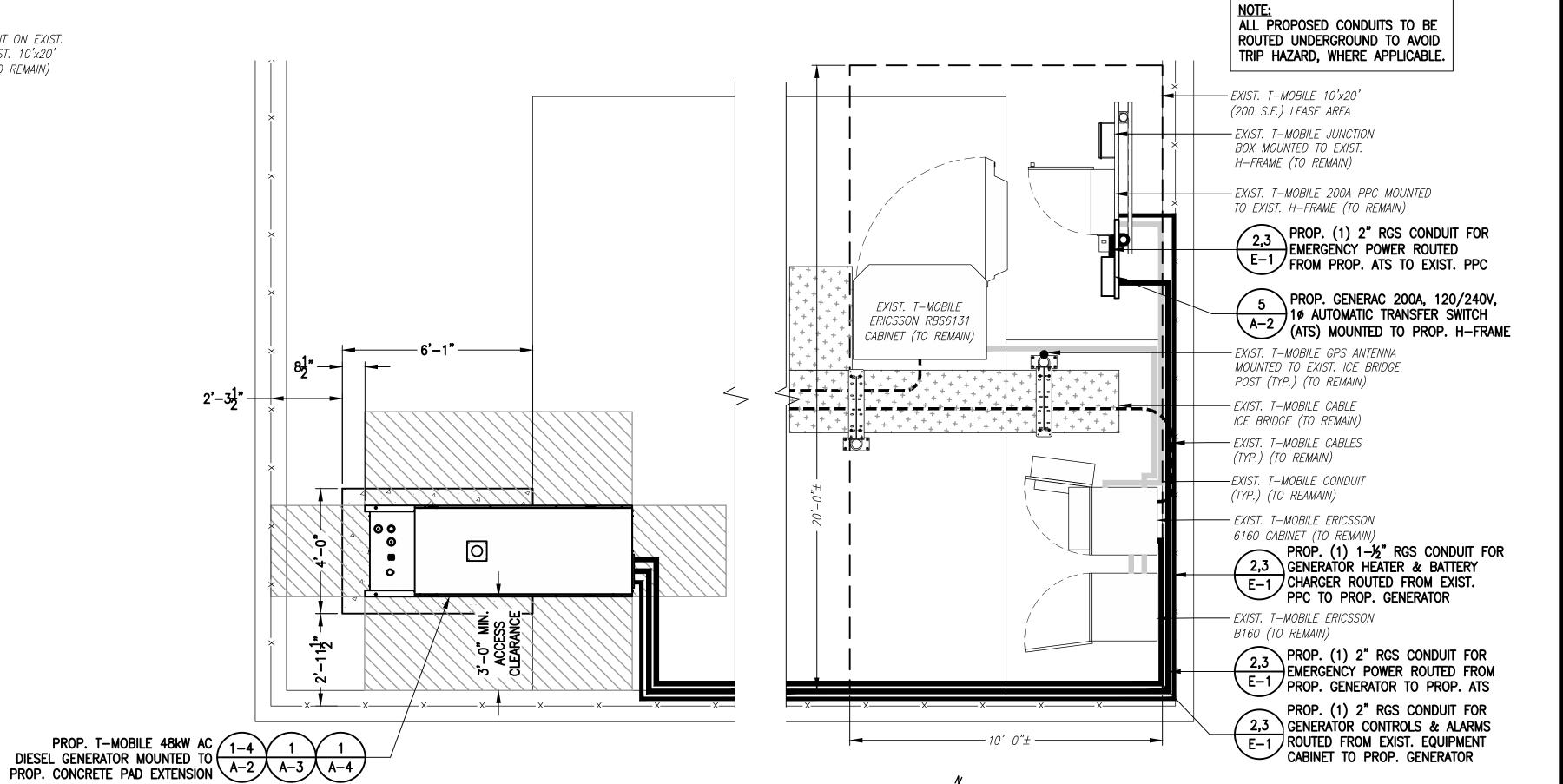
ANALYSIS AND ANY SUPPLEMENTAL CONSTRUCTION DRAWINGS (PROVIDED BY OTHERS).





EXISTING EQUIPMENT PHOTO 2
SCALE: N.T.S.





PROPOSED EQUIPMENT PLAN

0 2'-8" 5'-4" 8'-0"

