

Work Order Signature Document

NJPA EZIQC Contract No.: FL04GC4-051716-LCI

☒

New Work Order



Modify an Existing Work Order

Work Order Number.: 062104.00

Work Order Date: 02/13/2019

Work Order Title: Miami Beach Public Works Office New Generator

Owner Name: City of Miami Beach

Contractor Name: LEE Construction Group. Inc.

Contact: Adrian Morales

Contact: Andres Solares

Phone: 305-673-7000

Phone:

Work to be Performed

Work to be performed as per the Final Detailed Scope of Work Attached and as per the terms and conditions of NJPA EZIQC Contract No FL04GC4-051716-LCI.

Brief Work Order Description:

Install new 600KW Generator

Time of Performance

Estimated Start Date:

Estimated Completion Date:

Liquidated Damages

Will apply: ☐

Will not apply: ☒

Work Order Firm Fixed Price: \$295,649.75

Owner Purchase Order Number:

Approvals

Owner

Date

Contractor

Date

Detailed Scope of Work

To: Andres Solares
Solares Electrical Services, Inc
10421 NW 28th Street
Miami, FL 33172
No Data Input

From: Adrian Morales
City of Miami Beach
1700 Convention Center Drive
Miami Beach, FL 33139
305-673-7000

Date Printed: February 13, 2019

Work Order Number: 062104.00

Work Order Title: Miami Beach Public Works Office New Generator

Brief Scope: Install new 600KW Generator

☐

Preliminary

☐

Revised

☒

Final

The following items detail the scope of work as discussed at the site. All requirements necessary to accomplish the items set forth below shall be considered part of this scope of work.

Provide automatic transfer switch and generator including all conduit and wiring, excavation, surfacing repairs, testing, permit, concrete slabs.

Subject to the terms and conditions of JOC Contract **FL04GC4-051716-LCI**.

Contractor

Date

Owner

Date

Contractor's Price Proposal - Summary

Date: February 13, 2019

Re: IQC Master Contract #: FL04GC4-051716-LCI
Work Order #: 062104.00
Owner PO #:
Title: Miami Beach Public Works Office New Generator
Contractor: LEE Construction Group. Inc.
Proposal Value: \$295,649.75

Section - 01	\$25,856.70
Section - 02	\$1,272.54
Section - 03	\$7,195.93
Section - 22	\$1,245.11
Section - 23	\$2,012.43
Section - 26	\$244,175.12
Section - 28	\$681.79
Section - 32	\$13,210.13
Proposal Total	\$295,649.75

This total represents the correct total for the proposal. Any discrepancy between line totals, sub-totals and the proposal total is due to rounding.

The Percentage of NPP on this Proposal: 66.99%

Contractor's Price Proposal - Detail

Date: February 13, 2019

Re: IQC Master Contract #: FL04GC4-051716-LCI
 Work Order #: 062104.00
 Owner PO #:
 Title: Miami Beach Public Works Office New Generator
 Contractor: LEE Construction Group. Inc.
 Proposal Value: \$295,649.75

Sect.	Item	Mod.	UOM	Description	Line Total
Labor	Equip.	Material	(Excludes)		
Section - 01					
1	01 22 16 00 0002		EA	Reimbursable FeesReimbursable Fees will be paid to the contractor for eligible costs. The base cost of the Reimbursable Fee is \$1.00. Insert the appropriate quantity to adjust the base cost to the actual Reimbursable Fee (e.g. quantity of 125 = \$125.00 Reimbursable Fee). If there are multiple Reimbursable Fees, list each one separately and add a comment in the "note" block to identify the Reimbursable Fee (e.g. sidewalk closure, road cut, various permits, extended warrantee, expedited shipping costs, etc.). A copy of each receipt shall be submitted with the Price Proposal.	\$5,808.00
			Installation	Quantity 5,280.00 x Unit Price 1.00 x Factor 1.1000 = Total 5,808.00	
				permit fees	
2	01 22 16 00 0002		EA	Reimbursable FeesReimbursable Fees will be paid to the contractor for eligible costs. The base cost of the Reimbursable Fee is \$1.00. Insert the appropriate quantity to adjust the base cost to the actual Reimbursable Fee (e.g. quantity of 125 = \$125.00 Reimbursable Fee). If there are multiple Reimbursable Fees, list each one separately and add a comment in the "note" block to identify the Reimbursable Fee (e.g. sidewalk closure, road cut, various permits, extended warrantee, expedited shipping costs, etc.). A copy of each receipt shall be submitted with the Price Proposal.	\$3,300.00
			Installation	Quantity 3,000.00 x Unit Price 1.00 x Factor 1.1000 = Total 3,300.00	
				FPL fees to open vault for core drilling	
3	01 22 20 00 0049		HR	Investigating Senior Engineer Or Specialty ConsultantFor special investigatory engineering requirements or other miscellaneous professional services.	\$3,562.20
			Installation	Quantity 24.00 x Unit Price 125.00 x Factor 1.1874 = Total 3,562.20	
				for testing and owners training	
4	01 22 23 00 0389		WK	1/2 To 5/8 CY, 65 HP, Loader-Backhoe With Standard Bucket And Full-Time Operator	\$911.19
			Installation	Quantity 0.30 x Unit Price 2,557.94 x Factor 1.1874 = Total 911.19	
5	01 22 23 00 0729		DAY	650 KW A/C Resistive Loadbank	\$1,277.88
			Installation	Quantity 2.00 x Unit Price 538.10 x Factor 1.1874 = Total 1,277.88	
6	01 22 23 00 0747		EA	Fuel Reimbursement For GeneratorsPurchases made by the contractor for fuel will be reimbursed to the Contractor at the actual cost of the purchase, without mark-up, for which a receipt or bill is received. The Adjustment Factor applied to Reimbursable Fees will be 1.0000. The base cost of the purchase is \$1.00, quantity will adjust cost to actual purchase cost; i.e., quantity of 125 = \$125.00 purchase. If there are multiple purchases, each one shall be listed separately with a comment in the "note" block to identify the purchase.	\$2,374.80
			Installation	Quantity 2,000.00 x Unit Price 1.00 x Factor 1.1874 = Total 2,374.80	

Contractor's Price Proposal - Detail Continues..

Work Order Number: 062104.00

Work Order Title: Miami Beach Public Works Office New Generator

Section - 01

7	01 22 23 00 1194	WK	3 Ton Capacity, 12' To 16' Bed, 4 x 2 Flat Bed Truck With Full-Time Truck Driver						\$3,589.52
		Installation	Quantity	Unit Price	Factor	=	Total		
			1.00 x	3,023.01 x	1.1874	=	3,589.52		
		generator delivery							
8	01 45 23 00 0011	EA	Proctor Compaction 4" Standard Mold ASTM D698, Field Soils Test						\$420.74
		Installation	Quantity	Unit Price	Factor	=	Total		
			2.00 x	177.17 x	1.1874	=	420.74		
9	01 71 13 00 0005	EA	Up To 20 Ton Lift Move On/Off Cost, Truck Mounted CraneIncludes delivery and pickup.						\$317.63
		Installation	Quantity	Unit Price	Factor	=	Total		
			1.00 x	267.50 x	1.1874	=	317.63		
10	01 71 23 16 0023	ACR	Survey Clear Area For Underground Utilities						\$3,002.98
		Installation	Quantity	Unit Price	Factor	=	Total		
			1.00 x	2,529.04 x	1.1874	=	3,002.98		
11	01 71 36 00 0003	EA	X-Ray Or Electromagnetic Survey Minimum Set-Up ChargeFor projects where the total charges are less than the minimum set-up charge, use this task exclusively. This task should not be used in conjunction with any other tasks in this section.						\$378.27
		Installation	Quantity	Unit Price	Factor	=	Total		
			1.00 x	318.57 x	1.1874	=	378.27		
12	01 74 19 00 0015	EA	30 CY Dumpster (5 Ton) "Construction Debris"Includes delivery of dumpster, rental cost, pick-up cost, hauling, and disposal fee. Non-hazardous material.						\$913.49
		Installation	Quantity	Unit Price	Factor	=	Total		
			1.00 x	769.32 x	1.1874	=	913.49		

Subtotal for Section - 01

\$25,856.70

Section - 02

13	02 41 19 13 0063	EA	Saw Cut Minimum ChargeFor projects where the total saw cutting charge is less than the minimum charge, use this task exclusively. This task should not be used in conjunction with any other tasks in this section.						\$574.04
		Installation	Quantity	Unit Price	Factor	=	Total		
			1.00 x	483.44 x	1.1874	=	574.04		
14	02 41 19 13 0089	EA	Drill 2" Diameter Core In >4" To 6" Concrete						\$85.73
		Installation	Quantity	Unit Price	Factor	=	Total		
			2.00 x	36.10 x	1.1874	=	85.73		
15	02 41 19 13 0103	EA	Drill 4" Diameter Core In >6" To 8" Concrete						\$470.28
		Installation	Quantity	Unit Price	Factor	=	Total		
			6.00 x	66.01 x	1.1874	=	470.28		
16	02 66 23 00 0065	SF	Cleanup And Re-Grade Working Surface						\$142.49
		Installation	Quantity	Unit Price	Factor	=	Total		
			2,000.00 x	0.06 x	1.1874	=	142.49		

Subtotal for Section - 02

\$1,272.54

Section - 03

17	03 11 13 00 0026	SF	Elevated Slab Wood Formwork						\$336.98
		Installation	Quantity	Unit Price	Factor	=	Total		
			60.00 x	4.73 x	1.1874	=	336.98		

Contractor's Price Proposal - Detail Continues..

