

10 INDUSTRIAL AVE,
SUITE 3
MAHWAH NJ 07430
PHONE: 201.684.0055
FAX: 201.684.0066



June 22, 2021

Members of the Siting Council
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RE: Notice of Exempt Modification
219 Nells Rock Road, Shelton, CT 06484 (AKA 161 Nells Rock Road)
Latitude: 41.30416500
Longitude: -73.11827700
T-Mobile Site#: CT11199A - Hardening

Dear Ms. Bachman:

T-Mobile currently maintains nine (9) antennas at the 135-foot level of the existing 162-foot lattice tower at 219 Nells Rock Road, Shelton, CT. The 162-foot lattice tower is owned and operated by New Cingular Wireless PCS LLC (AT&T). T-Mobile now intends to add a 48Kw generator to an expanded 4' x 10' concrete pad within the existing compound.

Planned Modifications:

Ground:

Install New:

- (1) Generac RD48 48KW AC Diesel Generator - 229 gallon double walled self-contained tank with fuel sensor. Requires (2) 12-minute run cycles by-weekly.
- (1) 4' x 10' Concrete pad in new 40-ft lease area

This facility was originally approved by the Connecticut Siting Council in Docket No. 45 on September 14, 1984. The proposed modification complies with the original approval.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 16- SOj-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-SOj-73, a copy of this letter is being sent to Mayor - Mark A. Lauretti, Elected Official, and Alexander Rosetti, Planning and Zoning Administrator for the Town of Shelton.

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 modifications 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 modifications 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 telecommunications facility constitute an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

Eric Breun

Transcend Wireless

Cell: 201-658-7728

Email: ebreun@transcendwireless.com

Attachments

cc: Mark A. Lauretti - Mayor of Shelton

Peter Gillespie - Director of Planning and Economic Development

New Cingular Wireless PCS LLC (AT&T) - Tower and Property Owner

ERIC BREJUN
2016587728
10 INDUSTRIAL AVE
MAHWAH NJ 07430

1 LBS

1 OF 1

SHIP TO:
MARK A LAURETTI
MAYOR'S OFFICE
54 HILL STREET
SHELTON CT 06484



CT 066 9-03



UPS GROUND

TRACKING #: 1Z V25 742 03 9199 6917



BILLING: P/P

Reference #1: CT11199A

XOL 21.05.18 NV45 25.0A 06/2021*



TM

ERIC BREJUN
2016587728
10 INDUSTRIAL AVE
MAHWAH NJ 07430

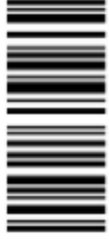
1 LBS

1 OF 1

SHIP TO:
PLANNING AND ZONING SHELTON
ALEXANDER ROSETTI
3RD FLOOR
54 HILL STREET
SHELTON CT 06484



CT 066 9-03



UPS GROUND

TRACKING #: 1Z V25 742 03 9706 3986



BILLING: P/P

Reference #1: CT11199A

XOL 21.05.18 NV45 25.0A 06/2021*



TM

ERIC BREUN
2016587728
10 INDUSTRIAL AVE
MAHWAH NJ 07430

1 LBS

1 OF 1

SHIP TO:
AT&T MOBILITY LLC
9E-L-01
1010 PINE STREET
SAINT LOUIS MO 63101



MO 631 9-02



UPS GROUND

TRACKING #: 1Z V25 742 03 9806 4009



BILLING: P/P

Reference #1: CT11199A

XOL 21.05.18 NV45 25.0A 06/2021*



TM

Detailed Parcel Information

GIS ID
90.-2

Parcel ID
90.-2

Account Number
7732

Owner
NEW CINGULAR
WIRELESS PCS LLC

Location
161 NELLE ROCK RD

MAILING ADDRESS
909 CHESTNUT ST RM 36-
M-1
ST LOUIS, MO 63101



Quick Links:

[Quick Map](#) [Summary Card](#)

Scroll Down For Complete Property Detail

PARCEL VALUATIONS

	Appraised Value	Assessed Value
Buildings	108570	76000
Land	87800	61460
TOTAL:	197300	138110

PROPERTY INFORMATION

Total Acres	1.3
Land Use	RESIDENTIAL
Land Class Code	4-2
Zoning	R-1
Census Tract	
Lot Description	
Lot Utilities	ELECTRIC

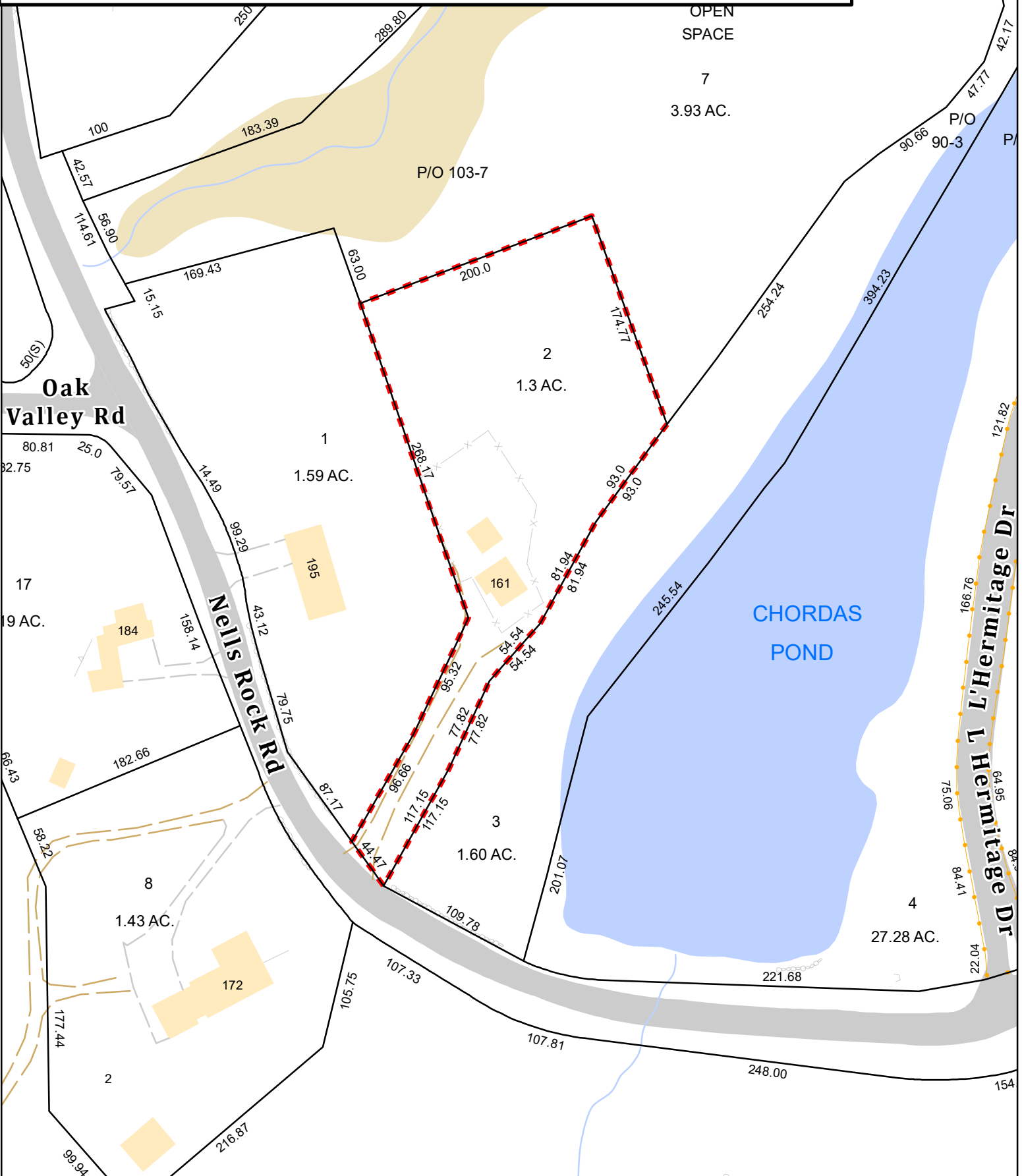
SALE INFORMATION

Sale Date	20150623
Sale Price	0
Book / Page	3564/303



City of Shelton, Connecticut - Parcel Map

Parcels: 90.-2 Address: 161 NELLS ROCK RD



Approximate Scale: 1:1,200

50 0 50 100
Feet

Map Produced
April 2017

Disclaimer: This map is for informational purposes only. All information is subject to verification by any user. The City of Shelton and its mapping contractors assume no legal responsibility for the information contained herein.

DOCKET NO. 45

AN APPLICATION SUBMITTED BY THE SOUTHERN NEW ENGLAND TELEPHONE COMPANY FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE, AND OPERATION OF FACILITIES TO PROVIDE CELLULAR SERVICE IN FAIRFIELD COUNTY. : CONNECTICUT SITING COUNCIL : September 14, 1984

DECISION AND ORDER

Pursuant to the foregoing opinion, the Council hereby directs that a certificate of environmental compatibility and public need as required by section 16-50k of the General Statutes of Connecticut, revisions of 1958, revised to 1983, as amended, be issued to the Southern New England Telephone Company for the construction, operation, and maintenance of a telecommunications tower and associated equipment to provide cellular service at each of the following sites:

Kaechele Place, Bridgeport, Connecticut;
Connecticut Avenue, Norwalk, Connecticut;
Nells Rock Road, Shelton, Connecticut;
Newfield Avenue, Stamford, Connecticut; and
Bayberry Lane, (former Nike site), Westport, Connecticut.

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

1. The towers shall be no taller than necessary to provide the proposed service, and in no event shall exceed
 - a) 167' at the Bridgeport site,
 - b) 167' at the Norwalk site,
 - c) 189.5' at the Shelton site,
 - d) 167' at the Stamford site,
 - e) 117' at the Westport site;
2. A fence not lower than eight feet shall surround each tower and its associated equipment;
3. The applicant or its successor shall notify the Council if and when directional antennas or any other equipment is added to any of these facilities;

4. The applicant or its successor shall permit, in accordance with representations made by it during the proceeding, public or private entities to share space on the facilities, for due consideration received, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing;
5. Unless necessary to comply with condition number six, below, no lights shall be installed on any of these towers;
6. The facilities shall be constructed in accordance with all applicable federal, state, and municipal laws and regulations;
7. The applicant shall submit a development and management plan (D&M) for the Bridgeport, Stamford, and Westport sites pursuant to sections 16-50j-85 through 16-50j-87 of the regulations of state agencies, except that irrelevant items in section 16-50j-86 need only be identified as such. The D&M plans shall include appropriate evergreen screening of the sites, erosion control measures, reseeding plans, and tree removal plans. The applicant shall consult with the Stamford Environmental Protection Board in the preparation of a drainage and erosion control plan for the Stamford tower. The applicant shall comply with the reporting requirements of section 16-50j-87 for all sites;
8. Construction activities shall take place during daylight working hours;
9. This decision and order shall be void and the towers and associated equipment approved herein shall be dismantled and

removed, or reapplication for any new use shall be made to the Connecticut Siting Council before any such new use is made, if the towers do not provide or permanently cease to provide cellular service following completion of construction;

10. This decision and order shall be void if all construction authorized is not completed within three years of the issuance of this decision.

Pursuant to section 16-50p of the General Statutes, we hereby direct that a copy of the opinion and decision and order be served on each person listed below. A notice of the issuance shall be published in the Bridgeport Post, the Norwalk Hour, the Stamford Advocate, and the Shelton Suburban News, and the Westport News.

The parties to this proceeding are

The Southern New England Telephone Company (Applicant)
Room 314
227 Church Street
New Haven, Connecticut 06506

Attention: Mr. Peter J. Tyrrell (its attorney)
Senior Attorney

Rolnick Observatory represented by:
52 Sawyer Road
Fairfield, Connecticut
Frederick H. Bump
Director

Mr. Adam Norton
40 Highland Road
Westport, Connecticut 06880

Representative John Wayne Fox (service waived)
13 Apple Tree Drive
Stamford, Connecticut 06906

Mr. George C. Lenfest
4 Highland Road
Westport, Connecticut

Mr. William Seiden
First Selectman
Town of Westport
110 Myrtle Avenue
P.O. Box 549
Westport, Connecticut 06881

Mr. Arthur L. Schimel
174 Bayberry Lane
Westport, Connecticut

Mr. Seymour Bendremer
11 Apache Trail
Westport, Connecticut

Ms. Gladys Floch
32 Woody Lane
Westport, Connecticut

Ms. Helen S. Cohen
15 Highland Road
Westport, Connecticut (service waived)

Mr. Jack Braverman
226 Bayberry Lane
Westport, Connecticut

Mr. Kevin Gavin
191 Bayberry Lane
Westport, Connecticut (service waived)

Mr. A.B. Beiser
12 Highland Road
Westport, Connecticut

Mr. Edward V. Polusky
4 Hooper Road
Westport, Connecticut (service waived)

Ms. Lois Schine

represented by:

Mary D. Mix, Esquire
830 Post Road - East
Suite 100
Westport, Connecticut 06880

Mr. Allen Witt
3 Apache Trail
Westport, Connecticut

Ms. Gayle Shiller
5 Apache Trail
Westport, Connecticut (service waived)

Mrs. Ronnie Hammer
3 Hooper Road
Westport, Connecticut

Mr. Paul Rosenblatt
7 Apache Trail
Westport, Connecticut

(service waived)

Mr. Henry J. Wolfson
179 Bayberry Lane
Westport, Connecticut

(service waived)

Mr. Melvin H. Barr
Planning Director
Town of Westport
110 Myrtle Avenue
P.O. Box 549
Westport, Connecticut 06881

(service waived)

Mr. Mark Infeld
6 Apache Trail
Westport, Connecticut

(service waived)

Ms. Barbara Saipe
Representative Town
Meeting Member
District #8
Town Hall
P.O. Box 549
Westport, Connecticut 06881

(service waived)

Ms. Peggy Goldenberg
201 Bayberry Lane
Westport, Connecticut

(service waived)

Ms. Martha Hauhuth
Board of Selectman
Town Hall
P.O. Box 549
Westport, Connecticut 06881

(service waived)

Ms. Meg Coffee
32 Otter Trail
Westport, Connecticut

(service waived)

STATE OF CONNECTICUT

)

COUNTY OF HARTFORD


:

)

ss. New Britain, September 14, 1984

I hereby certify that the foregoing is a true and correct copy of the decision and order issued by the Connecticut Siting Council, State of Connecticut.