T-MOBILE NORTHEAST LLC

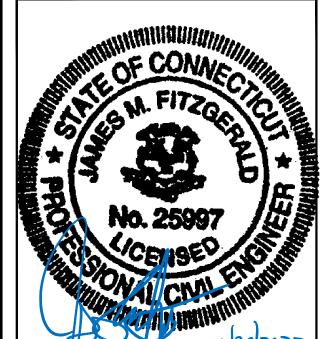
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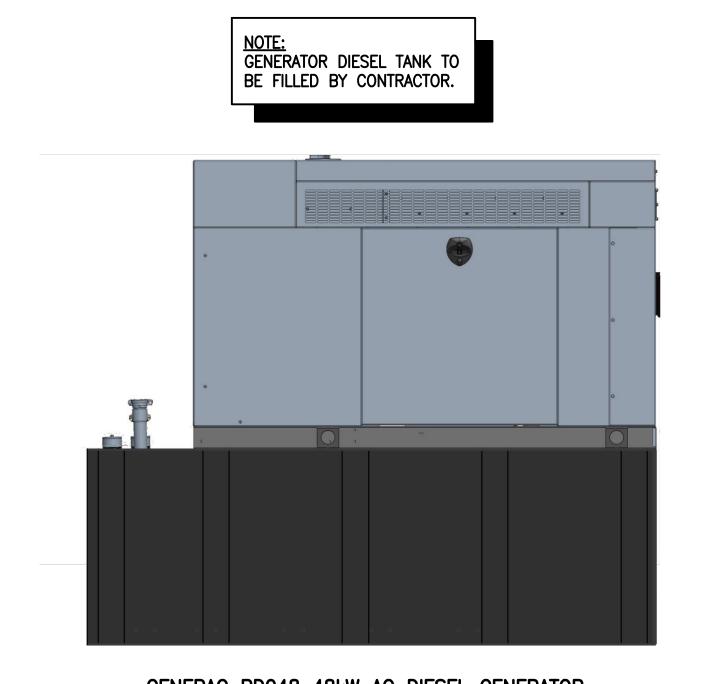
SHEET TITLE

COMPOUND & EQUIPMENT PLANS

SHEET NUMBER

A-

1815.49



GENERAC RD048 48kW AC DIESEL GENERATOR DIMENSIONS: 103.4"L x 35.0"W x 90.0"H WEIGHT: 2,954 lbs QUANTITY: TOTAL OF 1

GENERATOR DETAIL SCALE: N.T.S.

NOTE:
CONTRACTOR TO VERIFY 3"
MIN. FROM EDGE OF CONCRETE
TO NEW MOUNTING BOLT.

PROP. GENERATOR

EXIST./PROP. CONCRETE PAD EXTENSION —

PROP. ½"Ø HILTI KWIK BOLT TZ STAINLESS STEEL ANCHOR BOLT WITH 2" MIN.

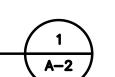
EMBEDMENT IN CONCRETE 1CC-ESR-1917,

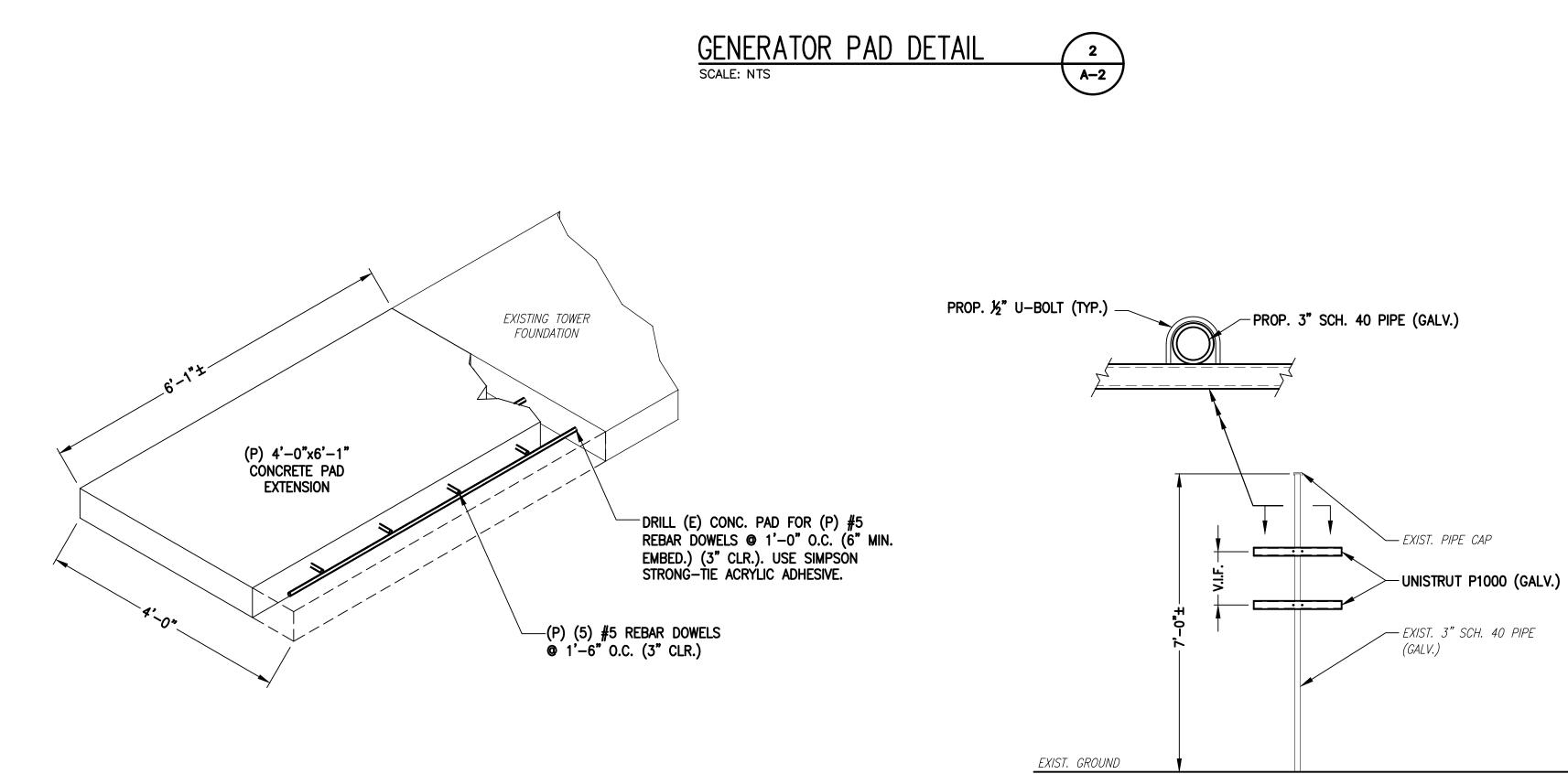
MANUFACTURER'S SPECIFICATIONS (TYP.)

