

VIA ELECTRONIC MAIL

September 10, 2021

Eric Breun Transcend Wireless 10 Industrial Avenue, Suite 3 Mahwah, NJ 07430

RE: **EM-T-MOBILE-141-210722** - T-Mobile notice of intent to modify an existing telecommunications facility located at 720 Quinebaug Road, Thompson, Connecticut.

Dear Mr. Breun:

The Connecticut Siting Council (Council) is in receipt of your correspondence of September 3, 2021, submitted in response to the Council's August 27, 2021 notification of an incomplete request for exempt modification with regard to the above-referenced matter.

The submission renders the request for exempt modification complete and the Council will process the request in accordance with the Federal Communications Commission 60-day timeframe.

Thank you for your attention and cooperation.

Sincerely,

Mahuilhal

Melanie Bachman Executive Director

MAB/IN/laf

Sent: Friday, September 3, 2021 11:55 AM
To: Mathews, Lisa A <<u>Lisa.A.Mathews@ct.gov</u>>
Cc: CSC-DL Siting Council <<u>Siting.Council@ct.gov</u>>
Subject: Re: 720 Quinebaug Road T-Mobile Cell Site Upgrade (CTNL193A)

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe. Lisa,

Attached is the revised PDF of this application.

On Mon, Jul 12, 2021 at 9:14 AM Breun, Eric <<u>ebreun@transcendwireless.com</u>> wrote: Good Afternoon,

Attached is a complete submittal package for a T-Mobile upgrade at the existing cell site at 720 Quinebaug Road in Thompson. Please confirm receipt of this email. Thank you in advance.

Eric Breun Site Acquisition Agent Transcend Wireless 10 Industrial Ave Suite 3 Mahwah NJ 07430 201-658-7728

10 Industrial Ave, Suite 3 Mahwah NJ 07430

PHONE: 201.684.0055 FAX: 201.684.0066



September 1, 2021

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

RE: Notice of Exempt Modification 720 Quinebaug Road, Thompson, CT Latitude: 42.0228527 Longitude: -72.297361 T-Mobile Site#: CTNL193A - Hardening

Dear Ms. Bachman:

T-Mobile currently maintains twelve (12) antennas at the 105-foot level of the existing 125-foot Monopole at 720 Quinebaug Road, Quinebaug, CT. The 125-foot Monopole is owned and operated by the Quinebaug Volunteer Fire Department. T-Mobile now intends to add a 25Kw generator to a proposed 10'x4' concrete pad within the existing compound.

Planned Modifications:

Ground:

Install New:

(1) Generac RD025 25 Kw AC Diesel Generator - 240 gallon double walled self-contained tank with fuel sensor.
Requires (2) 12-minute run cycles by-weekly.
(1) 10' x 4' Concrete Pad

This facility was approved by the Town of Thompson Planning and Zoning Commission on March 23, 1998. A copy of the minutes and decision of the Commission's meeting is attached, with no record of conditions that would restrict exempt modifications. Therefore, this modification complies with the aforementioned approval.

Attached is a copy of the original lease exhibit between T-Mobile and the Quinebaug Volunteer Fire Department. T-Mobile was given 60 SF but will be expanding to 100 SF.

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.SA. § 16-SOj-73, a copy of this letter is being sent to First Selectman Ken Beausoleil, Elected Official, and Tyra Penn-Gesek, Director of Planning and Development, as well as the property owner. Confirmation of delivery has been attached as well.

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.

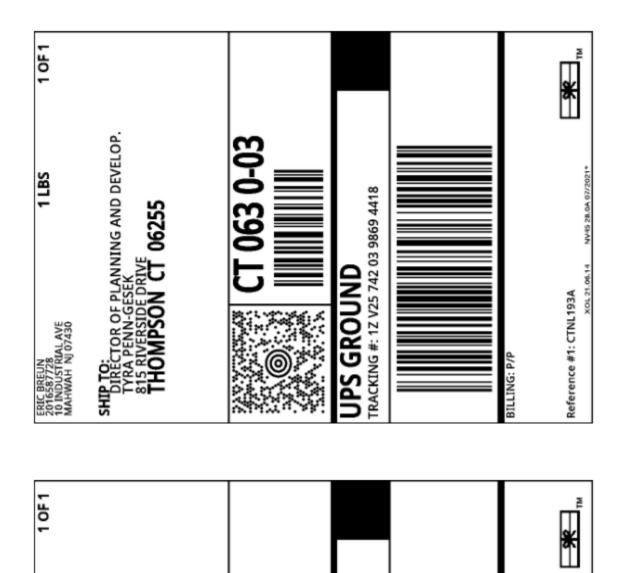
For the foregoing reasons, T-Mobile respectfully submits that the proposed modifications to the above referenced telecommunications facility constitute an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

Eric Breun

Transcend Wireless Cell: 201-658-7728 Email: <u>ebreun@transcendwireless.com</u>

Attachments cc: Ken Beausoleil - First Selectman of Thompson Tyra Penn-Gesek - Director of Planning and Development Quinebaug Volunteer Fire Department - Property Owner



T 063 0-03

TRACKING #: 1Z V25 742 03 9754 4420

JPS GROUND

NV45 28.0A 07/2021

XOL 21.06.14

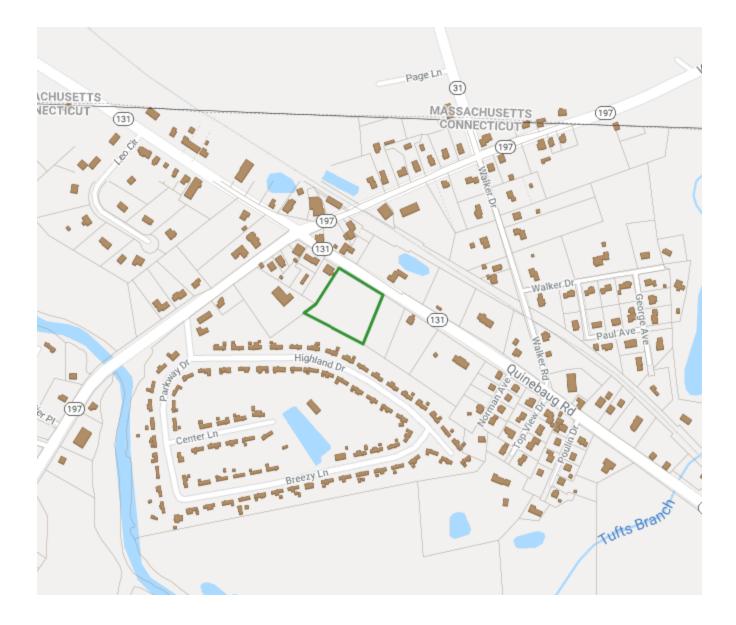
Reference #1: CTNL193A

BILLING: P/P

1 LBS

ERIC BREUN 2016587728 10 INDUSTRIAL AVE MAHWAH NJ 07430 SHIP TO: FIRST SELECTMAN KEN BEAUSOLEIL 815 RIVERSIDE DRIVE THOMPSON CT 06255





720 QUINEBAUG RD

Location	720 QUINEBAUG RD	Mblu	3/ 81/ 1/ /
Acct#	004936	Owner	QUINEBAUG VOLUNTEER FIRE DEPT
Assessment	\$727,600	Appraisal	\$1,039,500
PID	144	Building Count	1

Q Sales

🚔 Print

Field Card

🗴 Map It

Current Value

Appraisal						
Valuation Year Improvements Land Total						
2019	\$904,800	\$134,700	\$1,039,500			
Assessment						
Valuation Year Improvements Land		Total				
2019	\$633,4	400 \$94,20	0 \$727,600			

Owner of Record

Owner	QUINEBAUG VOLUNTEER FIRE DEPT	Sale Price	\$0
Co-Owner Address	P 0 B0X 144	Certificate Book & Page	0368/0336
	QUINEBAUG, CT 06262	Sale Date	12/19/1997

Ownership History

Ownership History				
Owner	Certificate	Book & Page	Sale Date	
QUINEBAUG VOLUNTEER FIRE DEPT	SO		0368/0336	12/19/1997

Building Information

Building 1 : Section 1

Year Built:	2005
Living Area:	4,500
Replacement Cost:	\$844,3
Building Percent Good:	80
Replacement Cost	

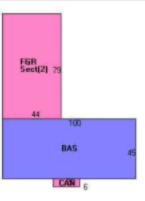
4,388

B	uilding Attributes
Field	Description
STYLE	Fire Station
MODEL	Ind/Comm
Grade	Good +10
Stories:	1
Occupancy	1
Exterior Wall 1	Pre-finsh Metl
Exterior Wall 2	
Roof Structure	Steel Frm/Trus
Roof Cover	Metal/Tin
Interior Wall 1	Drywall/Sheet
Interior Wall 2	
Interior Floor 1	Concr Aby Grad
Interior Floor 2	Vinyl/Asphalt
Heating Fuel	Oil
Heating Type	Hydro air
АС Туре	Central
Bidg Use	MUN FIRE
Total Rooms	03
Total Bedrms	0
Total Baths	0
1st Floor Use:	
Heat/AC	NONE
Frame Type	STEEL
Baths/Plumbing	AVERAGE
Ceiling/Wall	CEIL & WALLS
Rooms/Prins	AVERAGE
Wall Height	12
% Comn Wall	0