ATTEST:


Christopher S. Wood, Executive Director
Connecticut Siting Council

T-Mobile

SITE NAME: SHELTON/BUDDINGTON RD_1

SITE ID: CT11199A

219 NELLS ROCK ROAD
SHELTON, CT 06484

GENERAL NOTES

- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2018 CONNECTICUT SUPPLEMENT, INCLUDING THE I/A/E/A-222 REVISION "G" STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND SUPPORTING STRUCTURES, 2017 CONNECTICUT FIRE SAFETY CODE, NATIONAL ELECTRICAL CODE AND LOCAL CODES.
- CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT DOCUMENT SET. CONTRACTOR SHALL COORDINATE ALL WORK SHOWN IN THE SET OF DRAWINGS. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF DRAWINGS TO ALL SUBCONTRACTORS AND ALL RELATED PARTIES. THE SUBCONTRACTORS SHALL EXAMINE ALL THE DRAWINGS AND SPECIFICATIONS FOR THE INFORMATION THAT AFFECTS THEIR WORK.
- CONTRACTOR SHALL PROVIDE A COMPLETE BUILD-OUT WITH ALL FINISHES, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS AND PROVIDE ALL ITEMS AS SHOWN OR INDICATED ON THE DRAWINGS OR IN THE WRITTEN SPECIFICATIONS.
- CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR AND EQUIPMENT TO COMPLETE THE WORK AND FURNISH A COMPLETED JOB ALL IN ACCORDANCE WITH LOCAL AND STATE GOVERNING AUTHORITIES AND OTHER AUTHORITIES HAVING LAWFUL JURISDICTION OVER THE WORK.
- CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND ALL INSPECTIONS REQUIRED AND SHALL ALSO PAY FEES REQUIRED FOR THE GENERAL CONSTRUCTION, PLUMBING, ELECTRICAL, AND HVAC. PERMITS SHALL BE PAID FOR BY THE RESPECTIVE SUBCONTRACTORS.
- CONTRACTOR SHALL MAINTAIN A CURRENT SET OF DRAWINGS AND SPECIFICATIONS ON SITE AT ALL TIMES AND INSURE DISTRIBUTION OF NEW DRAWINGS TO SUBCONTRACTORS AND OTHER RELEVANT PARTIES AS SOON AS THEY ARE MADE AVAILABLE. ALL OLD DRAWINGS SHALL BE MARKED VOID AND REMOVED FROM THE CONTRACT AREA. THE CONTRACTOR SHALL FURNISH AN "AS-BUILT" SET OF DRAWINGS TO OWNER UPON COMPLETION OF PROJECT.
- LOCATION OF EQUIPMENT, AND WORK SUPPLIED BY OTHERS THAT IS DIAGRAMMATICALLY INDICATED ON THE DRAWINGS SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL DETERMINE LOCATIONS AND DIMENSIONS SUBJECT TO STRUCTURAL CONDITIONS AND WORK OF THE SUBCONTRACTORS.
- THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY.
- DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INDICATED TO BE SUBSTANDARD TO ANY ORDINANCES, LAWS, CODES, RULES, OR REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL INCLUDE IN HIS WORK AND SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH SUCH ORDINANCES, LAWS, CODES, RULES OR REGULATIONS WITH NO INCREASE IN COSTS.
- ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
- ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUBCONTRACTORS FOR ANY CONDITION PER MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
- ANY AND ALL ERRORS, DISCREPANCIES, AND 'MISSED' ITEMS ARE TO BE BROUGHT TO THE ATTENTION OF THE T-MOBILE CONSTRUCTION MANAGER DURING THE BIDDING PROCESS BY THE CONTRACTOR. ALL THESE ITEMS ARE TO BE INCLUDED IN THE BID. NO 'EXTRA' WILL BE ALLOWED FOR MISSED ITEMS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE SAFETY FROM THE TIME THE JOB IS AWARDED UNTIL ALL WORK IS COMPLETE AND ACCEPTED BY THE OWNER.
- CONTRACTOR TO REVIEW ALL SHOP DRAWINGS AND SUBMIT COPY TO ENGINEER FOR APPROVAL. DRAWINGS MUST BEAR THE CHECKER'S INITIALS BEFORE SUBMITTING TO THE CONSTRUCTION MANAGER FOR REVIEW.
- THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES AND EXISTING CONDITIONS AT THE SITE, PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA.
- COORDINATION, LAYOUT, FURNISHING AND INSTALLATION OF CONDUITS AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ALL REPAIRS REQUIRED FOR EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT LEAST 48 HOURS PRIOR TO ANY EXCAVATIONS AT 1-800-922-4455. ALL UTILITIES SHALL BE IDENTIFIED AND CLEARLY MARKED. CONTRACTOR SHALL MAINTAIN AND PROTECT MARKED UTILITIES THROUGHOUT PROJECT COMPLETION.
- CONTRACTOR SHALL COMPLY WITH THE OWNER'S ENVIRONMENTAL ENGINEER ON ALL METHODS AND PROVISIONS FOR ALL EXCAVATION ACTIVITIES INCLUDING SOIL DISPOSAL. ALL BACKFILL MATERIALS TO BE PROVIDED BY THE CONTRACTOR.

SITE DIRECTIONS

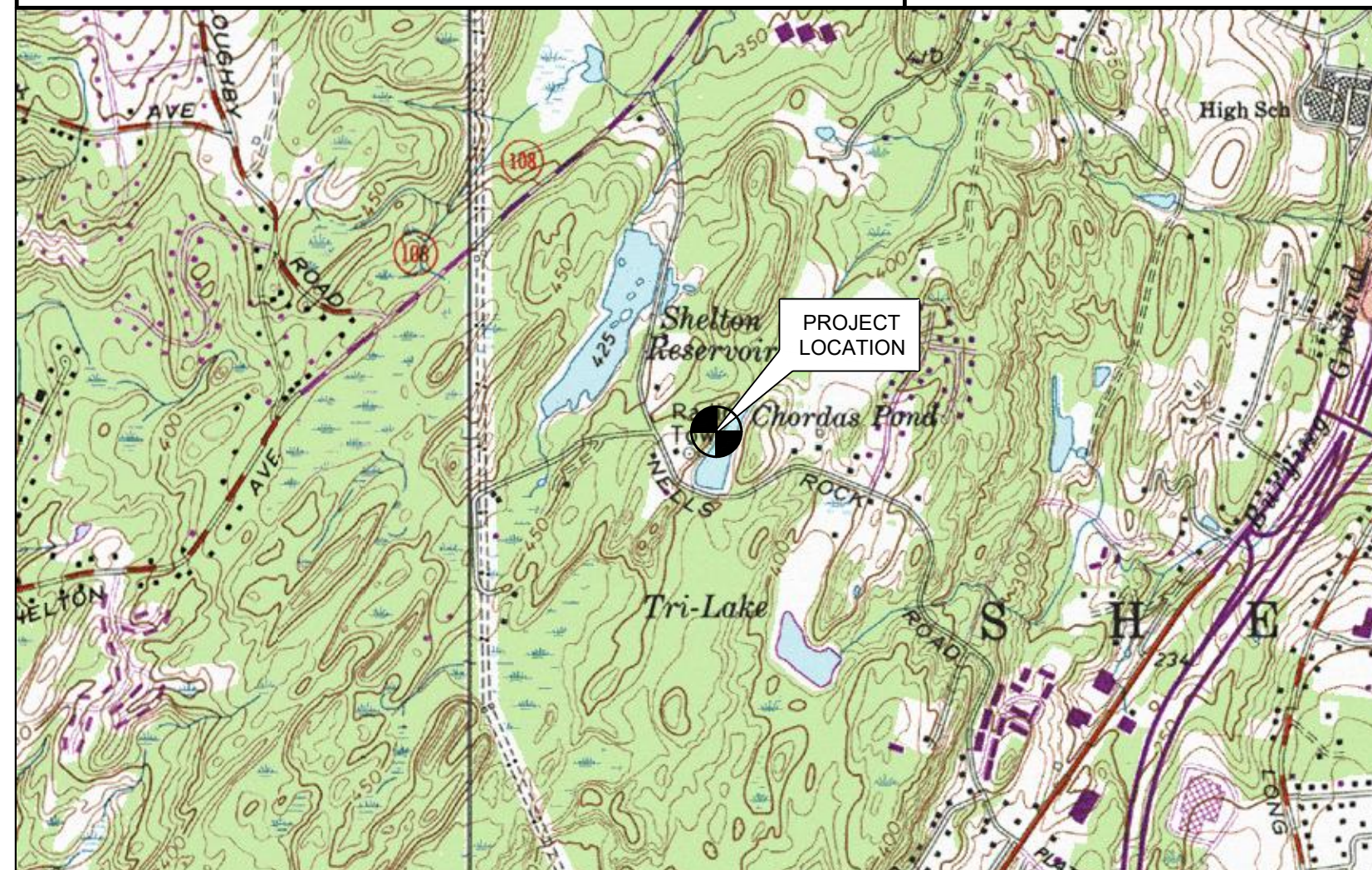
FROM: 35 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002

TO: 219 NELLS ROCK RD
SHELTON, CT 06484

- HEAD SOUTHEAST ON W NEWBERRY RD TOWARD GRIFFIN RD S.
- TURN LEFT ONTO GRIFFIN RD S.
- TURN RIGHT ONTO DAY HILL RD.
- USE THE RIGHT LANE TO MERGE ONTO I-91 S VIA THE RAMP TO HARTFORD.
- MERGE ONTO I-91 S.
- TAKE EXIT 17 TO MERGE ONTO CT-15 S/WILBUR CROSS PKWY.
- TAKE EXIT 58 TO MERGE ONTO CT-34 W/DERBY AVE/DERBY TURNPIKE TOWARD DERBY.
- MERGE ONTO CT-34 W/DERBY AVE/DERBY TURNPIKE.
- USE THE LEFT 2 LANES TO TURN LEFT ONTO MAIN ST.
- USE THE LEFT 2 LANES TO TURN LEFT ON MERGE ONTO CT-8 S TOWARD BRIDGEPORT.
- MERGE ONTO CT-8 S.
- TAKE EXIT 13 FOR BRIDGEPORT AVE.
- TURN LEFT ONTO BRIDGEPORT AVE.
- TURN RIGHT ONTO NELLS ROCK RD.

SITE COORDINATES: LATITUDE: 41°-18'-14.80" N
LONGITUDE: 73°-07'-05.87" W
GROUND ELEVATION: 458'± AMSL

COORDINATES AND GROUND ELEVATION ARE REFERENCED FROM GOOGLE EARTH



VICINITY MAP



PROJECT SUMMARY

- THE PROPOSED SCOPE OF WORK CONSISTS OF A MODIFICATION TO THE EXISTING UNMANNED TELECOMMUNICATIONS FACILITY INCLUDING THE FOLLOWING:
 - INSTALL (1) NEW 48 KW DIESEL FUELED BACK-UP GENERATOR ON A PROPOSED 10' x 4' CONC. SLAB-ON-GRADE WITHIN EXISTING COMPOUND
 - INSTALL (1) 200A AUTOMATIC TRANSFER SWITCH ON A PROPOSED UTILITY FRAME

PROJECT INFORMATION

SITE NAME: SHELTON/BUDDINGTON RD_1

SITE ID: CT11199A

SITE ADDRESS: 219 NELLS ROCK RD
SHELTON, CT 06484

APPLICANT: T-MOBILE NORTHEAST, LLC
35 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002

CONTACT PERSON: DAN REID (PROJECT MANAGER)
TRANSCEND WIRELESS, LLC
(203) 592-8291

ENGINEER OF RECORD: CENTEK ENGINEERING, INC.
63-2 NORTH BRANFORD RD.
BRANFORD, CT 06405

CARLO F. CENTORE, PE
(203) 488-0580 EXT. 122

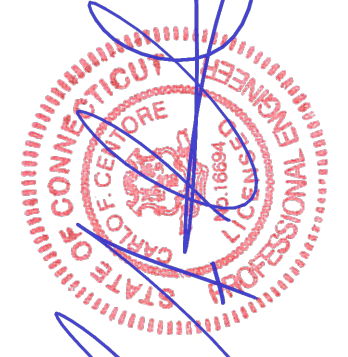
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SITE COORDINATES AND GROUND ELEVATION REFERENCED FROM GOOGLE EARTH.

SHEET INDEX

SHT. NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	0
N-1	GENERAL NOTES AND SPECIFICATIONS	0
C-1	COMPOUND AND EQUIPMENT PLAN	0
C-2	TYPICAL EQUIPMENT DETAILS	0
E-1	TYPICAL ELECTRICAL DETAILS	0
E-2	RISER AND CONDUIT ROUTING PLAN	0

PROFESSIONAL ENGINEER SEAL



T-Mobile
T-Mobile
www.t-mobile.com

CENTEK engineering
Centered on Solutions

(203) 488-0580
(203) 488-8587 Fax
63-2 North Branford Road
Branford, CT 06405
www.CentekEng.com

T-MOBILE NORTHEAST LLC
SHELTON/BUDDINGTON RD_1
SITE ID: CT11199A
219 NELLS ROCK RD
SHELTON, CT 06484

DATE: 03/19/21
SCALE: AS NOTED
JOB NO. 21003.11

TITLE SHEET

T-1

Sheet No. 1 of 6

CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION
TJR
RTS
DATE 05/26/21
REV. 0

NOTES AND SPECIFICATIONS

DESIGN BASIS:

GOVERNING CODE: 2015 INTERNATIONAL BUILDING (IBC) AS MODIFIED BY THE 2018 CONNECTICUT STATE BUILDING CODE.

- 1. DESIGN CRITERIA:
 - RISK CATEGORY II (BASED ON IBC TABLE 1604.5)
 - NOMINAL DESIGN SPEED (OTHER STRUCTURE): 120 MPH (V_{asd}) (EXPOSURE B/ IMPORTANCE FACTOR 1.0 BASED ON ASCE 7-10).

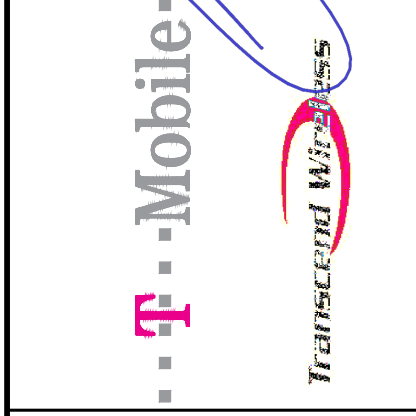
SITE NOTES

- 1. THE CONTRACTOR SHALL CALL UTILITIES PRIOR TO THE START OF CONSTRUCTION.
- 2. ACTIVE EXISTING UTILITIES, WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY, PRIOR TO PROCEEDING, SHOULD ANY UNCOVERED EXISTING UTILITY PRECLUDE COMPLETION OF THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- 3. THE AREAS OF THE COMPOUND DISTURBED BY THE WORK SHALL BE RETURNED TO THEIR ORIGINAL CONDITION.
- 4. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
- 5. IF ANY FIELD CONDITIONS EXIST WHICH PRECLUDE COMPLIANCE WITH THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND SHALL PROCEED WITH AFFECTED WORK AFTER CONFLICT IS SATISFACTORILY RESOLVED.