LARR 25701, EACH CORNER PER

(SPECIAL INSPECTION REQUIRED) -

GENERATOR MOUNTING DETAIL SCALE: N.T.S.





EXIST./PROP. CONCRETE

PAD EXTENSION ___

T-MOBILE NORTHEAST LLC

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PROP. T-MOBILE 48kW AC DIESEL GENERATOR (GENERAC P/N RD048)

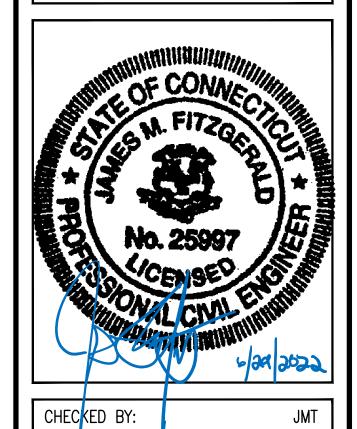
- EXIST. OR PROP. CRUSHED STONE



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SUBMITTALS REV. DATE DESCRIPTION

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SHEET TITLE

GENERATOR DETAILS

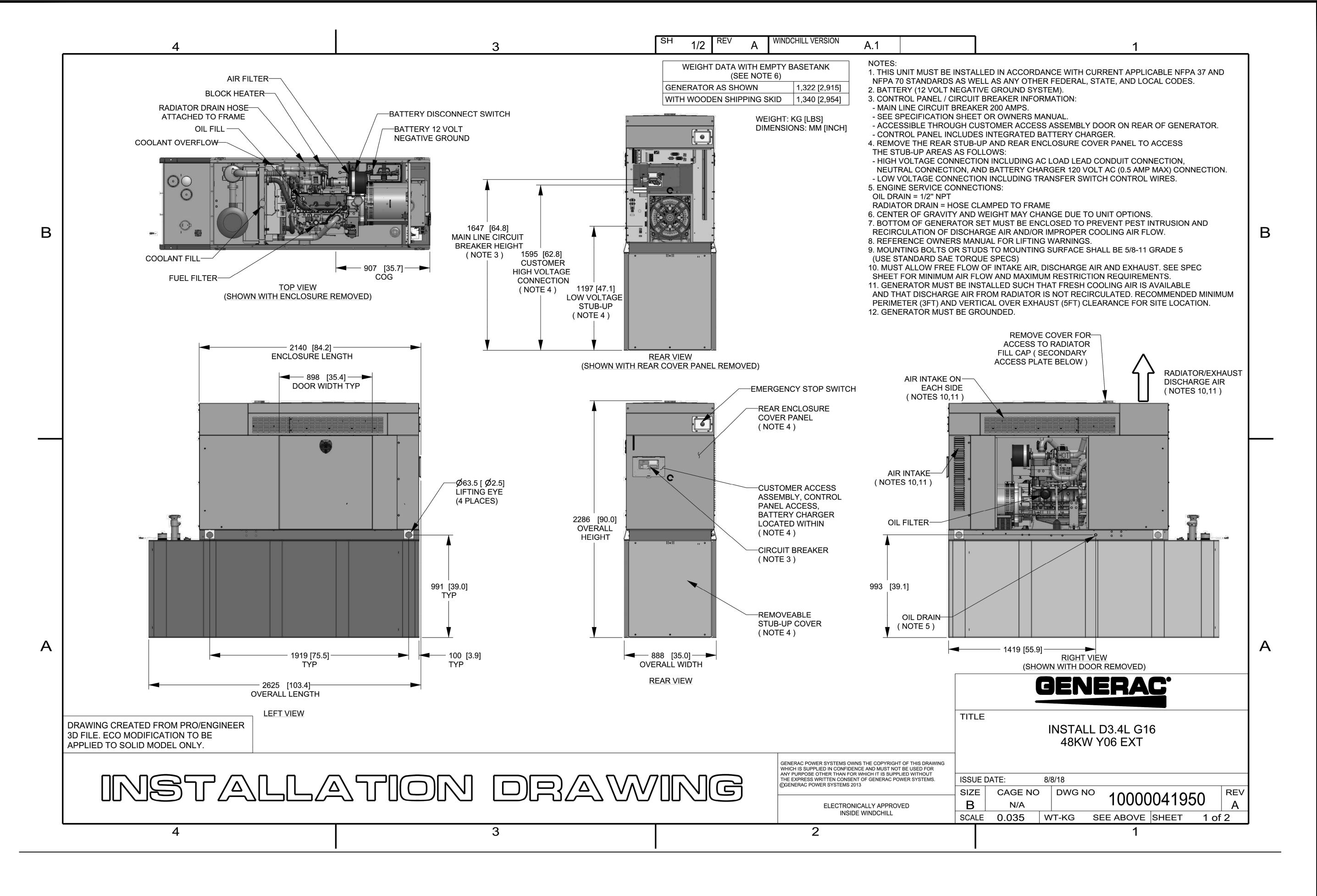
SHEET NUMBER

A-2

A-2

CONCRETE PAD EXTENSION SCALE: N.T.S.

