



**CITY OF FORT PIERCE, FLORIDA
BUILDING DEPARTMENT
APPLICATION FOR BUILDING PERMIT**
(772) 467-3718 FAX (772) 467-3849
building@city-ftpierce.com

APPLICANT
PERMIT # 18-3032
FBC (2017) 6th Edition
PIN # 28 7632

Building Department Project Manager:
Shanna

*Property Address 510 Wisteria AVE West *Date _____
Parcel ID# 2422-602-0241-020-7 *# of plans submitted _____ *# of CD's submitted _____
(Located on your tax bill)
*Owner Name Mar Investment Enterprises *Owner Address 119 SE 12th St Fort Lauderdale, FL 33316
Phone # (954) 444 - 2822 Fax # () - Cell # () -
Email Address bart.simon@towerquest.com

***Required Information**

Type of permit Back up generator *Valuation \$ 10,000.00
*Description of Work: Install diesel generator on existing concrete slab (A2P0068A)

Architect: _____
Phone () - Fax () - Email Address _____
Engineer: _____
Phone () - Fax () - Email Address _____

***CONTRACTOR/APPLICANT INFORMATION:**

City License # _____ State License # EC0000187
Company Name East Ocean Electric Qualifier Robert Koenekamp
Address 1581 Bayridge Place City/State Wellington Zip 33414
Phone # (954) 444 - 2822 Fax # () - Cell # () -
Email Address Stardemrelectrx@gmail.com

Occupancy _____ Construction Type _____ # of Units _____ # of Stories _____
Sq. Ft. Conditioned Space _____ Total Sq. Ft. _____

I understand that no building may be occupied until a Certificate of Occupancy/Certificate of Completion has been issued after final inspection by the Building Department and full compliance with the building code, city ordinances, state statutes and other applicable rules and regulations have been satisfied. I am also verifying that all sets of plans submitted are identical.

Application is hereby made to obtain a permit to do the work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work will be performed to meet the standards of all laws regulating construction in this jurisdiction. I understand that a separate permit must be secured for electrical work, plumbing, signs, wells, pools, furnaces, boilers, heaters, tanks, and air conditioners etc.

Owner's Affidavit: I certify that all the foregoing information is accurate and that all work will be done in compliance with all applicable laws regulating construction and zoning.



City of Fort Pierce - Electrical Information Form

To be completed with every electrical permit application

*Items must be filled in

Address: 2633 S. US1 Ft Pierce # of Units _____ Permit # _____

*Current Size of Service: _____ *Proposed size of service: _____

*Size of Amps: 200A Phases: _____ # of Units being worked on: _____

Circle all that Apply

Use of Building: Single Family Duplex Garage Multi-family Commercial

*Existing Service: Underground overhead

Changing from overhead to underground: Yes no

Scope of Work:

New Service Mobile Home Hook-up Swimming Pool Temp Pole Sign

Service Repair Service Change: Increase from _____ to _____

Renovation or Addition (specify): Adding generator diesel 25kw

Other (specify): _____

INDICATE EQUIPMENT TO BE INSTALLED

Circle all that apply

Air Conditioning	Stoves	Switches	Phone
Exhaust Fan	Disposal	Pool	Security
Neon Tubing	Furnace	Electric Sign	Communications
Pumps	Paddle Fan	Motors	Sound
Dishwasher	Spa	Outdoor Lighting	Signaling
Fixtures	Dryer	Water Heater	Photovoltaic KW
Outlets	Hood Fan	TV	

Other (specify) Generator

If you are upgrading the service: the service must go underground per Fort Pierce Code of Ordinance Section 5-1.101.4.1.1: Underground Electrical Service. All new or replacement utility service(s) shall be served by means of underground lateral service from the distribution point to the building in accordance with the requirements as set forth by the Fort Pierce Utilities Authority. Approval to activate electrical service shall not be granted if there is failure to comply with this provision.

WARNING TO OWNER:

YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

Must be signed by owner/Agent and applicant:

Robert Franke

(Signature of contractor)

State of Florida, County of Palm Beach

Affirmed to and subscribed before me this 13

Aug 20 18, by Robert Koencamp personally known to me or who has produced as identification.

Notary Signature Public State of Florida
Linda Palozzola
 My Commission GG 197440
 Expires 04/07/2022
 Notary (print name) Linda Palozzola

[Signature]

(Signature of Owner or Agent (including contractor))

State of Florida, County of Broward

Affirmed to and subscribed before me this 21, August

20 18, by Jose Delgado personally known to me or who has produced as identification.

Notary Signature: [Signature]

Notary (print name) MARIA SIMON

MARIA SIMON
 Notary Public - State of Florida
 Commission # GG 005405
 My Comm. Expires Sep 10, 2020
 Banded through Notary Public Records and Integrated

Construction documents must accompany this application. The Florida energy code submitted becomes an integral part of this plan and must pass final inspection. "Notice: In addition to the requirements of this permit, there may be additional restrictions applicable to this property that may be found in the public record of this county, and there may be additional permits required from other governmental entities such as waste management district, state agencies, or federal agencies. "SIGNATURE OF THE APPLICANT MUST BE NOTARIZED. If owner builder, applicant must sign in person. BUILDING PERMIT includes: Building, Electrical, Plumbing, Mechanical, and Sewer only. All other trades require separate applications.

Asbestos compliance: It is the owner's or operator's responsibility to comply with section 469.003, Florida Statutes, and to notify the Department of Environmental Protection of his or her intentions to remove asbestos, when applicable, in accordance with state and federal law.

FEE SIMPLE TITLEHOLDER, BONDING COMPANY AND MORTGAGE LENDER INFORMATION IS REQUIRED WHEN THE AGGREGATE VALUE (TOTAL COST OF ALL IMPROVEMENTS AND NOT JUST WORK AUTHORIZED BY THE INDIVIDUAL PERMIT) IS \$2500 OR MORE (EXCEPT HVAC REPAIR/REPLACEMENT < \$7500). PLEASE ADDRESS ALL ITEMS.

Fee Simple Titleholder's Same as Owner
 Name (if other than owner): _____
 Address: _____
 City: _____ State: _____ Zip: _____

Bonding Company Not Applicable
 Name: _____
 Address: _____
 City: _____ State: _____ Zip: _____

Mortgage Lender's Not Applicable
 Name: _____
 Address: _____
 City: _____ State: _____ Zip: _____

OFFICE USE ONLY

Is the property located in a Special Flood Hazard Area (floodplain) per the current Flood Insurance Rate Map (FIRM)

Yes No NSB

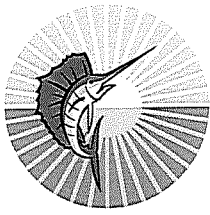
Flood Zone: _____ Reviewed by: _____ Determination: _____

Permit Fee	\$ <u>125</u>	Other	\$ _____	Plan Review Fee	\$ <u>75.00</u>
State Surcharge	\$ <u>5.00</u>	Other	\$ _____	Routing Fee	\$ _____
Subcontractor	\$ _____	Flood Review Fee	\$ <u>0.00</u>	Other	\$ _____
Total Amount Due at Issuance	\$ <u>130.00</u>				

Remarks _____

Active Code Violation Yes No
 Case # _____
 Case Type _____

Reviewed by STB Date 9-6-18 Final Check _____ Date _____ Page 2 of 2



THE SUNRISE CITY

FORT PIERCE

BUILDING DEPARTMENT

Florida

Permit Conditions

DATE: SEPTEMBER 10, 2018

PERMIT #: 18-3032

OWNER: MAR INVESTMENT ENTERPRISES

CONTRACTOR: EAST OCEAN ELECTRIC

PROJECT ADDRESS: 510 WISTERIA AVE

THE ABOVE REFERENCED PERMIT HAS BEEN ISSUED WITH THE FOLLOWING CONDITIONS: ANY FURTHER QUESTIONS PLEASE CONTACT MARIA LEWICKA - PLANNING & ZONING 772-467-3738

- 1) THE PROPOSED ABOVE GROUND DIESEL TANK WILL REQUIRE CITY COMMISSION APPROVAL (SEC. 7-20)

The above conditions must be addressed prior to requesting an inspection for the item included or prior to final approval of the project. Any items not properly addressed will hold up final approval and issuance of the required certificate of occupancy/completion. Some items listed above may require revised plans, as-built plans and/or certification by a licensed architect or Engineer. When dealing with revised documents, please allow sufficient time for review and approval by appropriate departments or agencies. **Approval must be granted prior to requesting any inspection.**

I have read the above statement and will abide by same:

Contractor or Owner/Builder's Signature

Date

CITY OF FORT PIERCE BUILDING DEPARTMENT ROUTING FORM

September 6, 2018
 Permit #: 18-00003032
 Owner Name: MAR INVESTMENT ENTERPRISES
 Property Address: 510 (W PARCEL) WISTERIA AVE
 Type of Permit: GENERATOR INSTALLATION

PM Shanna

SEP 06 2018
 CITY OF FORT PIERCE
 PLANNING & ZONING

Planning: Approved *ML 9/19/2018*

 Approved as Noted

 Rejected

 N/A

Historic:

 Approved

 Individually Designated

 District

 Approved as Noted

 Rejected

 N/A

Arch Design:

 Approved

 Approved as Noted

 Rejected

 N/A

Landscape:

 Approved

 Approved as Noted

 Rejected

Comments: THE PROPOSED ABOVE GROUND DIESEL TANK
WILL REQUIRE CITY COMMISSION APPROVAL (SEC. 7-12)

Zoning _____

Calculations (Road)	Land Use	Fee per Unit	Impact Fee
# Units _____	x	_____	= _____
# Sq. Ft _____	x	_____	= _____
Calculations (School, Parks, Library, Public Bldgs)			
# Units _____	x	_____	= _____
# Sq. Ft _____	x	_____	= _____

Impact fee credits due to change of use or previously demolished buildings: \$ _____

- | | | |
|-------------------------------|-------------------------------|-------------------------------|
| Road Impact Fee: _____ | Road Impact Fee: _____ | Road Impact Fee: _____ |
| School Impact Fee: _____ | School Impact Fee: _____ | School Impact Fee: _____ |
| Parks Impact Fee: _____ | Parks Impact Fee: _____ | Parks Impact Fee: _____ |
| Library Impact Fee: _____ | Library Impact Fee: _____ | Library Impact Fee: _____ |
| Public Bldg Impact Fee: _____ | Public Bldg Impact Fee: _____ | Public Bldg Impact Fee: _____ |
| Fire/ EMS Impact Fee: _____ | Fire/ EMS Impact Fee: _____ | Fire/ EMS Impact Fee: _____ |
| Law Impact Fee: _____ | Law Impact Fee: _____ | Law Impact Fee: _____ |

Impact Fee Credit: _____

TOTAL IMPACT FEE: _____

SD025 | 2.4L | 25 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary Emergency

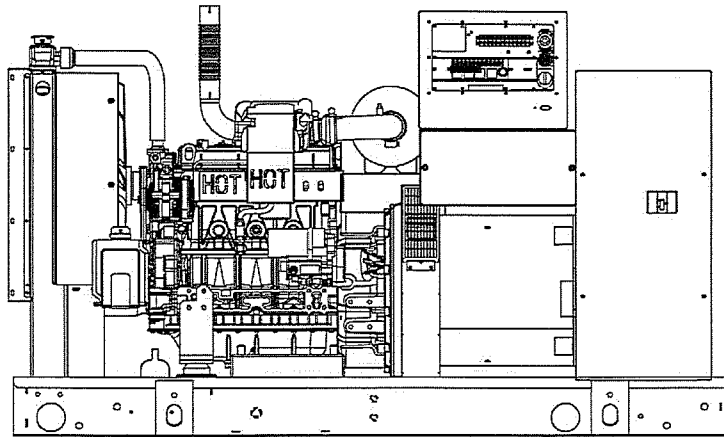


STANDBY POWER RATING

25 kW, 31 kVA, 60 Hz

PRIME POWER RATING*

23 kW, 28 kVA, 60 Hz



*Built in the USA using domestic and foreign parts

*EPA Certified Prime ratings are not available in the U.S. or its Territories.

Image used for illustration purposes only

**Certain options or customization may not hold certification valid.

CODES AND STANDARDS

Generac products are designed to the following standards:



UL2200, UL508, UL142, UL498



NFPA70, 99, 110, 37



NEC700, 701, 702, 708



ISO9001, 8528, 3046, 7637,
Pluses #2b, 4



NEMA ICS10, MG1, 250, ICS6, AB1



ANSI C62.41

POWERING AHEAD

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

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

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

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

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

STANDARD FEATURES

ENGINE SYSTEM

General

- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel flexible exhaust connection
- Critical Exhaust Silencer (enclosed only)
- Factory Filled Oil
- Radiator Duct Adapter (open set only)

Fuel System

- Fuel lockoff solenoid
- Primary fuel filter

Cooling System

- Closed Coolant Recovery System
- UV/Ozone resistant hoses
- Factory-Installed Radiator
- Radiator Drain Extension
- 50/50 Ethylene glycol antifreeze
- 120 VAC Coolant Heater

Engine Electrical System

- Battery charging alternator
- Battery cables
- Battery tray
- Solenoid activated starter motor
- Rubber-booted engine electrical connections

ALTERNATOR SYSTEM

- UL2200 GENprotect™
- 12 leads (3-phase, non 600 V)
- Class H insulation material
- Vented rotor
- 2/3 pitch
- Skewed stator
- Auxiliary voltage regulator power winding
- Amortisseur winding
- Brushless Excitation
- Sealed Bearings
- Automated manufacturing (winding, insertion, lacing, varnishing)
- Rotor dynamically spin balanced
- Full load capacity alternator
- Protective thermal switch

GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of circuits - high/low voltage
- Separation of circuits - multiple breakers
- Silencer Heat Shield
- Wrapped Exhaust Piping
- Silencer housed in discharge hood (enclosed only)
- Standard Factory Testing
- 2 Year Limited Warranty (Standby rated Units)
- 1 Year Limited Warranty (Prime rated Units)
- Silencer mounted in the discharge hood (enclosed only)

ENCLOSURE (IF SELECTED)

- Rust-proof fasteners with nylon washers to protect finish
- High performance sound-absorbing material
- Gasketed doors
- Stamped air-intake louvers
- Air discharge hoods for radiator-upward pointing
- Stainless steel lift off door hinges
- Stainless steel lockable handles
- Rhino Coat™ - Textured polyester powder coat

TANKS (IF SELECTED)