GENERAL NOTES

- 1. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2018 CONNECTICUT SUPPLEMENT, INCLUDING THE IA/EIA-222 REVISION "G" "STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND SUPPORTING STRUCTURES." 2017 CONNECTICUT FIRE SAFETY CODE, NATIONAL ELECTRICAL CODE AND LOCAL CODES.
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- 12. ANY AND ALL ERRORS, DISCREPANCIES, AND "MISSED" ITEMS, ARE TO BE BROUGHT TO THE ATTENTION OF THE SITE OWNER'S CONSTRUCTION MANAGER DURING THE BIDDING PROCESS BY THE CONTRACTOR. ALL THESE ITEMS ARE TO BE INCLUDED IN THE BID. NO 'EXTRA' WILL BE ALLOWED FOR MISSED ITEMS.
- 13. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE SAFETY FROM THE TIME THE JOB IS AWARDED UNTIL ALL WORK IS COMPLETE AND ACCEPTED BY THE OWNER.
- 14. CONTRACTOR TO REVIEW ALL SHOP DRAWINGS AND SUBMIT COPY TO ENGINEER FOR APPROVAL. DRAWINGS MUST BEAR THE CHECKER'S INITIALS BEFORE SUBMITTING TO THE CONSTRUCTION MANAGER FOR REVIEW.
- 15. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES, AND EXISTING CONDITIONS AT THE SITE, PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA.
- 16. COORDINATION, LAYOUT, FURNISHING AND INSTALLATION OF CONDUIT AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 17. ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ALL REPAIRS REQUIRED FOR EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
- 18. THE CONTRACTOR SHALL CONTACT "DIG SAFE" (DIAL 811) AT LEAST 48 HOURS PRIOR TO ANY EXCAVATIONS. ALL UTILITIES SHALL BE IDENTIFIED AND CLEARLY MARKED. CONTRACTOR SHALL MAINTAIN AND PROTECT MARKED UTILITIES THROUGHOUT PROJECT COMPLETION.
- 19. CONTRACTOR SHALL COMPLY WITH OWNER'S ENVIRONMENTAL ENGINEER ON ALL METHODS AND PROVISIONS FOR ALL EXCAVATION ACTIVITIES INCLUDING SOIL DISPOSAL. ALL BACKFILL MATERIALS TO BE PROVIDED BY THE CONTRACTOR.
- 20. THE COUNTY/CITY/TOWN WILL MAKE PERIODIC FIELD OBSERVATION AND INSPECTIONS TO MONITOR THE INSTALLATION, MATERIALS, WORKMANSHIP AND EQUIPMENT INCORPORATED INTO THE PROJECT TO ENSURE COMPLIANCE WITH THE DESIGN PLANS, SPECIFICATIONS, CONTRACT DOCUMENTS AND APPROVED SHOP DRAWINGS.
- 21. THE COUNTY/CITY/TOWN MUST BE NOTIFIED (2) WORKING DAYS PRIOR TO CONCEALMENT/BURIAL OF ANY SYSTEM OR MATERIAL THAT WILL PREVENT THE DIRECT INSPECTION OF MATERIALS, METHODS OR WORKMANSHIP. EXAMPLES OF THESE PROCESSES ARE BACKFILLING A GROUND RING OR TOWER FOUNDATION, POURING TOWER FOUNDATIONS, BURYING GROUND RODS, PLATES OR GRIDS, ETC. THE CONTRACTOR MAY PROCEED WITH THE SCHEDULED PROCESS (2) WORKING DAYS AFTER PROVIDING NOTICE UNLESS NOTIFIED OTHERWISE BY THE COUNTY/CITY/TOWN.

REV.	DATE	BY	DESCRIPTION
0	05/26/21	RTS	TJR
			CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION

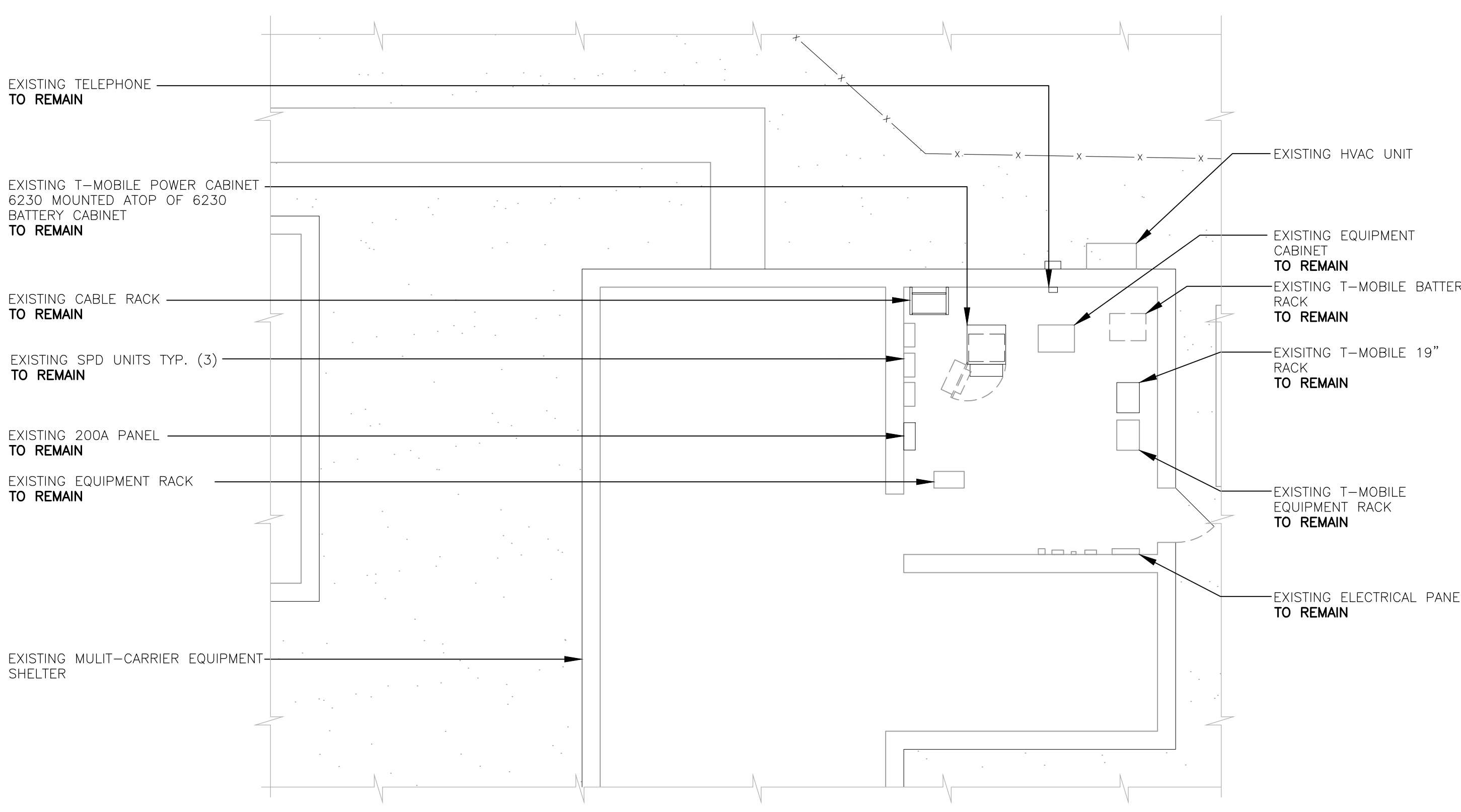


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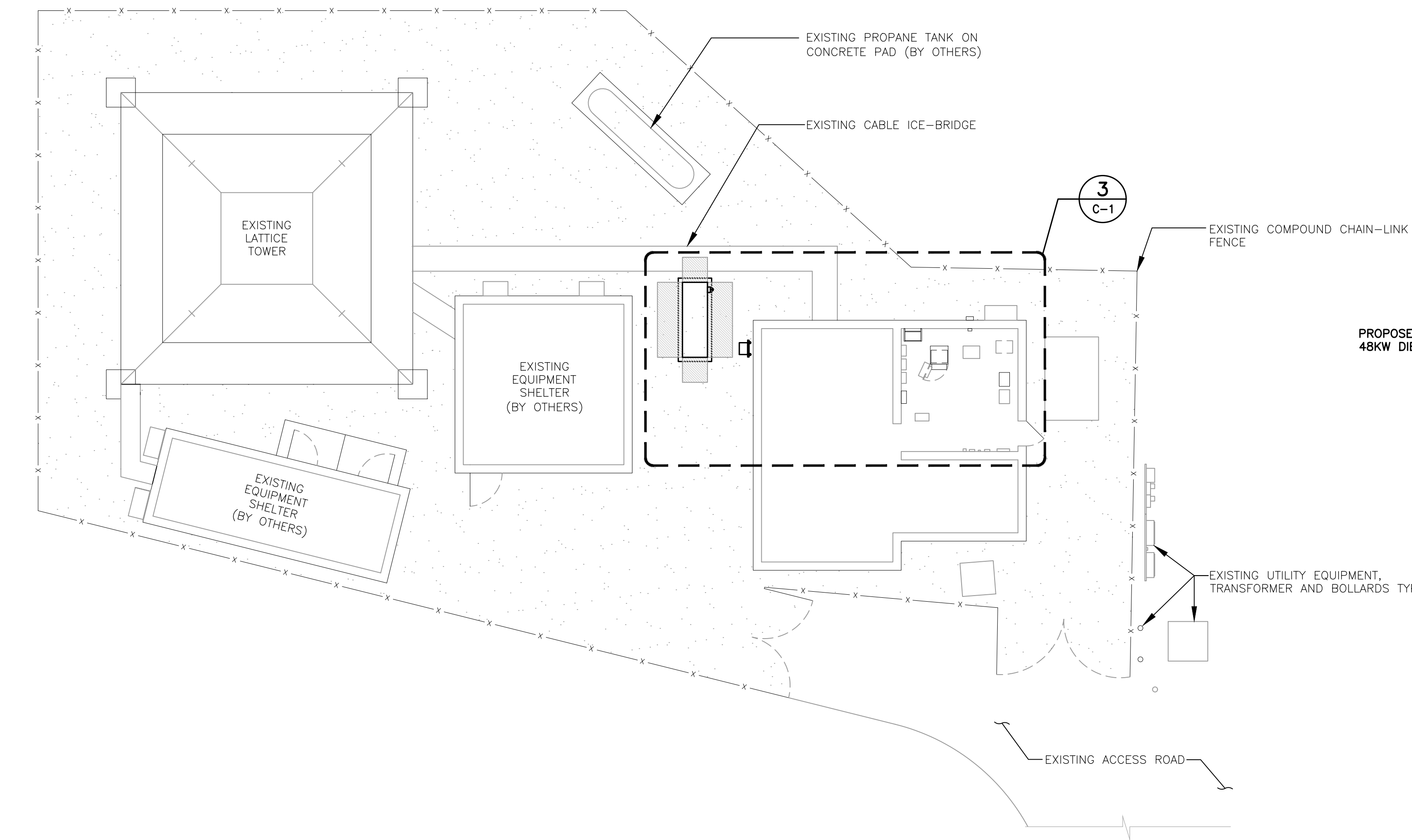
T-MOBILE NORTHEAST LLC
SHELTON/BUDDINGTON RD_1
SITE ID: CT1199A
219 NELLS ROCK RD
SHELTON, CT 06484

DATE: 03/19/21
SCALE: AS NOTED
JOB NO. 21003.11

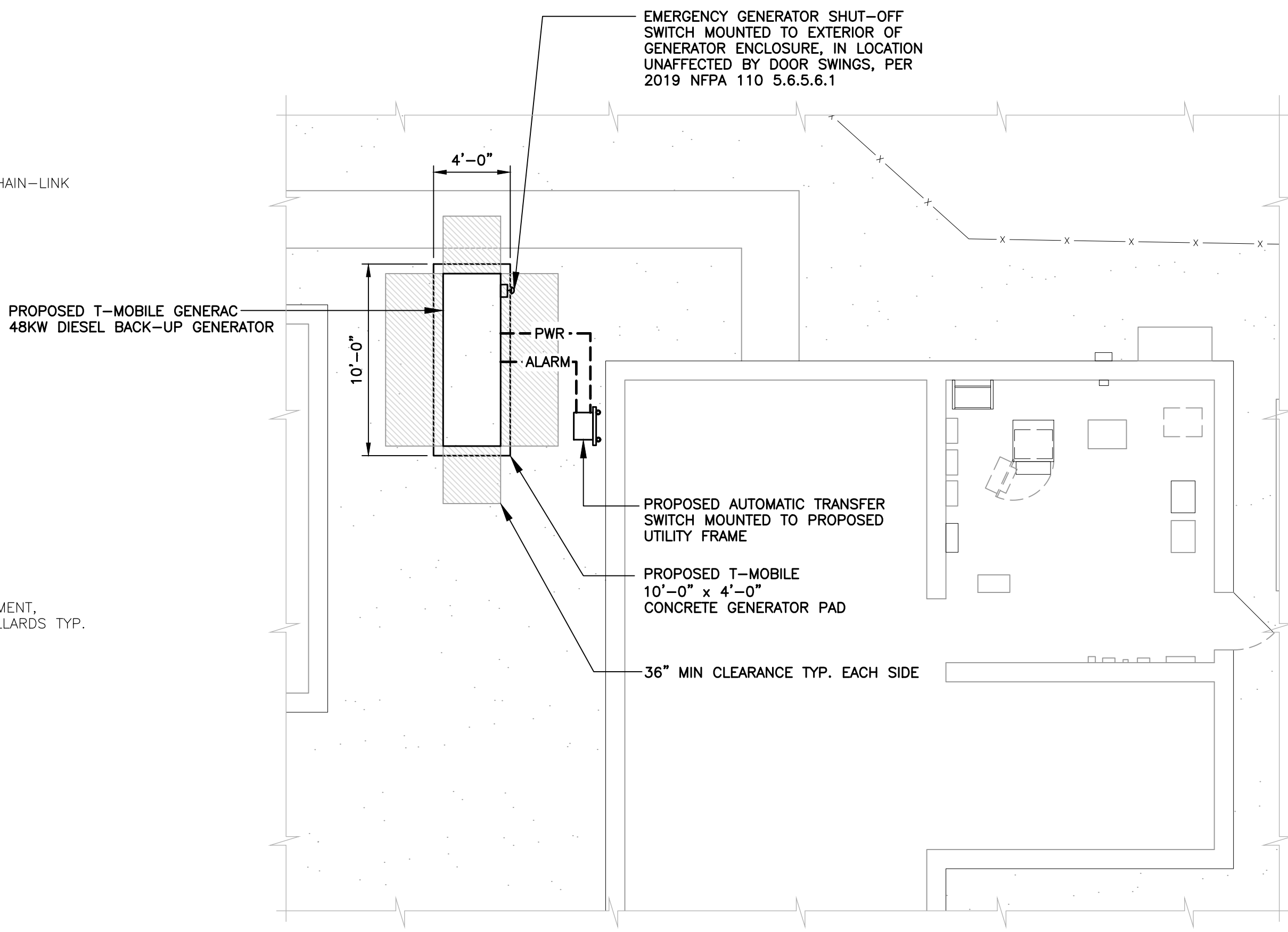
GENERAL NOTES
AND
SPECIFICATIONS



2
C-1 **EQUIPMENT PLAN - EXISTING**
SCALE: 3/16" = 1'
TRUE NORTH



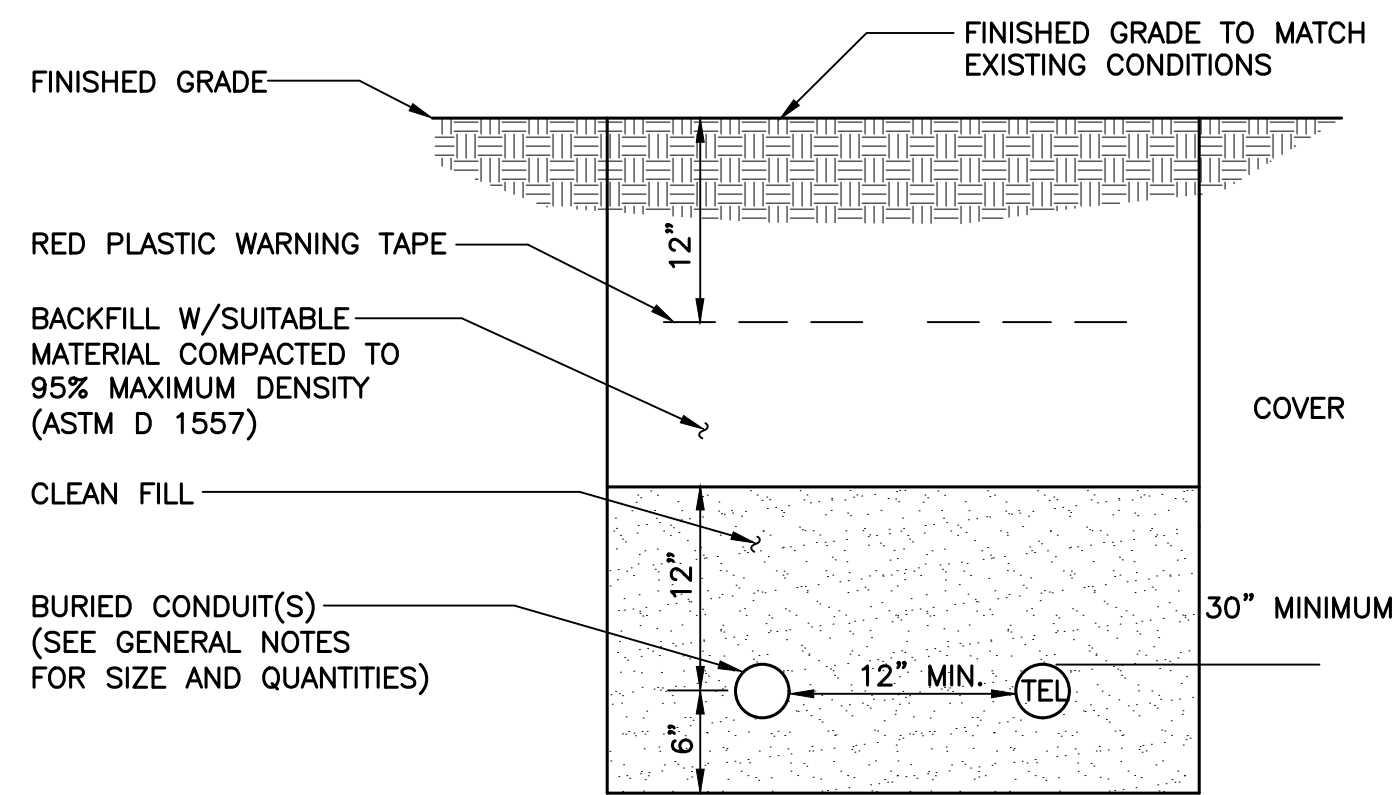
1
C-1 **COMPOUND PLAN - PROPOSED**
SCALE: 1" = 5'
TRUE NORTH