A-2



T-MOBILE NORTHEAST LLC

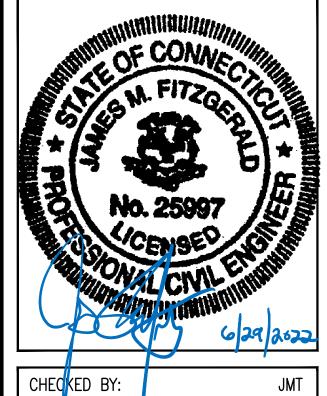
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APPROVED BY: JMT

SUBMITTALS REV. DATE DESCRIPTION B
REV. DATE DESCRIPTION B
0 05/31/22 ISSUED FOR CONSTRUCTION JE

SITE NUMBER: CT11380C

SITE ADDRESS: 10 REDWOOD LANE AVON, CT 06001

SHEET TITLE

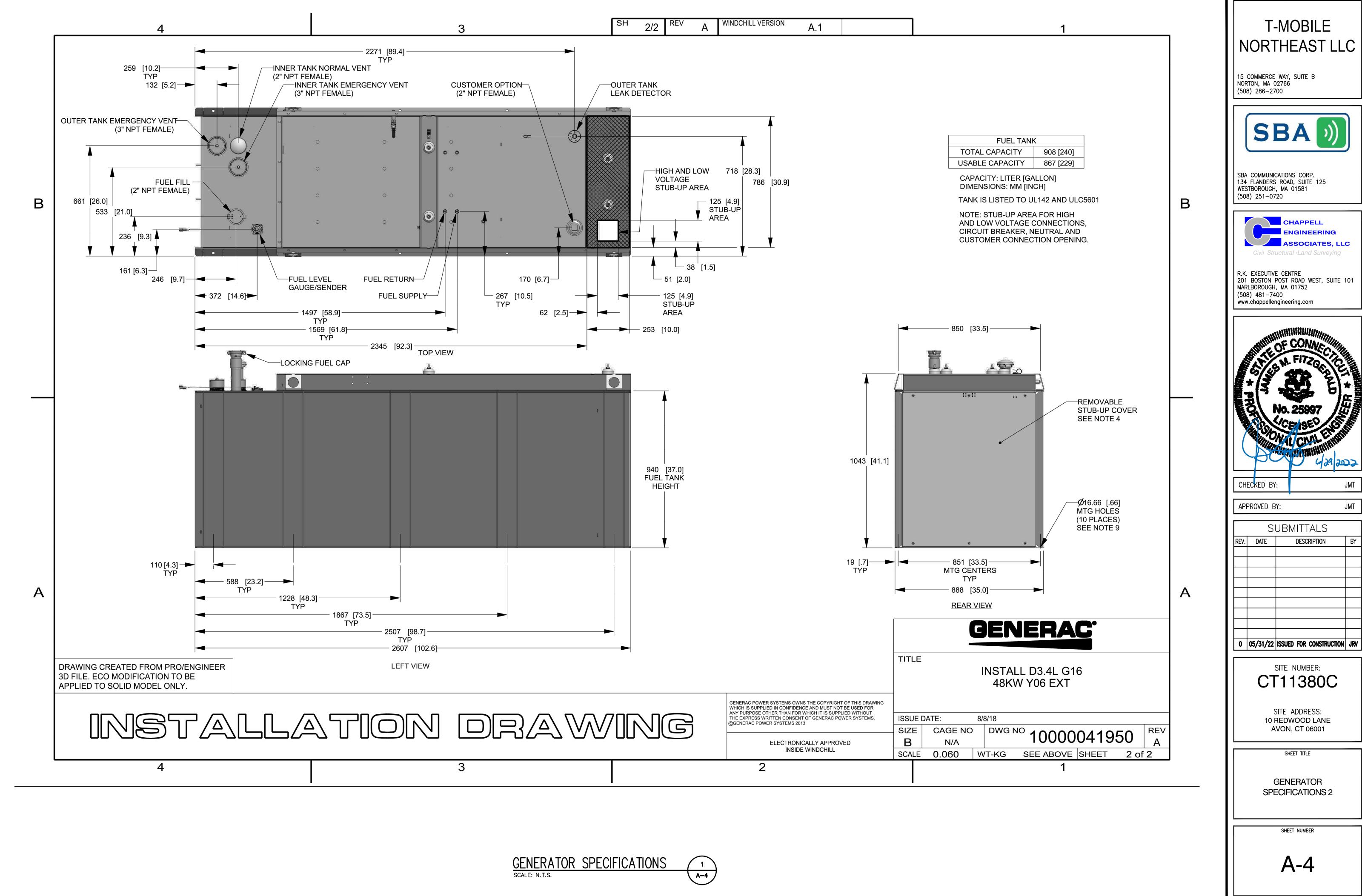