- UL 142
- Double wall
- Vents
- Sloped top
- Sloped bottom
- Factory pressure tested (2 psi)
- Rupture basin alarm
- Fuel level
- Check valve in supply and return lines
- Rhino Coat™ - Textured polyester powder coat
- Stainless hardware

CONTROL SYSTEM



Control Panel

- Digital H Control Panel - Dual 4x20 Display
- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable PLC
- RS-232/485
- All-Phase Sensing DVR
- Full System Status
- Utility Monitoring
- Low Fuel Pressure Indication
- 2-Wire Start Compatible
- Power Output (kW)

- Power Factor
- kW Hours, Total & Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/sealed Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus protocol
- Predictive Maintenance algorithm
- Sealed Boards
- Password parameter adjustment protection

- Single point ground
- 15 channel data logging
- 0.2 msec high speed data logging
- Alarm information automatically comes up on the display

Alarms

- Oil Pressure (Pre-programmable Low Pressure Shutdown)
- Coolant Temperature (Pre-programmed High Temp Shutdown)
- Coolant Level (Pre-programmed Low Level Shutdown)
- Low Fuel Pressure Alarm
- Engine Speed (Pre-programmed Over speed Shutdown)
- Battery Voltage Warning
- Alarms & warnings time and date stamped
- Alarms & warnings for transient and steady state conditions
- Snap shots of key operation parameters during alarms & warnings
- Alarms and warnings spelled out (no alarm codes)

CONFIGURABLE OPTIONS

ENGINE SYSTEM

General

- Oil Heater
- Industrial Exhaust Silencer

Fuel System

- Flexible fuel lines
- Primary fuel filter

Engine Electrical System

- 10A UL battery charger
- 2.5A UL battery charger
- Battery Warmer

ALTERNATOR SYSTEM

- Alternator Upsizing
- Anti-Condensation Heater
- Tropical coating
- Permanent Magnet Excitation

ENGINEERED OPTIONS

ENGINE SYSTEM

- Coolant heater ball valves
- Block Heaters
- Fluid containment pans

ALTERNATOR SYSTEM

- 3rd Breaker Systems

CONTROL SYSTEM

- Spare inputs (x4) / outputs (x4) - H Panel Only
- Battery Disconnect Switch

CIRCUIT BREAKER OPTIONS

- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breaker

GENERATOR SET

- Gen-Link Communications Software (English Only)
- 8 Position Load Center
- 2 Year Extended Warranty
- 5 Year Warranty
- 5 Year Extended Warranty

ENCLOSURE

- Weather Protected
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Steel Enclosure
- Aluminum Enclosure
- 150 MPH Wind Kit
- 12 VDC Enclosure Lighting Kit
- 120 VAC Enclosure Lighting Kit
- AC/DC Enclosure Lighting Kit
- Door Alarm Switch

GENERATOR SET

- Special Testing
- IBC Seismic Certification

ENCLOSURE

- Motorized Dampers
- Door switched for intrusion alert
- Enclosure ambient heaters

TANKS (Size on last page)

- Electrical Fuel Level
- Mechanical Fuel Level
- 54 Gal (204.4 L) Usable Capacity
- 132 Gal (499.7 L) Usable Capacity
- 211 Gal (798.7 L) Usable Capacity
- 300 Gal (1135.6 L) Usable Capacity
- 8" Fill Extension
- 13" Fill Extension
- 19" Fill Extension

CONTROL SYSTEM

- 21-Light Remote Annunciator
- Remote Relay Panel (8 or 16)
- Oil Temperature Sender with Indication Alarm
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- Remote Communication - Modem
- Remote Communication - Ethernet
- 10A Run Relay
- Ground Fault Indication and Protection Functions

TANKS

- Overfill Protection Valve
- UL2085 Tank
- ULC S-601 Tank
- Stainless Steel Tank
- Special Fuel Tanks (MIDEQ and FL DEP/DERM, etc.)
- Vent Extensions

RATING DEFINITIONS

Standby - Applicable for a varying emergency load for the duration of a utility power outage with no overload capability.

Prime - Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. A 10% overload capacity is available for 1 out of every 12 hours. The Prime Power option is only available on International applications. Power ratings in accordance with ISO 8528-1, Second Edition

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Generac
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emissions Data Sheet
Cylinder #	4
Type	In-Line
Displacement - L (cu In)	2.4 (146.46)
Bore - mm (in)	90 (3.54)
Stroke - mm (in)	94 (3.70)
Compression Ratio	21.3:1
Intake Air Method	Turbocharged
Cylinder Head Type	Cast Iron
Piston Type	Aluminium

Engine Governing

Governor	Electronic Isochronous
Frequency Regulation (Steady State)	+/- 0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full Flow
Crankcase Capacity - L (qts)	6.2 (6.52)

Cooling System

Cooling System Type	Closed Recovery
Water Pump	Pre-Lubed, Self Sealing
Fan Type	Pusher
Fan Speed (rpm)	2698
Fan Diameter mm (in)	560 (22)
Coolant Heater Wattage	1500
Coolant Heater Standard Voltage	120 VAC

Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel
Fuel Specifications	ASTM
Fuel Filtering (microns)	5
Fuel Injection	Distribution Injection Pump
Fuel Pump Type	Engine Driven Gear
Injector Type	Mechanical
Fuel Supply Line mm (in)	7.94 (0.31)
Fuel Return Line mm (in)	7.94 (0.31)

Engine Electrical System

System Voltage	12 VDC
Battery Charging Alternator	Std
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	390
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5%
Telephone Interference Factor (TIF)	<50

Standard Excitation	Synchronous
Bearings	Single Sealed Cartridge
Coupling	Direct, Flexible Disc
Load Capacity - Standby	100%
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Digital
Number of Sensed Phases	All
Regulation Accuracy (Steady State)	±0.25%

SD025 | 2.4L | 25 kW
INDUSTRIAL DIESEL GENERATOR SET
 EPA Certified Stationary Emergency



OPERATING DATA

POWER RATINGS

		Standby
Single-Phase 120/240 VAC @1.0pf	25 kW	Amps: 104
Three-Phase 120/208 VAC @0.8pf	25 kW	Amps: 87
Three-Phase 120/240 VAC @0.8pf	25 kW	Amps: 75
Three-Phase 277/480 VAC @0.8pf	25 kW	Amps: 38
Three-Phase 346/600 VAC @0.8pf	25 kW	Amps: 30

STARTING CAPABILITIES (sKVA)

		sKVA vs. Voltage Dip													
		480 VAC							208/240 VAC						
Alternator	kW	10%	15%	20%	25%	30%	35%	10%	15%	20%	25%	30%	35%		
Standard	25	16	25	33	41	49	57	12	19	25	31	37	43		
Upsize 1	35	24	36	48	60	72	84	18	27	36	45	54	63		
Upsize 2	40	27	41	54	68	81	95	20	31	41	51	61	71		

FUEL CONSUMPTION RATES*

		Diesel - gal/hr (l/hr)	
Fuel Pump Lift - ft (m)		Percent Load	Standby
3 (1)		25%	0.8 (3.0)
		50%	1.33 (5.0)
Total Fuel Pump Flow (Combustion + Return)		75%	1.67 (6.3)
4.5 gal/hr		100%	2.5 (9.5)

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

COOLING

		Standby
Coolant Flow per Minute	gal/min (l/min)	10 (38)
Coolant System Capacity	gal (L)	2.8 (10.95)
Heat Rejection to Coolant	BTU/hr	103,080
Inlet Air	cfm (m3/hr)	4,500 (7647)
Max. Operating Radiator Air Temp	F° (C°)	122 (50)
Max. Ambient Temperature (before derate)	F° (C°)	110 (43.3)
Maximum Radiator Backpressure	in H ₂ O	0.5

COMBUSTION AIR REQUIREMENTS

	Standby
Flow at Rated Power cfm (m3/min)	90 (2.55)

ENGINE

		Standby
Rated Engine Speed	rpm	1800
Horsepower at Rated kW**	hp	49
Piston Speed	ft/min (m/min)	1110 (338)
BMEP	psi	117

** Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

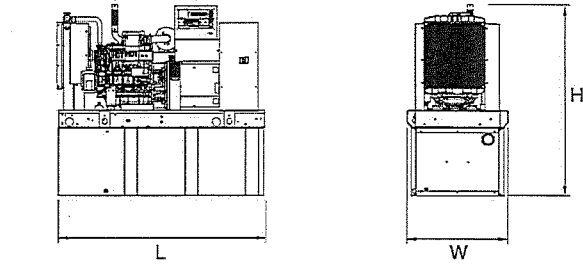
EXHAUST

		Standby
Exhaust Flow (Rated Output)	cfm (m ³ /min)	208 (354)
Max. Backpressure (Post Silencer)	inHg (Kpa)	1.5 (5.1)
Exhaust Temp (Rated Output)	°F (°C)	790 (421)
Exhaust Outlet Size (Open Set)	mm (in)	63.5 (2.5)

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.

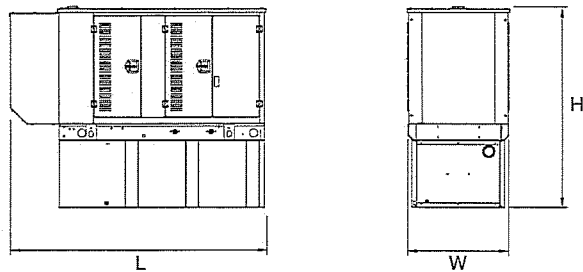
SD025 | 2.4L | 25 kW
INDUSTRIAL DIESEL GENERATOR SET
 EPA Certified Stationary Emergency

DIMENSIONS AND WEIGHTS*



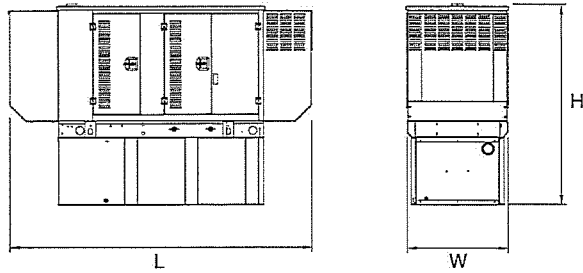
OPEN SET

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Tank & Open Set	
NO TANK	-	76 (1930.4) x 37.4 (949.9) x 42.2 (1072.1)	2060 (934)	
21	54 (204.4)	76 (1930.4) x 37.4 (949.9) x 55.2 (1402.1)	2540 (1152)	
52	132 (499.7)	76 (1930.4) x 37.4 (949.9) x 67.2 (1706.9)	2770 (1257)	
84	211 (798.7)	76 (1930.4) x 37.4 (949.9) x 79.2 (2011.7)	2979 (1351)	
120	300 (1135.6)	92.9 (2360) x 37.4 (949.9) x 82.7 (2100.6)	3042 (1380)	



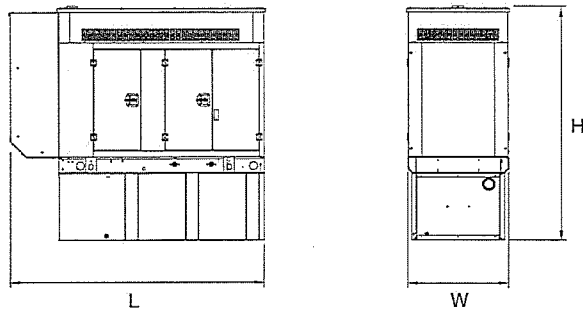
STANDARD ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	94.8 (2408.9) x 38 (965.2) x 49.5 (1258.1)		
21	54 (204.4)	94.8 (2408.9) x 38 (965.2) x 62.5 (1587.5)		
52	132 (499.7)	94.8 (2408.9) x 38 (965.2) x 74.5 (1892.3)	302 (137)	191 (87)
84	211 (798.7)	94.8 (2408.9) x 38 (965.2) x 86.5 (2197.1)		
120	300 (1135.6)	94.8 (2408.9) x 38 (965.2) x 90 (2286)		



LEVEL 1 ACOUSTIC ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	112.5 (2857.1) x 38 (965.2) x 49.5 (1258.1)		
21	54 (204.4)	112.5 (2857.1) x 38 (965.2) x 62.5 (1587.5)		
52	132 (499.7)	112.5 (2857.1) x 38 (965.2) x 74.5 (1892.3)	455 (206)	288 (131)
84	211 (798.7)	112.5 (2857.1) x 38 (965.2) x 86.5 (2197.1)		
120	300 (1135.6)	112.5 (2857.1) x 38 (965.2) x 90 (2286)		



LEVEL 2 ACOUSTIC ENCLOSURE

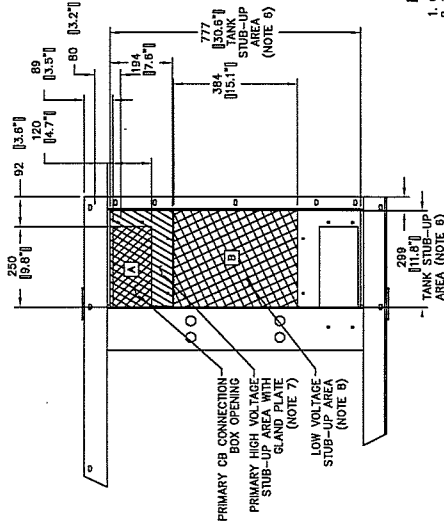
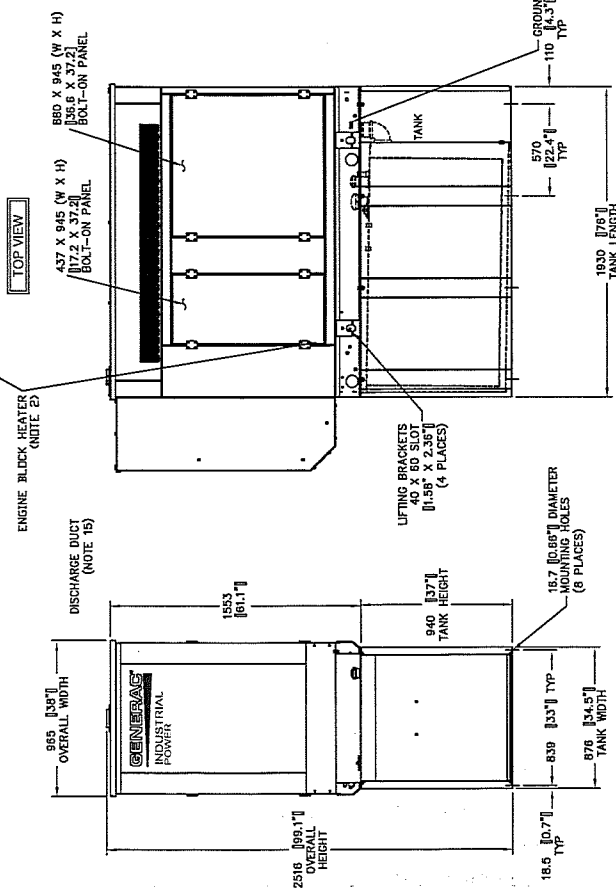
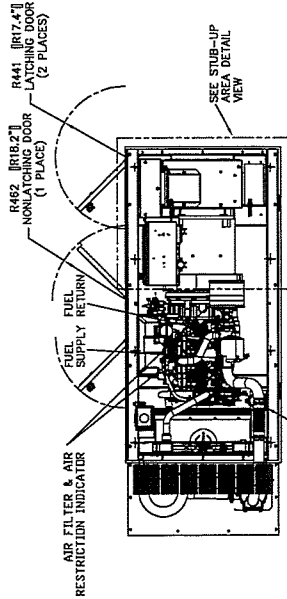
RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	94.8 (2408.9) x 38 (965.2) x 62 (1573.9)		
21	54 (204.4)	94.8 (2408.9) x 38 (965.2) x 75 (1905)		
52	132 (499.7)	94.8 (2408.9) x 38 (965.2) x 87 (2209.8)	460 (209)	291 (132)
84	211 (798.7)	94.8 (2408.9) x 38 (965.2) x 99 (2514.6)		
120	300 (1135.6)	94.8 (2408.9) x 38 (965.2) x 102.5 (2603.5)		

*All measurements are approximate and for estimation purposes only. Sound dBA can be found on the sound data sheet. Enclosure Only weight is added to Tank & Open Set weight to determine total weight.