Work Order Number: 062104.00

Work Order Title: Miami Beach Public Works Office New Generator

Section - 03

18	03	21	11	00	0130	LF	#6, Grade 60, Slab On Grade, Steel Reinforcement Bar							\$4,642.97
						Installation	Quantity	Unit Price	Factor	=	Total			
							2,660.00	1.47	1.1874		4,642.97			
19	03	31	13	00	0018	CY	Direct Chute, Place 3,000 PSI Concrete Continuous Footings							\$1,463.47
						Installation	Quantity	Unit Price	Factor	=	Total			
							10.00	123.25	1.1874		1,463.47			
20	03	31	13	00	0018	0042	MOD	For Up To 20, Add						\$77.18
						Installation	Quantity	Unit Price	Factor	=	Total			
							10.00	6.50	1.1874		77.18			
21	03	31	13	00	0104	HR	35 CY/HR, 66 HP Trailer Mounted Concrete PumpIncludes hoses							\$675.33
						Installation	Quantity	Unit Price	Factor	=	Total			
							7.00	81.25	1.1874		675.33			

Subtotal for Section - 03

\$7,195.93

Section - 22

22	22	11	16	00	0007	LF	2" Schedule 40 Threaded Galvanized Steel Pipe With 150 LB Malleable Iron Fitting AssemblyIncludes all hangers and all galvanized malleable iron fittings (couplings, elbows, tees and reducer fittings). All hangers are complete assemblies. Not for use where detail is available.							\$1,245.11
						Installation	Quantity	Unit Price	Factor	=	Total			
							70.00	14.98	1.1874		1,245.11			

Subtotal for Section - 22

\$1,245.11

Section - 23

23	23	05	48	00	0021	EA	550-1,920 LB Rubber In Shear Vibration Isolation With 0.48" Deflection							\$1,868.49
						Installation	Quantity	Unit Price	Factor	=	Total			
							4.00	393.40	1.1874		1,868.49			
24	23	09	23	00	0086	EA	Install And Wire Break Glass Switch							\$143.94
						Installation	Quantity	Unit Price	Factor	=	Total			
							1.00	121.22	1.1874		143.94			

Subtotal for Section - 23

\$2,012.43

Section - 26

25	26	00	00	00	0001	EA	Furnish 600KW Generator							\$198,044.16
						Installation	Quantity	Unit Price	Factor	=	Total			
							1.00	171,200.00	1.1568		198,044.16			
26	26	05	13	00	0226	EA	300 MCM Crimp Compression Connection For Bare Aluminum Wire							\$1,169.59
						Installation	Quantity	Unit Price	Factor	=	Total			
							10.00	98.50	1.1874		1,169.59			
27	26	05	19	16	0254	MLF	#6 AWG Cable - XLPE-USE-RHH-RHW 600 Volt Copper, Single Stranded, Placed In Conduit							\$563.37
						Installation	Quantity	Unit Price	Factor	=	Total			
							0.42	1,129.66	1.1874		563.37			
28	26	05	19	16	0261	MLF	#3/0 AWG Cable - XLPE-USE-RHH-RHW 600 Volt Copper, Single Stranded, Placed In Conduit							\$4,884.72
						Installation	Quantity	Unit Price	Factor	=	Total			
							0.79	5,207.33	1.1874		4,884.72			

Contractor's Price Proposal - Detail Continues..

Work Order Number: 062104.00

Work Order Title: Miami Beach Public Works Office New Generator

Section - 26

29	26	05	19	16	0287	MLF	#1/0 AWG Cable - Type THHN-THWN 600 Volt Copper, Single Stranded, Placed In Conduit							\$1,309.05
							Quantity	Unit Price	Factor	=	Total			
						Installation	0.41 x	2,673.47 x	1.1874	=	1,301.54			
						Demolition	0.02 x	316.44 x	1.1874	=	7.51			
30	26	05	19	16	0292	MLF	300 MCM Cable - Type THHN-THWN 600 Volt Copper, Single Stranded, Placed In Conduit							\$21,742.14
							Quantity	Unit Price	Factor	=	Total			
						Installation	3.00 x	6,103.57 x	1.1874	=	21,742.14			
31	26	05	19	16	0296	MLF	600 MCM Cable - Type THHN-THWN 600 Volt Copper, Single Stranded, Placed In Conduit							\$2,368.81
							Quantity	Unit Price	Factor	=	Total			
						Installation	0.16 x	11,936.17 x	1.1874	=	2,267.68			
						Demolition	0.12 x	709.73 x	1.1874	=	101.13			
32	26	05	26	00	0099	EA	5/8" Diameter x 10' Long Copper-Clad Ground Rods							\$801.73
							Quantity	Unit Price	Factor	=	Total			
						Installation	10.00 x	67.52 x	1.1874	=	801.73			
33	26	05	29	00	0029	LF	>2' Length x 1-5/8" Wide x 1-5/8" High, 12 Gauge, Steel Unistrut Channel							\$907.17
							Quantity	Unit Price	Factor	=	Total			
						Installation	100.00 x	6.84 x	1.1874	=	812.18			
						Demolition	80.00 x	1.00 x	1.1874	=	94.99			
34	26	05	29	00	0057	EA	3-Hole, 1-5/8" x 4-1/8", 90 Degree Angle, Steel, Unistrut Channel Fitting							\$66.26
							Quantity	Unit Price	Factor	=	Total			
						Installation	10.00 x	5.58 x	1.1874	=	66.26			
35	26	05	29	00	0093	EA	4" Diameter, Steel, Standard Pipe And Rigid Conduit Clamp For Unistrut Channel							\$24.94
							Quantity	Unit Price	Factor	=	Total			
						Installation	4.00 x	5.25 x	1.1874	=	24.94			
36	26	05	29	00	0138	EA	5/8-11, Steel Lock Nut With Spring For Unistrut Channel							\$279.69
							Quantity	Unit Price	Factor	=	Total			
						Installation	35.00 x	6.73 x	1.1874	=	279.69			
37	26	05	33	13	0034	CLF	1" Rigid Galvanized Steel (RGS) With 4 #12 THHN/THWN Wire AssemblyIncludes conduit, terminations, straps, wire as indicated. Not for use where detail is available.							\$1,138.95
							Quantity	Unit Price	Factor	=	Total			
						Installation	1.60 x	599.50 x	1.1874	=	1,138.95			
38	26	05	43	00	0156	LF	4 At 4", Duplex Polyvinyl Chloride (PVC), Type EB Duct Bank							\$426.93
							Quantity	Unit Price	Factor	=	Total			
						Installation	15.00 x	23.97 x	1.1874	=	426.93			
39	26	05	43	00	0167	LF	1 At 2", Duplex Polyvinyl Chloride (PVC), Type DB Duct Bank							\$66.08
							Quantity	Unit Price	Factor	=	Total			
						Installation	15.00 x	3.71 x	1.1874	=	66.08			
40	26	05	43	00	0188	EA	4" Adapter							\$244.15
							Quantity	Unit Price	Factor	=	Total			
						Installation	6.00 x	34.27 x	1.1874	=	244.15			
41	26	05	83	00	0024	EA	1/0 AWG Low Voltage (To 600 Volts) One Hole Compression Lug							\$341.38
							Quantity	Unit Price	Factor	=	Total			
						Installation	10.00 x	28.75 x	1.1874	=	341.38			

Contractor's Price Proposal - Detail Continues..