GENERATOR
SPECIFICATIONS 1

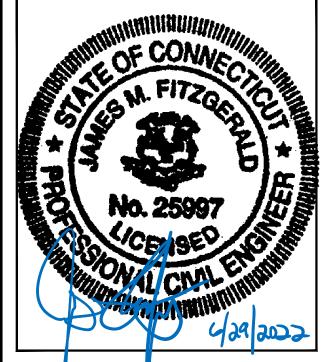
SHEET NUMBER

A-3

GENERATOR SPECIFICATIONS

A-3







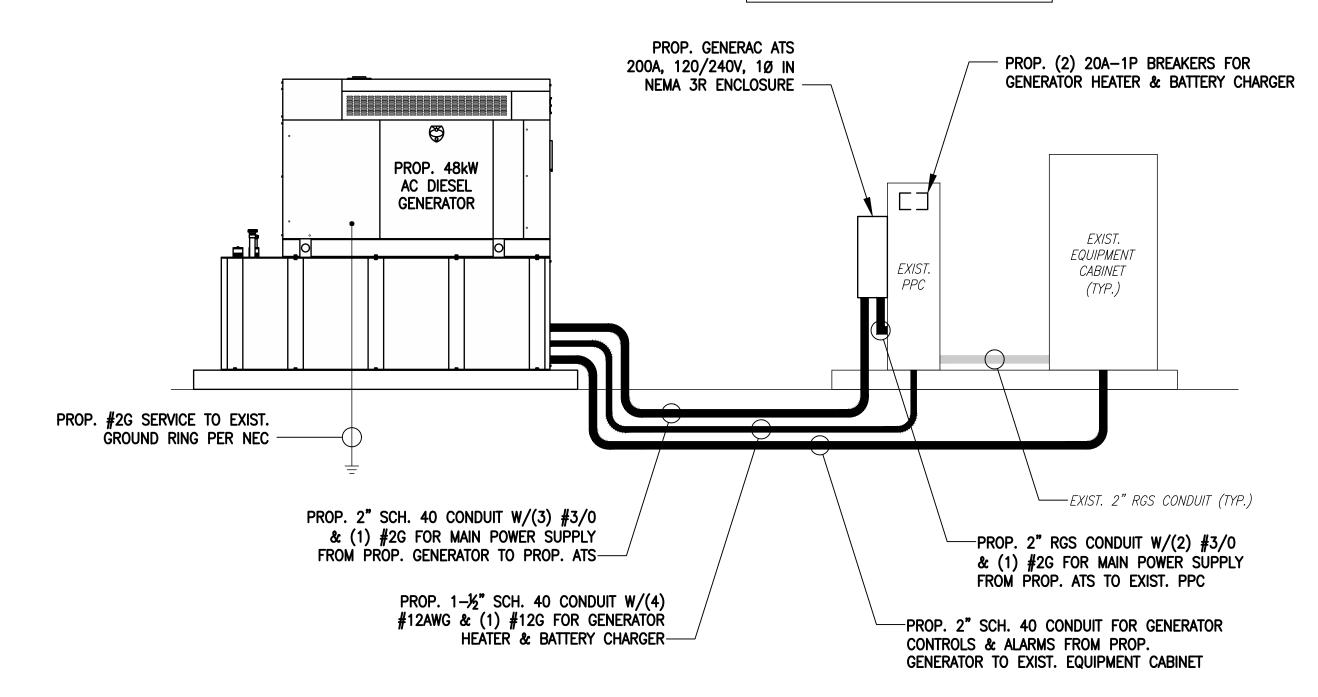


EXISTING POWER PANEL PHOTO

SCALE: NOT TO SCALE

1
E-1

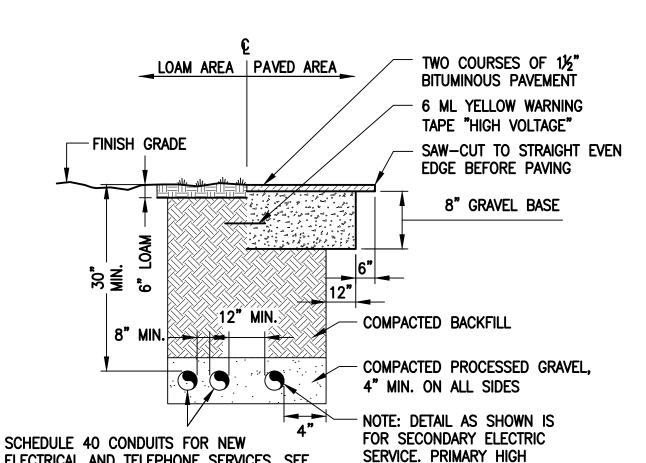
NOTE:
CUT BACK (E) MAIN POWER CONDUIT, AS REQUIRED, & RECOONECT TO (P) ATS.