Building Photo



Building Layout



	Building Sub-Areas	(sq ft)	Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	4,500	4,500
CAN	Canopy	120	0
		4,620	4,500

Building 1 : Section 2

\$211,500

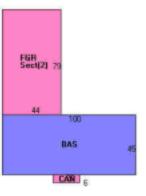
Building Attributes : Section 2 of 2

FieldDescriptionSTYLEFire StationMODELInd/CommGradeGood +10GradeGood +10Stories:1Cocupancy1Exterior Wall 1Pre-finish MetlExterior Wall 2Metal/TinRoof StructureMetal/TinInterior Wall 1Drywall/SheetInterior Wall 2Diru/NoneInterior Wall 2Diru/NoneInterior Floor 1Diru/NoneInterior Floor 2Diru/NoneHasting FuelOilAct TypeQuarterionStola BedrmsOilTotal RoomsOilTotal BedrmsOilTotal BedrmsStellHating TypeDiru/NoneStati Floor Use:NUN FIRETotal RoomsOilStati PlanumbingNoneFrame TypeStell AwALLSRooms/PrinsXIERAGEWall Height20Stati Room WallDiruStorm Storm	Building Attribut	es : Section 2 of 2
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Wall Height 20	Ceiling/Wall	CEIL & WALLS
-	Rooms/Prins	AVERAGE
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	% Comn Wall	0

Building Photo



Building Layout



	Building Sub-Areas	(sq ft)	Legend
Code	Description	Gross Area	Living Area
FGR	Garage	3,476	0
		3,476	0

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use		Land Line Valua	tion
Use Code	9032	Size (Acres)	2.4
Description	MUN FIRE	Frontage	305
Zone	R40	Depth	0
Neighborhood		Assessed Value	\$94,200
Alt Land Appr Category	No	Appraised Value	\$134,700

Outbuildings

	Outbuildings					Legend
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
PAV1	PAVING-ASPHALT			10000 S.F.	\$10,000	1
SHD1	SHED FRAME			392 S.F.	\$3,300	1
LT2	W/DOUBLE LIGHT			2 UNITS	\$2,000	1
LT3	W/TRIPLE LIGHT			1 UNITS	\$1,500	1
LT1	LIGHTS-IN W/PL			1 UNITS	\$1,000	1

Valuation History

Appraisal						
Valuation Year	Improvements	Land	Total			
2018	\$949,200	\$138,000	\$1,087,200			
2017	\$949,200	\$138,000	\$1,087,200			
2016	\$949,200	\$138,000	\$1,087,200			

Assessment					
Valuation Year	Improvements	Land	Total		
2018	\$664,500	\$96,600	\$761,100		
2017	\$664,500	\$96,600	\$761,100		
2016	\$664,500	\$96,600	\$761,100		

Proof of Delivery

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number

1ZV257420396414438

Weight 0.50 LBS

Service

UPS Ground

Shipped / Billed On 07/09/2021

Delivered On

07/22/2021 4:03 P.M.

Delivered To QUINEBAUG, CT, US

Received By

DRIVER RELEASE

Left At

Met Customer

Thank you for giving us this opportunity to serve you. Details are only available for shipments delivered within the last 120 days. Please print for your records if you require this information after 120 days.

Sincerely,

UPS

Tracking results provided by UPS: 08/31/2021 7:11 P.M. EST

Proof of Delivery

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number 1ZV257420397544420

12423/ 12033/311

Weight 0.50 LBS

Service

UPS Ground

Shipped / Billed On 07/09/2021

0770572021

Delivered On

07/22/2021 11:40 A.M.

Delivered To NORTH GROSVENORDALE, CT, US

Received By

PARADISE

Left At

Inside Delivery

Thank you for giving us this opportunity to serve you. Details are only available for shipments delivered within the last 120 days. Please print for your records if you require this information after 120 days.

Proof of Delivery

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number

1ZV257420398694418

Weight

0.50 LBS

Service

UPS Ground

Shipped / Billed On

07/09/2021

Delivered On

07/22/2021 11:40 A.M.

Delivered To NORTH GROSVENORDALE, CT, US

Received By

CLERK

Left At

Inside Delivery

Thank you for giving us this opportunity to serve you. Details are only available for shipments delivered within the last 120 days. Please print for your records if you require this information after 120 days.

vol 007 mil 255 Town of Thompson

PLANNING & ZONING COMMISSION

MUNICIPAL BUILDING

NORTH GROSVENOR DALE, CONN. 06255

TEL.: 203-923-9002

MINUTES PLANNING & ZONING COMMISSION MARCH 23, 1998 * 7:00 PM MERRILL SENEY COMMUNITY ROOM

5).

. Discussion Regarding Proposed Telecommunications Facility 720 Thompson Road; Map 120, Block 30, Lot 14, Industrial Zone John Kowalski, Techstar Communications

John Kowalski gave a brief presentation, they received a conceptual approval from the commission last month, he has submitted new information including the 10 ft. fence, materials stating the coverage afforded, they will be located in an industrial zone, the tower will co-host two additional users on the 140 ft. monopole. They are seeking their zoning permit at this time, there is no existing tower in town that will meet their coverage. Atty. St. Onge stated the rules are up in the air at this time, in the Town's Zoning Regulations a structure is defined as all inclusive, a building is defined with the exclusion of radio and TV antennas, and that is the only difference between a building and a structure; clearly there was an intention in the regulations but it was not spelled out. It does fit in under the industrial zone, where it accepts radio & TV towers but the regulations don't list where they're permitted. The law is the Town can regulate but it can't prohibit. The Town does need a regulation to address this issue and specify the height issue, setbacks, screening, fencing, co-location, minimum lot size, signs & lights, removal, etc. The commission may want to act on this application since he already has a conceptual approval but then either a moratorium or drafting of a new regulation must begin immediately to meet the Federal requirements. John Rice noted some approval stipulations: a letter signed by the Director of CT. operations for Techstar Communications that the commission reserves the right to require other applicant's to share their tower; also that Techstar agrees to dismantle and remove at their expense if the facility is not in use for 12 consecutive months, this removal shall occur within 90 days of the end of such 12 month period; the design and plan shall indicate how the tower will collapse without encroaching upon any adjoining property if failure occurs; a report from a licensed telecommunications system engineer indicating that the proposed wireless telecommunications facility will comply with F.C.C. radio frequency emissions standards and that the installation will not interfere with public safety communications. Discussion followed. Mr. Kowalski stated there will be no lights and no signs except for a warning sign.

A Motion was made by John Rice to approve the zoning permit for a free standing 140 ft. monopole tower and in conformity with the drawings submitted upon meeting all aforementioned stipulations and reviewed by the Zoning Enforcement Officer, seconded by Randolph Blackmer. All in favor.