Work Order Number: 062104.00
 Work Order Title: Miami Beach Public Works Office New Generator

Section - 26

42	26 05 83 00 0049	EA	750 MCM Low Voltage (To 600 Volts) Two Hole Compression Lug						\$957.31
			Quantity		Unit Price		Factor		Total
		Installation	9.00	x	89.58	x	1.1874	=	957.31
43	26 32 13 13 0021	EA	600 KW Diesel Generator Set, 3 Phase (Cummins DQCA)						\$8,838.69
			Quantity		Unit Price		Factor		Total
		Installation	1.00	x	7,443.73	x	1.1874	=	8,838.69
	X								

Subtotal for Section - 26

\$244,175.12

Section - 28

44	28 05 13 23 0005	MLF	2-Pair, 18 AWG, Twisted Pair, Non-Shielded, Plenum Rated, Solid Type FPLP (Red), Fire Alarm/Life Safety Cable, Installed In Conduit						\$197.13
			Quantity		Unit Price		Factor		Total
		Installation	0.10	x	1,660.22	x	1.1874	=	197.13
45	28 31 23 00 0332	EA	Remote Annunciator, 80 Character LCD, Common System Indicators, Beige Housing, Mounts To 4" Box With Supplied Ring (EST3 RLCD)						\$484.66
			Quantity		Unit Price		Factor		Total
		Installation	1.00	x	408.17	x	1.1874	=	484.66

Subtotal for Section - 28

\$681.79

Section - 32

46	32 11 26 19 0002	CY	Bituminous Stabilized Base Course 3/4" ASTM C33.						\$3,385.80
			Quantity		Unit Price		Factor		Total
		Installation	24.00	x	118.81	x	1.1874	=	3,385.80
47	32 12 13 19 0002	SY	Surface Prime Coat, 0.28 Gallon/SY						\$28.78
			Quantity		Unit Price		Factor		Total
		Installation	24.00	x	1.01	x	1.1874	=	28.78
48	32 12 13 19 0002 0339	MOD	For Up To 150, Add						\$6.55
			Quantity		Unit Price		Factor		Total
		Installation	24.00	x	0.23	x	1.1874	=	6.55
49	32 12 16 13 0005	SY	2" Thick Binder Course Includes placement, rolling, finishing and sweeping.						\$8,321.30
			Quantity		Unit Price		Factor		Total
		Installation	600.00	x	11.68	x	1.1874	=	8,321.30
50	32 12 16 13 0023	TON	Base Course, PC-I						\$978.47
			Quantity		Unit Price		Factor		Total
		Installation	6.00	x	137.34	x	1.1874	=	978.47
51	32 12 16 13 0023 0486	MOD	For >5 To 10, Add						\$489.23
			Quantity		Unit Price		Factor		Total
		Installation	6.00	x	68.67	x	1.1874	=	489.23

Subtotal for Section - 32

\$13,210.13

Proposal Total

\$295,649.75

This total represents the correct total for the proposal. Any discrepancy between line totals, sub-totals and the proposal total is due to rounding.

The Percentage of NPP on this Proposal: **66.99%**

Subcontractor Listing

Date: February 13, 2019

Re: IQC Master Contract #: FL04GC4-051716-LCI
Work Order #: 062104.00
Owner PO #:
Title: Miami Beach Public Works Office New Generator
Contractor: LEE Construction Group, Inc.
Proposal Value: \$295,649.75

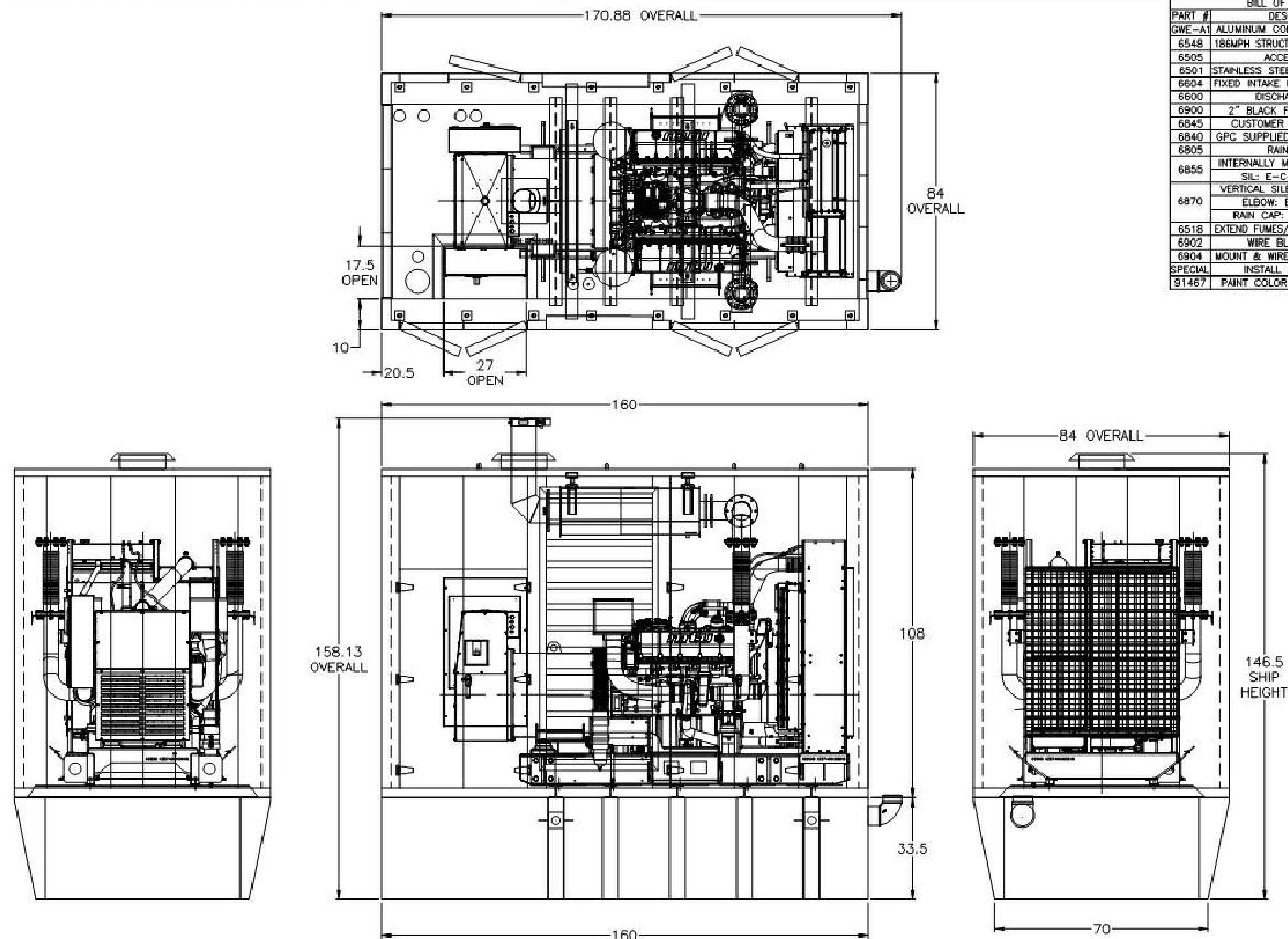
Name of Contractor	Duties	Amount	%
No Subcontractors have been selected for this Work Order		\$0.00	0.00



5757 Blue Lagoon Dr.
Suite 400
Miami, FL 33126
Phone: 305.266.6553
Fax: 305.266.6695
www.tlc-engineers.com
EB #0000015
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**PROPERTY MANAGEMENT
FACILITY**
1833 BAY ROAD
MIAMI BEACH, FL. 33139

BILL OF MATERIAL		
PART #	DESCRIPTION	QTY
GWE-A	ALUMINUM CONSTRUCTION (OBO)	1
6548	18BMPH STRUCTURE REINFORCEMENT	1
8505	ACCESS DOOR	7
8501	STAINLESS STEEL DOOR HARDWARE	7
6604	FIXED INTAKE HOOD/CANE LOUVER	2
6900	DISCHARGE GRILL	1
6800	2" BLACK FOAM INSULATION	1
6845	CUSTOMER SUPPLIED FLEX	1
6840	GPG SUPPLIED EXHAUST SYSTEM	1
8505	RAIN COLLAR	1
6855	INTERNALLY MOUNTED SILENCER	1
	SIL: E-C-12-08-XXXX	1
	VERTICAL SILENCER DISCHARGE	1
6870	ELBOW: EL-8F-C300Q	1
	RAIN CAP: PF-55-01-08	1
6518	EXTEND FUMS/DRANS TO EXTERIOR	1
8902	WIRE BLOCK HEATER	1
6904	MOUNT & WIRE BATTERY CHARGER	1
SPECIAL	INSTALL FIDA LABELS	2
91467	PAINT COLOR EGGSHELL WHITE	1