ONE-LINE POWER DIAGRAM

SCALE: NOT TO SCALE

E-1

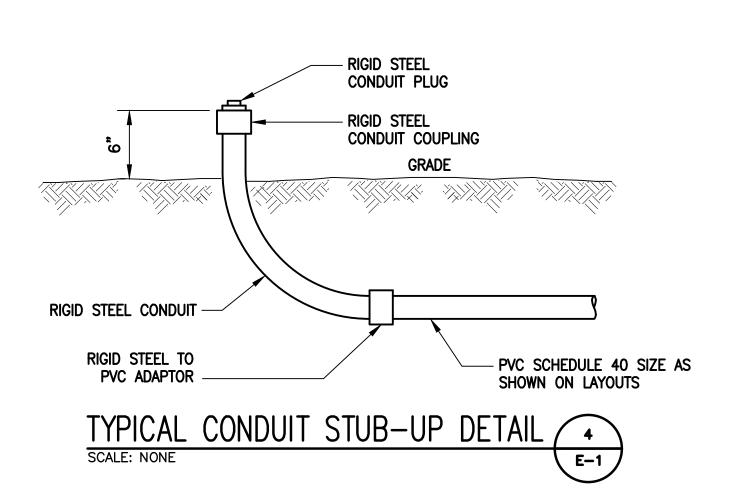


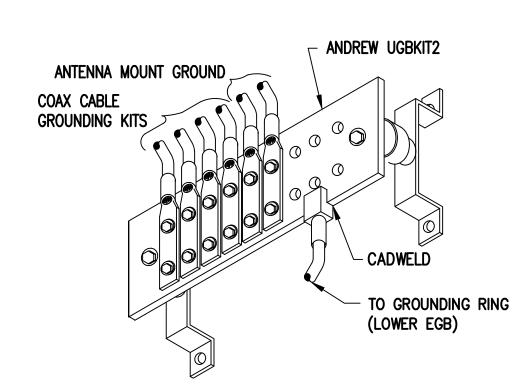
VOLTAGE SERVICE REQUIRES

4" CONCRETE ENCASEMENT.

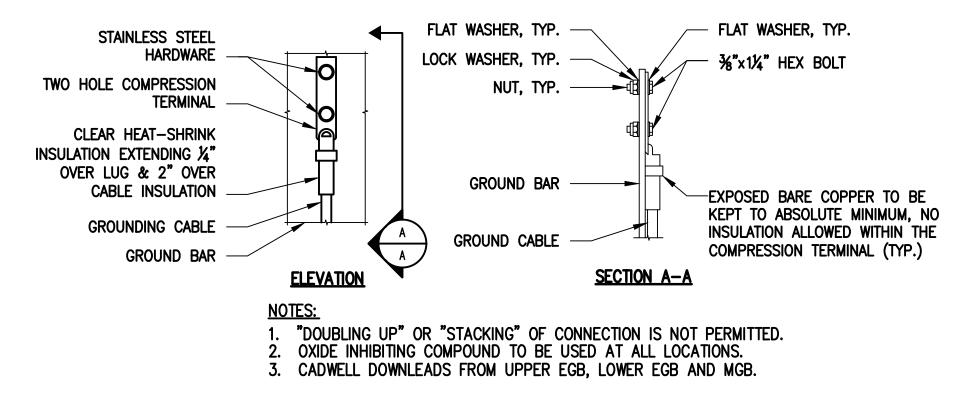
ELECTRICAL AND TELEPHONE SERVICES. SEE UTILITY AND SITE PLANS. PROVIDE APPROVED PULL BOXES AS REQUIRED, AND COORDINATE INSTALLATION W/ALL UTILITY COMPANIES FOR INTERFACING AT TERMINATION POINTS. PROVIDE FULL LENGTH PULL ROPES (TYP.).

BURIED CONDUIT DETAIL 3
SCALE: NOT TO SCALE









TYPICAL GROUND BAR CONNECTIONS DETAIL 6
SCALE: NOT TO SCALE E-1

ELECTRICAL AND GROUNDING NOTES

- 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 OR SCHEDULE 80 PVC (AS PERMITTED BY CODE) AND WHERE REQUIRED IN LIQUID TIGHT FLEXIBLE METAL OR NONMETALLIC 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
- 22. CONTRACTOR SHALL CONDUCT ANTENNA, COAX, AND LNA RETURN-LOSS AND DISTANCE- TO-FAULT MEASUREMENTS (SWEEP TESTS) AND RECORD RESULTS FOR PROJECT CLOSE OUT.

T-MOBILE NORTHEAST LLC

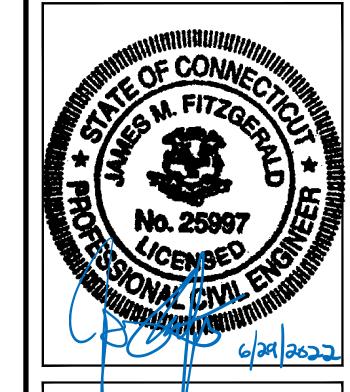
15 COMMERCE WAY, SUITE B NORTON, MA 02766 (508) 286-2700