VOTE: 9 YES MOTION CARRIED

Discussion followed regarding amending the regulations, it could be

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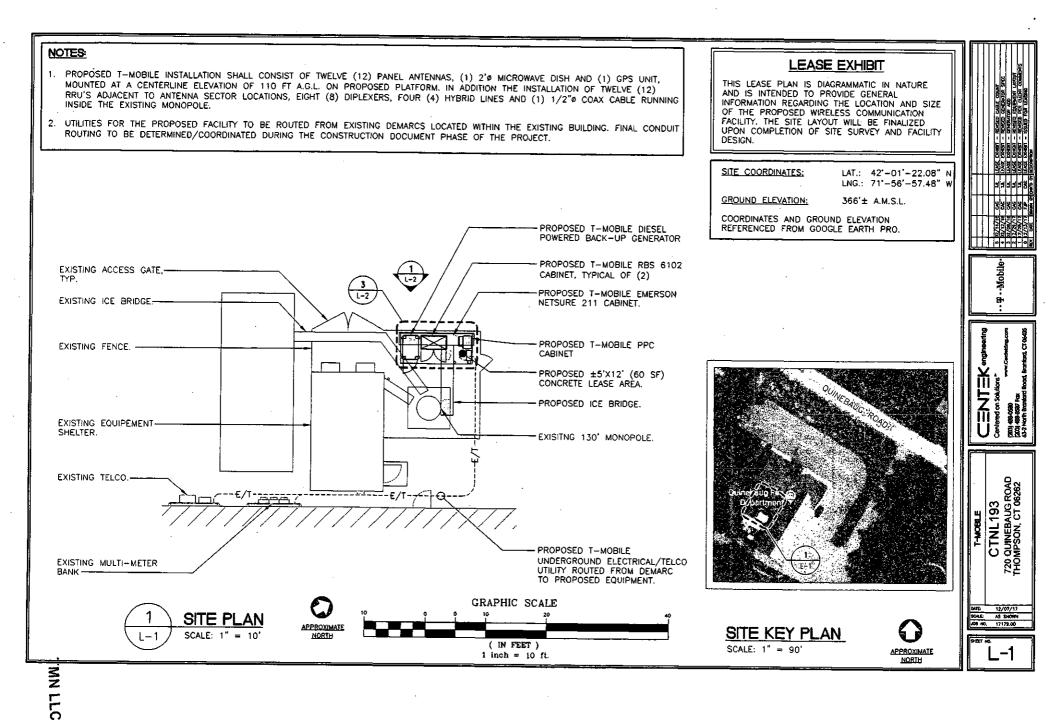
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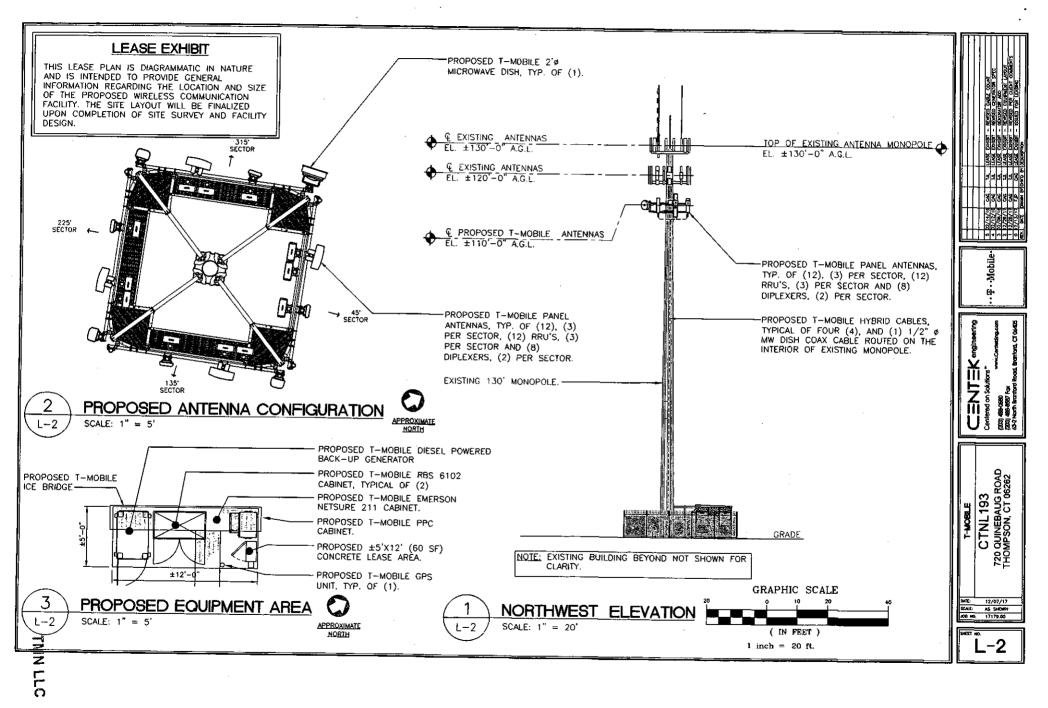
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7 Growth d n favor.





GENERAL NOTES

1.	ALL WORK SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL
	BUILDING CODE AS MODIFIED BY THE 2018 CONNECTICUT
	SUPPLEMENT, INCLUDING THE TIA/EIA-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 2. 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 5. INSPECTIONS REQUIRED AND SHALL ALSO PAY FEES REQUIRED FOR THE GENERAL CONSTRUCTON, 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 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 8. 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 9. 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.

- 10. ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
- 11. 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.
- 12. 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.
- 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 CONDUITS 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 '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.
- 19. 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.

- Mobile-SITE NAME: CTNL193A SITE ID: CTNL193A 720 QUINEBAUG RD QUINEBAUG, CT 06262

	RIFFIN ROAD SOUTH MFIELD, CT 06002	TO: 720 QUINEBAUG ROA QUINEBAUG, CT 062
	N GRIFFIN ROAD S. TOWARD HARTMAN RD. RIGHT ONTO DAY HILL RD.	0.30 I 3.64 I
3. MERGE ONTO I-	-91 S TOWARD HARTFORD	3.99
	-291 EAST VIA EXIT 35A TOWARD MANCHESTER -84 E/WILBUR CROSS HWY N VIA LEFT EXIT TOWA	6.18 RD BOSTON 24.79
6. TAKE THE CT-1	90 EXIT, EXIT 73 TOWARD UNION	0.24
8. TURN RIGHT ON	ITO BUCKLEY HWY/CT-190 ITO BIGELOW HOLLOW RD/CT-171/CT-197	1.90 2.29
9. TURN LEFT ONT	O LAWSON RD/CT-197 CONTINUE TO FOLLOW CT- TO QUINEBAUG RD/CT-131	-197 10.65 0.12
11. FINISH AT 720	QUINEBAUG ROAD, QUINEBAUG, CT 06262	0.12
	LATITUDE: 42°-01'-22.25" N	COORDINATES AND GROUND ELEVATIO
	LONGITUDE: 71°-56'-57.17" W	ARE REFERENCED FROM GOOGLE EAR
	GROUND ELEVATION: 368.14'± AMSL	
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	VICINITY MAP	(

PRO.	JFCT	SUMMARY	

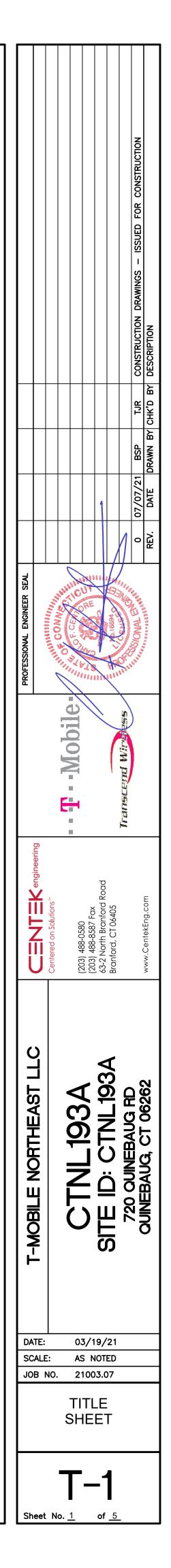
THE PROPOSED SCOPE OF WORK CONSISTS OF A MODIFICATION TO THE EXISTING UNMANNED TELECOMMUNICATIONS FACILITY INCLUDING THE FOLLOWING:

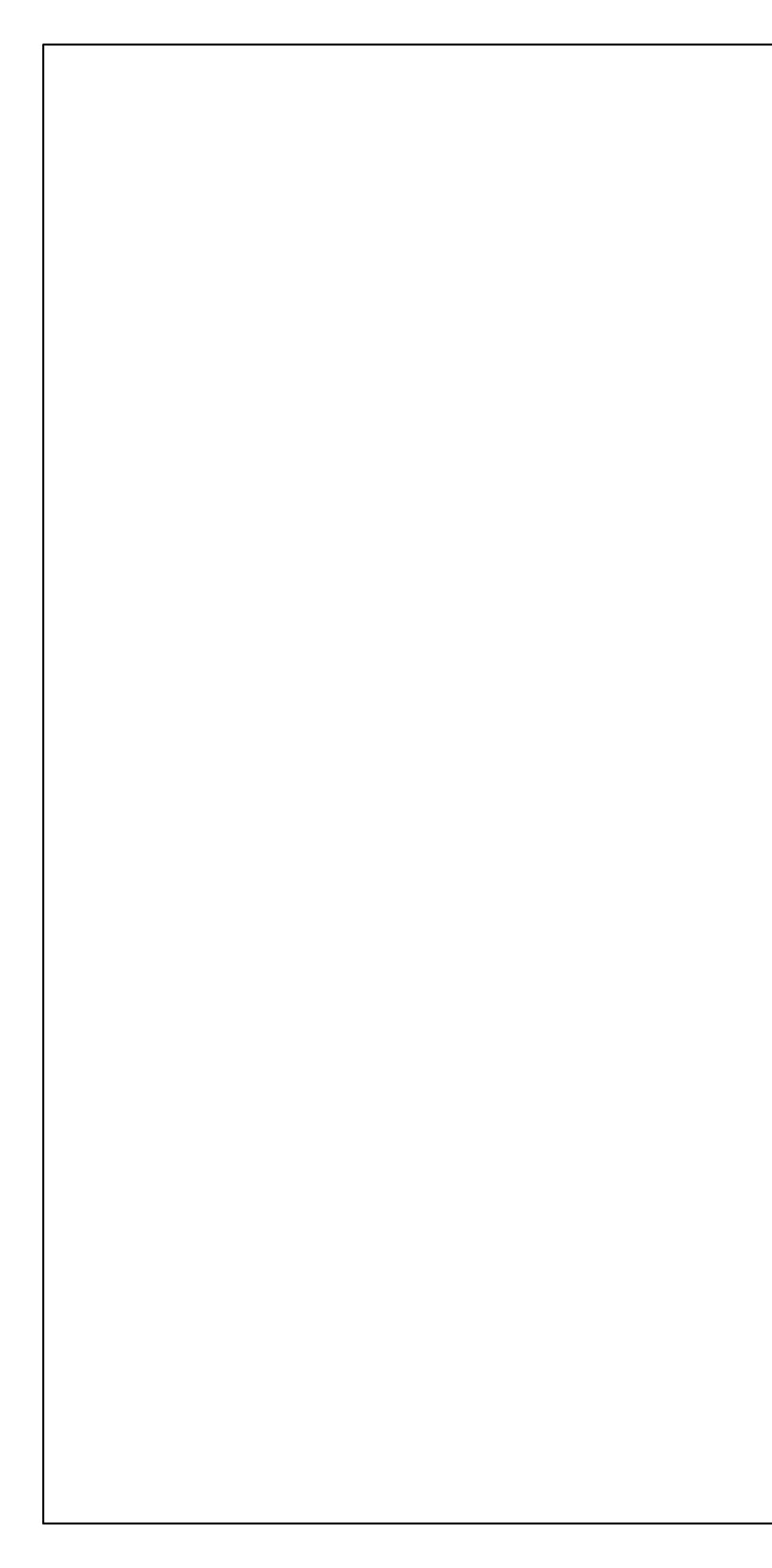
- A. INSTALL (1) NEW 25 KW DIESEL FUELED BACK-UP GENERATOR ON A PROPOSED $10' \times 4'$ CONCRETE PAD WITHIN THE EXISTING COMPOUND
- B. INSTALL (1) 200A AUTOMATIC TRANSFER SWITCH ON A PROPOSED UTILITY FRAME