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

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

0J7500A-TM



RECOMMENDED ELECTRICAL STUB-UPS (SEE DETAIL VIEW & TOP VIEW)

DESCRIPTION	INSIDE BASE
HIGH VOLTAGE STUB-UP AREA 1) AC LOAD LEAD CONDUIT AREA. 2) 120/240 VAC FROM UTILITY (BY OTHERS)	A
LOW VOLTAGE STUB-UP AREA 1) TRANSFER SWITCH/COMMUNICATIONS AND 2-WIRE START MUST NOT BE RUN IN CONDUIT WITH AC WIRING. (SEE NOTE 8)	B

- NOTES:
- CONTROL PANEL INCLUDES BATTERY CHARGER WITH THREE PRONG CORD.
 - 1500W 120VAC ENGINE BLOCK HEATER WITH THREE PRONG CORD.
 - 2 WIRE MAIN GROUND SYSTEM.
 - GROUNDING SYSTEM.
 - CENTER OF GRAVITY & WEIGHT MAY SHIFT SLIGHTLY DUE TO UNIT OPTIONS.
 - STUB-UPS: BASE TANK REQUIRES ALL STUB-UPS TO BE IN THE REAR TANK STUB-UP AREA.
 - STUB-UP AREA INCLUDES THE AC LOAD LEAD CONNECTION AND AUXILIARY 120/240V CONNECTION.
 - CONNECTION POINTS FOR CONTROL WIRES, BOTTOM OF LOW VOLTAGE CUSTOMER CONNECTION BOX HAS KNOCKOUTS FOR 1/2" AND 3/4" CONDUIT.
 - MUST ALLOW FREE FLOW OF DISCHARGE AIR AND EXHAUST. SEE SPEC SHEET FOR MINIMUM AIR FLOW AND MAXIMUM RESTRICTION REQUIREMENTS.
 - MUST ALLOW FREE FLOW OF INTAKE AIR. SEE SPEC SHEET FOR MINIMUM AIR FLOW AND MAXIMUM RESTRICTION REQUIREMENTS.
 - GENERATOR MUST BE INSTALLED SUCH THAT FRESH COOLING AIR IS NOT RECIRCULATED.
 - IT IS THE RESPONSIBILITY OF THE INSTALLATION TECHNICIAN TO ENSURE CODES, STANDARDS, AND REGULATIONS.
 - UNIT GRAVITY SEALING GASKETS BETWEEN DIESEL TANK IS INCLUDED WITH GENERATOR.
 - UNIT GRAVITY SEALING GASKETS BETWEEN DIESEL TANK AND RETURN LINES DISCONNECTED AND PLUGGED BETWEEN ENGINE AND FUEL TANK. THIS HAS BEEN DONE TO FACILITATE PRESSURE TESTING OF THE TANK IN THE FIELD.
 - FOR INFORMATION REGARDING CONNECTING THE FUEL SUPPLY AND RETURN LINES PRIOR TO START UP - SEE THE FUEL TANK FIELD TESTING PROCEDURES SHIPPED WITH THIS GENERATOR.
 - SEE DRAWING 0C3850 FOR DISCHARGE DUCT REMOVAL. REMOVAL OF DUCT WILL PROVIDE ACCESS TO MUFFLER FOR SERVICING.

WEIGHT DATA: (INCLUDES EMPTY FUEL TANK)
GENERATOR: (3280 LBS)

UNITS: mm [INCHES]

GENERAC POWER SYSTEMS Waukesha P.O. BOX 8 WAUKESHA, WIS. 53187	
FILE NAME	0J7500A-TM.DWG
SCALE	1 = 30
DWG NO.	0J7500A-TM
REV	A

INSTALL SD25 SSS DIESEL 2.4L
LV2A OUTDOOR SOUND ATTENUATED
WITH 211 GALLON U.L. 142
DOUBLE WALL FUEL TANK BASE

GENERAC POWER SYSTEMS HAS THE COURTESY OF THIS DRAWING WHICH IS SUPPLIED IN CONFIDENCE AND MUST NOT BE USED FOR ANY PURPOSE OTHER THAN FOR WHICH IT IS SUPPLIED WITHOUT THE EXPRESS WRITTEN CONSENT OF GENERAC POWER SYSTEMS.
© GENERAC POWER SYSTEMS 2008

INSTALLATION DRAWING

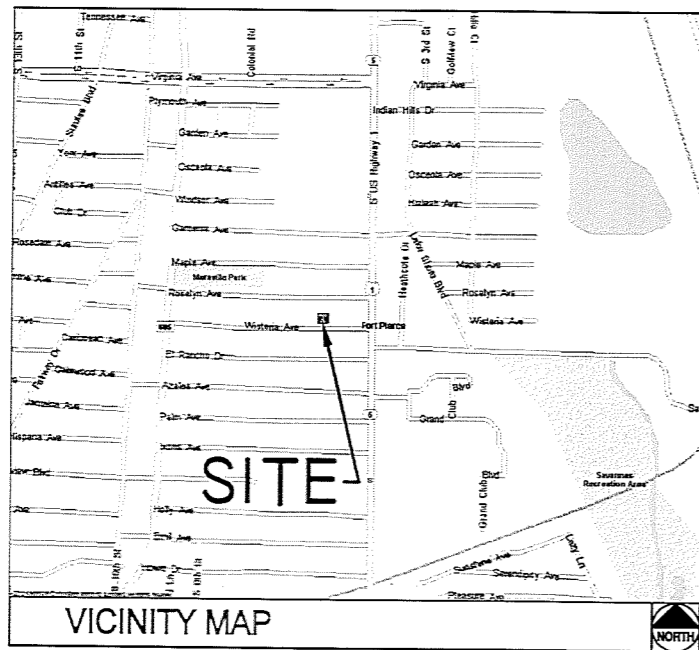
T-Mobile

1300 CONCORD TERRACE, SUITE 200
SUNRISE FL, 33323

A2P0068A - CINGULAR EAST FORT PIERCE (BU: 842793)

2633 SOUTH US 1
FORT PIERCE, FL 34982

LATITUDE 27°25'7.62"N, LONGITUDE 80°19'39.00"W



VICINITY MAP

FROM T-MOBILE OFFICE, HEAD NORTHWEST ON CONCORD TERRACE TOWARD SAWGRASS CORPORATE PKWY, TURN LEFT ONTO SAWGRASS CORPORATE PKWY, USE THE 2ND FROM THE RIGHT LANE TO TURN LEFT ONTO W SUNRISE BLVD, USE THE RIGHT 2 LANES TO MERGE ONTO FL-869 N VIA THE RAMP TO W PALM BEACH, MERGE ONTO FL-869 N, USE THE RIGHT 2 LANES TO TAKE EXIT 21A-B FOR FLORIDA'S TURNPIKE N, MERGE ONTO FLORIDA'S TURNPIKE, TAKE EXIT 152 FOR FL-70 TOWARD FT PIERCE/OKEECHOBEE, USE THE RIGHT 2 LANES TO TURN RIGHT ONTO FL-70/OKEECHOBEE RD, USE THE RIGHT 2 LANES TO TURN RIGHT ONTO US-1 S, TURN RIGHT ONTO ROSELYN AVE, THE SITE WILL BE ON THE RIGHT.

DRIVING DIRECTIONS

THIS IS AN APPLICATION FOR THE UPGRADE OF AN EXISTING WIRELESS FACILITY CONSISTING OF A NEW GENERATOR INSTALLATION.

PROJECT DESCRIPTION

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

- | | |
|--|---|
| 1. 6TH EDITION (2017) FLORIDA BUILDING CODE | 6. AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATIONS (AISC) |
| 2. NATIONAL ELECTRIC CODE (NEC) WITH LOCAL AMENDMENTS LATEST ED. | 7. UNDERWRITERS LABORATORIES (UL) APPROVED ELECTRICAL PRODUCTS |
| 3. ANS/IEEE APPLICABLE STANDARDS | 8. LOCAL BUILDING CODE |
| 4. LIFE SAFETY CODE NFPA-101-2018 | 9. CITY/COUNTY ORDINANCES |
| 5. 6TH EDITION (2017) FLORIDA FIRE PREVENTION CODE | 10. NFPA 55 (2016) AND 70 (2017) |

CODE COMPLIANCE

APPLICANT/LESSEE

MDCMC NAME: T-MOBILE
PROJECT MANAGER: DENISE CORREA
PHONE: (954) 604-9031

PROPERTY INFORMATION

OWNER: CROWN CASTLE INTERNATIONAL
6420 CONGRESS AVENUE
BOCA RATON, FL 33487

CONTACT: DEREK J. SMITH
(717) 856-0045

HANDICAP REQUIREMENTS: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED.

JURISDICTION: CITY OF FORT PIERCE

PARCEL ID: 2422-602-0241-020-7

PROJECT INFORMATION

EQUIPMENT LOCATION: OUTDOOR INDOOR

ANTENNA LOCATION:
 BELLTOWER
 SELF SUPPORT TOWER
 MONOPOLE
 ROOF TOP
 NEW TOWER
 OTHER

PROJECT SUMMARY

CIVIL ENGINEER:

KIMLEY-HORN AND ASSOCIATES, INC.
1920 WEKIVA WAY, SUITE 200
WEST PALM BEACH, FL 33407
(561) 845-0665

STRUCTURAL ENGINEER:

N/A

ELECTRICAL ENGINEER:

WAYPOINT ENGINEERING AND EQUIPMENT LLC
RUSSELL C. MORRISON
820 W. INDIANTOWN ROAD, SUITE 105
JUPITER, FLORIDA 33458
PH: 561-252-1220

SURVEYOR:

N/A

TOWER ENGINEER:

N/A

PROJECT TEAM

SHEET	DESCRIPTION	REV.
T-1	COVER SHEET	0
G-1	GENERAL NOTES	0
C-1	SITE PLAN & EQUIPMENT LAYOUT PLANS	0
C-2	GENERATOR DETAILS	0
E-1	ELECTRICAL NOTES	0
E-2	ELECTRICAL PLAN	0
E-3	ELECTRICAL DETAILS	0
ISSUED FOR:		
GENERATOR UPGRADE		
DATE: JULY 2018		

SHEET INDEX

ISSUED FOR:
GENERATOR UPGRADE
DATE: JULY 2018

DESIGN:
6TH EDITION (2017) FLORIDA BUILDING CODE
WIND LOADS (ASCE 7-10)
ULTIMATE WIND SPEED = 160 MPH
NOMINAL WIND SPEED = 124 MPH
RISK CATEGORY II
WIND EXPOSURE = C

T-Mobile

1300 CONCORD TERRACE, SUITE 200
SUNRISE FL, 33323

PROJECT INFORMATION:

CINGULAR EAST FORT PIERCE
A2P0068A
510 WISTERIA AVENUE
FORT PIERCE, FL 34982
ST. LUCIE COUNTY

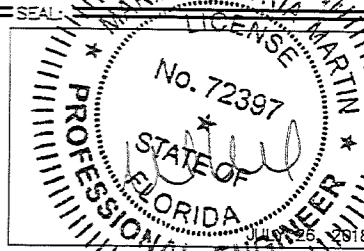
CURRENT ISSUE DATE:

JULY 2018

ISSUED FOR:

GENERATOR UPGRADE

REV.: DATE: DESCRIPTION:



PLANS PREPARED BY:

Kimley-Horn
© 2018 KIMLEY-HORN AND ASSOCIATES, INC.
1920 WEKIVA WAY, SUITE 200
WEST PALM BEACH, FLORIDA 33411
(561) 845-0665
FBPE CA00000696

PROVIDER:

DRAWN BY: CHK.: APV.:

GD LF MYM

LICENSURE:

KEVIN K. MARAH PE 71455
MARIA VICTORIA MARTIN PE 72397
ARNOLD A. ARTLES PE 70645

SHEET TITLE:

COVER SHEET

SHEET NUMBER: REVISION:

T-1

KHA Job #:

044290125

Drawing Name: K:\VPRD_CRM\CELL_SITES\Crown\044290125 - Crown T-Mobile Generator Upgrade - 2018\A2P0068A - 842793\CD\A2P0068A Cover.dwg T-1 Jul 26, 2018 3:16pm by: cory.daniel

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STANDARD PROVISIONS

INTENT

- A. THESE SPECIFICATIONS AND CONSTRUCTION DRAWINGS ACCOMPANYING THEM DESCRIBE THE WORK TO BE PERFORMED AND THE MATERIALS TO BE FURNISHED FOR THE CONSTRUCTION OF THE T-MOBILE SITE.
- B. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE FULLY EXPLANATORY AND COMPLEMENTARY. HOWEVER, SHOULD ANYTHING BE SHOWN, INDICATED OR SPECIFIED ON ONE AND NOT THE OTHER, IT SHALL BE THE SAME AS IF SHOWN, INDICATED OR SPECIFIED ON BOTH.
- C. THE INTENTION OF THE DOCUMENTS IS TO INCLUDE ALL LABOR AND MATERIALS REASONABLY NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK AS INDICATED IN THE DOCUMENTS.
- D. THE PURPOSE OF THE SPECIFICATIONS IS TO SUPPLEMENT THE INTENT OF THE DRAWINGS AND TO DESIGNATE A PROCEDURE, TYPE OR QUALITY OF MATERIALS REQUIRED TO COMPLETE THE WORK.
- E. MINOR DEVIATIONS FROM THE DESIGN LAYOUT ARE ANTICIPATED AND SHALL BE CONSIDERED AS PART OF THE WORK HOWEVER, NO CHANGES THAT ALTER THE CHARACTER INTENT OF THE DESIGN WILL BE MADE OR PERMITTED BY T-MOBILE, WITHOUT A CHANGE ORDER.