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



APPROVED BY: JMT

	S	UBMITTALS	
REV.	DATE	DESCRIPTION	BY
0	05/31/22	ISSUED FOR CONSTRUCTION	JRV

SITE NUMBER: CT11380C

SITE ADDRESS: 10 REDWOOD LANE AVON, CT 06001

SHEET TITLE

ELECTRIC & GROUNDING DETAILS

SHEET NUMBER

E-

1815.4

EXHIBIT 7

Generac RD048 48 KW 48kw Diesel Specifications

Model Number 48kW: G0071940

INDUSTRIAL DIESEL GENERATOR SET EPA Certified Stationary Emergency

Standby Power Rating 48 kW. 60 Hz





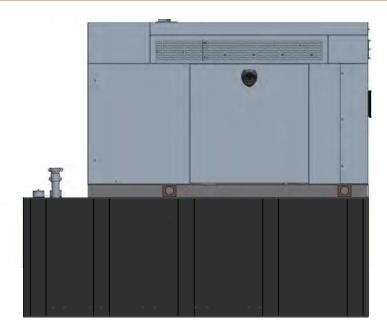


Image used for illustration purposes only

CODES AND STANDARDS

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



UL2200, UL508, UL489, UL142



CSA C22.2





BS5514 and DIN 6271



SAE J1349



NFPA 37, 70, 99



ISO 3046, 8528, 9001



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



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.

RD048 3.4L

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

STANDARD FEATURES

ENGINE SYSTEM

- · Block Heater
- · Oil Drain Extension
- · Fan Guard
- · Factory Filled Oil & Coolant

GENERATOR SET

- . Sound Attenuated Aluminum Enclosure
- · Internal Genset Vibration Isolation
- · Separation of Circuits High/Low Voltage
- Wrapped Exhaust Piping
- · Standard Factory Testing
- Ready to Accept Full Load in <10 Seconds
- · External Emergency Stop Push Button

ENCLOSURE

- · Lockable Doors- Keyed Lock with Padlock Hasp
- · Rust Proof Hardware
- RhinoCoat[™] Textured Polyester Powder Coat

Electrical System

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

ALTERNATOR SYSTEM

- 2/3 Pitch
- · Skewed Stator
- · Sealed Bearings
- Low Temperature Rise (<120°C)
- Low THD (<5%)

Cooling System

GENERAC

- · 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

INDUSTRIAL

Fuel System

- · Primary Fuel Filter
- · Stainless Steel Fuel Lines

FUEL TANKS

- 48 Minimum Hour Run Time
- UL142 Listed
- · Lockable Fuel Cap

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 Event Run Log
- · Future Set Capable Exerciser · Incorrect Wiring Protection
- · Internal Fault Protection

- Common External Fault Capability
- · Governor Failure Protection
- · OBD2 Diagnostic Port

Alarms

- · Door Open
- · Fuel Level
- 90% Full
- 50% Low Fuel
- 10% Shutdown
- · Generator Running
- · Not in Auto
- · Common Shutdown

OPTIONAL SHIPPED LOOSE AND FIELD INSTALL KITS

GENERATOR SET

- Paint Kit
- o Scheduled Maintenance Kit

FUEL TANK

- o Fuel Fill Drop Tube
- o Spill Box
- 90% Fuel Audible Alarm
- o Tank Risers
- o Spill Box Drainback Kit
- o Vent Extension Support Kit
- o Overfill Prevention Valve

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC* INDUSTRIAL POWER

Negative

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General		Cooling System	
Make	Generac	Cooling System Type	Pressurized Closed Recovery
Cylinder #	4	Fan Type	Pusher
Туре	In-Line	Fan Speed (rpm)	2,029
Displacement - in ³ (L)	207.48 (3.4)	Fan Diameter - mm (in)	22 (559)
Bore - in (mm)	3.86 (98)		
Stroke - in (mm)	4.45 (113)	Fuel System	
Compression Ratio	18.5:1	•	
Intake Air Method	Turbocharged/Aftercooled	Fuel Type	Ultra Low Sulfur Diesel Fuel
Cylinder Head	Cast Iron OHV	Fuel Specification	ASTM
Piston Type	Aluminum	Fuel Pump Type	Mechanical Engine Driven Gear
Tioton Type	/ Harring III	Injector Type	Mechanical
Engine Coverning		Fuel Supply Line (mm/in)	7.94 (0.31) ID
Engine Governing		Fuel Return Line (mm/in)	7.94 (0.31) ID
Governor	Electronic	Fuel Filtering (microns)	10
Frequency Regulation (Steady State)	±0.25%		
Lubrication System		Engine Electrical System	
Oil Burn Tyno	Gear	System Voltage	12 VDC
Oil Pump Type		Battery Charger Alternator	Standard
Oil Filter Type	Full Flow Spin-On Canister	Battery Size	Group 27F
Crankcase Capacity - L (qts)	7.0 (7.4)	Battery Voltage	12 VDC

ALTERNATOR SPECIFICATIONS

Standard Model	Generac	Standard Excitation	Direct
Poles	4	Bearings	Sealed Ball
Field Type	Rotating	Coupling	Flexible Disc
Insulation Class - Rotor	F	Prototype Short Circuit Test	Yes
Insulation Class - Stator	Н	Voltage Regulator Type	Full Digital
Total Harmonic Distortion	<5%	Regulation Accuracy (Steady State)	±1.0%
Telephone Interference Factor (TIF)	<50		