PROJECT INFORMATION

SITE NAME:	CTNL193A
SITE ID:	CTNL193A
SITE ADDRESS:	720 QUINEBAUG ROAD QUINEBAUG, CT 06262
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
PROJECT COORDINATES:	LATITUDE: 42°-01'-22.25" N LONGITUDE: 71°-56'-57.17" W GROUND ELEVATION: 368.14'± AMSL
	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		





NOTES AND SPECIFICATIONS

DESIGN BASIS:

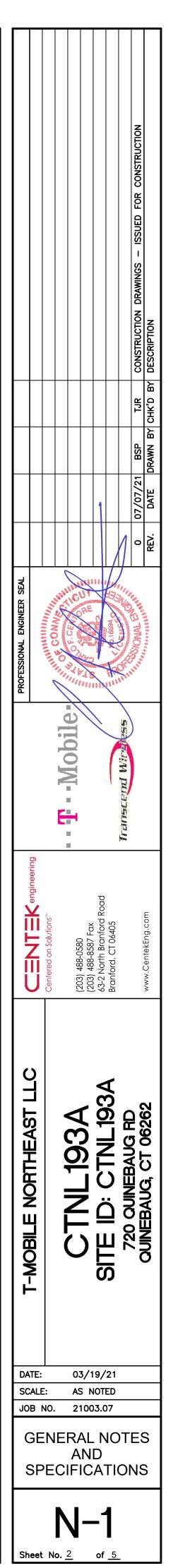
GOVERNING CODE: 2015 INTERNATIONAL BUILDING (IBC) AS MODIFIED BY THE 2018 CONNECTICUT STATE BUILDING CODE.

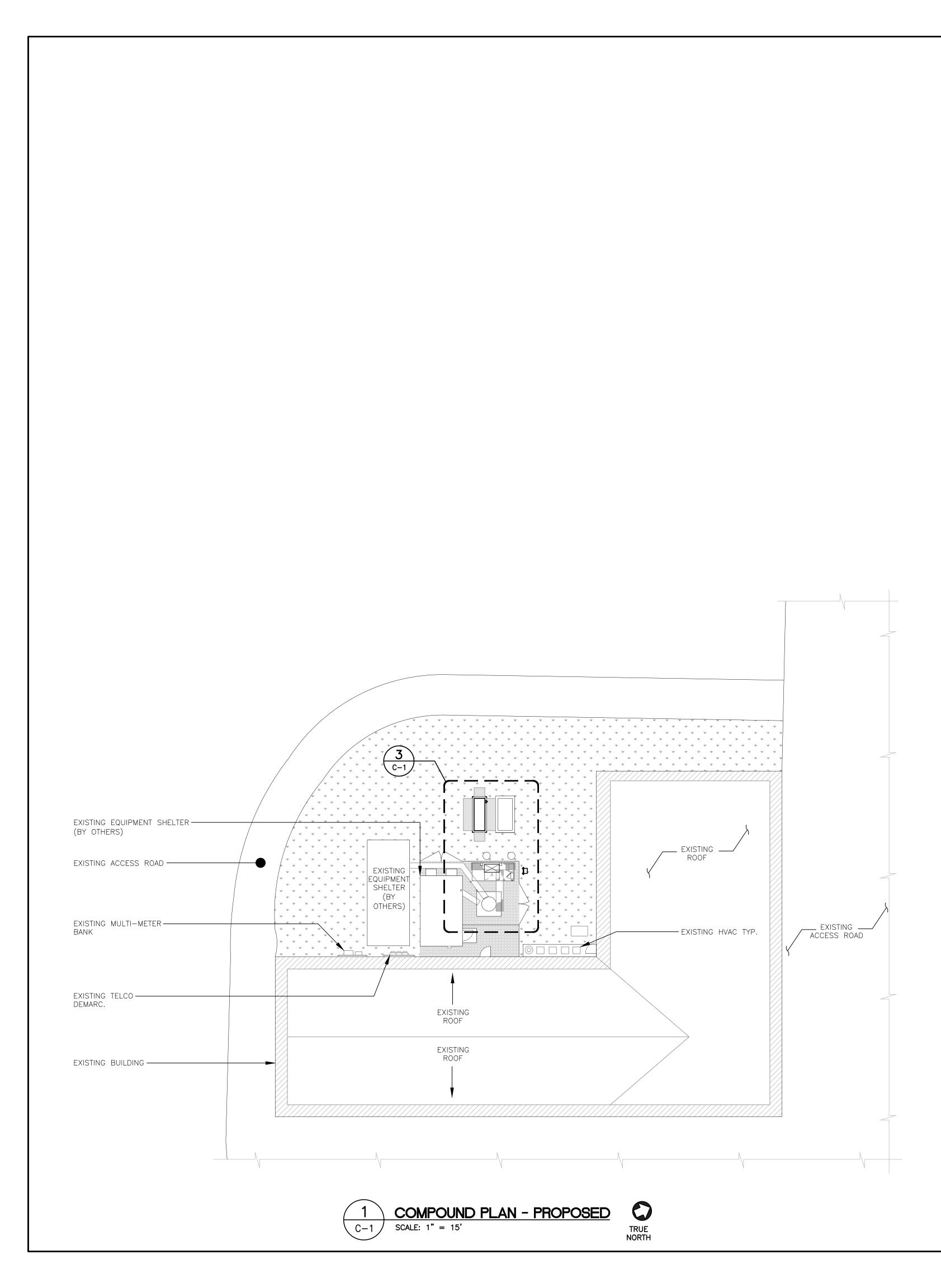
- 1. DESIGN CRITERIA:
- RISK CATEGORY II (BASED ON IBC TABLE 1604.5)
- NOMINAL DESIGN SPEED (OTHER STRUCTURE): 120 MPH (Vasd) (EXPOSURE B/ IMPORTANCE FACTOR 1.0 BASED ON ASCE 7-10