3
C-1 **EQUIPMENT PLAN - PROPOSED**
SCALE: 3/16" = 1'
TRUE NORTH

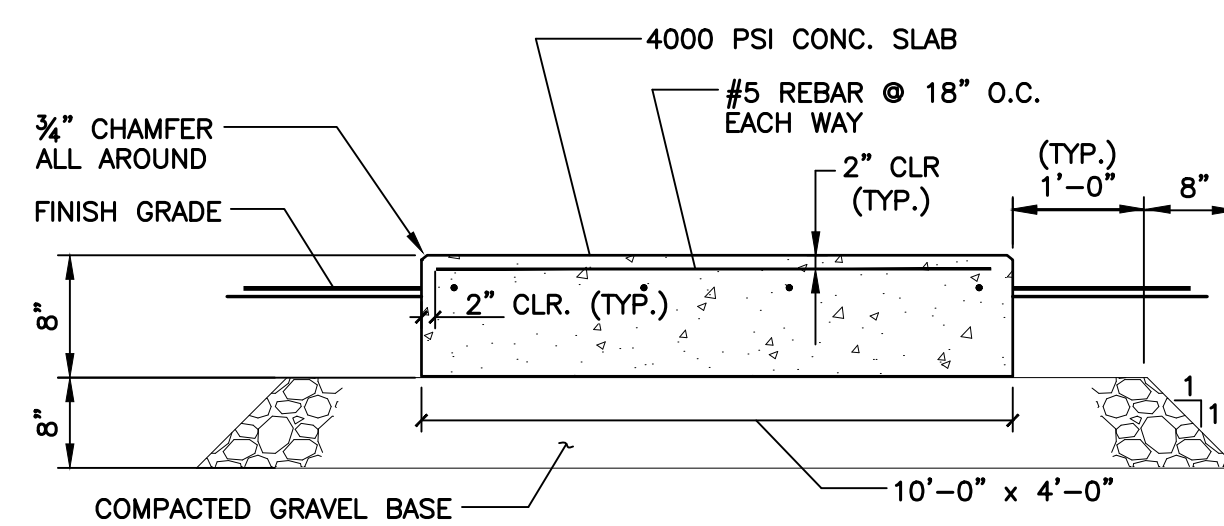
REV.	DATE	BY	CHK'D BY	DESCRIPTION
0	05/26/21	RTS	TJR	CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION

PROFESSIONAL ENGINEER SEAL	
T-Mobile	
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T-MOBILE NORTHEAST LLC	SHELTON/BUDDINGTON RD_1 SITE ID: CT1199A 219 NELLE ROCK RD SHELTON, CT 06484
DATE:	03/19/21
SCALE:	AS NOTED
JOB NO.	21003.11
COMPOUND AND EQUIPMENT PLAN	
C-1	
Sheet No. 3 of 6	

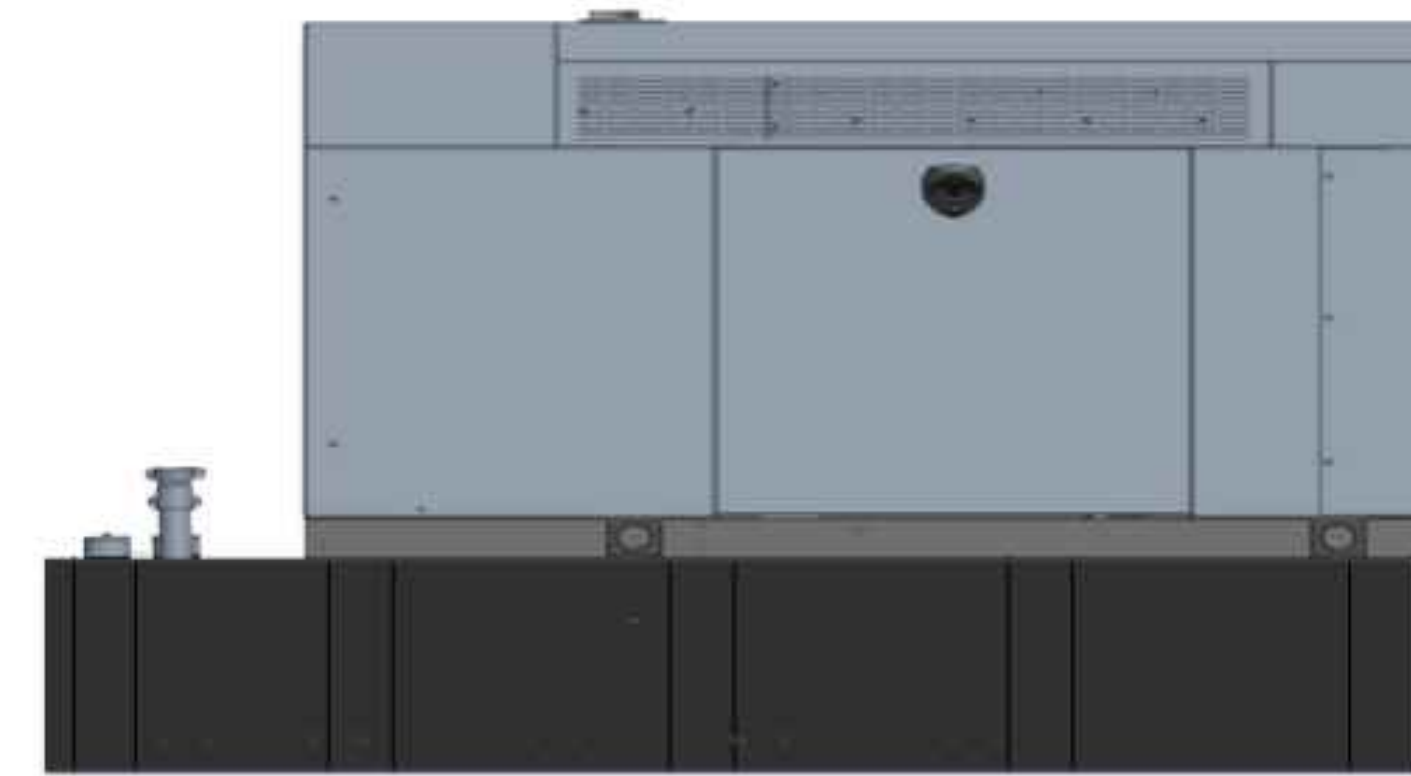


- NOTES:**
1. THE CLEAN FILL SHALL PASS THROUGH A 3/8" MESH SCREEN AND SHALL NOT CONTAIN SHARP STONES. OTHER BACKFILL SHALL NOT CONTAIN ASHES, CINDERS, SHELLS, FROZEN MATERIAL, LOOSE DEBRIS OR STONES LARGER THAN 2" IN MAXIMUM DIMENSION.
 2. WHERE EXISTING UTILITIES ARE LIKELY TO BE ENCOUNTERED, CONTRACTOR SHALL HAND DIG AND PROTECT EXISTING UTILITIES.

1 TYPICAL ELECTRICAL/TEL TRENCH DETAIL
C-2 NOT TO SCALE



2 TYPICAL CONCRETE PAD DETAIL
C-2 NOT TO SCALE

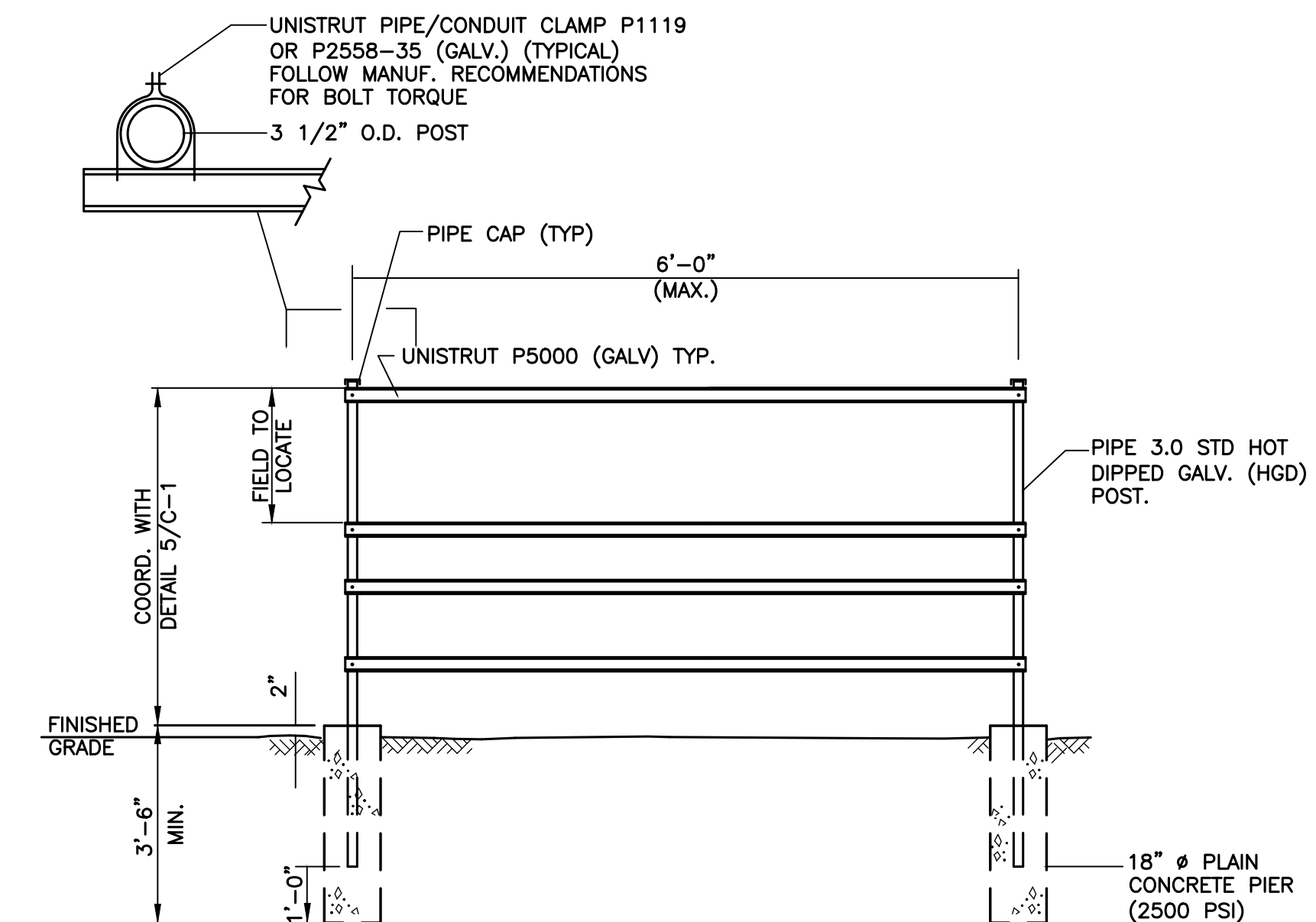


BACKUP POWER GENERATOR						
EQUIPMENT	POWER GENERATED	FUEL	MODEL NUMBER	FUEL TANK SIZE (GAL)	DIMENSIONS	WEIGHT
MAKE: GENERAC MODEL: RD48	48 KW, AC	DIESEL	7194-0	229	103.4"L x 35.0"W x 91.7"H	TBD

NOTES:

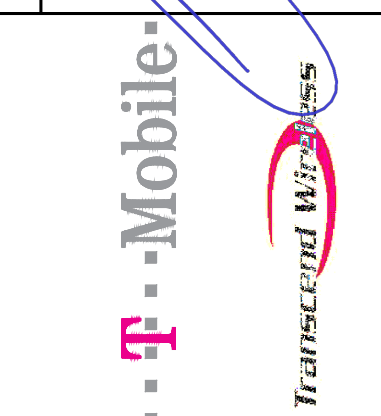
1. FUEL LEVEL/SECONDARY CONTAINMENT SHALL BE ALARMED AND IN COMMUNICATION WITH T-MOBILE'S NOC.
2. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION AND ALL OPTIONAL FEATURES WITH T-MOBILE'S CONSTRUCTION MANAGER PRIOR TO ORDERING.