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REVISED			REVISED			GWE-A1-500-1100 ASSEMBLY	
REV	DATE	CHANGE MADE	REV	DATE	CHANGE MADE	CUSTOMER/ID: FLORIDA DDA	
						JOB REF:	
						DRAWING REF: AAAQ33787	
						DWG #: X	
						DATE: 5/30/17	
						DRAWN BY: MTR	



GLOBAL POWER COMPONENTS

[illegible]

Seal
Manuel Mollinedo, P.E.
Florida License #63096

Project No.:	618043
Issue Date:	04-11-2018
Drawn By:	TLC
Approved By:	TLC
Scale:	

STANDBY GENERATOR DIMENSIONS

Drawing No.: **E-1.02**

Sheet: of

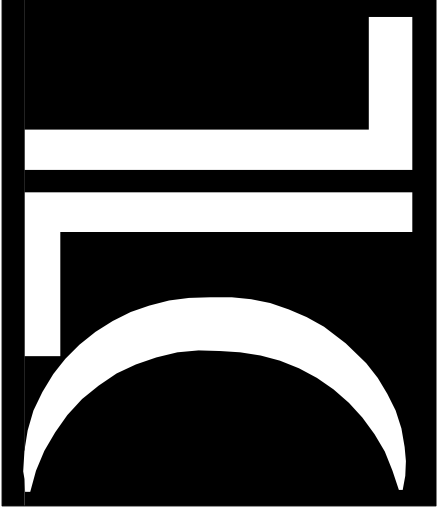
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3/16/2018 2:26:23 PM

100% PROGRESS SET

THE SCOPE OF WORK FOR THE PRESENT DESIGN IS TO PROVIDE STANBY POWER TO MAIMI BEACH - PUBLIC WORK FACILITY.

THIS SHALL BE DONE BY INSTALLING A 600KW
DIESEL FUELED GENERATOR @ 480/277 V -
THREE PHASE.



ENGINEERING FOR ARCHITECTURE

Suite 400
Miami, FL 33126
Phone: 305.266.6553
Fax: 305.266.6695
www.tlc-engineers.com

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451 Dade Blvd,
Miami Beach, FL 33140

451 Dade Blvd,
Miami Beach, FL 33140

Revisions:		
No.	Date	Description

Manuel Mollinedo, P.E.
Florida License #63096

Manuel Mollinedo, P.E.
Florida License #63096

Manuel Mollinedo, P.E.
Florida License #63096

Project No.: 618002

03-31-08

Drawn By: ILC
Approved By: TLC

Scale: 1/8" = 1'-0"

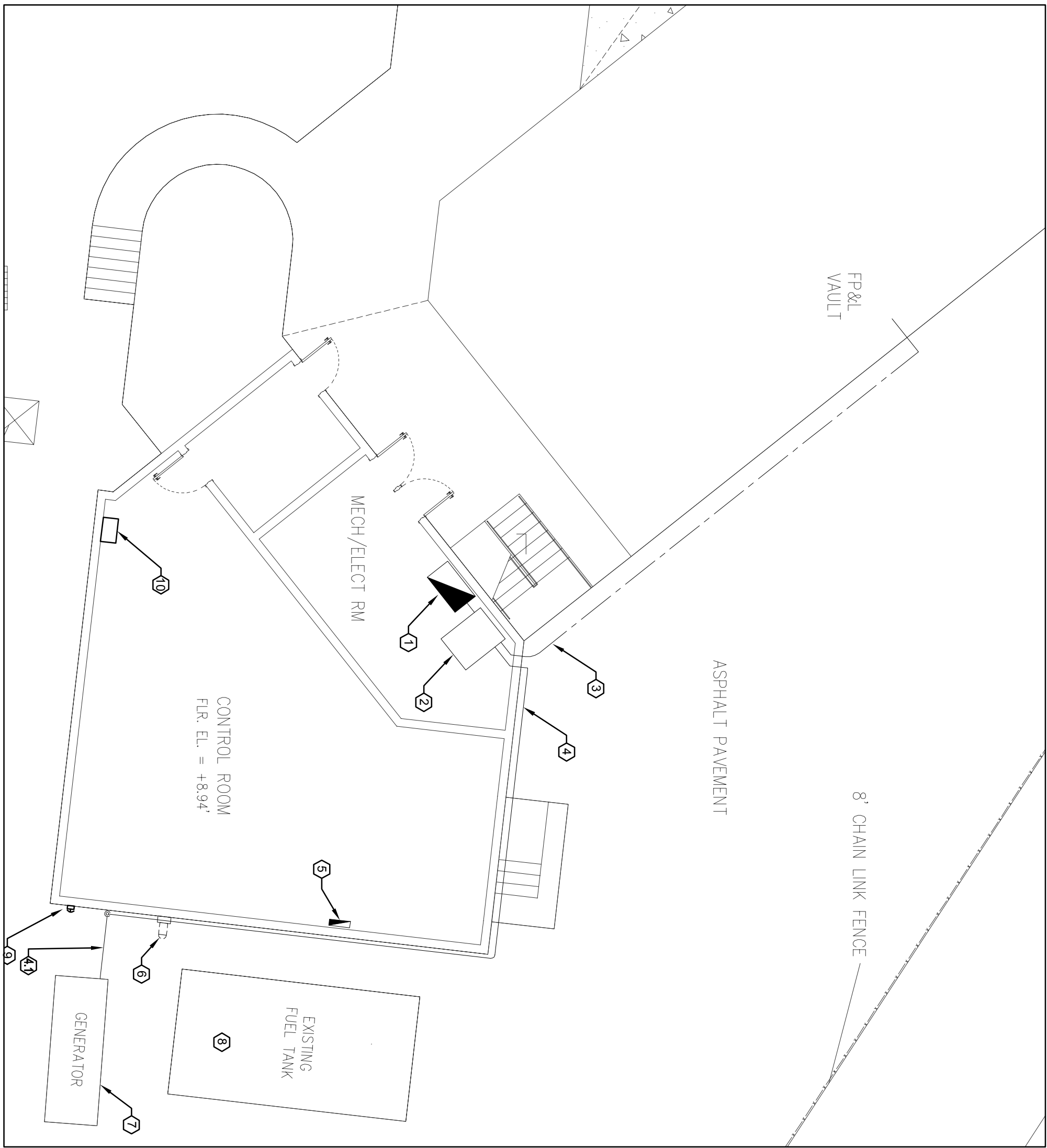
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GENERATOR FLOOR PLAN & RISER DIAGRAM

Drawing No.:

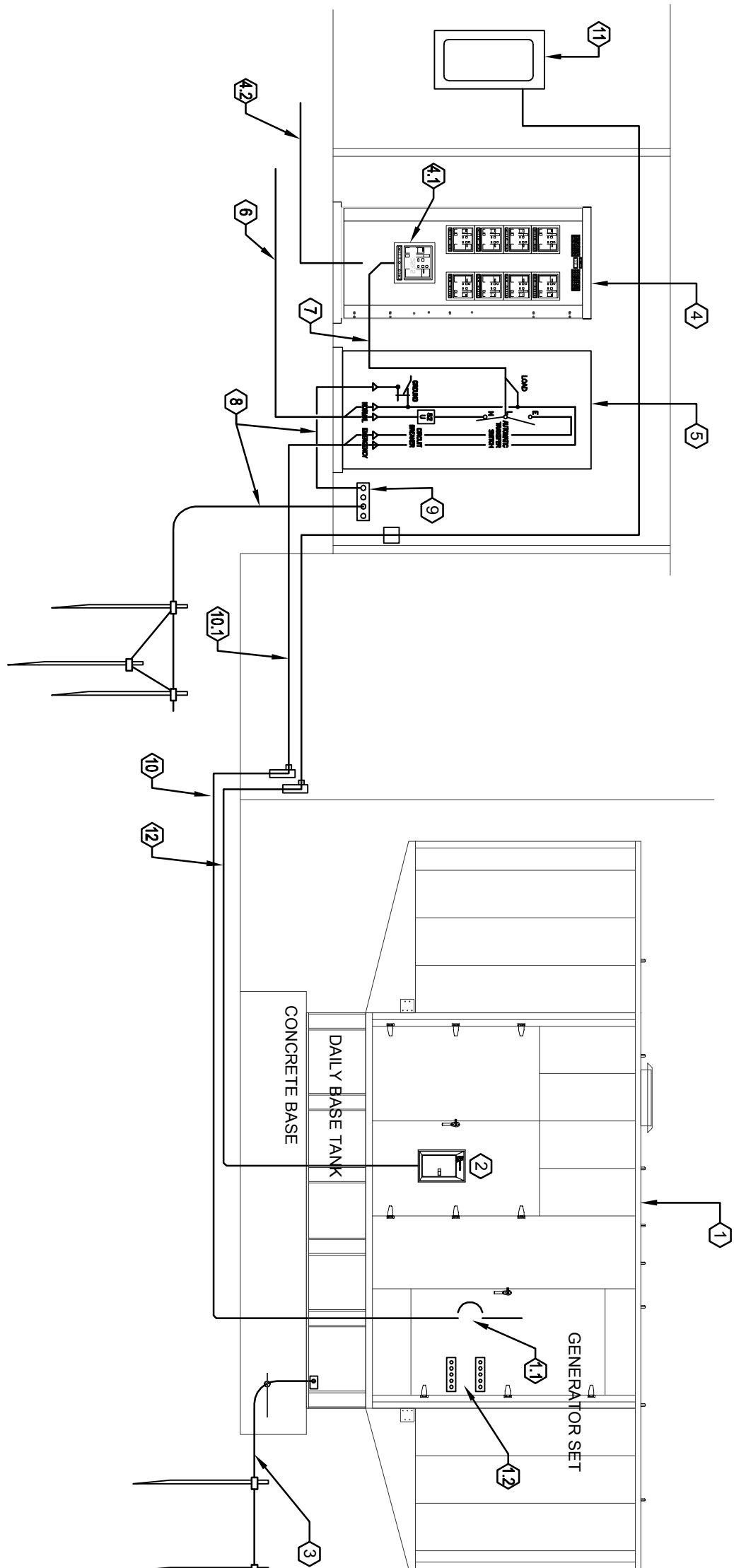
E-101

Sheets



 ELECTRICAL SITE PLAN
SCALE: 1/8" = 1'-0"

SCALE: 1/8" = 1'-0"



KEY NOTES:

- [illegible]

5/10/2018

onsite energy
 NIBCA PUBLIC WORK
 NIBCA PUBLIC WORK

String Recommended

Customer Contact:

String Prepared By:
 United States of America

Project Overview			
Voltage	277/480V	Grid Type	Grid
Frequency	60 Hz	Rating Type	Standard
Phase	Three Phase	Site Address	3 in 1 (3) N
Product Type	Standard	Ambient Temperature	21C (69F)
		Permitted Use: residence	50 m (164 ft) H ₂ O
Peak kW	550	Load Analysis Summary	425
Peak kVA	450	Running kVA	425
		Running PF	0.9
Generator Set Details			
Generator Set Model	MTU 12V/600 (S45-6) (GV 1)	Nameplate kW Rating	450
Alternator Model	350C-4025-W PMG	Rated P.F.	0.8
Engine Model	3D 16SD707E TAA (Ecopower 17.7) (C45-50) (16000 rpm) TD	425	
Break Load Test Parameters			
Load Change	Step	Wdg	Recovery Times
0-25 %	1.1%	3.8%	0.6
0-50 %	2.8%	6.6%	1.5
0-75 %	4.3%	10.4%	1.6
0-100 %	6.7%	15.9%	2
Technical Data at 100% Nameplate Rated Loading			
Make	MTU	Efficiency	Factor
Model	MTU 12V/600 (S45-6)	Generator Set Efficiency	97.0 (27.9%)
Application	Tubed-cooled	Cooling Pkg. Ambient Rating	64.6 m ² /min (2287 ft ³ /min)
Cylinder Configuration	12-V	Hot Rejection to Coolant	23 kW (33.84 Btu/min)
Displacement	12.5 (1208 in ³)	Hot Rejection to CAC	118 kW (8711 Btu/min)
Rated RPM	1800	Hot Rejection to Pad	48 kW (265 Btu/min)
Rated Power	450 kW (610.5 kW/m ²)	Hot Rejection to Ambient	48 kW (265 Btu/min)
Rated Power Factor	0.9	Hot Rejection to Stack	48 kW (265 Btu/min)
Rated Efficiency	97.0 (27.9%)	Exhaust Flow Rate	313 m ³ /min (5637 ft ³ /min)
Exhausts Rating	Exhaust Temp: 170 C	Exhaust Temp: 170 C	Exhaust Temp: 170 C

1. Load on standard conditions (25°C ambient, 60 Hz, 277/480V) and 100% Nameplate Rated Loading. Efficiency is based on the generator set efficiency and the generator set efficiency is based on the generator set efficiency. Efficiency is based on the generator set efficiency and the generator set efficiency is based on the generator set efficiency.

2. Efficiency is based on the generator set efficiency and the generator set efficiency is based on the generator set efficiency. Efficiency is based on the generator set efficiency and the generator set efficiency is based on the generator set efficiency.

3. Efficiency is based on the generator set efficiency and the generator set efficiency is based on the generator set efficiency. Efficiency is based on the generator set efficiency and the generator set efficiency is based on the generator set efficiency.

4. Efficiency is based on the generator set efficiency and the generator set efficiency is based on the generator set efficiency. Efficiency is based on the generator set efficiency and the generator set efficiency is based on the generator set efficiency.

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6. Efficiency is based on the generator set efficiency and the generator set efficiency is based on the generator set efficiency. Efficiency is based on the generator set efficiency and the generator set efficiency is based on the generator set efficiency.

7. Efficiency is based on the generator set efficiency and the generator set efficiency is based on the generator set efficiency. Efficiency is based on the generator set efficiency and the generator set efficiency is based on the generator set efficiency.

8. Efficiency is based on the generator set efficiency and the generator set efficiency is based on the generator set efficiency. Efficiency is based on the generator set efficiency and the generator set efficiency is based on the generator set efficiency.

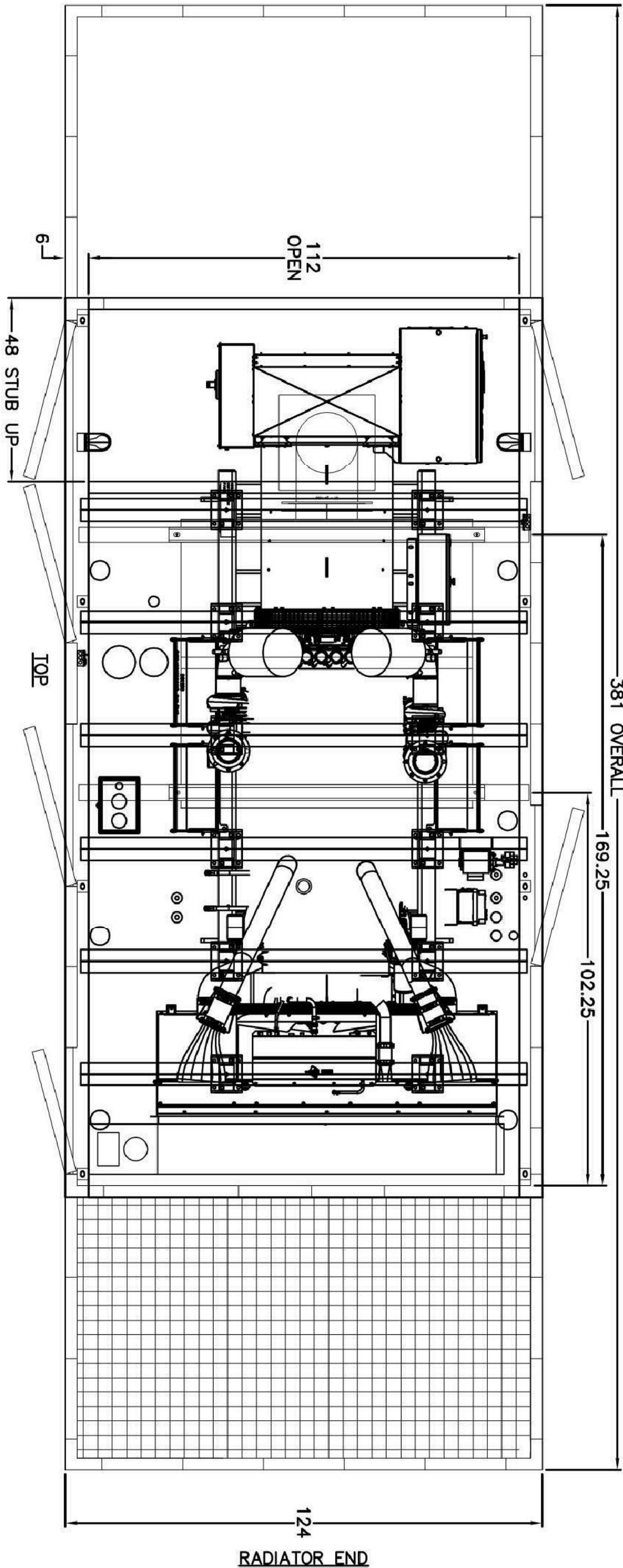
9. Efficiency is based on the generator set efficiency and the generator set efficiency is based on the generator set efficiency. Efficiency is based on the generator set efficiency and the generator set efficiency is based on the generator set efficiency.