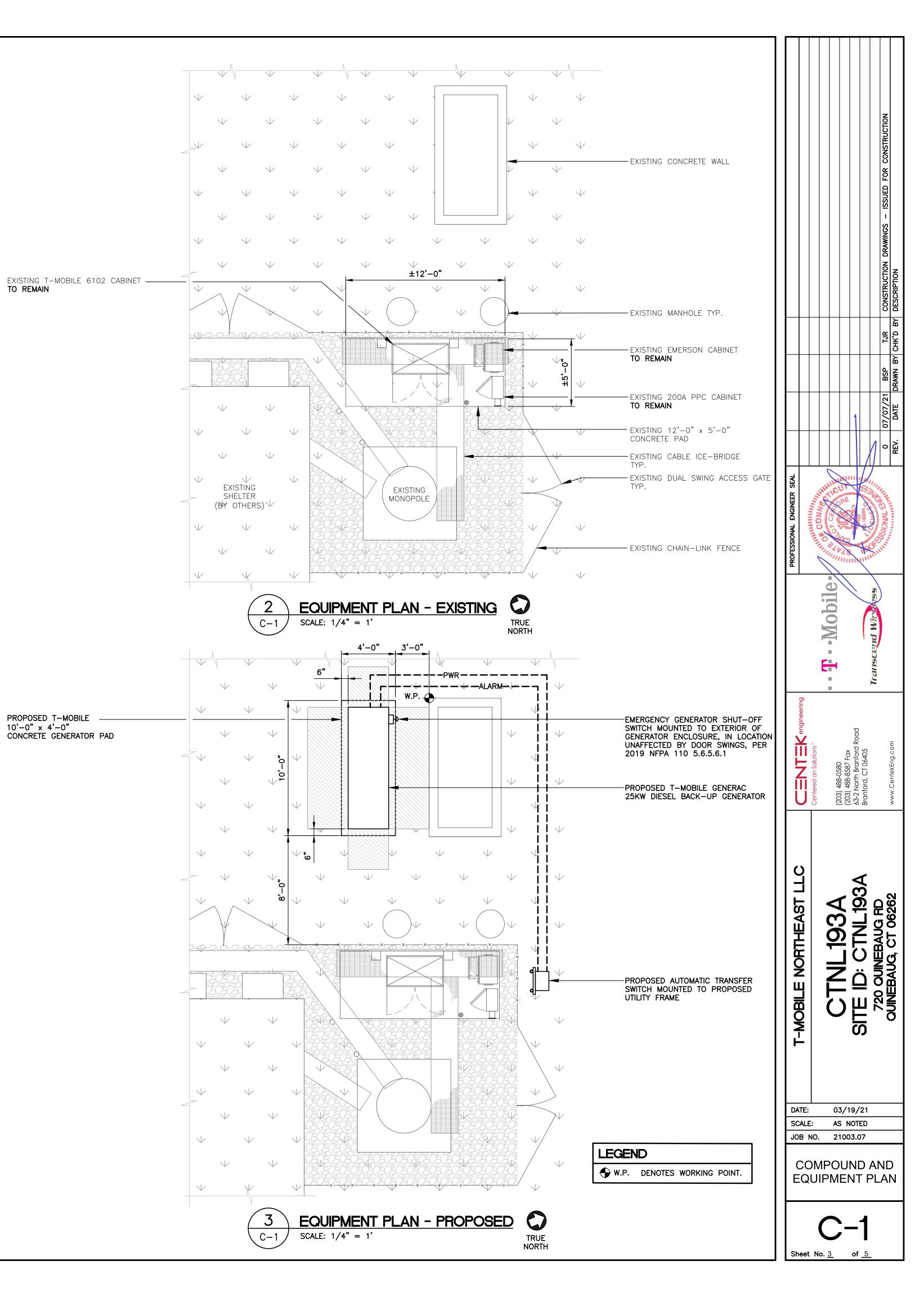
<u>SITE NOTES</u>

- 1. THE CONTRACTOR SHALL CALL UTILITIES PRIOR TO THE START OF CONSTRUCTION.
- 2. ACTIVE EXISTING UTILITIES, WHERE ENCOUNTERED IN THE WORK, SH PROTECTED AT ALL TIMES. THE ENGINEER SHALL BE NOTIFIED IMMEI 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 E 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 SEDI CONTROL.
- IF ANY FIELD CONDITIONS EXIST WHICH PRECLUDE COMPLIANCE WITH DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGIN AND SHALL PROCEED WITH AFFECTED WORK AFTER CONFLICT IS SATISFACTORILY RESOLVED.

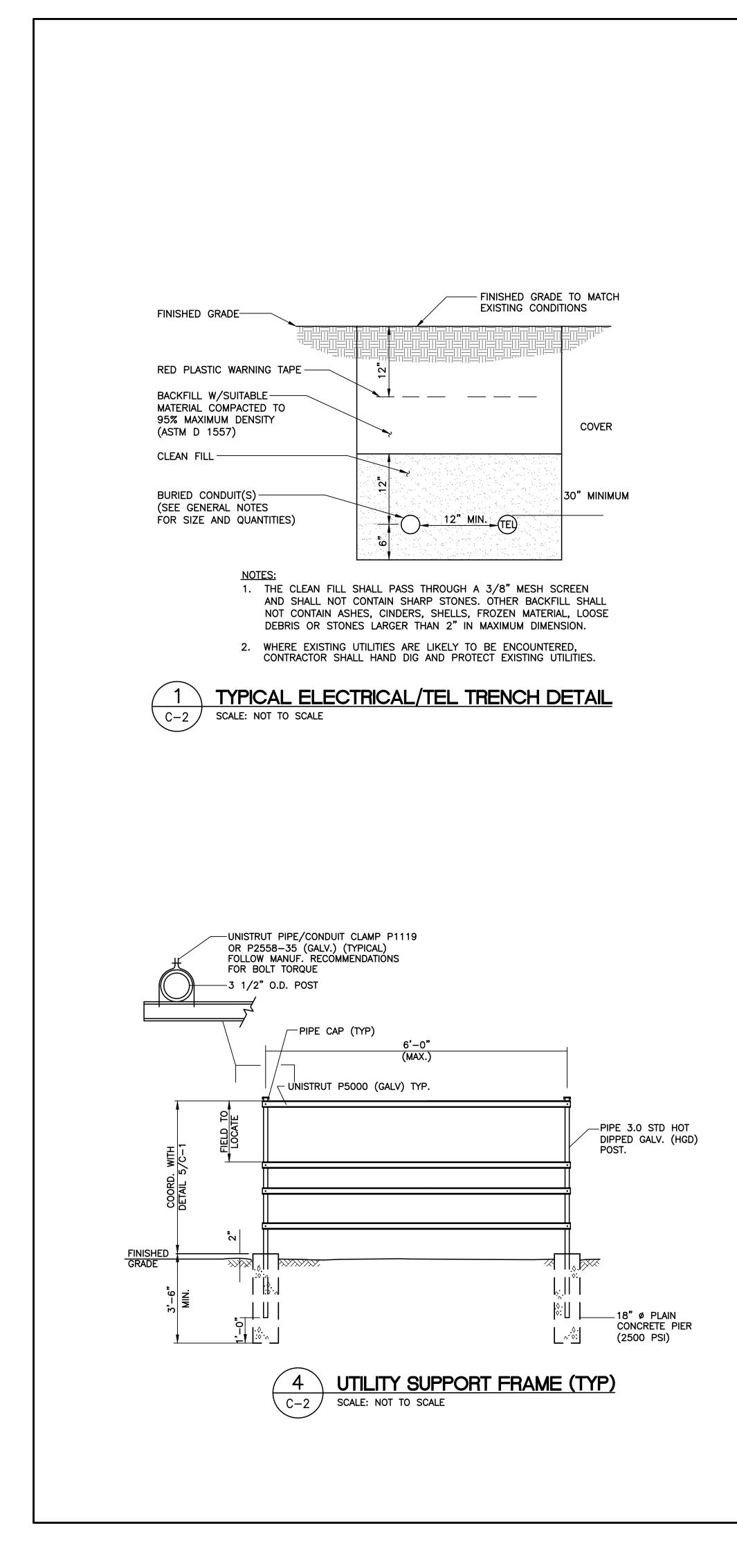
		NERAL NOTES
	1.	ALL WORK SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2018 CONNECTICUT SUPPLEMENT, INCLUDING THE TIA/EIA-222 REVISION "G" "STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND SUPPORTING STRUCTURES." 2017 CONNECTICUT FIRE SAFETY CODE, NATIONAL ELECTRICAL CODE AND LOCAL CODES.
).	2.	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.
LL BE ATELY,	3.	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.
	4.	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.
MENT	5.	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.
THE ER	6.	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.
	7.	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.
	8.	THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND IT'S COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY.
	9.	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.
	10.	ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
	11.	ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUBCONTRACTORS FOR ANY CONDITION PER MFR.'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
	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.