3 PROPOSED GENERATOR DETAIL
C-2 SCALE: NOT TO SCALE



4 UTILITY SUPPORT FRAME (TYP)
C-2 NOT TO SCALE

REV.	DATE	BY	DESCRIPTION
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SHELTON/BUDDINGTON RD_1
SITE ID: CT1199A
219 NELLS ROCK RD
SHELTON, CT 06484

DATE: 03/19/21
SCALE: AS NOTED
JOB NO. 21003.11

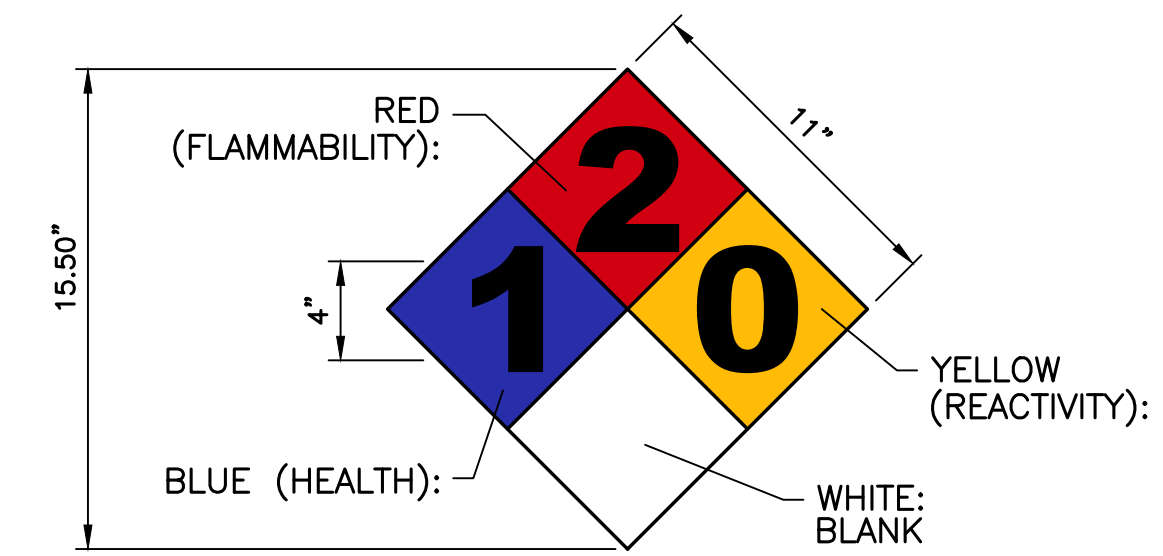
TYPICAL EQUIPMENT DETAILS

C-2
Sheet No. 4 of 6



AUTOMATIC TRANSFER SWITCH					
EQUIPMENT	PHASE	VOLTAGE	ENCLOSURE	AMP	DIMENSIONS
MAKE: GENERAC MODEL: RXSC200A3	1-PHASE	120/240	NEMA-3R	200	17.3"L x 12.5"W

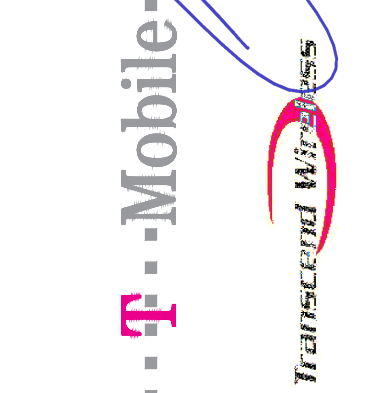
1 AUTOMATIC TRANSFER SWITCH DETAIL
E-1 NOT TO SCALE



SIGN NAME: REGULATORY, NFPA 704 HAZARD ID
 DESCRIPTION: MOUNT ON GENERATOR ACCESS DOOR. CONSULT WITH GENERATOR MANUFACTURER MSDS SHEET FOR BLUE AND RES POSITIONS
 NOTES: 1) SIGNS EXPOSED TO WEATHER SHOULD BE CHECKED ANNUALLY FOR READABILITY.
 2) SIGNS MUST BE UPDATED IF CHEMICAL STORAGE OR HAZARD INFORMATION FOR THE LOCATION CHANGES.
 3) THE GC MUST REVIEW WITH LOCAL JURISDICTION WHEN FILLING FOR PERMITS, AS EACH JURISDICTION MAY HAVE DIFFERENT REQUIREMENTS AND COMPLY WITH POSTING REQUIREMENTS OR DIRECTIVES FROM THE LOCAL JURISDICTION.

2 NFPA 704 DIAMOND SIGNAGE DETAIL
E-1 NOT TO SCALE

REV.	DATE	DESCRPTION
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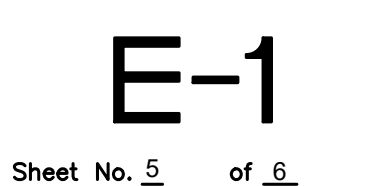


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TYPICAL ELECTRICAL DETAILS

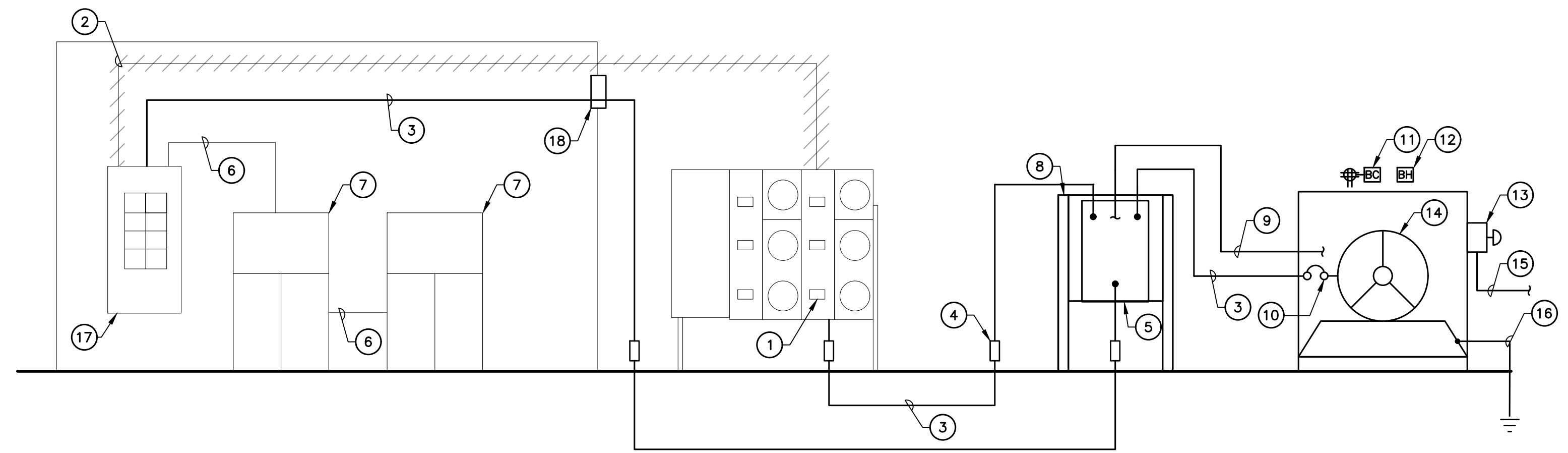


RISER DIAGRAM NOTES

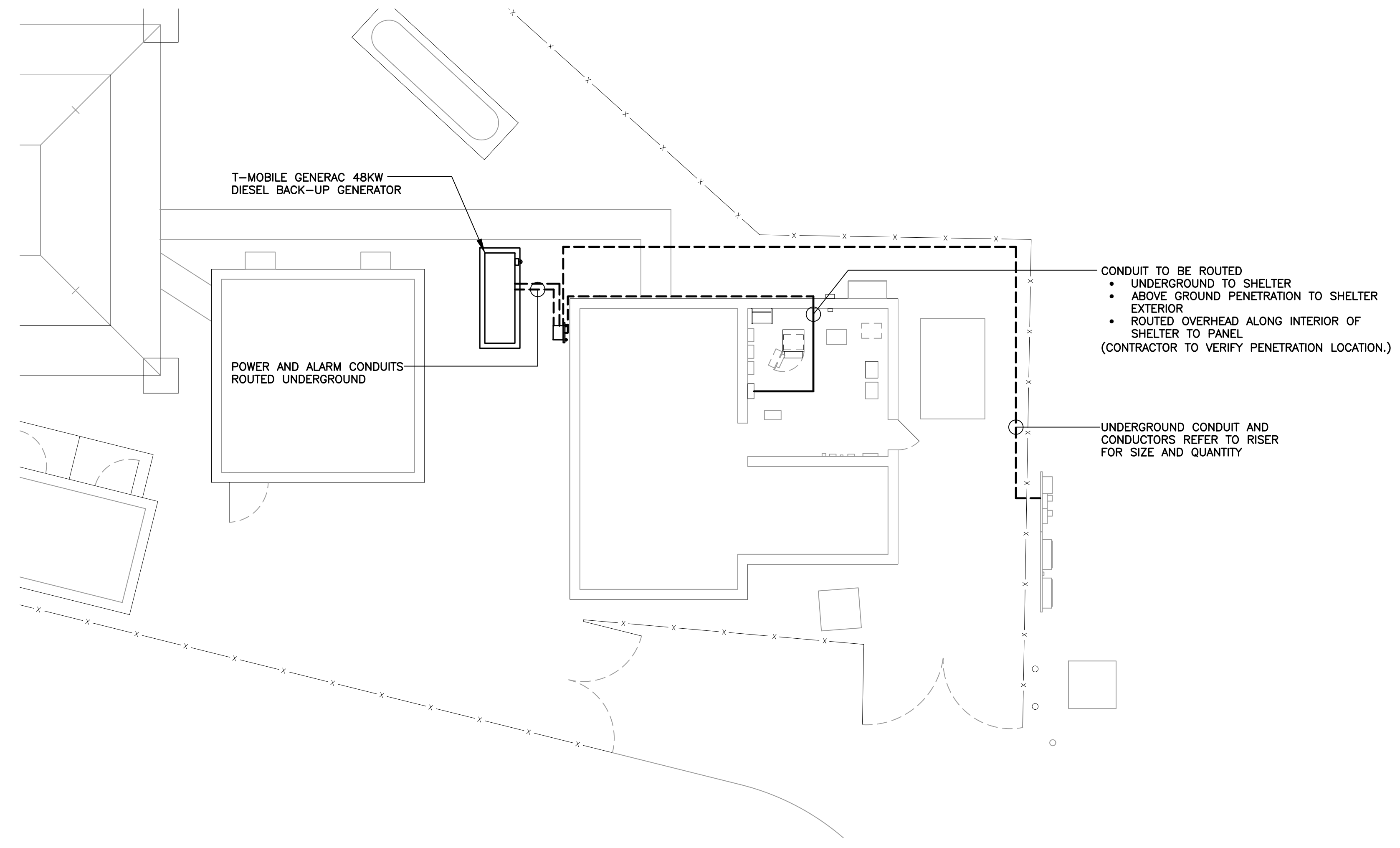
- 1 EXISTING 200A METER AND CIRCUIT BREAKER TO REMAIN
- 2 EXISTING CONDUIT AND CONDUCTORS TO BE REMOVED.
- 3 (3) #3/0 AWG, (1) #6 AWG GROUND, 2-1/2" CONDUIT.
- 4 EXPANSION COUPLING TYPICAL.
- 5 NEW 200A, 2 SOURCE AUTOMATIC TRANSFER SWITCH.
- 6 EXISTING CONDUITS AND CONDUCTORS TO REMAIN
- 7 EXISTING EQUIPMENT CABINETS TO REMAIN.
- 8 NEW UTILITY FRAME
- 9 1" CONDUIT FOR GENERATOR CONTROL AND SIGNAL WIRING.
- 10 GENERATOR OUTPUT CIRCUIT BREAKER.

RISER DIAGRAM NOTES

- 11 GENERATOR BATTERY CHARGER AND CONVENIENCE GFCI OUTLET WIRED TO EXISTING PANEL. OUTLET TO BE MOUNTED IN WEATHERPROOF ENCLOSURE.
- 12 GENERATOR BLOCK HEATER WIRED TO EXISTING PANEL SERVING T-MOBILE EQUIPMENT.
- 13 REMOTE GENERATOR SHUT OFF SWITCH IN BREAK GLASS ENCLOSURE MOUNTED TO EXTERIOR OF GENERATOR ENCLOSURE PER 2019 NFPA 110 5.6.5.6.1.
- 14 EMERGENCY BACK UP GENERATOR.
- 15 3/4" CONDUIT AND CONDUCTORS REQUIRED FOR PROPER OPERATION OF EMERGENCY GENERATOR SHUT OFF SWITCH.
- 16 GENERATOR GROUNDING PER NEC AND MANUFACTURER'S REQUIREMENTS. BOND TO EXISTING GROUNDING SYSTEM. (MINIMUM OF (1) #2 AWG GROUND)
- 17 EXISTING 200A ELECTRICAL PANEL TO REMAIN
- 18 EXTERIOR WALL PENETRATION. COORDINATE WITH CIVIL AND STRUCTURAL DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR ENSURING PENETRATION IS THOROUGHLY WATERPROOF.



1 ELECTRICAL POWER RISER DIAGRAM
E-2 NOT TO SCALE



2 ELECTRICAL CONDUIT ROUTING PLAN
E-2 SCALE: 1" = 8'

PROFESSIONAL ENGINEER SEAL				TJR	CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION		
T-Mobile				RTS	DATE	DRAWN BY	CHK'D BY
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				DATE:			
				SCALE:			
				JOB NO.:			
				RISER AND CONDUIT ROUTING PLAN			
E-2							
Sheet No. 6 of 6							

Protector™ Series

Diesel Generator Set

INCLUDES:

- Two Line LCD Multilingual Digital Evolution™ Controller (English/Spanish/French/Portuguese) with external viewing window for easy indication of generator status and breaker position.
- Isochronous Electronic Governor
- Sound Attenuated Aluminum Enclosure
- Smart Battery Charger
- UV/Ozone Resistant Hoses
- ±1% Voltage Regulation
- Integrated Base Tank Provides Up to 40 Hours of Run Time
- 5 Year Limited Warranty*
- UL 2200 / UL142 / ULC S601 Listed
- Meets code requirements for External Vent and Fill

Standby Power Rating

- Model RD015 - 15 kW 60 Hz
- Model RD020 - 20 kW 60 Hz
- Model RD030 - 30 kW 60 Hz
- Model RD048 - 48 kW 60 Hz (single phase only)
- Model RD050 - 50 kW 60 Hz (three phase only)



QUIET-TEST™



*Built in the USA using domestic and foreign parts

Meets EPA Emission Regulations
CA/MA Emissions Compliant

* 5 year warranty applicable to U.S. and Territories/Canada. International warranty is 3 year limited.

FEATURES

- **INNOVATIVE DESIGN & PROTOTYPE TESTING** are key components of GENERAC'S success in "IMPROVING POWER BY DESIGN." But it doesn't stop there. Total commitment to component testing, reliability testing, environmental testing, destruction and life testing, plus testing to applicable CSA, NEMA, EGSA, and other standards, allows you to choose GENERAC POWER SYSTEMS with the confidence that these systems will provide superior performance.
- **SOLID-STATE, FREQUENCY COMPENSATED VOLTAGE REGULATION.** This state-of-the-art power maximizing regulation system is standard on all Generac models. It provides optimized FAST RESPONSE to changing load conditions and MAXIMUM MOTOR STARTING CAPABILITY by electronically torque-matching the surge loads to the engine. Digital voltage regulation at ±1%.
- **TEST CRITERIA:**
 - ✓ PROTOTYPE TESTED
 - ✓ SYSTEM TORSIONAL TESTED
 - ✓ NEMA MG1-22 EVALUATION
 - ✓ MOTOR STARTING ABILITY
- **SINGLE SOURCE SERVICE RESPONSE** from Generac's extensive dealer network provides parts and service know-how for the entire unit, from the engine to the smallest electronic component.
- **GENERAC TRANSFER SWITCHES.** Long life and reliability are synonymous with GENERAC POWER SYSTEMS. One reason for this confidence is that the GENERAC product line includes its own transfer systems and controls for total system compatibility.