60% PROGRESS SET

JOB #	TANK GAL	GENSET MODEL	GENSET FOOTPRINT	TOTAL WEIGHT
	5000 GAL	DS1250	198.25" X 90"	48,750 LBS

NEC 2014

ALL VERTICAL WALL & DOOR PANELS 2" FIBER INSULATION BOARD W/ PERF



PART #	DESCRIPTION	QTY
GWE-A1-ALUMINUM CONSTRUCTION (100,125)		1
6546 100 MFT STRUCTURE REINFORCEMENT		1
SPECIAL MPKO RATED PER BLACKWATER TESTING		1
6503 ACCESS DOOR		6
6501 STAINLESS STEEL DOOR HARDWARE		6
6510 EXTERNAL VERTICAL INTAKE HOOD		1
6518 EXTERNAL VERTICAL DISCHARGE HOOD		1
SPECIAL 2" FIBER INSULATION BOARD		1
6520 LINE INTERLOCK W/ ALUMINUM PER		1
6523 RAIN COLLAR		1
6540 CUSTOMER SUPPLIED EXHAUST FLEX		2
6545 GFCI SUPPLIED EXHAUST SYSTEM		1
6555 INTERNALLY MOUNTED EXHAUST SYSTEM		1
SIL. GFCI-F-C-12-16-0754-BW		1
6570 VERTICAL SILENCER DISCHARGE		1
ELBOW: EL-16F-C3000-STD		1
6570 RAIN CAP: PARKER PAR-55-03-16		2
6518 EXHAUST EXTENSION		1
6518 EXTEND FIBER/DRAIN F. VALVE PRESENT		2
6502 MOUNT & WIRE BATTERY CHARGER		1
6510 INCANDESCENT LIGHT PACKAGE		1
6513 INCANDESCENT FIBRE (100 WATT)		3
6516 LIGHT SWITCH (1-POLE)		1
GFCI OUTLET (20 AMP)		1
GFCI PROTECTED OUTLET (20 AMP)		1
6514 100A DIST PANEL (1%, 120/240V)		1
6555 MOUNT & WIRE LOAD BANK		1
6556 MOUNT & WIRE LOAD BANK CONTROLS		1
91467 PAINT COLOR EGGSHELL WHITE		1

DPBR #1D MFT-10468

GENERAL SPECIFICATIONS:
- CERTIFICATIONS AND STANDARDS:
EMISSIONS: COMPLYING WITH EPA TIER 3.
MANUFACTURED IN ISO 9001 AND ISO 14001 CERTIFIED FACILITY.
UL 2200 COMPLIANT.
ISO 8528-5 FOR TRANSIENT RESPONSE.
POWER RATING: ACCEPTS DESIGN LOAD IN ONE STEP PER NEC 110.
POWER FACTOR > 0.8.
2 YEAR STANDARD WARRANTY.

ELECTRIC STARTING MOTOR - 24V.
CHARGING ALTERNATOR - 24V.
SUSTAINED SHORT CIRCUIT CURRENT UP TO 300% IN 10 SEC.

DIGITAL, SOLID STATE, VOLT-PER-HERTZ REGULATOR.

+/- 0.25 % VOLTAGE REGULATION.

COMMUNICATION TO REMOTE ANNUNCIATOR.
ENGINE JACKET WATER HEATER.

FUEL CONSUMPTION AT 100 % = 4.2

GL/HR

FUEL CONSUMPTION AT 75 % = 3.3
GL/HR

EMERGENCY POWER SYSTEM.

POWER SUPPLY - GENERAL REQUIREMENTS

STANDBY GENERATOR SHALL BE SUCH THAT, IN THE EVENT OF FAILURE OF THE NORMAL POWER, THE EMERGENCY POWER SHALL BE AVAILABLE WITHIN THE TIME REQUIRED FOR THE APPLICATION BUT NOT TO EXCEED 30 SECONDS.
EXISTING EMERGENCY LIGHTS ARE CURRENTLY POWERED WITH BATTERY BACKUP AND READY TO START 10 SECONDS AFTER THE POWER FAILURE.

EMERGENCY GENERATOR PRIME MOVERS SHALL BE AN INTERNAL COMBUSTION ENGINE FUELED BY DIESEL #2 TYPE A SUB-BASE FUEL TANK SHALL BE PROVIDED WITH ENOUGH CAPACITY FOR 12 HOURS OF CONTINUOUS OPERATION AT A LOAD OF 100% POWER RATING. AUXILIARY FUEL TANK WITH CAPACITY FOR 96 HOURS IS EXISTING AT THE FACILITY.

CLASSIFICATION OF THE EMERGENCY POWER SUPPLY SYSTEM.

THIS STANDBY GENERATOR AND THE AIS SHALL BE PART OF THE EPSS AND SHALL BE CLASSIFIED AS LEVEL 2, TYPE 30, AND CLASS 12. ELECTRICAL CONTRACTOR SHALL VERIFY THAT THE EPSS IS CAPABLE TO ACTUATE IN LESS THAN 30 SECONDS FROM THE INSTANT THE NORMAL POWER FAILS. ELECTRICAL CONTRACTOR SHALL MAKE THE REQUIRED ADJUSTING TO GET THAT TIME.

THE STANDBY GENERATOR SHALL BE HEATED AS NECESSARY TO MAINTAIN THE WATER JACKET AND BATTERY TEMPERATURE DETERMINED BY THE MANUFACTURER FOR COLD START AND LOAD ACCEPTANCE.

THE EMERGENCY GENERATOR SHALL BE PROVIDED WITH A CONTROL PANEL CONTAINING THE FOLLOWING:

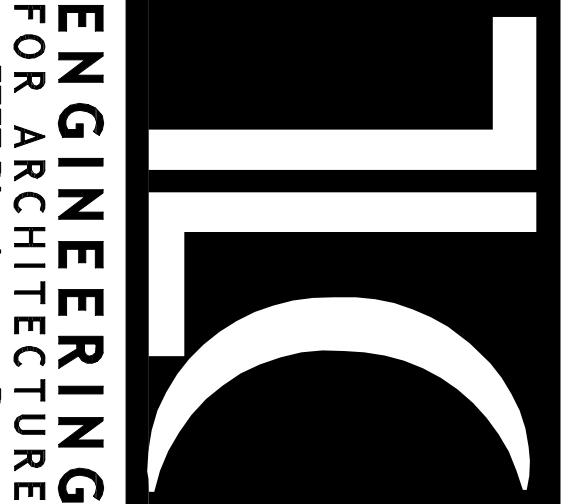
- A.- AUTOMATIC REMOTE START CAPABILITY.
- B.- "RUN-OFF-AUTOMATIC" SWITCH.
- C.- SHUTDOWNS, ALARMS, AND CONTROLS AS REQUIRED BY NFPA 110 INFORMATION.

- THE CONTROL PANEL SHALL BE CAPABLE TO OFFER THE FOLLOWING INFORMATION:
 - A.- HIGH ENGINE TEMPERATURE PRE-ALARM
 - B.- HIGH ENGINE TEMPERATURE (AND SHUTDOWN).
 - C.- LOW LUBE OIL PRESSURE PRE-ALARM
 - D.- LOW LUBE OIL PRESSURE (AND SHUTDOWN).
 - E.- OVERSPEED (AND SHUTDOWN).
 - F.- LOW FUEL MAIN TANK.
 - G.- CONTROL SWITCH NOT IN AUTOMATIC POSITION.
 - H.- LOW VOLTAGE IN BATTERY.
 - I.- BATTERY CHARGER AC FAILURE.
 - J.- AIR SHUTDOWN DAMPER WHEN USED (AND SHUTDOWN).
 - K.- REMOTE EMERGENCY STOP.

AN EMERGENCY MANUAL STOP STATION SHALL BE FACTORY BUILT-IN ON THE GENERATOR HOUSING. ADDITIONAL A REMOTE EMERGENCY MANUAL STOP STATION SHALL BE PROVIDED INSIDE THE OFFICE AREA IN MARINE PAROL MAIN OFFICE. THE REMOTE MANUAL STOP STATION SHALL BE LABELED.