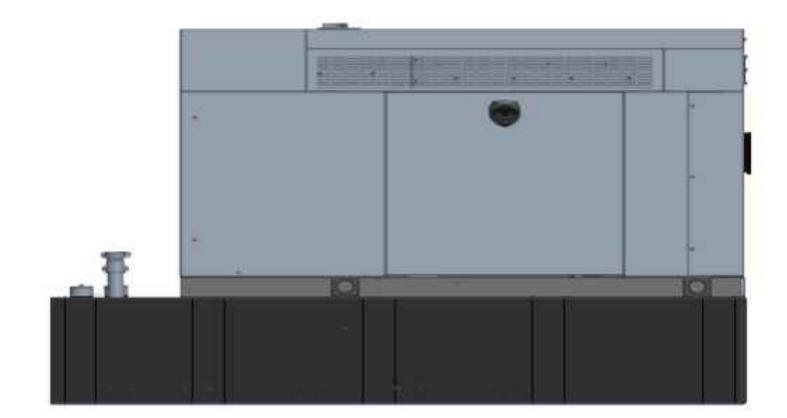


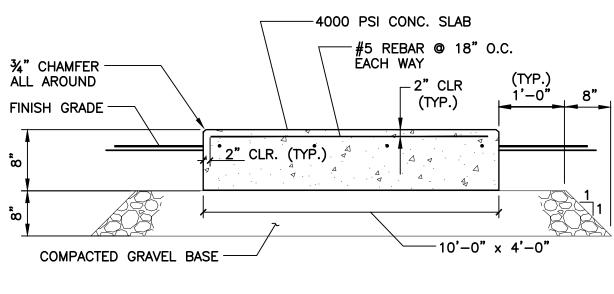




PROPOSED T–MOBILE _____ 10'–0" x 4'–0" CONCRETE GENERATOR PAD









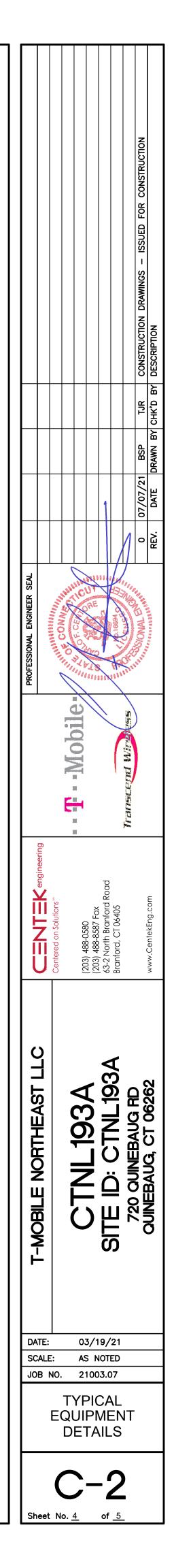
TYPICAL CONCRETE PAD DETAIL SCALE: NOT TO SCALE

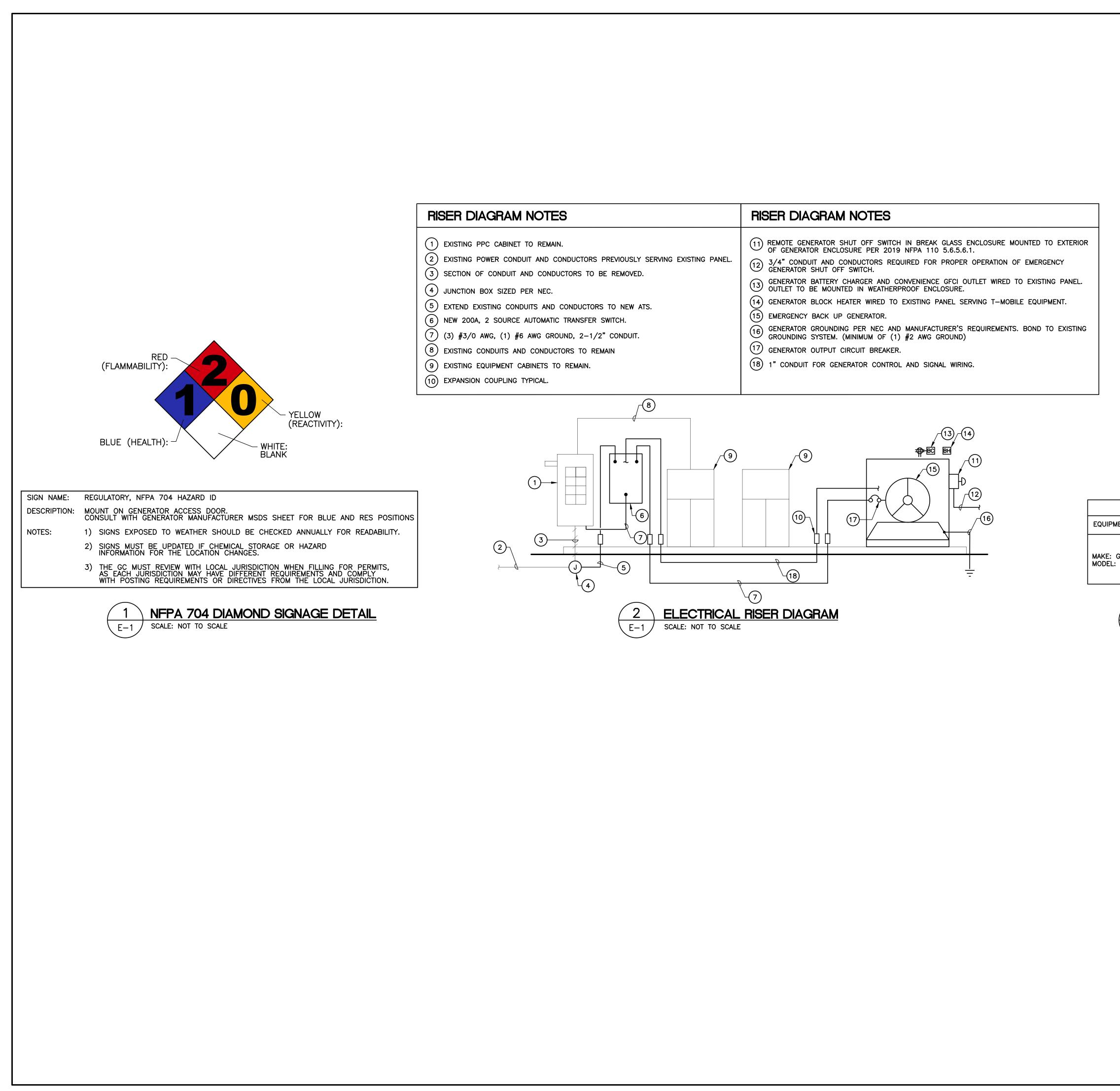
	BACKUP POWER GENERATOR						
EQUIPMENT POWER GENERATED FUEL MODEL NUMBER FUEL TANK SIZE (GAL) DIMENSIONS		DIMENSIONS	WEIGHT				
MAKE: GENERAC MODEL: RD025	25 KW, AC	DIESEL	7192–0	229	103.4"L x 35.0"W x 91.7"H	2123 LBS.	
NOTES: 1. FUEL LEVEL/SECONDARY CONTAINMENT SHALL BE ALARMED AND IN COMMUNICATION 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.							

<u><u></u> <u>></u> <u>PROPOSED GENERATOR DETAIL</u></u>

SCALE: NOT TO SCALE

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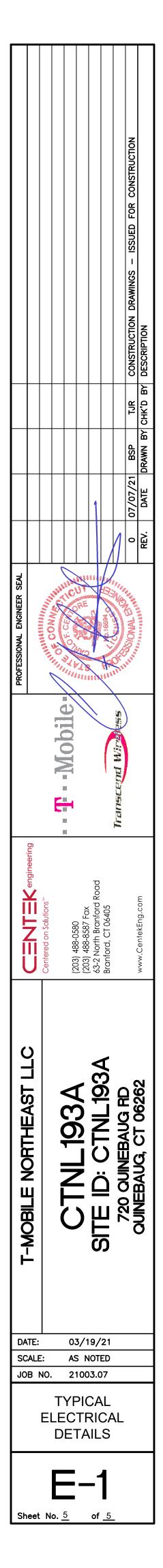




AUTOMATIC TRANSFER SWITCH					
MENT	PHASE	VOLTAGE	ENCLOSURE	AMP	DIMENSIONS
GENERAC : RXSC200A3	1-PHASE	120/240	NEMA-3R	200	17.3"L x 12.5"W



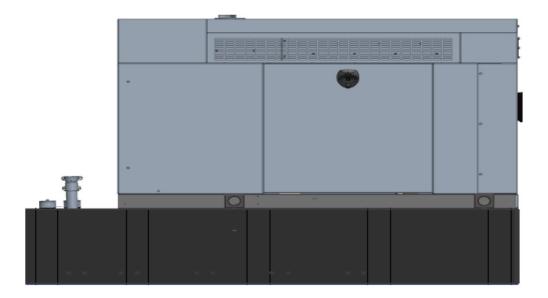
AUTOMATIC TRANSFER SWITCH DETAIL SCALE: NOT TO SCALE





Generac RD025 Design Document

Diesel, AC, 25kW External Fill Tank Model#7192-0 SKU#33651



The following are responsible for this project document:

Kevin Smith

SR. Engineer (770) 256-3594

Project Design Spec Revision	1.0	Last Date:08/23/2018	5/14/2018
Final doc URL (~Dnnnnn):			
Location	Use the InfoRouter Search (Advanced) putting the Document ID (nnnnnn without the D) to find the location of the master document.		
Template URL:	http://docs.eng.t-mobile.com/Ir	nfoRouter/docs/~D423750	Slightly updated 1/2011

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4.1	Interfaces and Alarming	7
5	Regulatory Requirements	9
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1 Introduction / Project Summary

1.1 Purpose of Project

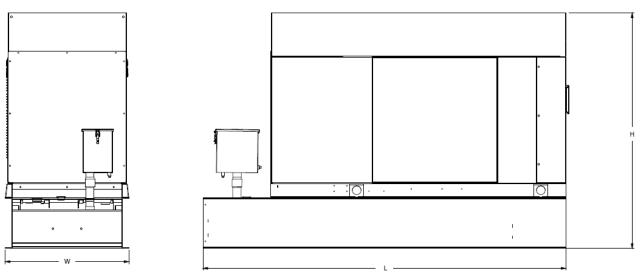
T-Mobile's nationwide cell site hardening plan is providing a refuellable backup power system capable of powering a site for a minimum of 48 hours before refueling is required. The purpose of this project is to give T-Mobile customers reliable service during power outages and provide a sufficient layer of coverage. This design document is for Generac's RD025 model#7192-0, which is a Diesel AC generator with a capacity of 25kW.