15 • 20 • 30 • 48 • 50 kW**application & engineering data****GENERATOR SPECIFICATIONS**

Type	Synchronous
Rotor Insulation Class	H (15 & 20 kW) or F (30, 48 & 50 kW)
Stator Insulation Class	H
Telephone Interference Factor (TIF)	<50
Alternator Output Leads 1-Phase	3 wire
Alternator Output Leads 3-Phase	6 wire
Bearings	Single Sealed Cartridge
Coupling	Direct, Flexible Disc
Excitation System	Direct

VOLTAGE REGULATION

Type	Electronic
Sensing	Single Phase
Regulation	± 1%
Features	Adjustable Voltage & Gain

GOVERNOR SPECIFICATIONS

Type	Electronic Isochronous
Steady State Regulation	± 0.25%

ELECTRICAL SYSTEM

Battery Charge Alternator	50 Amp (15 & 20 kW) or 70 Amp (30, 48 & 50 kW)
Smart Battery Charger	2 Amp
Recommended Battery (battery not included)	Group 27F, 700 CCA
System Voltage	12 Volts

GENERATOR FEATURES

<p>Revolving field heavy duty generator Directly connected to the engine Operating temperature rise 120°C above a 40°C ambient Class H insulation is NEMA rated Class F insulation is NEMA rated All models fully prototype tested</p>

ENCLOSURE FEATURES

Aluminum weather protective enclosure	Ensures protection against mother nature. Electrostatically applied textured epoxy paint for added durability.
Enclosed critical grade muffler	Quiet, critical grade muffler is mounted inside the unit to prevent injuries and maximize sound dampening.
Small, compact, attractive	Makes for an easy, eye appealing installation.
SAE	Sound attenuated enclosure ensures quiet operation.

(All ratings in accordance with BS5514, ISO3046, ISO8528, SAE J1349 and DIN6271)

15 • 20 • 30 • 48 • 50 kW

application & engineering data

ENGINE SPECIFICATIONS: 15 & 20 kW

Make	Generac
Model	In-line
Cylinders	4
Displacement (Liters)	2.28
Bore (in./mm)	3.46/88
Stroke (in./mm)	3.70/94
Compression Ratio	21.3:1
Intake Air System	Naturally Aspirated
Cylinder Head Type	Cast Iron OHV
Piston Type	Aluminum
EPA Emissions Compliance	Emergency Stationary

ENGINE SPECIFICATIONS: 30 kW

Make	Generac
Model	In-line
Cylinders	4
Displacement (Liters)	2.4
Bore (in./mm)	3.54/90
Stroke (in./mm)	3.70/94
Compression Ratio	21.3:1
Intake Air System	Turbocharged
Cylinder Head Type	Cast Iron OHV
Piston Type	Aluminum
EPA Emissions Compliance	Emergency Stationary

ENGINE SPECIFICATIONS: 48/50 kW

Make	Generac
Model	In-Line
Cylinders	4
Displacement (Liters)	3.4
Bore in/mm	3.86/98
Stroke in/mm	4.45/113
Compression Ratio	18.5:1
Intake Air System	Turbocharged/Aftercooled
Cylinder Head Type	Cast Iron OHV
Piston Type	Aluminum
EPA Emissions Compliance	Emergency Stationary

WEIGHTS AND DIMENSIONS

	15 kW	20 kW	30 kW	48 kW	50 kW
Weight (lb/kg)	1380/626		1927/874	2197/997	
Dimensions (LxWxH) (in/cm)	81 x 31 x 50/205 x 78 x 128		95 x 35 x 57/242 x 89 x 145		

ENGINE LUBRICATION SYSTEM

Oil Pump Type	Gear
Oil Filter Type	Full flow spin-on canister
Crankcase Capacity (quarts/liters)	6.87/6.5 - 15 & 20 kW
	6.8/6.4 - 30 kW
	7.4/7 - 48 & 50 kW

ENGINE COOLING SYSTEM

Type	Pressurized radiator - 15 & 20 kW Closed recovery - 30, 48 & 50 kW
Water Pump	Pre-lubed, self-sealing
Fan Speed (rpm)	1800 - 15 & 20 kW
	2061 - 30 kW
	2029 - 48 & 50 kW
Fan Diameter (in./mm)	18.11/460 (15 & 20 kW) 22/559 (30, 48 & 50 kW)
Fan Mode	Pusher

FUEL SYSTEM

Fuel Type	Ultra Low Sulfur Diesel Fuel
Fuel Pump Type	Mechanical Engine Driven Gear
Injector Type	Mechanical
Fuel Supply Line (mm/in)	7.94/0.31 (ID)
Fuel Return Line (mm/in)	7.94/0.31 (ID)
Fuel Specification	ASTM
Fuel Filtering (microns)	5 - 15, 20 & 30 kW
	10 - 48 & 50 kW

TANK SPECIFICATIONS

Total Size (gallons/liters)	34/128.7 - 15 & 20 kW
	62/234.7 - 30, 48 & 50 kW
Usable Size (gallons/liters)	32/121.1 - 15 & 20 kW
	57/215.8 - 30, 48 & 50 kW
Run Time @ 1/2 Load (hrs)	41 - 15 kW
	31 - 20 kW
	38 - 30 kW
	25 - 48 & 50 kW
Listings	UL142
	ULC-S601

15 • 20 • 30 • 48 • 50 kW

operating data

GENERATOR OUTPUT VOLTAGE/kW - 60 Hz

		kW (Standby)	Amp (Standby)	CB Size
RD015	120/240 V, 1Ø, 1.0 pf	15	62	70
	120/208 V, 3Ø, 0.8 pf	15	52	60
	120/240 V, 3Ø, 0.8 pf	15	45	50
RD020	120/240 V, 1Ø, 1.0 pf	20	83	100
	120/208 V, 3Ø, 0.8 pf	20	69	80
	120/240 V, 3Ø, 0.8 pf	20	60	70
RD030	120/240 V, 1Ø, 1.0 pf	30	125	150
	120/208 V, 3Ø, 0.8 pf	30	104	125
	120/240 V, 3Ø, 0.8 pf	30	90	100
	277/480 V, 3Ø, 0.8 pf	30	45	50
RD048/ RD050	120/240 V, 1Ø, 1.0 pf	48	200	200
	120/208 V, 3Ø, 0.8 pf	50	173	200
	120/240 V, 3Ø, 0.8 pf	50	150	175
	277/480 V, 3Ø, 0.8 pf	50	75	90

SURGE CAPACITY IN AMPS

		Voltage Dip @ < .4 pf	
		15%	30%
RD015	120/240 V, 1Ø	53	129
	120/208 V, 3Ø	37	90
	120/240 V, 3Ø	32	78
RD020	120/240 V, 1Ø	87	211
	120/208 V, 3Ø	59	143
	120/240 V, 3Ø	51	124
RD030	120/240 V, 1Ø	66	168
	120/208 V, 3Ø	59	144
	120/240 V, 3Ø	51	125
	277/480 V, 3Ø	26	64
RD048/ RD050	120/240 V, 1Ø	69	189
	120/208 V, 3Ø	90	218
	120/240 V, 3Ø	78	189
	277/480 V, 3Ø	36	87

ENGINE FUEL CONSUMPTION

		gal/hr	L/hr
RD015	25% of rated load	0.51	1.93
	50% of rated load	0.79	2.99
	75% of rated load	1.14	4.31
	100% of rated load	1.48	5.58
RD020	25% of rated load	0.67	2.6
	50% of rated load	1.05	3.97
	75% of rated load	1.52	5.32
	100% of rated load	1.98	7.48
RD030	25% of rated load	0.92	3.5
	50% of rated load	1.45	5.5
	75% of rated load	1.96	7.4
	100% of rated load	2.74	10.4
RD048/ RD050	25% of rated load	1.35	5.11
	50% of rated load	2.15	8.14
	75% of rated load	3.06	11.58
	100% of rated load	3.98	15.07

STANDBY RATING: Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-3046-1. Design and specifications are subject to change without notice.

15 • 20 • 30 • 48 • 50 kW

operating data

ENGINE COOLING

	15 kW	20 kW	30 kW	48/50 kW
Air flow (inlet air including alternator and combustion air in cfm/cmm)	2824/80	2824/80	3038/86	2824/80
System coolant capacity (gal/liters)	2.8/10.6	2.8/10.6	2.8/10.6	2.8/10.6
Heat rejection to coolant (BTU per hr/MJ per hr)	63,535/67	63,535/67	111,000/117.1	135,900/143.4
Maximum operation air temperature on radiator (°C/°F)	50/122			
Maximum ambient temperature (°C/°F)	50/122			

COMBUSTION REQUIREMENTS

Flow at rated power (cfm/cmm)	84.76/2.4	84.76/2.4	90/2.55	190/5.38
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SOUND EMISSIONS

Sound output in dB(A) at 23 ft (7 m) with generator in exercise mode*	65
Sound output in dB(A) at 23 ft (7 m) with generator operating at normal load*	70

*Sound levels are taken from the front of the generator. Sound levels taken from other sides of the generator may be higher depending on installation parameters.

EXHAUST

Exhaust flow at rated output (cfm/cmm)	98.88/2.8	98.88/2.8	230/6.51	448/12.7
Exhaust temperature at rated output (°C/°F)	604.4/1120	604.4/1120	454.4/850	604.4/1120

ENGINE PARAMETERS

Rated Synchronous RPM	1800			
HP at rated kW	26.4	33.5	49	85

POWER ADJUSTMENT FOR AMBIENT CONDITIONS

Temperature Deration	3% for every 5 °C above 25 °C or 1.7% for every 5 °F above 77 °F
Altitude Deration (15, 30, 48 & 50 kW)	1% for every 100 m above 915 m or 3% for every 1000 ft above 3000 ft
Altitude Deration (20 kW)	1% for every 100 m above 305 m or 3% for every 1000 ft above 1000 ft

CONTROLLER FEATURES

2-Line Plain Text Multilingual LCD Display	Simple user interface for ease of operation.
Mode Buttons: Auto	Automatic Start on Utility failure. Programmable 7 day exerciser.
Manual	Start with starter control, unit stays on. If utility fails, transfer to load takes place.
Off	Stops unit. Power is removed. Control and charger still operate.
Ready to Run/Maintenance Messages	Standard
Engine Run Hours Indication	Standard
Programmable start delay between 2-1500 seconds	Standard (programmable by dealer only)
Utility Voltage Loss/Return to Utility Adjustable	From 140-171 V/190-216 V
Future Set Capable Exerciser/Exercise Set Error Warning	Standard
Run/Alarm/Maintenance Logs	50 Events Each
Engine Start Sequence	Cyclic cranking: 16 sec on, 7 rest (90 sec maximum duration).
Starter Lock-out	Starter cannot re-engage until 5 sec after engine has stopped.
Smart Battery Charger	Standard
Charger Fault/Missing AC Warning	Standard
Low Battery/Battery Problem Protection and Battery Condition Indication	Standard
Automatic Voltage Regulation with Over and Under Voltage Protection	Standard
Under-Frequency/Overload/Stepper Overcurrent Protection	Standard
Safety Fused/Fuse Problem Protection	Standard
Automatic Low Oil Pressure/High Oil Temperature Shutdown	Standard
Overcrank/Overspeed (@ 72 Hz)/RPM Sense Loss Shutdown	Standard
High Engine Temperature Shutdown	Standard
Internal Fault/Incorrect Wiring Protection	Standard
Common External Fault Capability	Standard
Field Upgradable Firmware	Standard

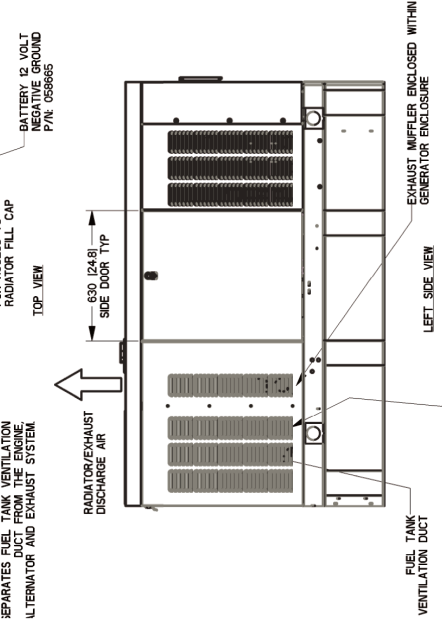
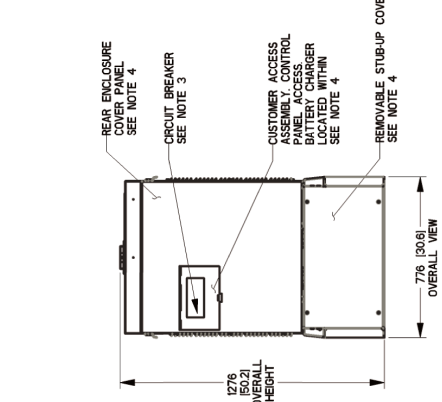
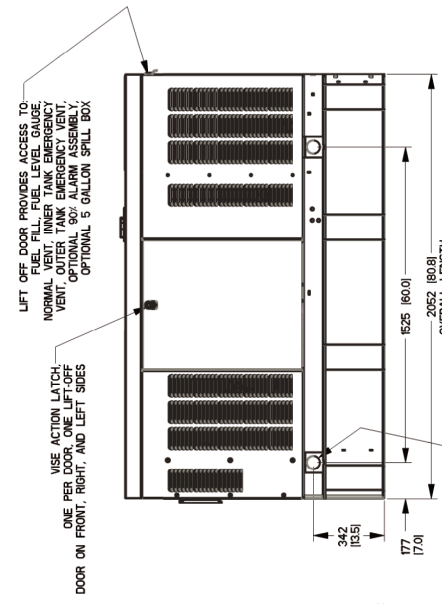
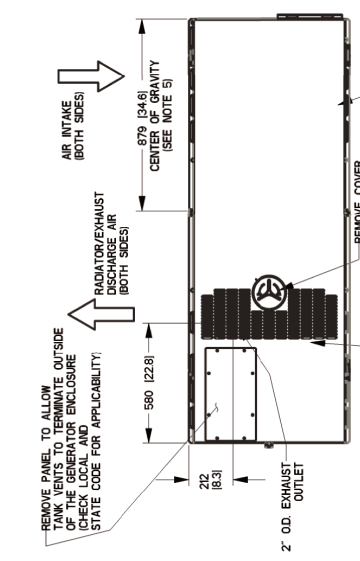
15 & 20 kW

Drawing #0K7025-C (1 of 2)

- NOTES:**
- MINIMUM RECOMMENDED CONCRETE PAD SIZE: 1082 (437) WIDE X .2865 (837) LONG. REFERENCE INSTALLATION GUIDE SUPPLIED WITH UNIT FOR CONCRETE PAD GUIDELINES.
 - ALLOW SUFFICIENT ROOM ON ALL SIDES OF THE GENERATOR FOR MAINTENANCE AND SERVICING. THIS UNIT MUST BE INSTALLED IN ACCORDANCE WITH CURRENT ELECTRICAL CODES, LOCAL AND NATIONAL ELECTRICAL CODES, NATIONAL FIRE ALARM AND SIGNALING ASSOCIATION (NFPA) 70 STANDARDS AS WELL AS ANY OTHER FEDERAL, STATE, AND LOCAL CODES.
 - CONTROL PANEL / CIRCUIT BREAKER INFORMATION
 - SEE SPECIFICATION SHEET OR OWNERS MANUAL
 - SEE SPECIFICATION SHEET OR OWNERS MANUAL FOR ACCESS TO CONTROL PANEL
 - REMOVE THE REAR STUBUP AND REAR ENCLOSURE COVER PANEL TO ACCESS THE STUBUP AREAS AS FOLLOWS:
 - HIGH VOLTAGE CONNECTION INCLUDING AC LOAD LEAD CONDUIT CONNECTION, NEUTRAL CONNECTION, AND BATTERY CHARGER 120 VOLT AC (105 AMP MAX) CONNECTION
 - TRANSFER SWITCH OR TRANSFER SWITCH CONTROL WIRES
 - TRANSFER SWITCH AND ACCESSORY RELAY CONNECTION (ITY 4)
 - CENTER OF GRAVITY AND WEIGHT MAY CHANGE DUE TO UNIT OPTIONS.
 - BOTTOM OF GENERATOR SET MUST BE ENCLOSED TO PREVENT PEST INTRUSION AND EXHAUST SYSTEM AIR DISCHARGE BACK PRESSURE (24 INCHES TYP).
 - REFERENCE OWNERS MANUAL FOR LIFTING WARNINGS.
 - MOUNTING BOLTS OR STUDS TO MOUNTING SURFACE SHALL BE 5/8-11 GRADE 5 (USE STANDARD SAE TORQUE SPECS).
 - SEE SPECIFICATION SHEET FOR AIR DISCHARGE AIR AND EXHAUST. SEE SPEC SHEET FOR MINIMUM AIR FLOW RESTRICTION REQUIREMENTS.
 - GENERATOR MUST BE INSTALLED SUCH THAT FRESH COOLING AIR IS AVAILABLE AND THAT DISCHARGE AIR FROM RADATOR IS NOT RECIRCULATED.