REQUIRED WIRING BETWEEN TRANSFER SWITCH AND GENERATOR CONTROL PANEL SHALL BE RUN BY THE ELECTRICAL CONTRACTOR. PROVIDE NECESSARY CONDUITS AND WIRES FOR CONTROL FUNCTIONS COORDINATE WITH GENERATOR / TRANSFER SWITCH MANUFACTURER'S REPRESENTATIVE FOR QUANTITY AND SIZES.

100% PROGRESS SET



PROPERTY MANAGEMENT FACILITY
GENERATOR
1833 BAY ROAD
MIAMI BEACH, FL. 33139

Revisions:		
No.	Date	Description

Seal

Manuel Molinero, P.E.
Florida License #63096

Project No.:	618043
Issue Date:	04-11-2018
Drawn By:	TLC
Approved By:	TLC
Scale:	1/8" = 1'-0"

Drawing Title:
STANDBY
GENERATOR
DIMENSIONS

Drawing No.:

E-102

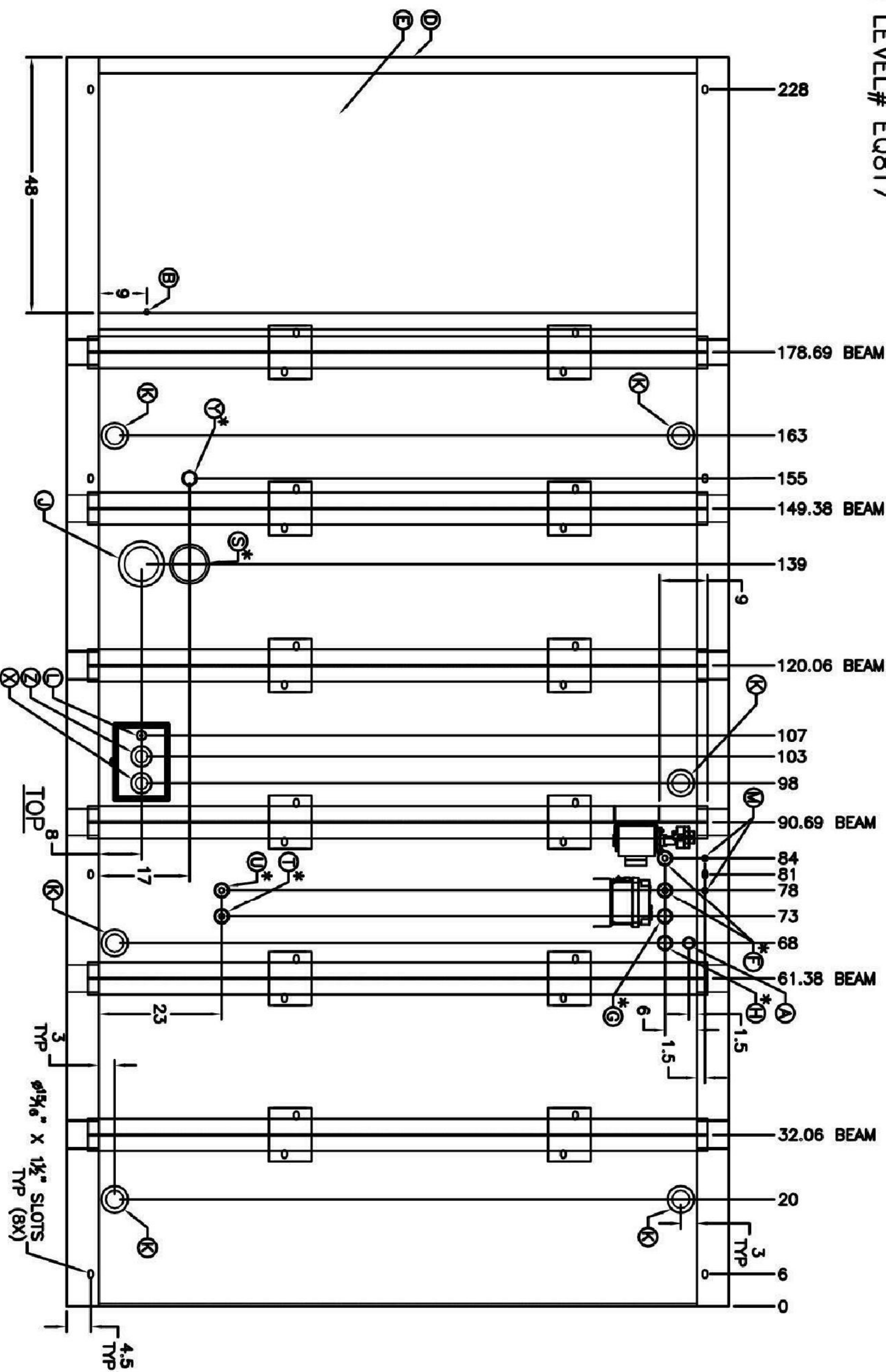
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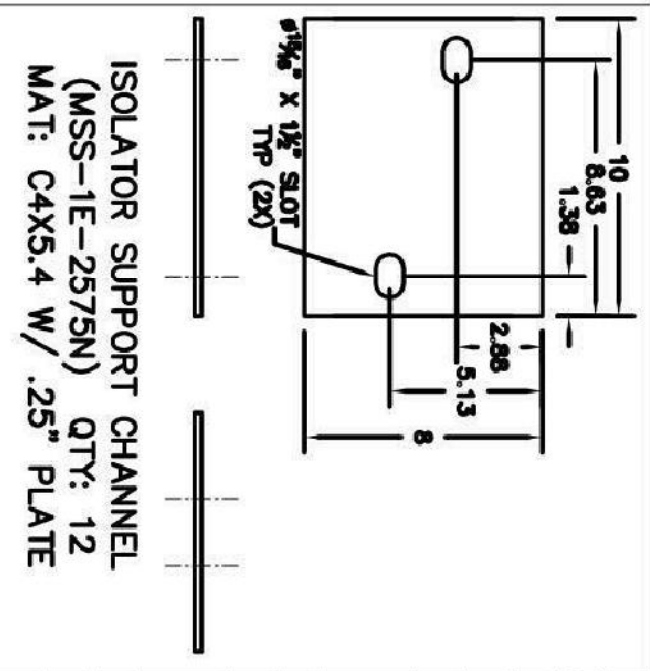
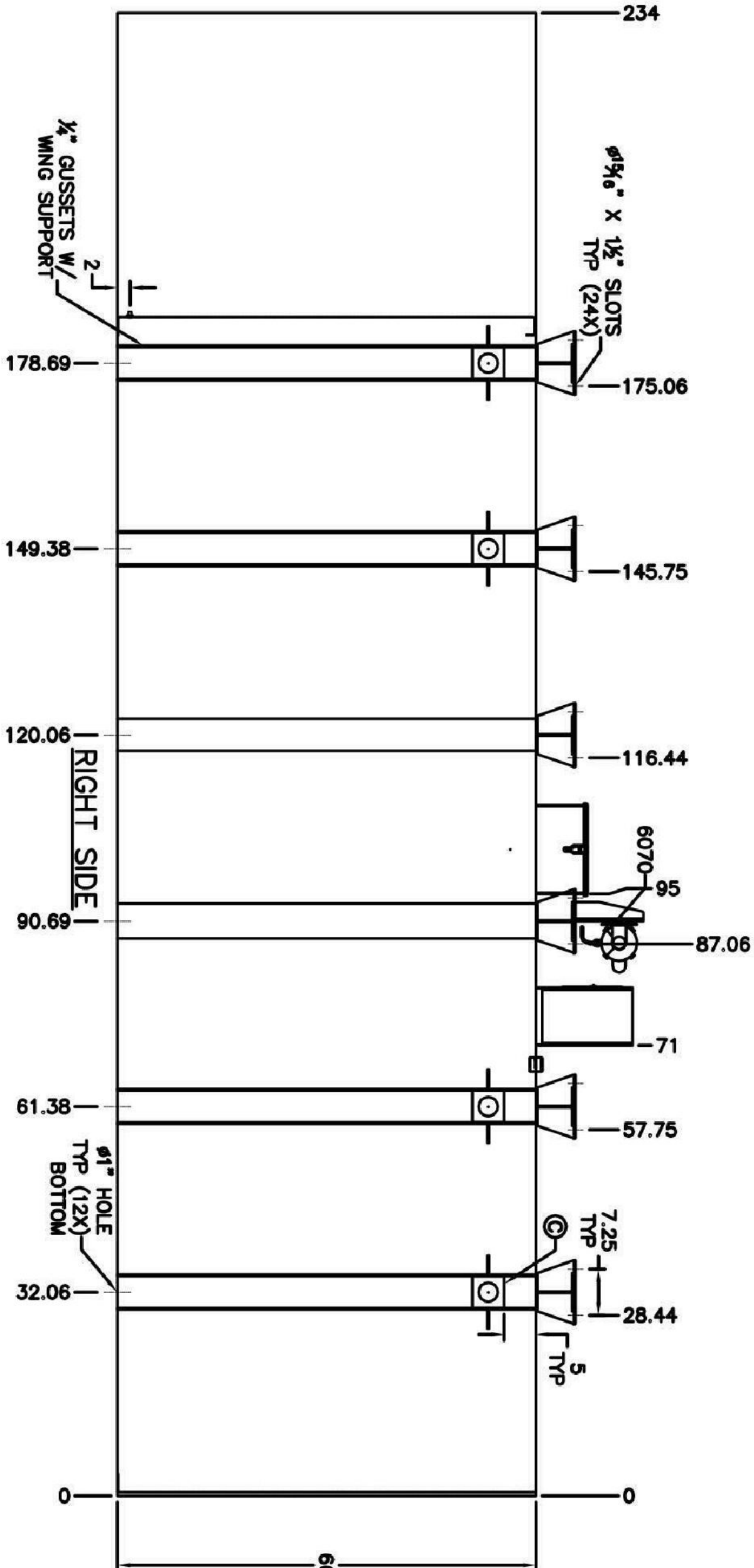
JOB #	TANK GAL	GENSET MODEL	GENSET FOOTPRINT	TANK WEIGHT
	5000 GAL	DS1250	198.25" X 90"	16,525 LBS