1.2 Feature Description

The Generac RD025 is a 25kW AC, diesel generator is one of the generators selected as part of the T-Mobile RFP in support of the nationwide cell site hardening plan. The RD025 has a Level 2 acoustic enclosure, 3 phase sensing, and +-0.25% digital voltage regulation. It is equipped with RS232, RS485 and canbus remote ports and Evolution control panel. It is also equipped with a automatic transfer switch, the RXSC200A3 (Automatic Transfer Switch) Controls the process of transferring commercial AC power and generator power. The RXSC200A3 is a 200Amp, switch that is programmed to perform engine test runs and also has adjustable engine run time capabilities. For RXSC200A3 Owners Manual and full feature descriptions LINK

1.3 Dimensions

The dimensions of a level 2 Acoustic Enclosure L x W x H in inches $103.4 \times 35 \times 91.7$. T-Mobile requires a 36-inch radius around the generator that will cover the 18'' door swing on the generator.



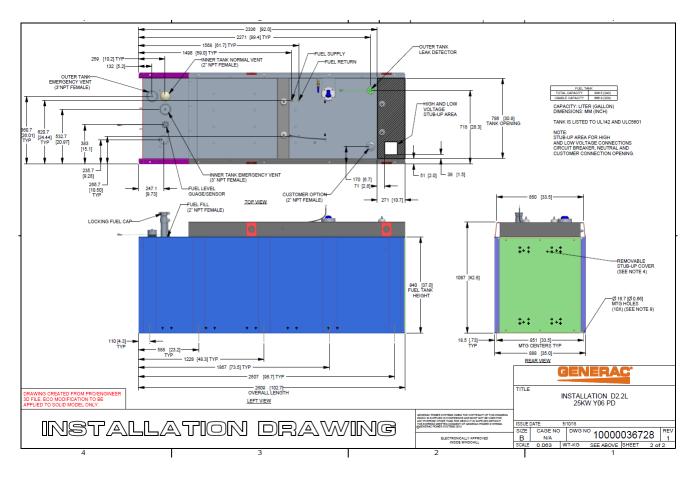
Weights and Dimensions

Unit Weight - Ibs	Unit Weight with Skid - Ibs	Dimensions (L x W x H) - in
2,123	2,161	103.4 x 35.0 x 73.8

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2 Fuel Tanks

The RD025 has a 102.7" 240 Gallon Double-Wall UL142 Base tank to provide 98 hours of backup power at full load deployed on site. Below is the Install drawing for the 240-gallon tank for the RD025kW.

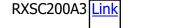


3 RXSC200A3 ATS/ Controller

3.1 Hardware

The RD025 will come with a RXSC200A3 and an Evollution controller. The sites considered for the RD025 should not have a DC power consumption above 20kW

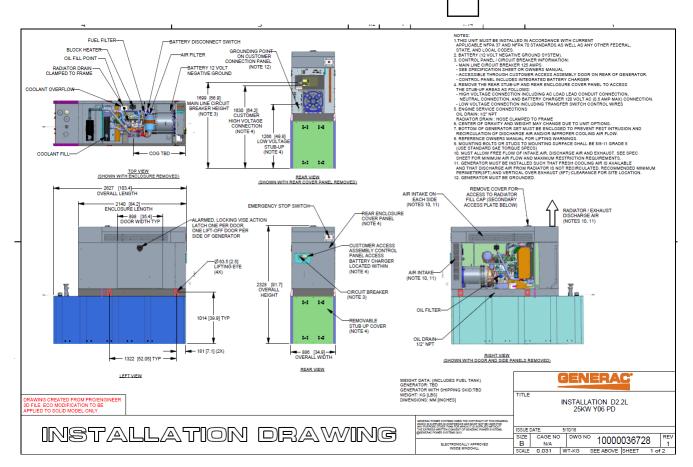




RXSC200A3 install drawing Link

Evollution controller spec sheet Link

RD025 installation drawings and supporting documentation Link



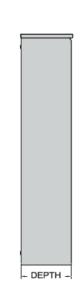
3.2 RXSC200A3 Automatic Transfer Switch

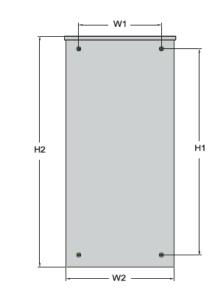
The RXSC200A3 (Automatic Transfer Switch) is equiped with the following functions. Utility voltage drop-out <65%. Timer to Generator start: 10 second factory set, adjustable between 2-1500 seconds. Engine Warm up delay: 5 seconds. Standby Voltage Sensor: 65% for 5 seconds. Utility Voltage Pickup >80%. Re-Transfer Time Delay: 15 seconds. Engine Cool-Down Timer: 60 seconds. Exerciser: 5 or 12 minute adjustable weekly/by-weekly/monthly.The transfer switch can also be operated manually without power applied

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RXSC200A3 Dimensions

Model		RXSC200A3	
Height (in./mm)	HI	17.24/437.9	
	H2	20/508	
Width (in./mm)	WI	12.5/317.5	
	W2	14.6/370.8	
Depth (i	in./mm)	7.09/180.1	
Weight (I	bs./kilos)	20/9.07	







4 Architecture/Alarms

4.1 Interfaces and Alarming

The generator will be monitored by external alarms, conduit and cat five cables have to be installed from the Evolution Controllers Low Voltage Box located in the Generac generator to the appropriate cell site equipment. Nokia FSEB or FSEE and in Ericsson the SAU.

At a Nokia site, this connection is at the FSEB or an FSEE module. For the wiring diagram and instructions for the FSEB click the Link (The FSEE is the Nokia module that will be replacing the FSEB. For details on the FSEE contact: HQNokiaCellsiteDesigns@T-Moblie.com)

Ericsson sites will connect to the SAU module via OVP Expansion Kit for 8 External Alarms. Product number: UTOVP-ALM8EXP. For the wiring diagram and instructions for this click the link

The RXSC200A3 has auxiliary contacts that will facilitate the *ATS in Emergency position* alarm and will be a Normally Closed contact. Below is the wiring schematic for this contact and it can be found in the RXSC200A3 owners manual.

Auxiliary Contact

See **Figure 3-4**. If desired, there is one normally-closed Auxiliary Contact (A) on the transfer switch to operate customer accessories, remote advisory lights, or remote annunciator devices. A suitable power source must be connected to the common terminal. If needed, an extra auxiliary contact can be added.

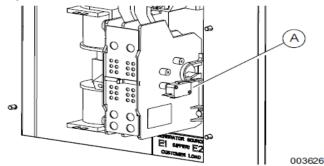


Figure 3-4. Auxiliary Contact

The auxiliary contact is normally closed when the transfer switch is in utility mode. The contacts will open when the transfer switch is in the standby power mode.

NOTE: Auxiliary Contact is rated 10 amps at 125 or 250 volts AC, and 0.6 amps at 125 volts DC.

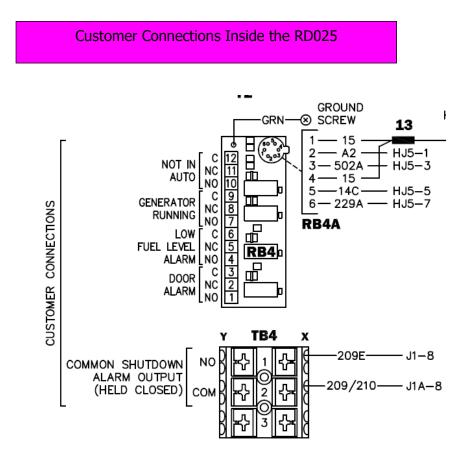
ACAUTION

Equipment damage. Exceeding rated voltage and current will damage the auxiliary contacts. Verify that voltage and current are within specification before energizing this equipment. (000134a)

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T-Mobile has four relays available from the Generac controller that are user-defined. T-Mobile can have four-alarm categories and a limitless number of subcategories. T- Mobile will utilize Normally Closed (NC) dry contacts for alarms in Low Voltage Connection box in the spare outputs section. Ericsson cabinets need to be equipped with the alarm expansion kit (UTOVP-ALM8EXP) to handle external alarms.