Ground Polarity

RD048 | 3.4L | 48kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

OPERATING DATA

POWER RATINGS

Standby

Single-Phase 120/240 VAC @1.0pf 48 kW Amps: 200 Circuit Breaker Size Amps: 200

STARTING CAPABILITIES (sKVA)

sKVA vs. Voltage Dip at 30%

120/240 V, Single-Phase at 0.4pf 189

FUEL CONSUMPTION RATES*

Percent Load	Diesel gal/hr (L/hr)
25%	1.35 (5.11)
50%	2.15 (8.14)
75%	3.06 (11.58)
100%	3.98 (15.07)

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

COOLING

		Standby
Air Flow (Radiator and Alternator)	cfm (m³/min)	2824 (80)
Coolant System Capacity	gal (I)	2.8 (10.6)
Heat Rejection to Coolant	BTU/hr (MJ/hr)	135,900 (143.4)
Temperature Deration	3% for every 5°C a	bove 25°C or 1.7% for every 5°F over 77°F
Altitude Deration	1% for every 100 r	m above 915 or 3% for every 1000 ft over 3000 ft
Maximum Ambient Temperature Operating Range	°F (°C)	-20 - 122 (-28 - 50)
Maximum Radiator Backpressure	in H ₂ 0	0.5

COMBUSTION AIR REQUIREMENTS

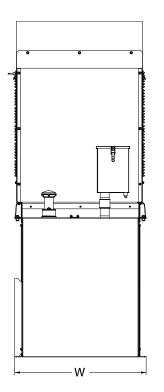
Standby
Flow at Rated Power cfm (m³/min) 190 (5.38)

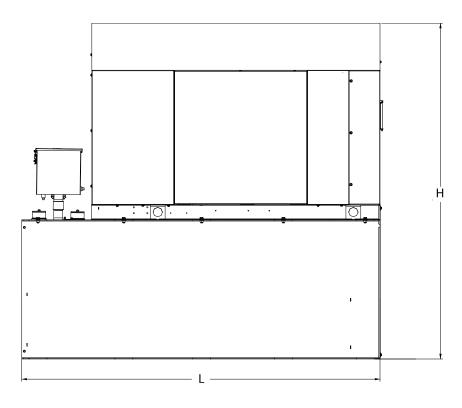
ENGINE			EXHAUST	EXHAUST		
		Standby			Standby	
Rated Engine Speed	rpm	1800	Exhaust Flow (Rated Output)	cfm (m³/min)	448 (12.7)	
			Exhaust Temp (Rated Output - Post Silencer)	°F (°C)	1120 (604.4)	



EPA Certified Stationary Emergency

DIMENSIONS AND WEIGHTS*





GENERAC* INDUSTRIAL

Weights and Dimensions

1	Unit Weight The	Unit Weight with Skid - lbs	Dimensions (L x W x H) - in
		Offic Weight with Skid - IDS	Difficiations (E X W X II) - III
	2,915	2,954	103.4 (2,625) x 35.0 (888) x 90.0 (2,286)

48kW Fuel Consumption

•	
Fuel Tank Gross Total Capacity	240
Fuel Tank Gross Usable Capacity	229
Fuel Tank Net Usable Capacity (Run Hours Based on Net Usable Capacity)	206
Run Hours 100% Load	52
Run Hours 75% Load	67
Run Hours 50% Load	96

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

* All measurements are approximate and for estimation purposes only.

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER		

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.

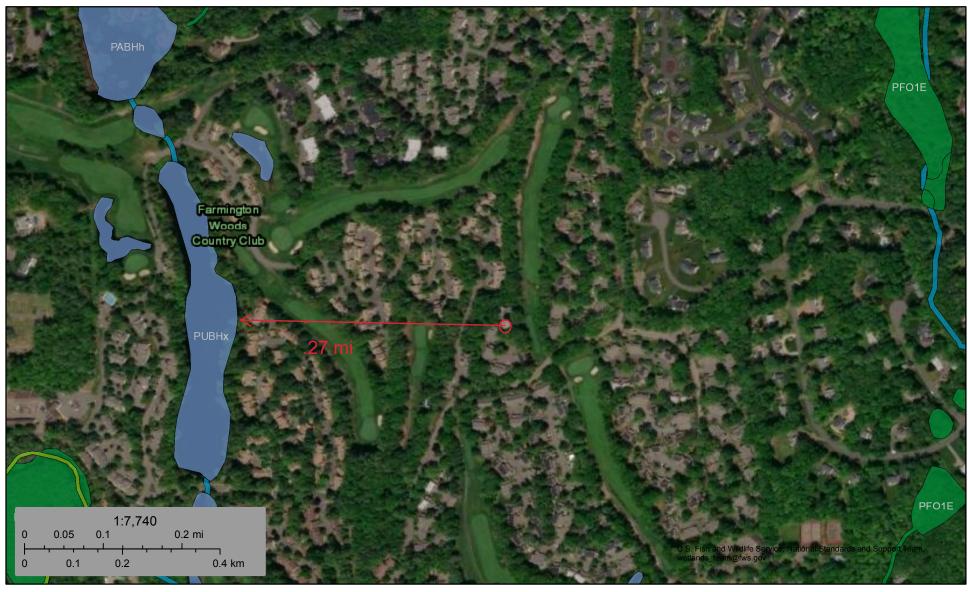
EXHIBIT 8

Map showing nearest wetlands

U.S. Fish and Wildlife Service

National Wetlands Inventory

10 Redwood Ln Avon



August 11, 2022

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Riverine

Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.