CONFLICTS

- A. THE CONTRACTOR AND EACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL MEASUREMENTS AT THE SITE BEFORE ORDERING ANY MATERIALS OR PERFORMING ANY WORK. NO EXTRA CHARGE OR COMPENSATION SHALL BE ALLOWED DUE TO DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND DIMENSIONS INDICATED ON THE CONSTRUCTION DRAWINGS. ANY SUCH DISCREPANCY IN DIMENSION WHICH MAY INADVERTENTLY OCCUR SHALL BE SUBMITTED TO THE T-MOBILE CONSTRUCTION PROJECT MANAGER (CPM) FOR CONSIDERATION BEFORE THE CONTRACTOR PROCEEDS WITH THE WORK IN THE AFFECTED AREA.
- B. THE CONTRACTOR, IF AWARDED THE CONTRACT, WILL NOT BE ALLOWED ANY EXTRA COMPENSATION BY REASON OF ANY MATTER OR THING ABOUT WHICH THE CONTRACTOR MIGHT NOT HAVE FULLY INFORMED HIMSELF PRIOR TO BIDDING.

CONTRACTS AND WARRANTIES

- A. EACH CONTRACTOR IS RESPONSIBLE FOR HELPING TO OBTAIN THE BUILDING PERMIT AT THE LOCAL JURISDICTION AS THE CONTRACTOR OF RECORD, AND PROVIDE SAID JURISDICTION WITH ALL PROOF REQUIRED TO OPERATE AS A CONTRACTOR IN THAT JURISDICTION.

STORAGE

- A. DO NOT USE THE EXISTING BUILDING SPACE FOR STORAGE OF TOOLS OR MATERIALS WITHOUT THE CONSTRUCTION PROJECT MANAGER AND/OR BUILDING OWNER APPROVAL.
- B. ALL MATERIALS MUST BE STORED IN A LEVEL AND DRY LOCATION AND IN A MANNER THAT WILL NOT OBSTRUCT THE FLOW OF OTHER WORK. ANY EQUIPMENT OR MATERIAL STORAGE METHOD MUST MEET ALL RECOMMENDATIONS OF THE MANUFACTURER.

PROTECTION

- A. PROTECT FINISHED SURFACES, INCLUDING JAMES AND HEADS OF OPENINGS USED AS PASSAGEWAYS THROUGH WHICH EQUIPMENT AND MATERIALS WILL PASS.
- B. PROVIDE PROTECTION FOR EQUIPMENT ROOM SURFACES PRIOR TO ALLOWING EQUIPMENT OR MATERIALS TO BE MOVED OVER SUCH SURFACES.
- C. MAINTAIN FINISHED SURFACES CLEAN, UNMARRED AND SUITABLY PROTECTED UNTIL JOB SITE IS ACCEPTED BY CPM.

REPAIRS AND REPLACEMENTS

- A. IN EVENT OF DAMAGE, THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS AND REPAIRS AND AT NO ADDITIONAL COST TO T-MOBILE AND/OR BUILDING OWNER.

TEMPORARY FACILITIES

- A. WATER: WATER IS NOT AVAILABLE TO THE CONTRACTORS ON SITE.
- B. LIGHT AND POWER: LIGHT AND POWER ARE AVAILABLE ON SITE.
- C. TELEPHONE: EACH CONTRACTOR TO PROVIDE HIS OWN TELEPHONE ACCESS IF REQUIRED.
- D. IF PERMANENT POWER IS COMPLETED, ALL CONTRACTORS MAY USE THE SERVICE CONNECTION FOR PRODUCTION WORK ONLY, PROVIDED THAT ELECTRICAL CORDS AND CONNECTIONS ARE FURNISHED BY THE CONTRACTORS AND ARE DISCONNECTED AND PROPERLY STORED DURING NON-WORKING HOURS.

CLEAN UP

- A. THE CONTRACTORS SHALL AT ALL TIMES KEEP THE SITE FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY THEIR EMPLOYEES AT WORK, AND AT THE COMPLETION OF THE WORK, THEY SHALL REMOVE ALL RUBBISH FROM AND ABOUT THE BUILDING, INCLUDING ALL TOOLS, SCAFFOLDING AND SURPLUS MATERIALS, AND SHALL LEAVE THE WORK CLEAN AND READY FOR USE.
- B. EXTERIOR: VISUALLY INSPECT EXTERIOR SURFACES AND REMOVE ALL TRACES OF SOIL, WATER MATERIALS, SMUDGES AND OTHER FOREIGN MATTER.
 - 1. REMOVE ALL TRACES OF SPLASHED MATERIALS FROM ADJACENT SURFACES.
- C. INTERIOR: VISUALLY INSPECT INTERIOR SURFACE AND REMOVE ALL TRACES OF SOIL, WASTE MATERIALS, SMUDGES AND OTHER FOREIGN MATTER.
 - 1. REMOVE ALL TRACES OF SPLASHED MATERIAL FROM ADJACENT SURFACES.
 - 2. REMOVE PAINT DROPPINGS, SPOTS, STAINS AND DIRT FROM FINISHED SURFACES.
- D. CONTRACTOR SHALL WASH AND WAX FLOOR PRIOR TO FINAL ACCEPTANCE. FLOOR WAX SHALL BE OF THE ANTI-STATIC TYPE.

CHANGE ORDER PROCEDURE

- A. CHANGE ORDER MAY BE INITIATED BY THE CPM, AND/OR THE CONTRACTOR. THE CONTRACTOR, UPON VERBAL REQUEST FROM THE CPM SHALL PREPARE A WRITTEN PROPOSAL DESCRIBING THE CHANGE IN WORK OR MATERIALS AND ANY CHANGES IN THE CONTRACT AMOUNT AND PRESENT TO THE CPM FOR APPROVAL. SUBMIT REQUESTS FOR SUBSTITUTIONS IN THE FORM AND IN ACCORDANCE WITH PROCEDURES REQUIRED FOR CHANGE ORDER PROPOSALS. ANY CHANGES TO THE SCOPE OF WORK OR MATERIALS WHICH ARE PERFORMED BY THE CONTRACTOR WITHOUT A WRITTEN CHANGE ORDER AS DESCRIBED AND APPROVED BY THE CPM, SHALL BECOME THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

RELATED DOCUMENTS AND COORDINATION

- A. GENERAL CARPENTRY, ELECTRICAL, AND ANTENNA DRAWINGS ARE INTERRELATED. IN PERFORMANCE OF THE WORK, EACH CONTRACTOR MUST REFER TO ALL DRAWINGS. ALL COORDINATION TO BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

SHOP DRAWINGS

- A. CONTRACTORS TO SUBMIT SHOP DRAWINGS AS REQUIRED AND LISTED IN THESE SPECIFICATIONS THROUGH THE GENERAL CONTRACTOR TO THE CPM, FOR REVIEW.
- B. ALL SHOP DRAWINGS TO BE REVIEWED, CHECKED, CORRECTED, STAMPED AND SIGNED BY GENERAL CONTRACTOR PRIOR TO SUBMITTAL TO THE CPM.

PRODUCTS AND SUBSTITUTIONS

- A. SUBMIT 3 COPIES OF EACH REQUEST FOR SUBSTITUTION. IN EACH REQUEST IDENTIFY THE PRODUCT FABRICATION OR INSTALLATION METHOD TO BE REPLACED BY THE SUBSTITUTION. INCLUDE RELATED SPECIFICATION SECTION AND DRAWING NUMBERS, AND COMPLETE DOCUMENTATION SHOWING COMPLIANCE WITH THE REQUIREMENTS FOR SUBSTITUTIONS.
- B. ALL NECESSARY PRODUCT DATA AND CUT SHEETS SHALL PROPERLY INDICATE AND DESCRIBE THE ITEMS, PRODUCTS, AND MATERIALS BEING INSTALLED. THE CONTRACTOR SHALL, IF DEEMED NECESSARY BY THE CPM, SUBMIT ACTUAL SAMPLES TO THE CPM FOR APPROVAL IN LIEU OF CUT SHEETS.

COMPLIANCE

- A. ALL MATERIALS, DESIGN, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES (SOME OF WHICH ARE LISTED BELOW), ORDINANCES, AND AUTHORITIES HAVING JURISDICTION OVER THE WORK. UPON THE COMPLETION OF THE WORK, THE CONTRACTOR SHALL PROVIDE T-MOBILE WITH A CERTIFICATE OF OCCUPANCY (IF REQUIRED) AND OTHER LEGAL DOCUMENTS TO VERIFY SUCH COMPLIANCE. WHERE NO CODES EXIST, THE WORK SHALL CONFORM WITH THE 6TH EDITION (2017) FLORIDA BUILDING CODE, AND/OR THE SPECIFICATIONS HEREIN, WHICHEVER IS MORE STRINGENT, AND A DOCUMENT STATEMENT SHALL BE FURNISHED TO THIS EFFECT.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY COMPLIANCE WITH THE GOVERNING CODES AND TO NOTIFY THE CPM OF ANY DISCREPANCIES PRIOR TO PERFORMING WORK.

REFERENCE TO ANY STANDARD OR CODE OF PRACTICE IN THIS SPECIFICATION SHALL BE DEEMED TO MEAN THE EDITION CURRENT AT THE TIME OF AWARD OF THE CONTRACT. THE CONTRACTOR SHALL COMPLY WITH ALL ZONING AND SITE ACQUISITION SPECIAL STIPULATIONS AS OUTLINED IN THE JOB SPECIFICATIONS, OR AS DIRECTED BY THE CPM.

ANSI/TIA/EIA APPLICABLE STANDARDS
6TH EDITION (2017) FLORIDA BUILDING CODE
BUILDING OFFICIALS & CODE ADMINISTRATORS
NATIONAL ELECTRICAL CODE (NEC) WITH LOCAL AMENDMENTS
UNDERWRITERS LABORATORIES (U.L.) APPROVED ELECTRICAL PRODUCTS
AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATIONS (AISC)
LIFE SAFETY CODE NFPA - 101-2018
FEDERAL AVIATION REGULATIONS
NFPA 55 (2016) AND 70 (2017)

PERMITS AND LICENSES

- A. THE SITE ACQUISITION SPECIALIST SHALL OBTAIN, AT HIS OWN EXPENSE, ALL REQUIRED LOCAL, STATE, AND/OR COUNTY CONSTRUCTION PERMITS AND LICENSES. COPIES OF ALL PERMITS SHALL BE SENT TO CPM. APPROVALS FROM RELEVANT PLANNING BOARDS, ENVIRONMENTAL BOARDS, AND/OR OTHER COMMITTEES WILL BE SUPPLIED BY OTHERS, BUT MUST BE CONFIRMED BY THE SITE ACQUISITION SPECIALIST PRIOR TO THE APPLICATION FOR CONSTRUCTION PERMITS.
FAA APPROVAL WILL BE SUPPLIED BY OTHERS, BUT MUST BE CONFIRMED BY THE CONTRACTOR WITH THE CPM PRIOR TO THE COMMENCEMENT OF WORK.

- B. PRIOR TO COMMENCING THE WORK, THE CPM SHALL SCHEDULE AN ON-SITE MEETING WITH ALL MAJOR PARTIES TO THE PROJECT. THIS WOULD INCLUDE (THOUGH NOT LIMITED TO) THE DESIGNATED ELECTRICIAN, LOCAL TELEPHONE COMPANY, CARPENTRY FOREMAN (IF SUBCONTRACTED), A REPRESENTATIVE FROM THE LOCAL SPECIFIED WAREHOUSE AND CPM OR HIS DESIGNATED REPRESENTATIVE.

- C. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES BOTH HORIZONTALLY AND VERTICALLY PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES OR DOUBTS AS TO THE INTERPRETATION OF PLANS SHOULD BE IMMEDIATELY REPORTED TO THE ENGINEER FOR RESOLUTION AND INSTRUCTION AND NO FURTHER WORK SHALL BE PERFORMED UNTIL DISCREPANCY IS CHECKED AND CORRECTED BY THE ENGINEER. FAILURE TO SECURE SUCH INSTRUCTION MEANS CONTRACTOR WILL HAVE WORKED AT HIS OWN RISK AND EXPENSE.

- D. THE CONTRACTOR SHALL BE EQUIPPED WITH A MEANS OF CONSTANT COMMUNICATIONS, SUCH AS A CELLULAR PHONE OR A PAGER.

- E. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL SITE SAFETY INCLUDING BUT NOT LIMITED TO PROTECTION OF ALL SITE PERSONNEL AND THE GENERAL PUBLIC DURING THE ENTIRE SITE CONSTRUCTION PERIOD. HE SHALL TAKE ALL REASONABLE PRECAUTIONS TO PLACE AND MAINTAIN BARRICADES, LAMPS, SIGNS, AND THE LIKE IN ACCORDANCE WITH OSHA SAFETY ACT AND ANSI OCCUPATIONAL GUIDELINES.

- F. PROVIDE DAILY UPDATES ON SITE PROGRESS, EITHER VERBAL OR WRITTEN TO CPM.

- G. COMPLETE INVENTORY OF CONSTRUCTION MATERIALS AND EQUIPMENT IS REQUIRED PRIOR TO START OF CONSTRUCTION.

- H. **COORDINATION WITH PUBLIC UTILITY AUTHORITIES**
THE CONTRACTOR SHALL COORDINATE WITH RELEVANT AUTHORITIES THE WORKS THEY ARE TO BE CARRIED OUT. HE SHALL CONDUCT HIS OPERATIONS SO AS TO NOT INTERFERE WITH THE OPERATIONS OF PUBLIC AND/OR PRIVATE UTILITY AUTHORITIES, INSTALLING SERVICES ON THE SITE.

THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PROTECTION OF SUCH FACILITIES AND STRUCTURES DURING CONSTRUCTION OF THIS SITE.

INSPECTIONS

THE CONTRACTOR SHALL NOTIFY THE CPM AT LEAST 24 HOURS IN ADVANCE OF REQUIRED INSPECTIONS. INSPECTIONS THAT WILL BE REQUIRED BY THE CPM OR OTHER DESIGNATED T-MOBILE REPRESENTATIVE ARE:

- 1. INSPECTION OF GROUNDING SYSTEM
- 2. PRACTICAL COMPLETION

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ENSURING THAT ALL RELEVANT AUTHORITY INSPECTIONS ARE CARRIED OUT IN A TIMELY MANNER. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION OF ALL INSPECTIONS.

THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH T-MOBILE'S DESIGNATED ENGINEERING FIRM TO OBTAIN ALL REQUIRED INSPECTIONS AND TESTING. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION OF ALL INSPECTIONS.

ENVIRONMENTAL PROTECTION

NOISE LEVEL: THE CONTRACTOR SHALL ENSURE THAT STATE AND LOCAL REGULATIONS ARE COMPLIED WITH IN REGARD TO NOISE LEVELS PRODUCED BY HIS OR HIS SUB-CONTRACTOR'S EQUIPMENT OR METHODS OF CONSTRUCTION.

DUST CONTROL: THE CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO LIMIT THE CREATION OF ANY DUST NUISANCE THAT MIGHT ARISE DURING CONSTRUCTION TO THE SATISFACTION OF THE LOCAL AUTHORITIES AND THE BUILDING OWNER. THE CPM MAY DIRECT THAT WORK CEASE UNTIL SUCH TIME AS ANY PARTICULAR DUST NUISANCE IS CONTROLLED TO THE SATISFACTION OF THE CPM, LOCAL AUTHORITIES, AND BUILDING OWNERS.

REINSTATEMENT

ANY PAVEMENT, FOOTPATH, CURB, GUTTERS, WALLS, FLOORS, SERVICES, AND EXISTING FEATURES OR OTHER PROPERTIES, DISTURBED OR DESTROYED DURING CONSTRUCTION SHALL BE REINSTATED TO A CONDITION AT LEAST EQUAL TO THAT EXISTING BEFORE COMMENCEMENT OF OPERATIONS.

AS-BUILTS DRAWINGS

THE CONTRACTOR SHALL PREPARE A RED LINED SET OF AS-BUILT DRAWINGS. THE FORM OF MARKED UP CONSTRUCTION PLANS SHALL BE STANDARD ACCEPTABLE TO THE T-MOBILE. SUCH DRAWINGS SHALL BE SUBMITTED TO T-MOBILE WITHIN TWO WEEKS FROM PRACTICAL COMPLETION AND PRIOR TO APPROVAL OF THE CONTRACTOR'S FINAL INVOICE.

PRACTICAL COMPLETION

THE FOLLOWING DOCUMENTATION SHALL BE PROVIDED TO T-MOBILE WIRELESS PRIOR TO THE DATE OF PRACTICAL COMPLETION:

- 1. ALL QUALITY ASSURANCE CHECKLISTS AS OUTLINED IN THE PREVIOUS SECTIONS
- 2. WARRANTIES AND MAINTENANCE MANUALS, IF APPLICABLE
- 3. GROUND SYSTEM RESISTANCE TEST
- 4. CERTIFICATE OF OCCUPANCY

INSURANCE AND BONDS

- A. EACH CONTRACTOR SHALL AT HIS OWN EXPENSE CARRY AND MAINTAIN FOR THE DURATION OF THE PROJECT ALL INSURANCE AS REQUIRED AND LISTED AND SHALL NOT COMMENCE WITH HIS WORK UNTIL HE HAS PRESENTED A CERTIFICATE OF INSURANCE STATING ALL COVERAGES TO THE GENERAL CONTRACTOR WHO SHALL, IN TURN, FORWARD A COPY OF ALL CERTIFICATES TO THE CPM.

T-Mobile

1300 CONCORD TERRACE, SUITE 200
SUNRISE FL, 33323

PROJECT INFORMATION:

CINGULAR EAST FORT PIERCE
A2P0068A
510 WISTERIA AVENUE
FORT PIERCE, FL 34982
ST. LUCIE COUNTY

CURRENT ISSUE DATE:

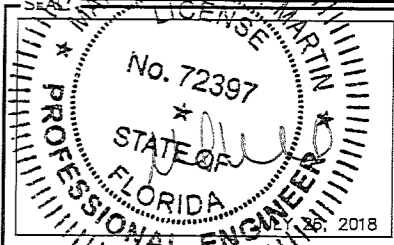
JULY 2018

ISSUED FOR:

GENERATOR UPGRADE

REV. DATE DESCRIPTION:

REV.	DATE	DESCRIPTION



PLANS PREPARED BY

Kimley-Horn
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SHEET TITLE:
GENERAL NOTES

SHEET NUMBER: **G-1** REVISION:

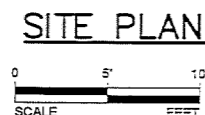
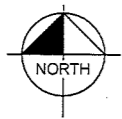
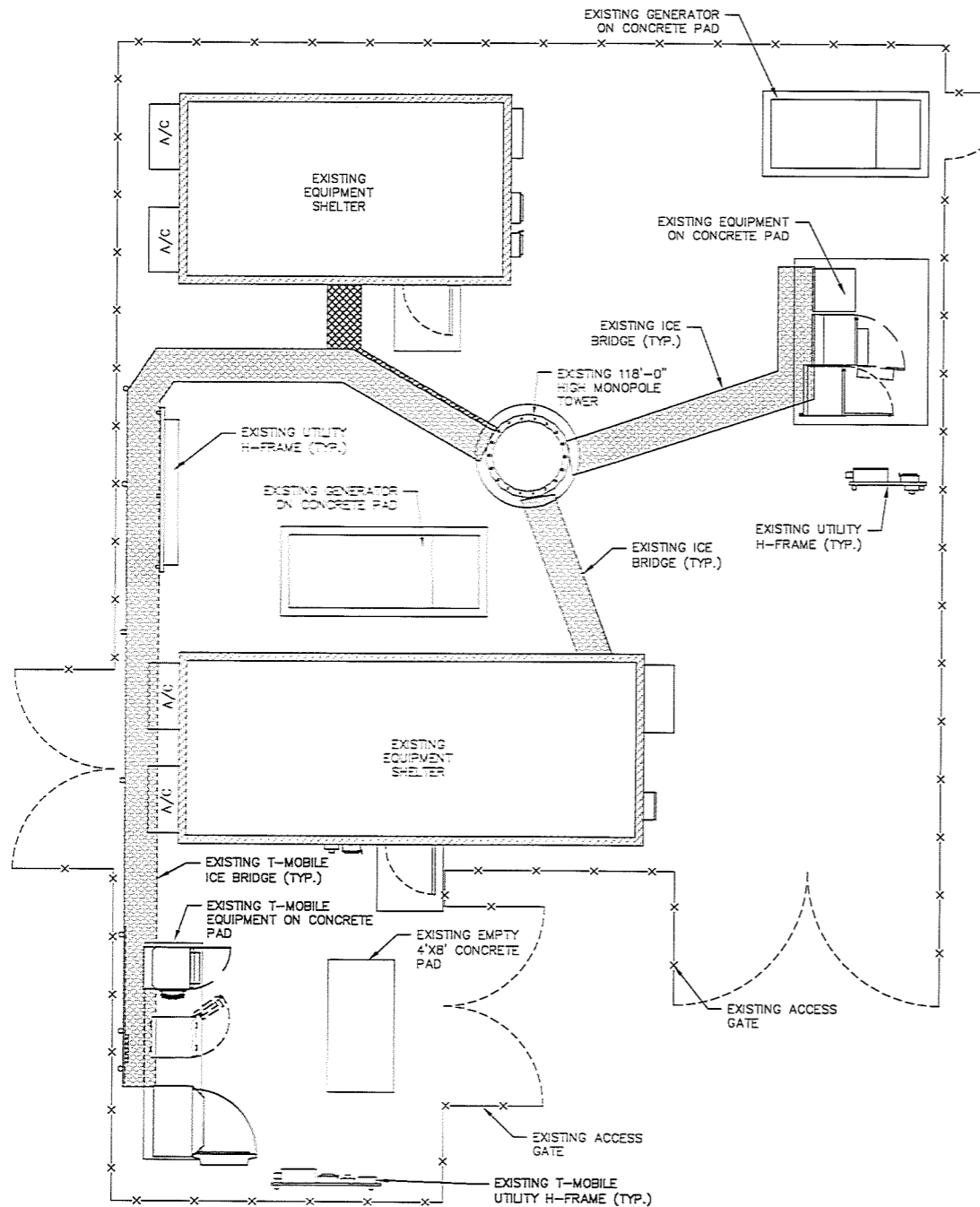
G-1

KHA Job #:
044290125

Drawing name: K:\WPB_Cam\CELL_SITES\Crom\044290125 - Crom T-Mobile Generator Upgrade - 2018\A2P0068A - 842783\GDV\A2P0068A Cover-04.dwg 0-1 Jul 28, 2018 3:16pm by: ogydamla

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Drawing Name: K:\WPB_CMA\CELL_8183\Drawn\044290125 - Crown T-Mobile Generator Upgrade - 2018\A2P0068A - 842793\044290125.dwg C-1 Jul 26, 2018 3:15pm by Derydahl



SITE PLAN

EMERGENCY PUSH BUTTON NOTE

1. PROPOSED EMERGENCY STOP BUTTON MAINTAINED 50MM RED MUSHROOM PUSH BUTTON, EMERGENCY STOP ENGRAVED, BLACK BEZEL, WITH ONE N.C. CONTACT MODEL E22JLB2N88 BY EATON OR APPROVED EQUAL IN NEMA 3R HOUSING W/P600 CONTACT RATING DESIGNATION TO BREAK IGNITION POWER OF EMERGENCY GENERATOR (VERIFY CONTACT RATING AND EXACT WIRING WITH GEN. MANUF.) SUPPLY AND INSTALL ENGRAVED PLAQUE STATING "T-MOBILE EMERGENCY STOP"
2. CONSTRUCTION INSTALLATION MAINTENANCE AND OPERATIONAL TESTING OF EPSS SHALL COMPLY THE LATEST ADOPTED EDITION OF NFPA 110.
3. ALL ELECTRICAL WORK SHALL COMPLY WITH THE LATEST ADOPTED EDITION OF NFPA 70 NATIONAL ELECTRICAL CODE

CALL 48 HOURS BEFORE YOU DIG

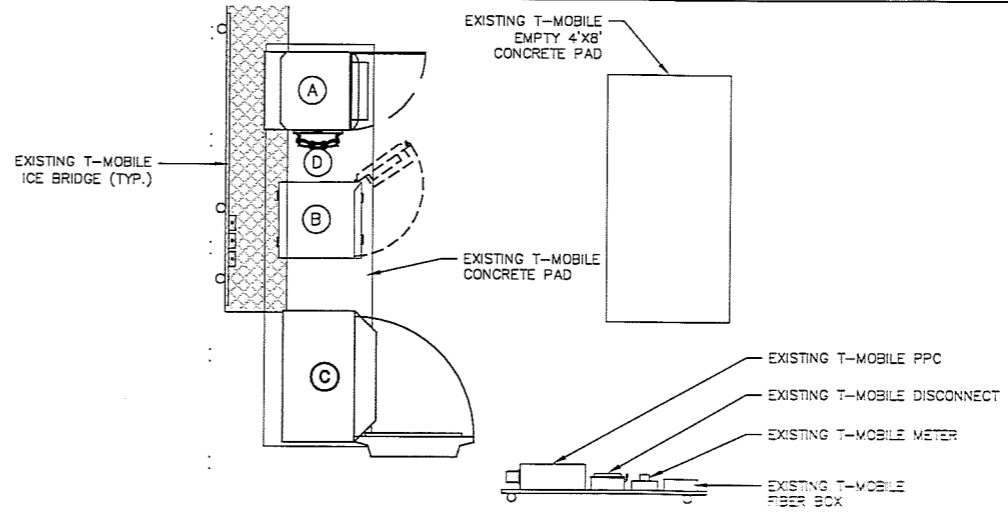
IT'S THE LAW: DIAL 811

811

Know what's below. Call before you dig.

SUNSHINE STATE ONE CALL OF FLORIDA, INC.