Ericsson UTOVP- ALM8EXP



UTOVP-ALM8EXPOVP Expansion Kit for 8 External AlarmsQtyProduct noDenominationUTOVP-ALM8EXPOVP Expansion Kit for 8 External Alarms1NFD30234/08OVERVOLTAGE ARRESTER/OVP-ALM 81RPM777143/01200CABLE WITH CONNECTOR/SIGNAL CABLE2



Evolution Controller Customer		
Connections	Nokia FSEB Alarm Connections 13-24	T-Mobile Standard Alarms
NC#8-Gen Running	NC 4110 grd 4111 pin 13	Generator Running
NC#11-Not In Auto	NC 4110 grd 4111 pin 14	Generator Alarm Critical
NC#2-Door Alarm	NC 4110 grd 4111 pin 15	Generator Alarm NSI
NC#5-Low Fuel	NC 4110 grd 4111 pin 16	Low Fuel
RXSC200A3-Auxiliary Contacts	NC 4110 grd 4111 pin 17	ATS in Emergency Position

Evolution Controller Customer				
Connections	Ericsson Alarm 8expConnections	T-Mobile Standard Alarms		
NC#8- Gen. Running	NC - A5	Generator Running		
NC#11-Not In Auto	NC - A6	Generator Alarm Critical		
NC#2-Door Alarm	NC - A7	Generator Alarm NSI		
NC#5-Low Fuel	NC - A8	Low Fuel		
RXSC200A3-Auxiliary Contacts	NC - A9	ATS in Emergency Position		

5 Regulatory Requirements

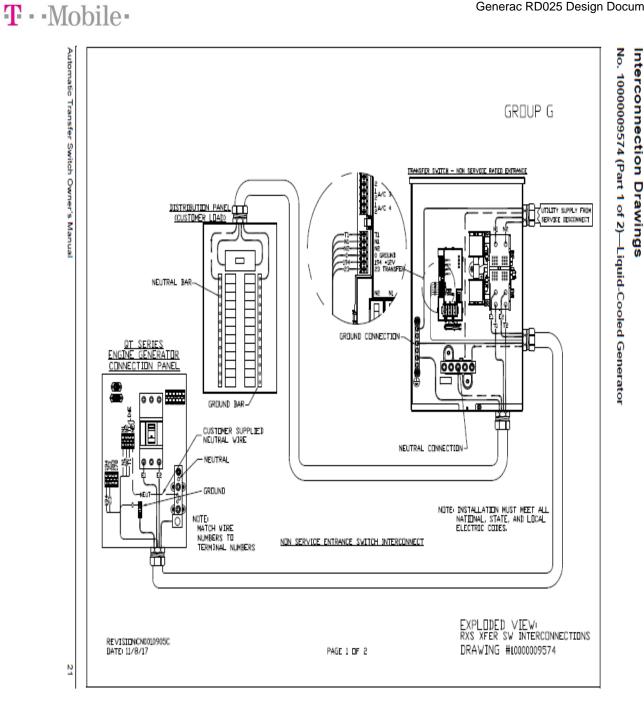
Level 2 Acoustic Enclosure provides a noise level of 67.5dBA. It is EPA certified and meets NFPA 99 and 110 requirements(NFPA National Fire Protection Association). The RD025 generator engines is a tier 4 engine and meets the EPA final standards.

6 Configuration/Diagrams

The physical configuration of the Generator and the RXSC200A3 is, ATS before the PPC to ensure overcurrent protection when commercial power is restored. The RD025 and the RXSC200A3 has to be wired to Commercial AC power.

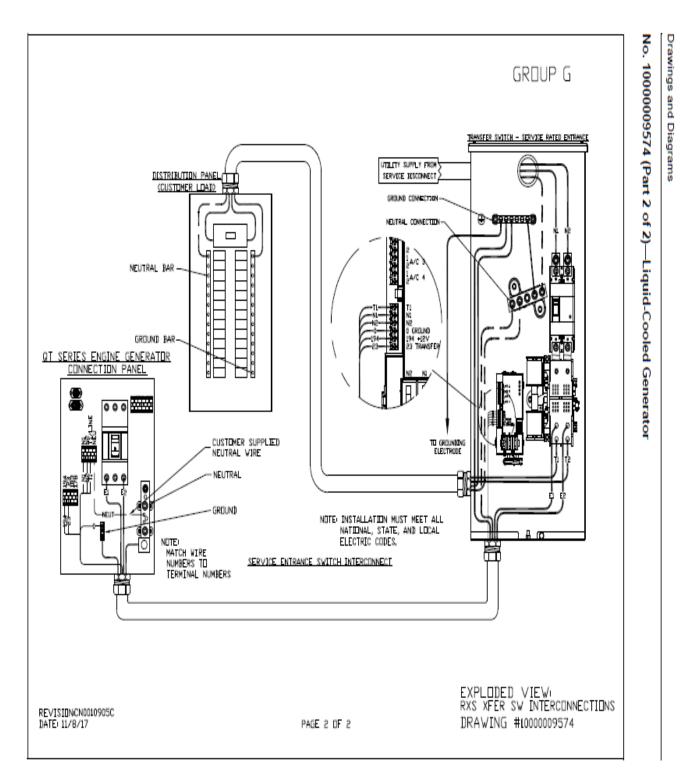


Commercial Power Connection Points On The RXSC200A3



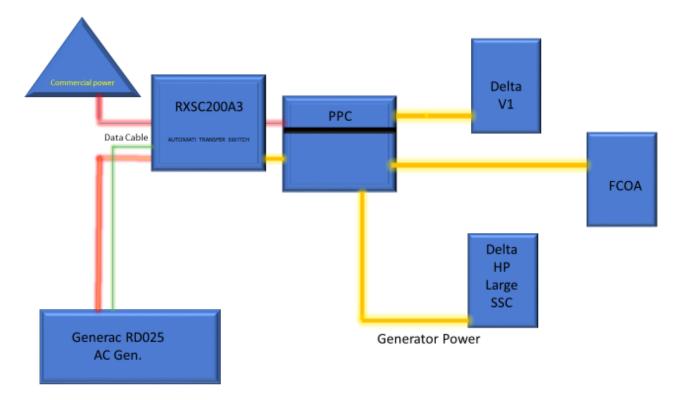
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Generac RD025 Design Document



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Compound Diagram:



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7 Maintenance

T-Mobile is recommending preventive maintenance to be performed every 250 hours of runtime or every 12 months, whichever comes first.

T-Mobile requires this minimum service checklist for the generator engine:

- Check engine mounts and support. Tighten fasteners.
- Check all the engine hoses and clamps for proper fit, and any signs of cracking and fatigue from wear.
- Inspect all belts for signs of cracking and fatigue from wear and adjust for proper tension.
- Inspect the exhaust system for leaks, burns and wet stacking. Drain exhaust line and tighten any clamps and flange bolts.
- Inspect silencer and plumbing for leaks, cracks or any other signs of wear.
- Inspect the system for fuel, oil and coolant leaks and signs of corrosion.
- Replace water separator.
- Replace water filter/ conditioner.
- Check Anti-Freeze (Spector-Analysis).
- Check coolant level and add, if needed.
- Inspect radiator mounting for signs or wear and cracking.
- Inspect/ clean air filter and change per manufacturer specifications.
- Inspect air intakes and outlets and tighten clamps and brackets, if applicable.
- Replace fuel filter.
- Inspect the carburetor fuel injection system, fuel injection pump and choke, if equipped. Adjust to manufacturers specifications.
- Change engine oil, oil filter and record the date on the filter casing.
- Check engine heater operation, if equipped.
- Check and adjust the battery charger operations, and charge rate within the manufacturer's recommended operating specifications.

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- Inspect the battery housing, hardware connections, and cables for corrosion and wear.
- Check the battery electrolyte levels and specific gravity levels.
- Load test generator battery.
- Check, adjust and record generator output voltage, as necessary.
- Check and record the alternator charge rate.
- During inspection run the generator for 30 minutes under load. During this time, and after the engine is at full operational speed and has reached engine operating temperature; determine and record the condition of all inspection points: oil pressure, water/ coolant temperature, Fuel pressure, generator gauge, indicator operations, generator battery.
- Check the engine timing and adjust to manufacturers specifications, if necessary.
- Inspect, adjust and record governor and frequency, if necessary.
- Verify that the low fuel alarm is operational and configured correctly to trigger when the fuel tank reaches 50% of fuel tank capacity.

Check fuel level and refuel the generator during the preventive/ corrective maintenance visit.