SERVICE ITEM	23L	WEIGHT DATA WITH EMPTY BASETANK (SEE NOTE 5)
OIL FILL CAP	RIGHT SIDE	GENERATOR AS SHOWN 626 (1360)
OIL DIP STICK	RIGHT SIDE	WITH WOODEN SHIPPING SKID 666 (1485)
OIL FILTER	RIGHT SIDE	
OIL DRAIN HOSE	RIGHT SIDE	
RADIATOR DRAIN HOSE	LEFT SIDE	
COOLANT RECOVERY BOTTLE	LEFT SIDE	WEIGHT: KG (LBS)
RADIATOR FILL CAP ACCESS	ROOF TOP	DIMENSIONS: MM (INCH)
AIR CLEANER ELEMENT	EITHER SIDE	
MUFFLER	FRONT	
FAN BELT	EITHER SIDE	
BATTERY	LEFT SIDE	

REFERENCE OWNERS MANUAL FOR PERIODIC REPLACEMENT PART LISTINGS.



REMOVE PANEL TO ALLOW ACCESS TO INSIDE OF THE GENERATOR ENCLOSURE (CHECK LOCAL AND STATE CODE FOR APPLICABILITY)

REMOVE COVER FOR ACCESS TO RADIATOR FILL CAP

BATTERY 12 VOLT (WITH 5 AMP FUSE) GROUND P/N: US6665

INTERNAL DIVIDER PANEL SEPARATES FUEL TANK VENTILATION SYSTEM FROM EXHAUST SYSTEM

2' O.D. EXHAUST OUTLET

REMOVE COVER FOR ACCESS TO RADIATOR FILL CAP

630 (248) SIDE DOOR HGT

RADIATOR/EXHAUST DISCHARGE AIR

EXHAUST MUFFLER ENCLOSED WITHIN GENERATOR ENCLOSURE

FUEL TANK VENTILATION DUCT

OPEN PUNCHED LOUVERS TYPICAL ON BOTH SIDES OF FUEL TANK VENTILATION DUCT TO PROVIDE ADEQUATE CROSS-FLOW OF AIR VENTILATION

REAR VIEW

676 (266) OVERALL HEIGHT

776 (30.6) OVERALL WIDTH

REAR ENCLOSURE COVER PANEL SEE NOTE 4

CIRCUIT BREAKER SEE NOTE 3

CUSTOMER ACCESS PANEL ACCESS BATTERY CHARGER (SEE NOTE 4)

REMOVABLE STUB-UP COVER SEE NOTE 4

DOOR ON FRONT, RIGHT, AND LEFT SIDES

VISE ACTION LATCH

LIFT OFF DOOR PROVIDES ACCESS TO REAR ENCLOSURE COVER PANEL

NORMAL VENT

INNER TANK EMERGENCY VENT

OUTER TANK EMERGENCY VENT

OPTIONAL 90° ALARM ASSEMBLY

OPTIONAL 5 GALLON SPILL BOX

342 (13.5)

177 (7.0)

1525 (60.0)

2052 (80.8) OVERALL LENGTH

RIGHT SIDE VIEW

LIFTING PROVISION (4 PLACES) SEE NOTES 5, 8 AND CENTER OF GRAVITY DIMENSIONS

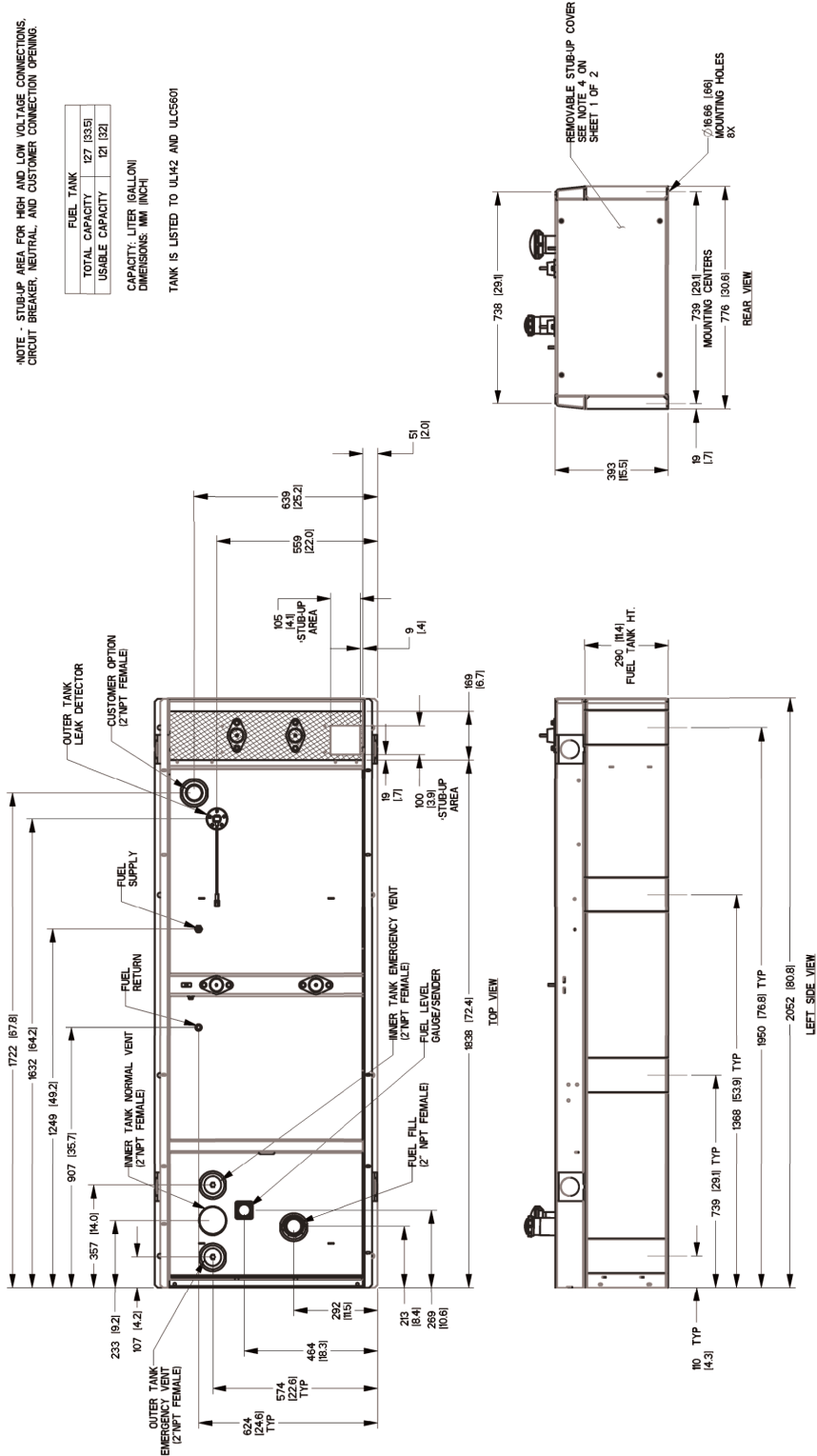
15 & 20 kW

NOTE - STUBUP AREA FOR HIGH AND LOW VOLTAGE CONNECTIONS, CIRCUIT BREAKER, NEUTRAL, AND CUSTOMER CONNECTION OPENING.

FUEL TANK	
TOTAL CAPACITY	127 [33.5]
USABLE CAPACITY	121 [32]

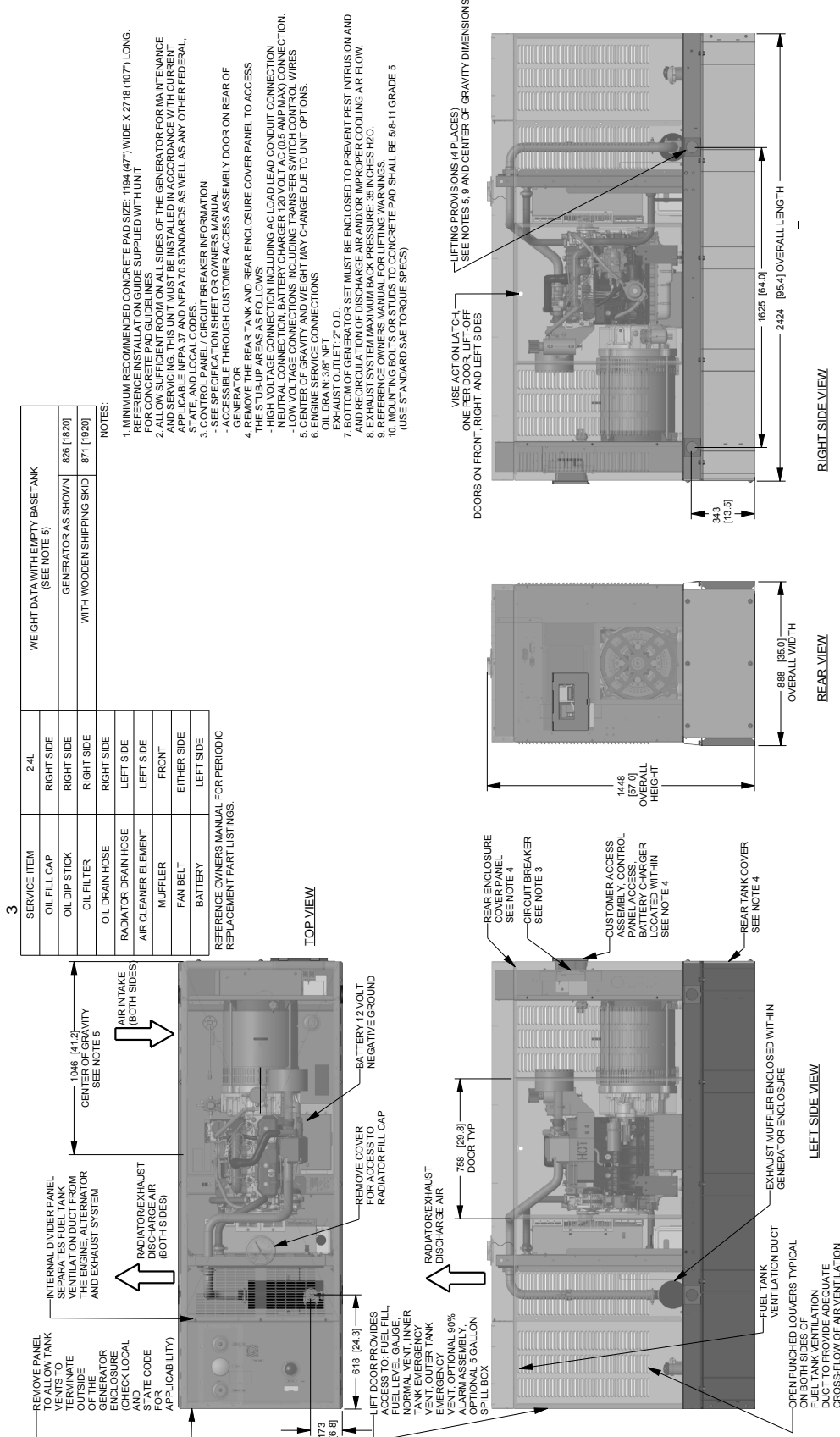
CAPACITY: LITER (GALLON)
DIMENSIONS: MM (INCH)

TANK IS LISTED TO UL142 AND ULCS601



30 kW

Drawing #0K7002-C (1 of 2)



30 kW

GENERAC®

installation layout

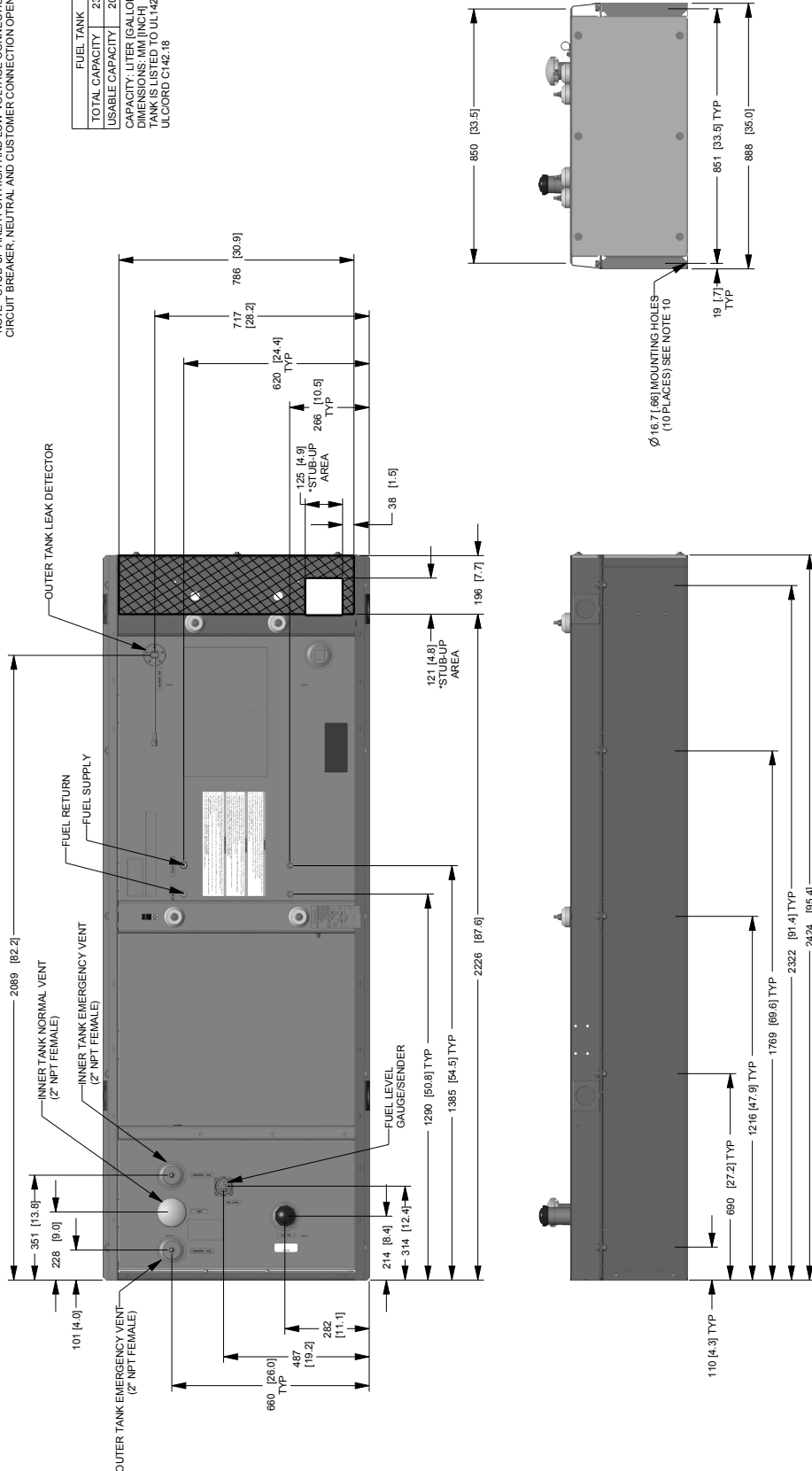
Drawing #0K7002-B (2 of 2)