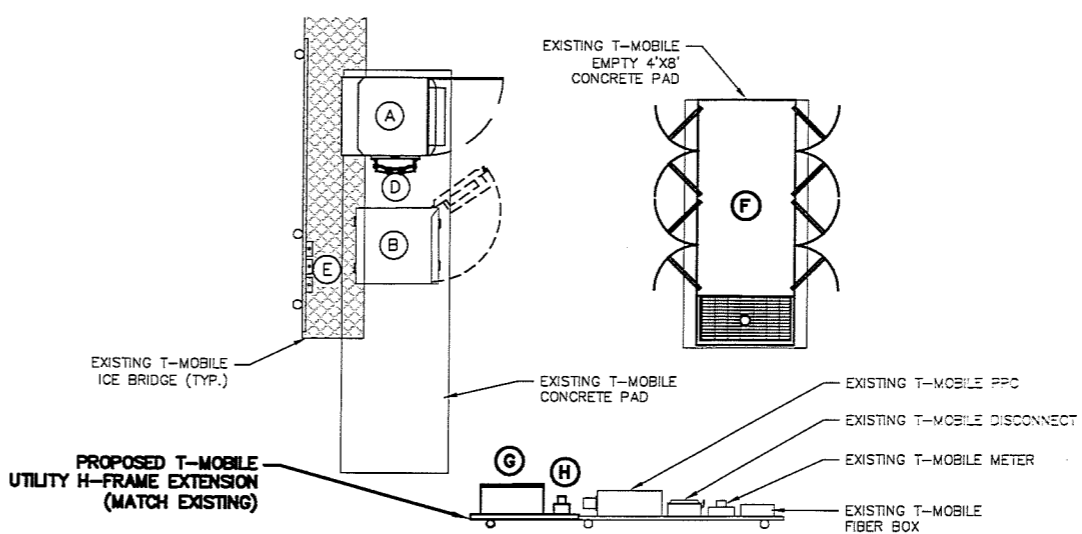
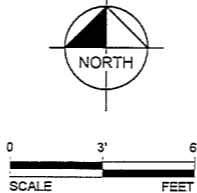
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EXISTING T-MOBILE EQUIPMENT LAYOUT PLAN

LEGEND

- (A) EXISTING T-MOBILE FCOA CABINET
- (B) EXISTING T-MOBILE SSC (TALL)
- (C) EXISTING T-MOBILE GSM CABINET TO BE REMOVED
- (D) EXISTING T-MOBILE COVP
- (E) EXISTING T-MOBILE (3) TWIN AWS/PCS DIPLEXERS MOUNTED TO EXISTING RACK
- (F) PROPOSED T-MOBILE 25KW DIESEL GENERATOR W/ 211 GAL TANK ON A EXISTING 5'X8' CONCRETE PAD
- (G) PROPOSED T-MOBILE GENERATOR ATS
- (H) PROPOSED T-MOBILE GENERATOR SHUT OFF SWITCH



PROPOSED T-MOBILE EQUIPMENT LAYOUT PLAN

FLOOD ZONE INFORMATION							
COMMUNITY NUMBER	PANEL NUMBER	SUFFIX	DATE OF FIRM	FIRM ZONE	BASE FLOOD ELEVATION	LOWEST FLOOR ELEV.	
120285	0187	J	02/16/2012	X	N/A	N/A	

T-Mobile

1300 CONCORD TERRACE, SUITE 200
SUNRISE FL, 33323

PROJECT INFORMATION:

CINGULAR EAST FORT PIERCE
A2P0068A
510 WISTERIA AVENUE
FORT PIERCE, FL 34982
ST. LUCIE COUNTY

CURRENT ISSUE DATE:

JULY 2018

ISSUED FOR:

GENERATOR UPGRADE

REV.: DATE: DESCRIPTION:

PLANS PREPARED BY:

Kimley-Horn

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SHEET TITLE:

SITE PLAN & T-MOBILE EQUIPMENT LAYOUT

SHEET NUMBER: REVISION:

C-1

KHA Job #:

044290125

ELECTRICAL SYSTEM NOTES

1. GENERAL
 - A. THE CONTRACTOR SHALL PROVIDE ALL MATERIAL AND LABOR FOR A COMPLETE ELECTRICAL SYSTEM AS INDICATED ON THE DRAWINGS. ITEMS NOT SHOWN BUT OBVIOUSLY NECESSARY FOR A COMPLETE SYSTEM SHALL BE INCLUDED.
 - B. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, INSPECTIONS AND APPROVALS.
 - C. ALL WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE AND THE LOCAL BUILDING CODES. ALL COMPONENTS SHALL BE U.L. APPROVED.
 - D. THE CONTRACTOR SHALL BEFORE SUBMITTING HIS BID, VISIT THE SITE OF THE PROJECT AND BECOME FAMILIAR WITH THE CONDITIONS. NO ALLOWANCE WILL BE MADE FOR EXISTING CONDITIONS OR FAILURE OF THE CONTRACTOR TO OBSERVE THEM.
 - E. EXACT LOCATION OF ALL EQUIPMENT SHALL BE COORDINATED WITH WIRELESS CARRIER, THE BUILDING OWNER AND OTHER TRADES.
 - F. WHERE EQUIPMENT IS SPECIFIED BY MANUFACTURER AND TYPE, SUBSTITUTION SHALL ONLY BE MADE WITH THE APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL SUBMIT DETAILS OF PROPOSED MATERIALS, REASON FOR CHANGE AND CHANGE IN CONTRACT AMOUNT.
2. SCOPE OF WORK
 - A. THE CONTRACTOR SHALL PROVIDE ALL ELECTRICAL WIRING AND EQUIPMENT UNLESS OTHERWISE INDICATED. MAIN COMPONENTS ARE AS FOLLOWS:
 1. PROVIDE ELECTRICAL SERVICE AS INDICATED ON THE DRAWINGS.
 2. PROVIDE SERVICE EQUIPMENT MOUNTED AS DIRECTED BY CARRIER AND AS INDICATED ON THE DRAWINGS.
 3. PROVIDE TELEPHONE CONDUIT WITH PULL WIRE AND CABLE AS INDICATED ON DRAWINGS.
 4. COORDINATE ELECTRICAL SERVICE WITH POWER CO. CONTACT REPRESENTATIVE & OBTAIN FAULT CURRENT LETTER PRIOR TO CONSTRUCTION. CONTRACTOR SHALL MAKE ADJUSTMENTS TO CIRCUIT BREAKERS TO MEET FAULT CURRENT WHEN NOT USING CURRENT LIMITING FUSES.
 5. COORDINATE TELEPHONE SERVICE WITH THE TELEPHONE CO. CONTACT REPRESENTATIVE PRIOR TO CONSTRUCTION.
 6. INSTALL WIRE AND CONDUIT AS INDICATED. PROVIDE CABLE SUPPORTS AS INDICATED.
 7. PROVIDE GROUNDING AND LIGHTNING PROTECTION SYSTEM AS INDICATED.
 8. RESTORE ALL AREAS TO ORIGINAL CONDITION AFTER INSTALLATION OF CONDUIT.
 9. CONTRACTOR SHALL CLEARLY LABEL DISCONNECTS AND OTHER RELATED GEAR.
 10. AT TIME OF PLAN PERMITTING, CONTRACTOR SHALL APPLY FOR A THIRTY (30) DAY TEMPORARY POWER PERMIT FOR TESTING PURPOSES.
3. CONDUIT
 - A. CONDUIT SIZES AS SHOWN ON THE DRAWINGS ARE A MINIMUM. THE CONTRACTOR MAY INCREASE AS REQUIRED FOR EASE OF PULLING.
 - B. CONDUIT TYPES SHALL BE AS FOLLOWS UNLESS OTHERWISE INDICATED:
 1. ALL ABOVE GRADE CONDUIT SHALL BE RIGID GALVANIZED STEEL.
 2. ALL CONDUIT BELOW GRADE SHALL BE SCHEDULE 40 PVC.
 3. CONCEALED CONDUIT IN WALLS OR ABOVE CEILING SHALL BE EMT.
 - C. ALL EXPOSED CONDUIT SHALL BE NEATLY INSTALLED AND RUN PARALLEL OR PERPENDICULAR TO STRUCTURAL ELEMENTS. SUPPORTS AND MOUNTING HARDWARE SHALL BE HOT DIPPED GALVANIZED STEEL. NYLON INSULATED BUSHINGS SHALL BE USED ON ALL CONDUIT TERMINATIONS.
 - D. FLEX CONDUIT SHALL BE LIQUID TIGHT FLEXIBLE METALLIC CONDUIT.
 - E. NO CONDUIT SHALL BE INSTALLED IN LIFE SAFETY AREAS SUCH AS STAIRWAYS.
 - F. CONDUIT ROUTES ARE SCHEMATIC. FIELD VERIFY ROUTE BEFORE BID. COORDINATE ROUTE WITH WIRELESS CARRIER AND BUILDING OWNER.
 - G. WEATHERPROOF HUBS SHALL BE USED FOR ALL TOP AND SIDE PENETRATIONS TO ENCLOSURE LOCATED OUTDOORS.
4. CONDUCTORS
 - A. CONDUCTORS SHALL BE STRANDED COPPER TYPE THWN WITH 90 DEGREE C RISE INSULATION.
 - B. INTERIOR ENCL. SHALL BE NEMA 1. EXTERIOR ENCL. SHALL BE NEMA 3R.
5. PULL BOXES AND JUNCTION BOXES
 - A. INTERIOR ENCL. SHALL BE NEMA 1. EXTERIOR ENCL. SHALL BE NEMA 3R.
6. GROUNDING
 - A. PROVIDE GROUND SYSTEM AS INDICATED ON THE DRAWINGS AND AS REQUIRED BY THE NATIONAL ELECTRIC CODE AND RADIO EQUIPMENT MANUFACTURER.
 - B. ALL RACEWAYS REQUIRE GROUNDING CONDUCTORS. BONDING CONDUCTORS THROUGH THE RACEWAY SYSTEM SHALL BE CONTINUOUS FROM MAIN SWITCH GROUND BUSES TO PANEL GROUND BARS, AND FROM PANEL GROUNDING BARS TO BRANCH CIRCUIT OUTLETS, MOTORS, LIGHTS, ETC. THESE GROUND CONDUCTORS ARE REQUIRED THROUGHOUT THE PROJECT REGARDLESS OF WHETHER CONDUIT RUNS SHOW GROUND CONDUCTORS ON THE DRAWINGS.
 - C. COORDINATE WITH ENCLOSURE SUPPLIER TO INSTALL TELCO GROUND BARS BELOW THE TELCO BOARD. CONNECT TO MAIN GROUNDING SYSTEM.

GROUNDING PROTECTION SYSTEM NOTES

1. PROVIDE "CABLE ENTRANCE GROUND BAR" (CEGB), 3"H X 6"L X 1/4"D. MOUNT AT TELCO CABINET. COORD. INSTALLATION WITH CPM.
2. PROVIDE A GROUND RING BURIED A MINIMUM OF 18" BELOW GRADE. THE GROUND RING SHALL BE INSTALLED A MINIMUM OF 2'-0" AWAY FROM THE FOUNDATION UNLESS SHOWN ON DRAWING.
3. BOND FENCE POST TO GROUND RING USING AN EXOTHERMIC WELD. BOND FENCE GATE TO POST WITH A FLEXIBLE COPPER JUMPER STRAP MECHANICALLY OR EXOTHERMICALLY. TYPICAL FOR ALL FENCE PLANES WITHIN 12 FEET OF TOWER FOUNDATION. FOR FENCE PLANES BEYOND 12', EXTEND 1#2 TO EACH FENCE PLANE TO ANY PLANES WITHIN 50'.
4. BOND DISCONNECT SWITCH, METER, TELEPHONE CABINET AND SERVICE CONDUITS TO BURIED GROUND RING AS THEY CROSS.
5. EACH LEG OF THE WAVEGUIDE STRUCTURE SHALL BE INDIVIDUALLY BONDED TO THE BURIED GND RING. EXOTHERMICALLY WELD CONNECTIONS AT POST FOR WAVEGUIDE STRUCTURE AND BURIED GND RING. PLACE 5/8"x10' COPPERCLAD GND ROD AT 10' INTERVALS ALONG WAVEGUIDE PATH.
6. BOND REBAR IN CONCRETE FOR COMMUNICATION STRUCTURE AND EQUIPMENT PAD TO BURIED GROUND RING. EXOTHERMICALLY WELD A #2 TINNED SOLID COPPER CONDUCTOR TO THE REBAR AND CONNECT TO THE BURIED GROUND RING.
7. PROVIDE INSPECTION SLEEVE AT MAIN SERVICE GROUNDS. EXOTHERMIC CONNECTIONS.
8. PROVIDE BONDING CONDUCTOR(S) FROM THE BURIED GROUND RING TO THE ANTENNA CABLE BUS BAR AT POINT JUST INSIDE OF THE COMMUNICATION STRUCTURE EXIT. VERIFY EXACT LOCATION OF COPPER BUS BAR FOR PROPER CONDUCTOR LENGTH. FINAL EXOTHERMIC WELDS TO COPPER BUS BAR BY THE ANTENNA CABLE INSTALLER.
9. EXOTHERMICALLY WELD BONDING CONDUCTOR TO COMMUNICATION STRUCTURE LEG AT 1'-0" ABOVE PAD AND BOND TO BURIED GROUND RING. PROVIDE A 3/4" PVC SLEEVE WITH A GRADUAL BEND IN THE CONCRETE FOUNDATION.
10. 5/8"x10'-0" LONG COPPER CLAD GND ROD AS SHOWN ON PLAN (NON-LINEAR). TYPICAL FOR ALL GROUND RODS SHOWN. USE STAINLESS STEEL HARDWARE WHERE APPLICABLE.
11. ELECTRICAL CONTRACTOR SHALL TAKE MEGGER READINGS OF GROUND. THE RESULTS SHALL NOT BE GREATER THAN 5 OHMS.
12. ALL CONNECTIONS TO GROUND SYSTEM SHALL BE MADE IN LINE WITH BENDS NOMINAL 12" RADIUS IN THE DIRECTION OF CURRENT FLOW. T-CONNECTIONS WILL NOT BE ALLOWED.
13. ALL BENDS IN GROUND WIRES SHALL BE NOMINAL 12" RADIUS.
14. ANTENNA CABLES SHALL BE BONDED AT EACH END. RUNS GREATER THAN 150' SHALL BE BONDED TOWARDS MIDDLE OF LENGTH. COORDINATE LOCATION WITH WIRELESS CARRIER'S PROJECT MANAGER.
15. WHEN APPLICABLE, CONTRACTOR SHALL BOND FRAMES TO EACH OTHER AND TO GND RING VIA TWO PATHS. COORDINATE WITH WIRELESS CARRIER PROJECT MANAGER.
16. CONTRACTOR CAN PROVIDE ONE OF THE FOLLOWING AS DIRECTED BY THE PROJECT MANAGER: THE SECOND OPTION IS PREFERRED.
 - A. CADWELD EACH CABINET GROUND WIRE TO GROUND RING AS SHOWN IN EQUIPMENT GROUND DETAIL.
 - B. CADWELD EACH WIRE TO A 1/4"x4"x24" MIN. COPPER BUS BAR LOCATED BEHIND RADIO CABINET. EXTEND A #2 WIRE FROM EACH END OF COPPER BUS BAR TO GROUND RING.
17. PROVIDED BRAIDED BONDING JUMPERS BETWEEN EACH GATE AND POST (OPTIONAL).
19. CONTRACTOR SHALL PROVIDE EXOTHERMIC BONDING AT ALL BURIED GROUND RING CONNECTIONS, STRUCTURAL EQUIPMENT FRAME, SERVICE RACK(S), EXISTING TOWER GROUND RINGS, AND AS INSTRUCTED BY METROPCS CPM.
20. CONTRACTOR SHALL PROVIDE MECHANICAL BONDING AT ALL ANTENNA SECTOR GROUND BARS, ALL ELECTRICAL EQUIPMENT DISCONNECTS, TRANSFORMERS, J-BOXES, PANEL-BOARDS, CABINETS, AND MAIN GROUND BAR AS DIRECTED BY METROPCS CPM. ALL MECHANICAL CONNECTIONS SHALL BE PROPERLY TERMINATED W/ LUGS, NUTS & BOLTS.
21. CONTRACTOR SHALL COAT WITH NOX-OX ALL POINTS OF CONTACT BETWEEN DISSIMILAR METALS.

ABBREVIATIONS

ANT	ANTENNA
AWG	AMERICAN WIRE GAUGE
BCW	BARE COPPER WIRE
RHY	RACEWAY
TYP.	TYPICAL
RGS	RIGID GALVANIZED STEEL
EMT	ELECTRICAL METALLIC TUBING
DWG	DRAWING
LPS.	LIGHTNING PROTECTION SYSTEM
S.S.	STAINLESS STEEL
PNL	PANEL
CLF.	CURRENT LIMITING FUSE
CPM	CONST. PROJ. MANAGER

SYMBOLS

- ▼ CADWELD TYPE CONNECTION
- ⊙ 5/8" X10'-0" COPPERCLAD GRND. ROD W/INSP. SLEEVE
- ⊙ 5/8" X10'-0" COPPERCLAD GRND. ROD
- MECHANICAL TYPE CONNECTION
- #2 TINNED SOLID BARE CU WIRE
- UNDER GROUND TELCO CONDUIT
- UNDER GROUND ELECTRIC CONDUIT
- (GD) CONDUIT TAG 1; REFER TO RISER
- (M-1,3) CONDUIT TAG 1; PANEL SCHEDULE
- ⊕ GENERATOR RECEPTACLE



WAYPOINT

ENGINEERING AND EQUIPMENT LLC
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 PHONE: 561-252-1220
 FLORIDA CA #29673
 RUSSELL C. MORRISON, P.E., #51567
 CHARLES G. NERO, P.E., #51540

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ELECTRICAL SYSTEM NOTES



1300 CONCORD TERRACE, SUITE 200
 SUNRISE FL, 33323

PROJECT INFORMATION:

CINGULAR EAST FORT PIERCE
 A2P0068A
 510 WISTERIA AVENUE
 FORT PIERCE, FL 34982
 ST. LUCIE COUNTY

CURRENT ISSUE DATE:

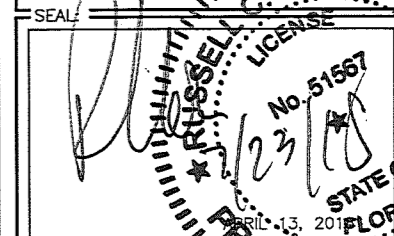
APRIL 2018

ISSUED FOR:

GENERATOR UPGRADE

REV.: DATE: DESCRIPTION:

REV.	DATE	DESCRIPTION



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SHEET TITLE:

ELECTRICAL NOTES

SHEET NUMBER: REVISION:

E-1	
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KHA Job #:

044290125

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CINGULAR EAST FORT PIERCE
A2P0068A
510 WISTERIA AVENUE
FORT PIERCE, FL 34982
ST. LUCIE COUNTY

CURRENT ISSUE DATE:
APRIL 2018

ISSUED FOR:
GENERATOR UPGRADE

REV. DATE DESCRIPTION:

SEAL: **RUSSELL C. MORRISON**
No. 51567
7/23/18
STATE OF FLORIDA
APRIL 18, 2018
PROFESSIONAL ENGINEER

PLANS PREPARED BY:
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DRAWN BY: **CHK.** APV.:
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SHEET TITLE:
ELECTRICAL PLAN

SHEET NUMBER: **E-2** REVISION:

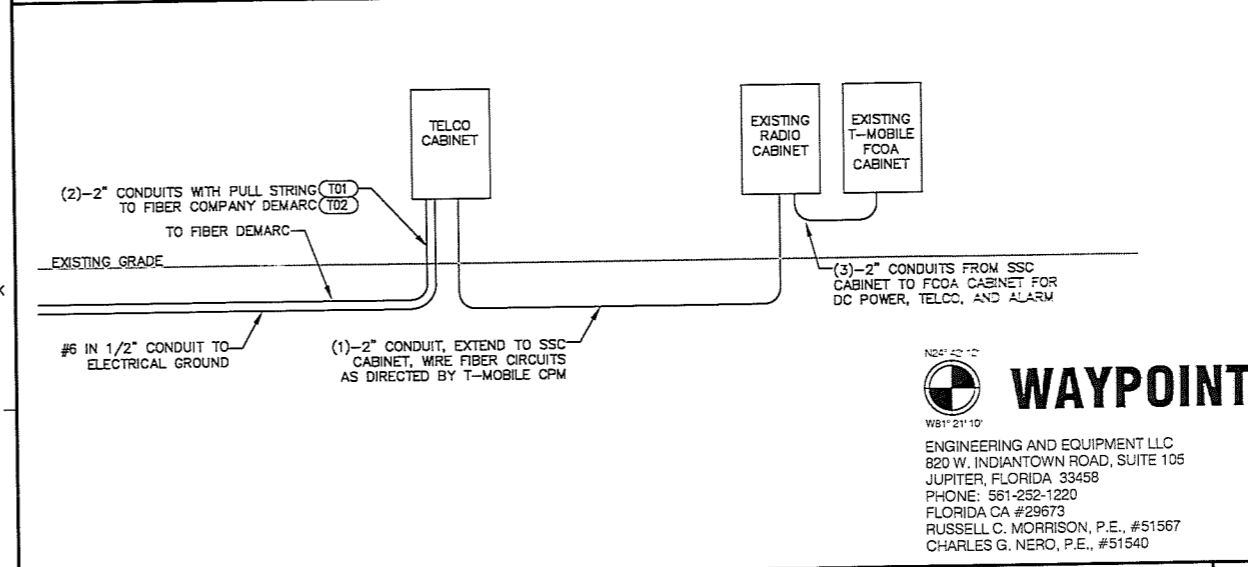
KHA Job #: **044290125**

EXISTING PANELBOARD T-MOBILE

WIRE SIZE	COND SIZE	BUS AMPS		LOAD	POLES	AMPS	BUS		AMPS	POLES	LOAD	BUS AMPS		WIRE SIZE	COND SIZE
		L1	L2				L1	L2				L1	L2		
		0	0	SURGE PROTECTOR	2	60	1	13		1	GFCI	1			
		0	0	SPARE	2	30	2	14		2	GSM CABINET	0	0		
		25	25	SSC CABINET	2	100	4	16		20	1	1	5#12	3/4"	
							5	17		20	1	1			
							6	18							
							7	19							
							8	20							
							9	21							
							10	22							
							11	23							
							12	24							

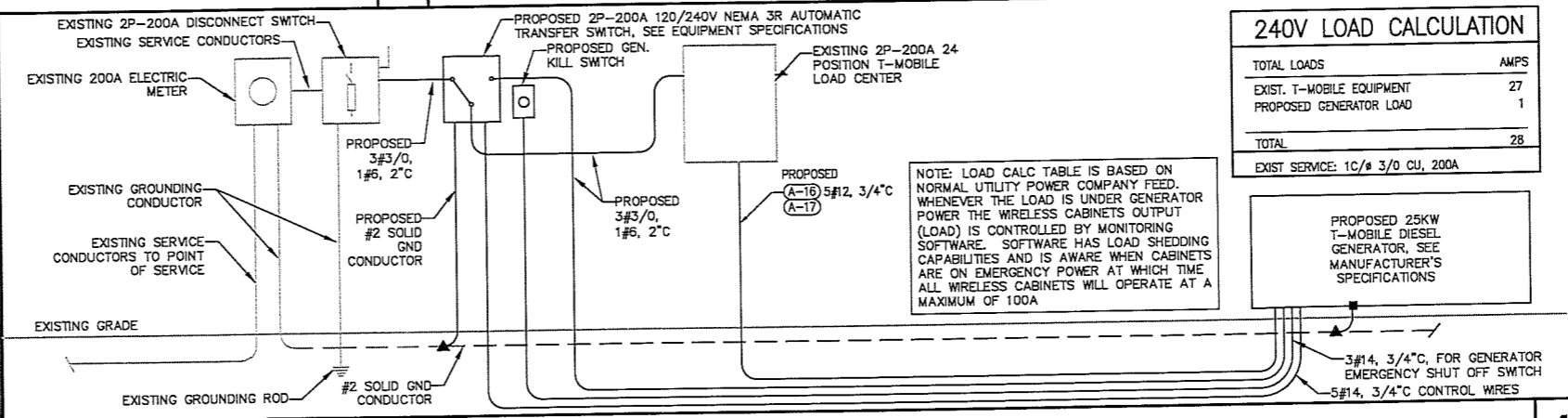
RATED VOLTAGE: 120/240 1 PHASE, 3 WIRE BRANCH POLES: 12 24 30 42 APPROVED MFRS.
 RATED AMPS: 125 200 400 CABINET: SURFACE FLUSH NEMA 1 3R 4X
 MAIN LUGS ONLY MAIN 200 AMPS BREAKER FUSED SWITCH HINGED DOOR KEYPED DOOR LATCH
 FUSED CIRCUIT BREAKER BRANCH DEVICES TO BE GFCI BREAKERS FULL NEUTRAL BUS GROUND BUS
 ALL BREAKERS MUST BE RATED TO INTERRUPT A SHORT CIRCUIT ISC OF 10,000 AMPS SYMMETRICAL

PANELBOARD SCHEDULE



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1 TELCO RISER DIAGRAM



240V LOAD CALCULATION

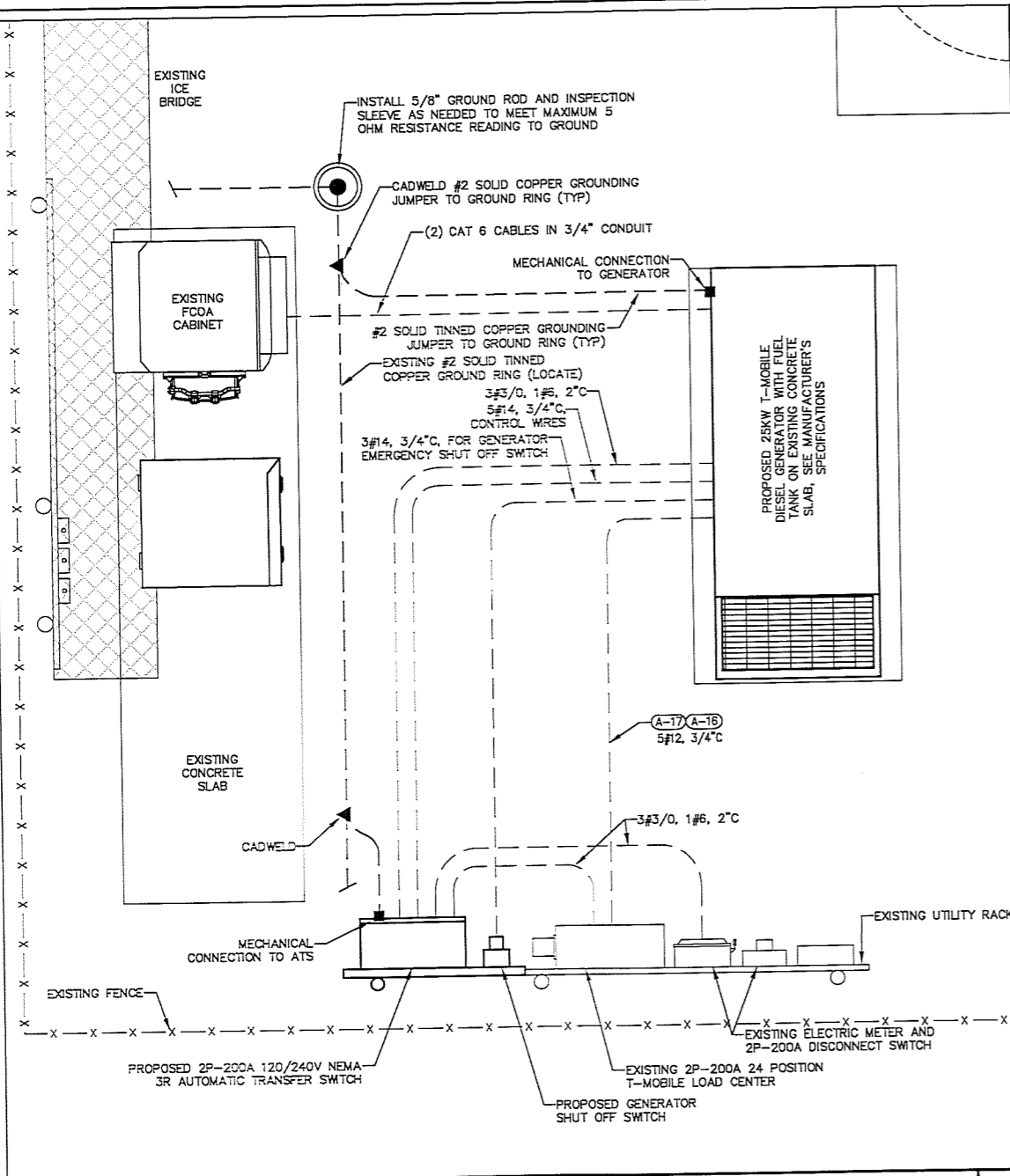
TOTAL LOADS	AMPS
EXIST. T-MOBILE EQUIPMENT	27
PROPOSED GENERATOR LOAD	1
TOTAL	28

EXIST SERVICE: 1C/3 3/0 CU, 200A

NOTE: LOAD CALC TABLE IS BASED ON NORMAL UTILITY POWER COMPANY FEED. WHENEVER THE LOAD IS UNDER GENERATOR POWER THE WIRELESS CABINETS OUTPUT (LOAD) IS CONTROLLED BY MONITORING SOFTWARE. SOFTWARE HAS LOAD SHEDDING CAPABILITIES AND IS AWARE WHEN CABINETS ARE ON EMERGENCY POWER AT WHICH TIME ALL WIRELESS CABINETS WILL OPERATE AT A MAXIMUM OF 100A