Protector™ Series

9 of 12

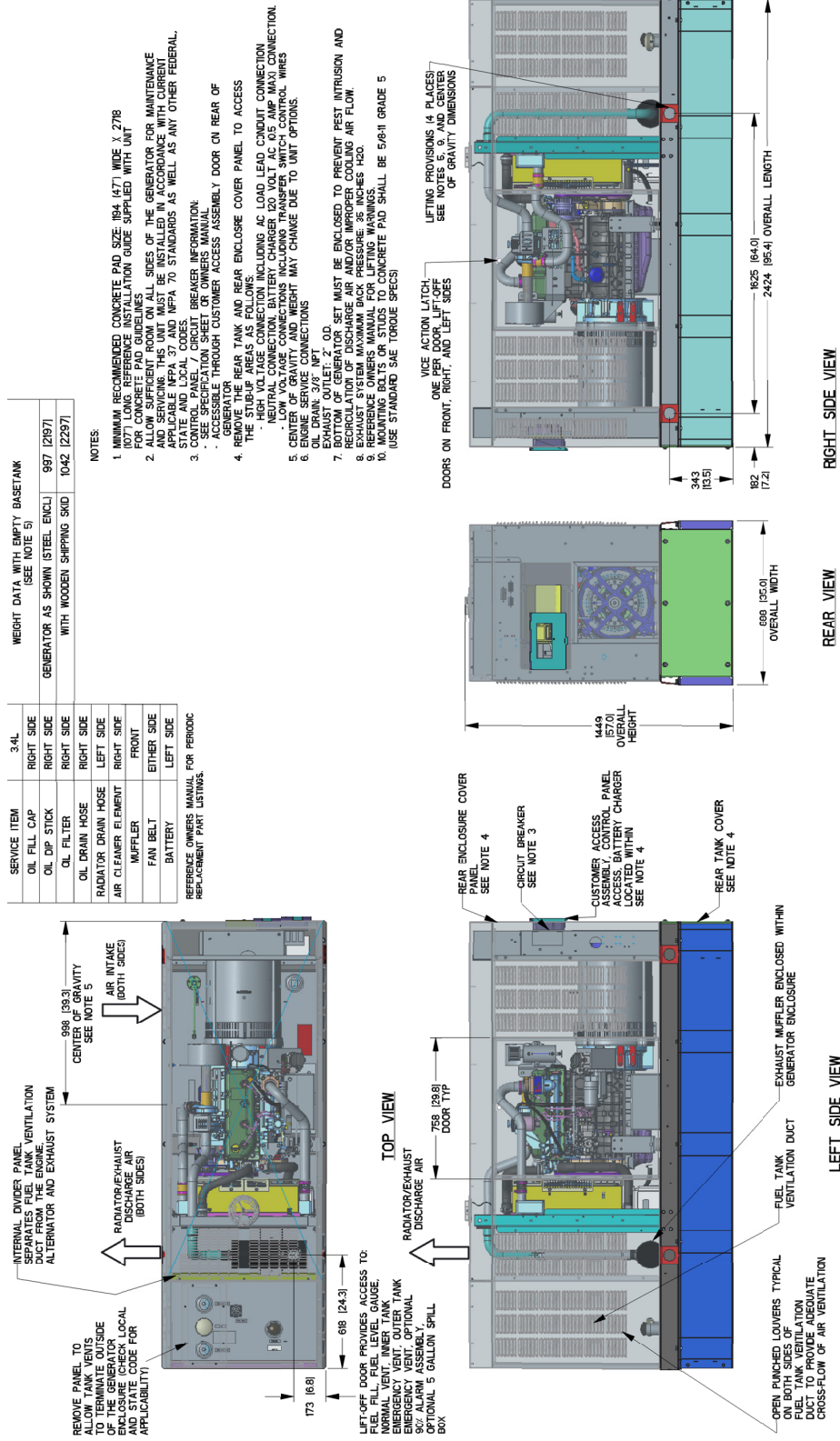
*NOTE - STUB-UP AREA FOR HIGH AND LOW VOLTAGE CONNECTIONS, CIRCUIT BREAKER, NEUTRAL AND CUSTOMER CONNECTION OPENING.

FUEL TANK	
TOTAL CAPACITY	233 [6.1]
USABLE CAPACITY	203 [5.5]
CAPACITY, LITER (GALLON)	
DIMENSIONS: MM (INCH)	
TANK IS LISTED TO UL142 AND UL308 C142.18	



48 & 50 kW

Drawing #0K6968-C (1 of 2)



WEIGHT DATA WITH EMPTY BASETANK (SEE NOTE 5)	34L
GENERATOR AS SHOWN (STEEL ENCL. WITH WOODEN SHIPPING SKID)	997 (2197)
	1042 (2297)

- NOTES:**
- MINIMUM RECOMMENDED CONCRETE PAD SIZE: 164" (4.7) WIDE X 278" (7.0) DEEP. SEE CONCRETE PAVEMENT GUIDE SUPPLIED WITH UNIT FOR CONCRETE PAD GUIDELINES.
 - ALLOW SUFFICIENT ROOM ON ALL SIDES OF THE GENERATOR FOR MAINTENANCE AND SERVICING. THIS UNIT MUST BE INSTALLED IN ACCORDANCE WITH CURRENT STATE AND LOCAL CODES.
 - CONTROL PANEL / CIRCUIT BREAKER INFORMATION:
 - SEE SPECIFICATION SHEET OR OWNERS MANUAL
 - ACCESS THROUGH CUSTOMER ACCESS ASSEMBLY DOOR ON REAR OF ENCLOSURE
 - REMOVE THE REAR TANK AND REAR ENCLOSURE COVER PANEL TO ACCESS THE STUB-UP AREAS AS FOLLOWS:
 - HIGH VOLTAGE CONNECTION INCLUDING AC LOAD LEAD CIRCUIT CONNECTION
 - LOW VOLTAGE CONNECTION INCLUDING TRANSFER SWITCH CONTROL WIRING
 - ENGINE SERVICE CONNECTIONS
 - EXHAUST OUTLET: 2" OD
 - CENTER OF GRAVITY AND WEIGHT MAY CHANGE DUE TO UNIT OPTIONS.
 - REAR TANK AND REAR ENCLOSURE COVER PANEL MUST BE ENCLOSED TO PREVENT INTRUSION AND REDUCATION OF DISCHARGE AIR AND/OR IMPROPER COOLING AIR FLOW.
 - SEE SPECIFICATION SHEET FOR LIFTING PROVISIONS INFO.
 - REFERENCE OWNERS MANUAL FOR LIFTING WARNINGS.
 - MOUNTING BOLTS OR STUDS TO CONCRETE PAD SHALL BE 5/8"-I GRADE 5 (USE STANDARD SAE TORQUE SPECS)

SERVICE ITEM	34L	RIGHT SIDE
OIL FILL CAP		RIGHT SIDE
OIL DIP STICK		RIGHT SIDE
OIL FILTER		RIGHT SIDE
OIL DRAIN HOSE		RIGHT SIDE
RADIATOR DRAIN HOSE		LEFT SIDE
AIR CLEANER ELEMENT		RIGHT SIDE
MUFFLER		FRONT
FAN BELT		EITHER SIDE
BATTERY		LEFT SIDE

REFERENCE OWNERS MANUAL FOR PERIODIC MAINTENANCE AND REPLACEMENT PART LISTING.

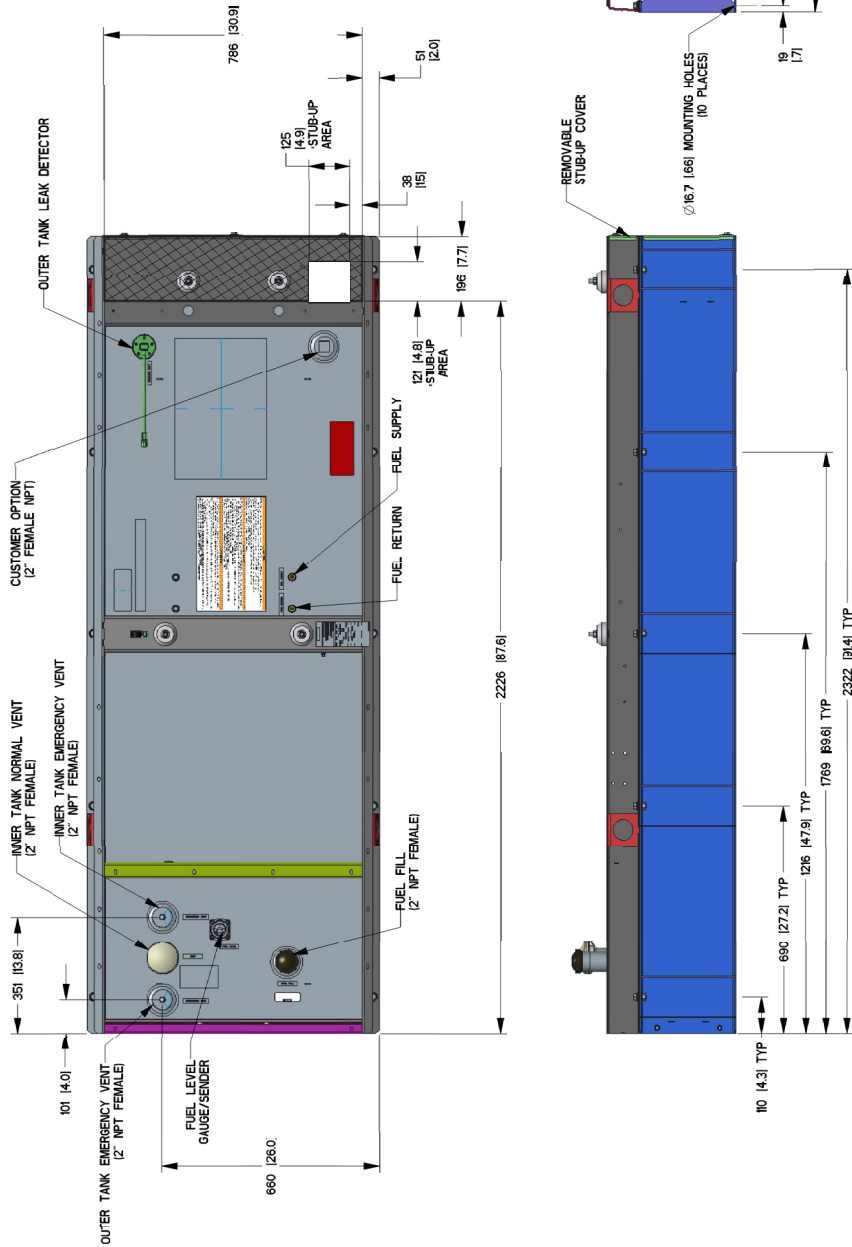
48 & 50 kW

installation layout

Drawing #0K6968-A (2 of 2)

FUEL TANK	
TOTAL CAPACITY	233 [61]
USABLE CAPACITY	209 [55]
CAPACITY: LITER (GALLONS)	
DIMENSIONS: MM (INCH)	
THIS TANK IS LISTED TO UL142 AND ULCS907	

NOTE - STUBUP AREA FOR HIGH AND LOW VOLTAGE CONNECTIONS, CIRCUIT BREAKER, NEUTRAL AND CUSTOMER CONNECTION OPENING.



15 • 20 • 30 • 48 • 50 kW**available accessories**

Model #	Product	Description
G006463-4	Mobile Link™	Generac's Mobile Link allows you to check the status of your generator from anywhere that you have access to an Internet connection from a PC or with any smart device. You will even be notified when a change in the generator's status occurs via e-mail or text message. Note: Harness Adapter Kit required. Available in the U.S. only.
G006478-0	Harness Adapter Kit	The Harness Adapter Kit is required to make liquid-cooled units compatible with Mobile Link™.
G006502-0	Spill Box	The 5-gallon spill box screws into the existing fuel fill port of the base tank. It captures and contains fuel if over fueling or spilling occurs during the fill process.
G006504-0	90% Fuel Level Alarm	The 90% fuel level alarm alerts the fuel fill operator when the tank reaches a 90% fill level by sounding an audible alarm and triggering an LED warning light.
G006505-0 - 15 & 20 kW G006506-0 - 30, 48 & 50 kW	Tank Risers	Tank risers are required in some municipalities to help avoid potential base tank corrosion caused by mounting on rough surfaces.
G006507-0	Fuel Fill Drop Tube	A powder coat painted, steel fuel fill drop tube is required in some municipalities to prevent sparking due to static electricity buildup, which can be caused by the fuel dropping into the tank from the fill area. Using a drop tube also results in submerged filling, which increases the fuel delivery flow rate and reduces vapors, foam and potential tank evaporation.
G006513-0 - 15 & 20 kW G006517-0 - 30 kW G006516-0 - 48 & 50 kW	Stainless Steel Fuel Lines	Some municipalities require the use of stainless steel fuel lines instead of the standard hoses provided with the diesel generator products. These stainless steel lines are fire resistant for additional safety.
G006510-0	E-Stop	E-stop allows for immediate fuel shutoff and generator shutdown in the event of an emergency.
006511-0	Spill Box Drainback Kit	The spill box drainback kit allows fuel that was captured in the 5-gallon spill box to be drained directly back into the fuel tank to avoid vapors.
G006588-1	Vent Extension Support Kit	The vent extension support kit consists of two aluminum plates with the appropriate pipe cutouts to secure the vent extension pipes coming through the top of the generator enclosure. It helps to minimize stress on the NPT fittings integrated on the tank and also helps protect against pests.
G006512-0	Lockable Fuel Cap	The cast iron, lockable fuel cap provides the ability to lock the fuel system to prevent unwanted fuel tampering or fuel siphoning.
G006572-0 - 15 & 20 kW G006571-0 - 30 kW G006570-0 - 48 & 50 kW	Maintenance Kits	The Protector Maintenance Kits offer all the hardware necessary to perform complete maintenance on Generac Protector generators.
G006560-0 - 15 & 20 kW G006559-0 - 30 kW G006558-0 - 48 & 50 kW	Cold Weather Kits	Recommended for generators installed in regions where the temperature regularly falls below 32 °F (0 °C). The Cold Weather Kits consist of a block heater with all necessary mounting hardware and a battery warmer with a thermostat built into the battery wrap.
G005704-0	Paint Kit	If the generator enclosure is scratched or damaged, it is important to touch-up the paint to protect from future corrosion. The paint kit includes the necessary paint to properly maintain or touch-up a generator enclosure.
G006664-0	Local Wireless Remote	Completely wireless and battery powered, Generac's wireless remote monitor provides you with instant status information without ever leaving the house.
G006665-0	Wireless Remote Extension Harness	Recommended for use with the Wireless Remote on units up to 60 kW, required for use on units 70 kW or greater.
G006873-0	Smart Management Module (50 Amps)	Manage large loads by utilizing up to 8 individual Smart Management modules. These devices are installed directly in line with existing appliance wiring for easy installation.