PROPOSED 25KW T-MOBILE DIESEL GENERATOR. SEE MANUFACTURER'S SPECIFICATIONS

ELECTRICAL RISER DIAGRAM

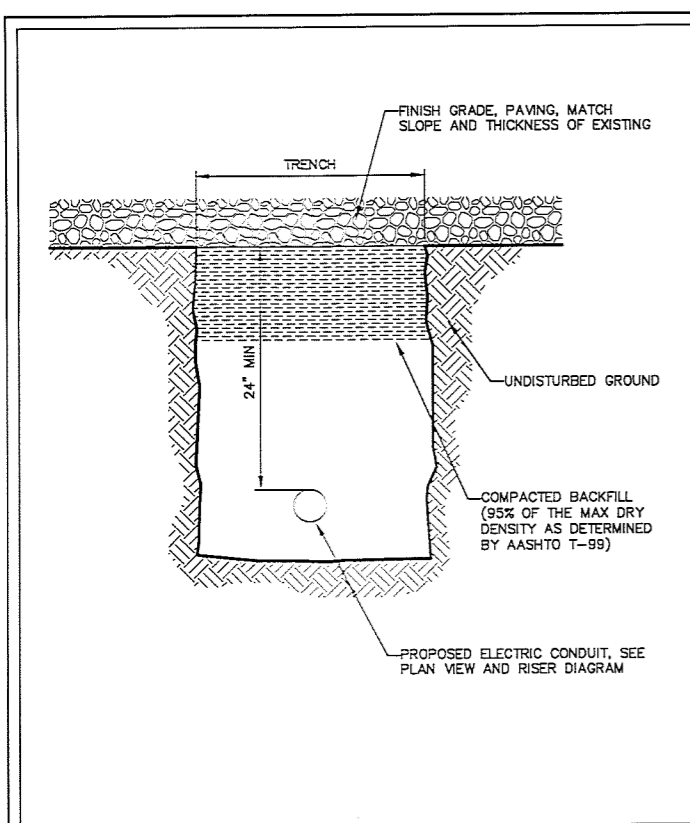


ELECTRICAL SITE PLAN

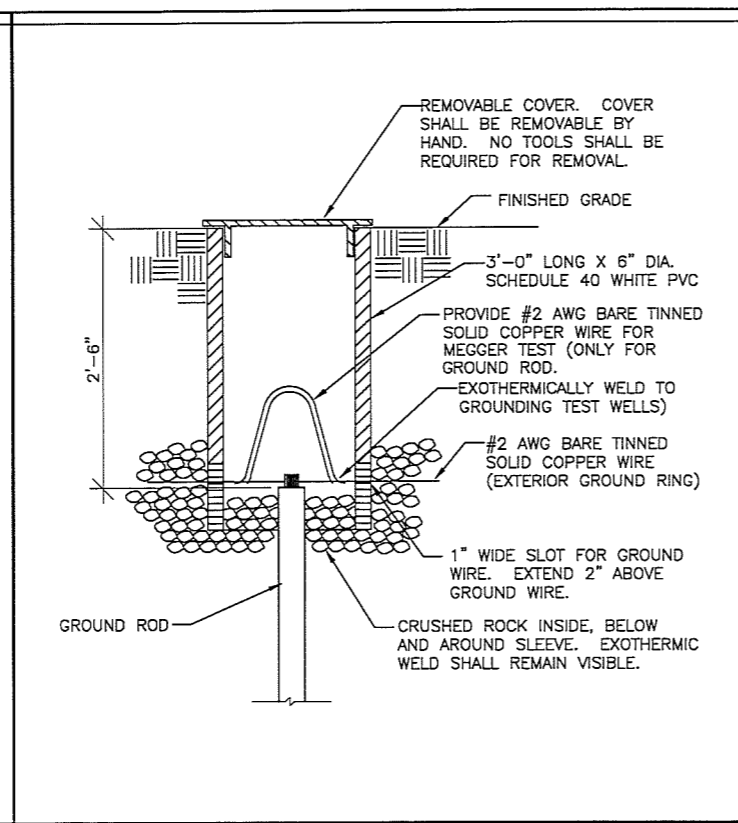


EXISTING PANELBOARD

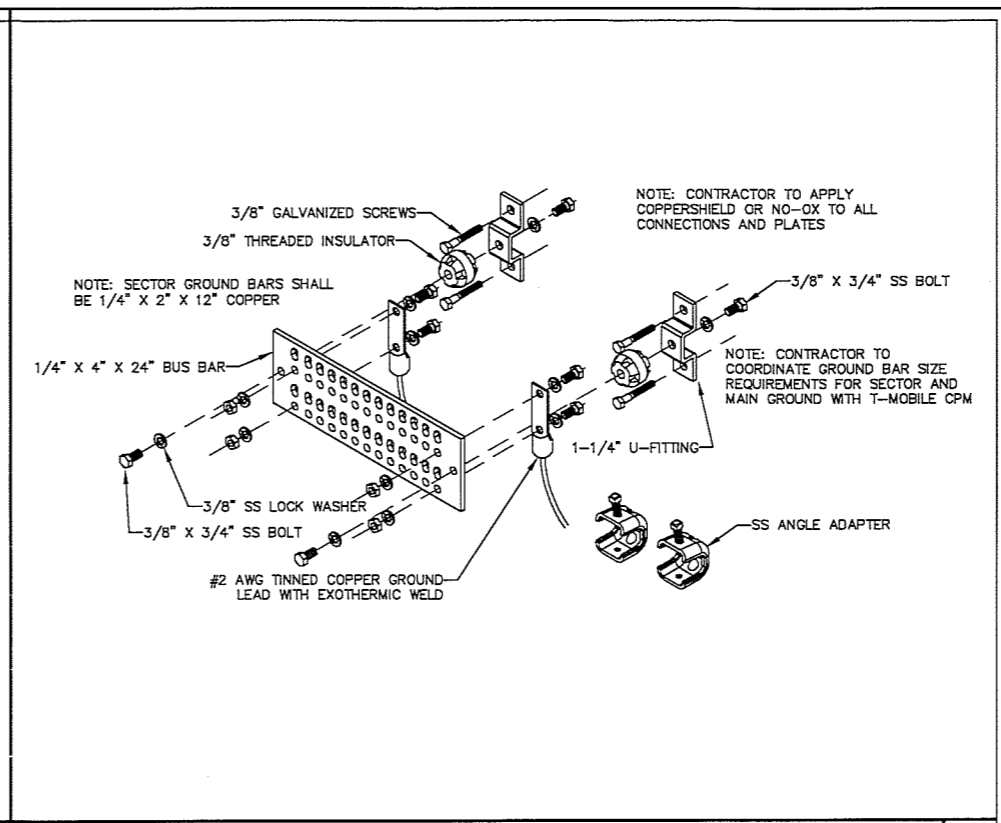
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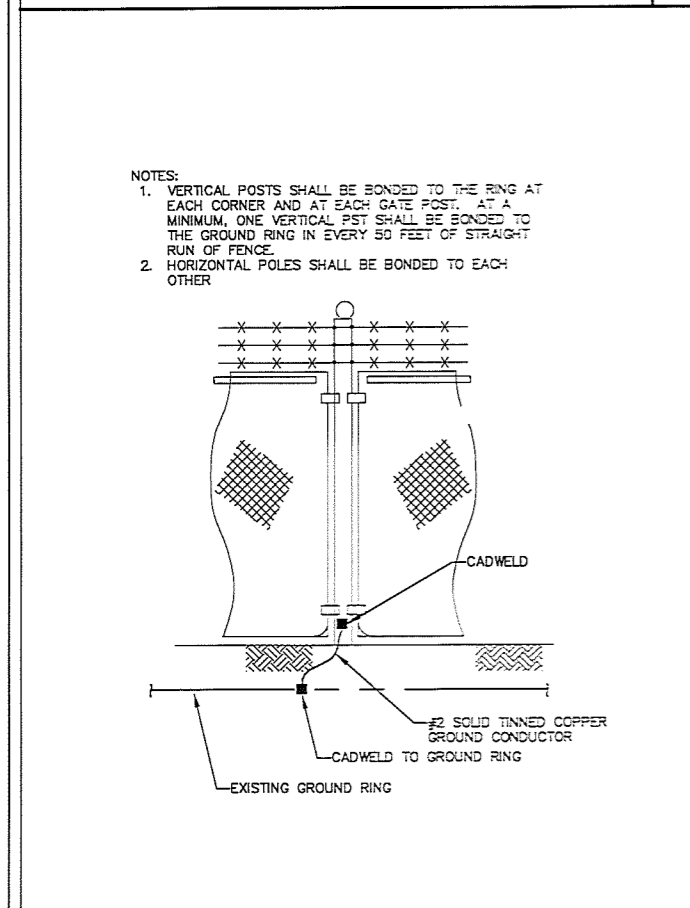
CONDUIT TRENCH DETAIL 1



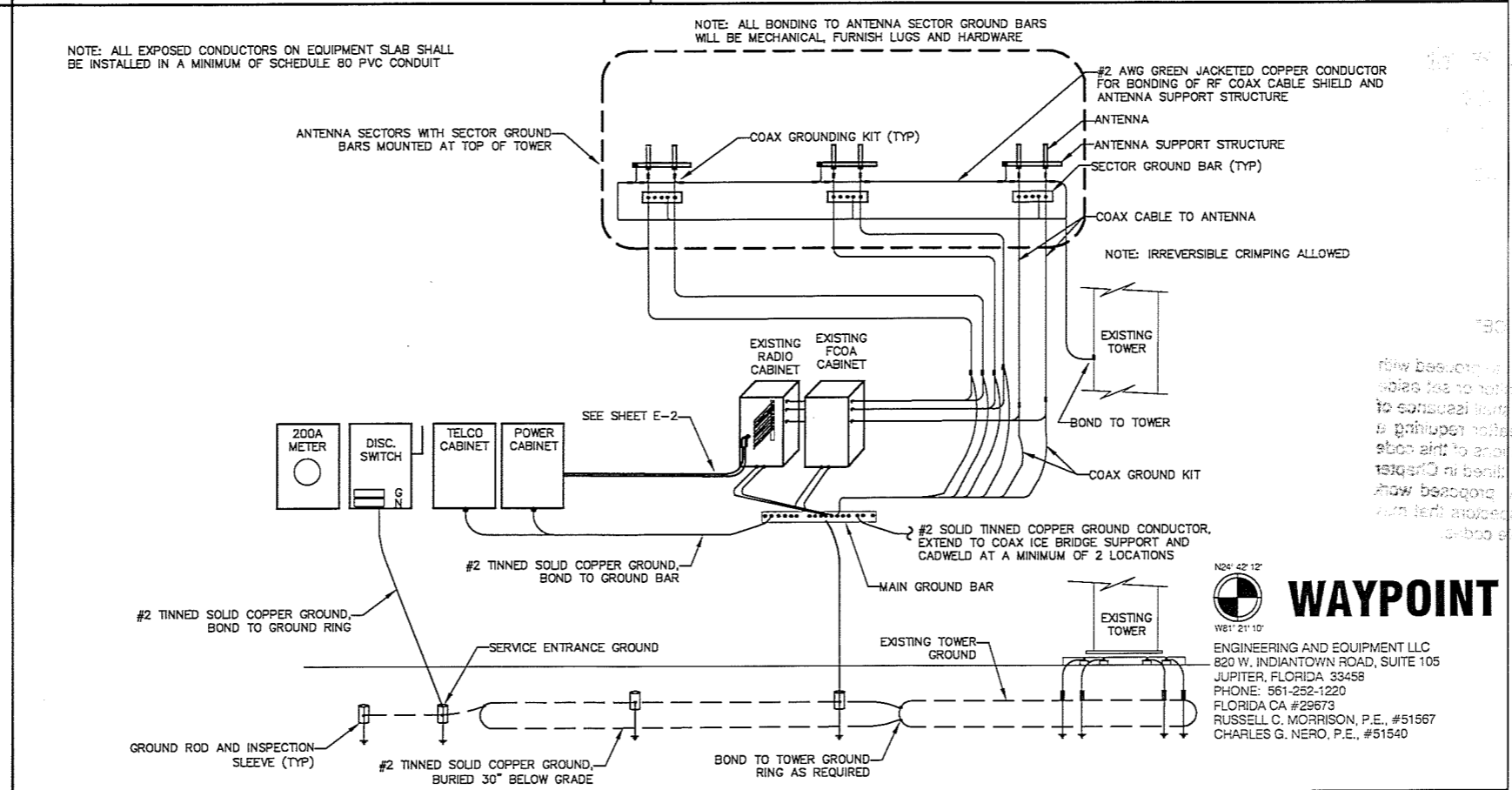
GROUND ROD INSPECTION SLEEVE 2



GROUND BAR DETAIL 3

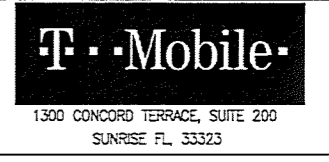


FENCE BONDING DETAIL 4



EQUIPMENT GROUNDING DETAIL 5

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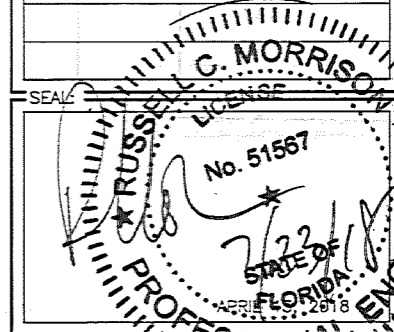


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 (561) 845-0665
 FBPE CAD0000696

PROVIDER:

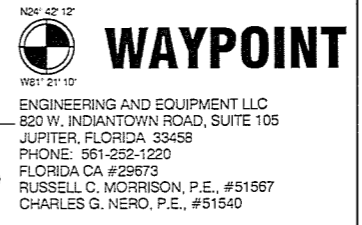
DRAWN BY: **CHK.** APV: **LF** **MVM**

LICENSURE:
 KEVIN K. MARAJH PE 71455
 MARIA VICTORIA MARTIN PE 72397
 ARNOLDO A. ARTILES PE 70645

SHEET TITLE:
ELECTRICAL DETAILS

SHEET NUMBER: **E-3** REVISION:

KHA Job #: **044290125**



JOB SITE
COPY

18-3032

510 Wisteria Ave

Mar Investments

Generator

CITY OF FT. PIERCE	
PLAN REVIEW	
REVIEWED BY:	
BLDG.	<input checked="" type="checkbox"/>
DATE:	
ELEC:	<input checked="" type="checkbox"/>
DATE:	9-6-18
PLUMB:	<input checked="" type="checkbox"/>
DATE:	
MECH:	<input checked="" type="checkbox"/>
DATE:	

These plans and all proposed work are subject to any corrections required by field inspectors that may be necessary in order to comply with all applicable codes

"REVIEWED FOR CODE COMPLIANCE"

A permit issued shall be construed to be a license to proceed with the work and not as authority to violate, cancel, alter or set aside any of the provisions of the technical codes, nor shall issuance of a permit prevent the building official from thereafter requiring a correction of errors in plans, construction or violations of this code inadvertently overlooked during plan review as outlined in Chapter 1 Section 105.4 of the Florida Building Code. All proposed work is subject to any corrections required by field inspectors that may be necessary in order to comply with all applicable codes.