FDEP:
TANK# EQ716
SPILL BOX# EQ567
BASIN ALARM# EQ817
HIGH LEVEL# EQ817

* = 2" PIPE TO TANK TOP UNLESS OTHERWISE NOTED



RADIATOR END

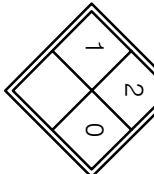


GLOBAL POWER COMPONENTS		
1100	GLS UL142 SUB-BASE TANK - EQ# 567	
SIZE	DATE 8/20/07	DMC/JDC
SCALE	AMC/STW	CORRECTION
	BAC PROJECT/NO. DET. RESEL.	

ANCHOR REQUIREMENT:
- 1/16" DIA. HEX HEAD ASTM F1554 GR. 105 ANCHOR BOLTS,
- 6 EMBEDMENT
- 4000 PSI CRACKED CONCRETE.

PROVIDE SIGN AS PER NFPA 704 FOR FUEL SUPPLY TANK,
FUELING PORT AND OUTSIDE THE GENERATOR ROOM,
INDICATING THE FOLLOWING:

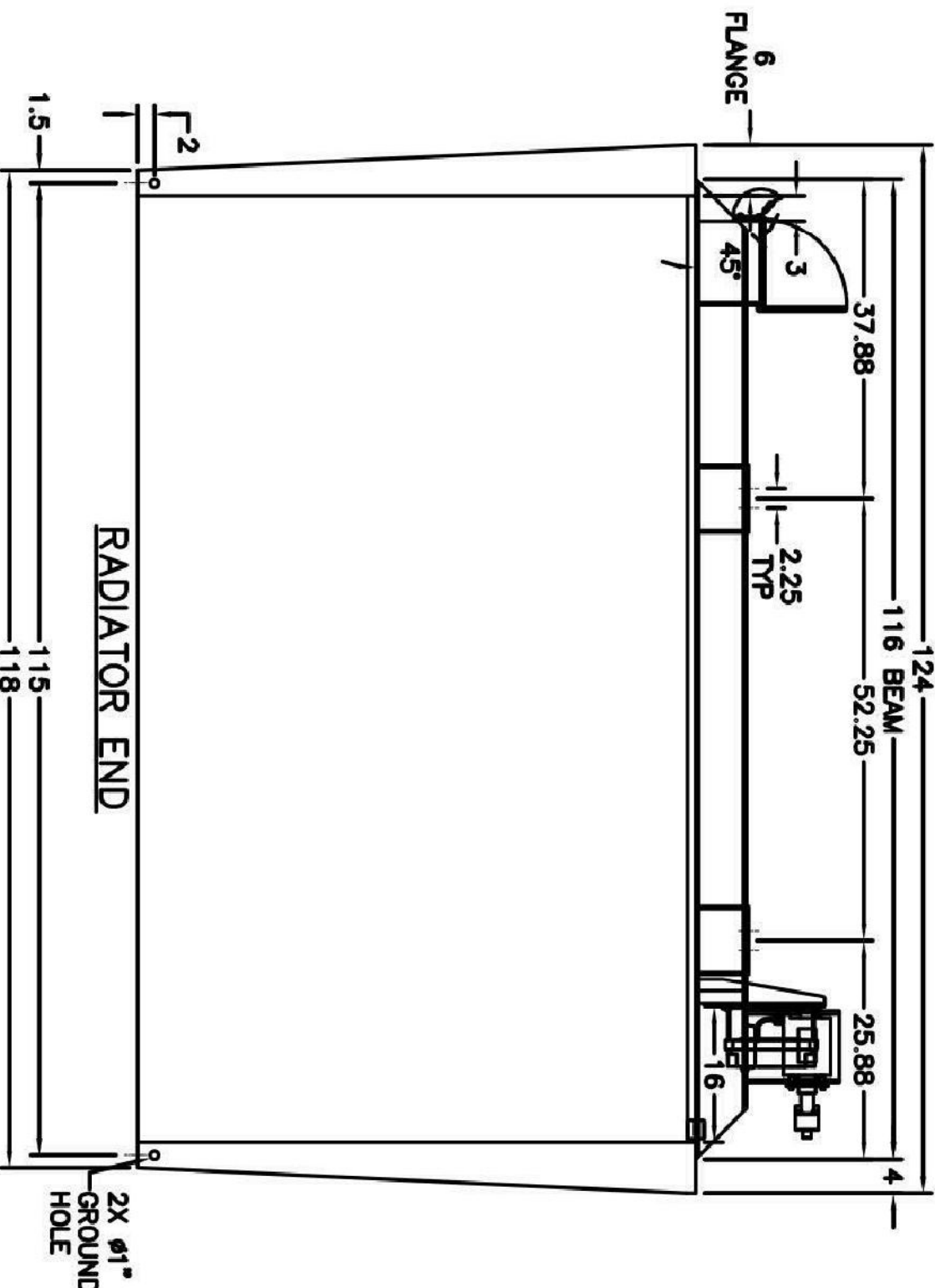
- HEALTH HAZARD = 1
- FLAMMABILITY HAZARD = 2
- INSTABILITY HAZARD = 0
- SPECIAL HAZARD = N/A



SUB-BASE FUEL TANK

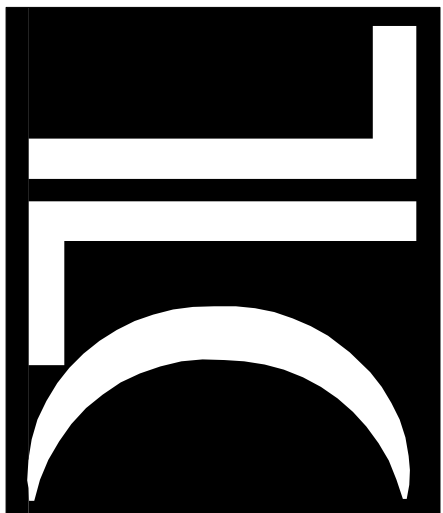
BILL OF MATERIAL		
LETTER PART #	DESCRIPTION	QTY
S 3166	F. CPLG, 6" E-VENT	1
T 3655	F. CPLG, 2", RETURN W/ 3/4" DIP TUBE	1
U 3655	F. CPLG, 2", SUPPLY W/ 3/4" DIP TUBE	1
X 1003	FLANGE, 2", FUEL LEVEL GAUGE	1
Y 1003-TS	ROCHESTER TANKITE ADAPTER (#2546802547)	1
Z 3152	F. CPLG, 2", STANDARD VENT CAP	1
A 4301	FLANGE, 2", LOCKING FILL CAP	1
B 3502	FLANGE, 1-1/2", LD-FH-BB15 FLUAT	1
C 8410	1/2" FLUSH MOUNT LIFTING PLATE	8
D 8003	REMOVABLE END PLATE - 3" BEND	1
E 4000	48" STANDARD ELECTRICAL STUB UP	1
F 3600	F. CPLG, 2", FITTING W/ 1/2" DIP TUBE	2
G 1093	F. CPLG, 2", 3-FLAT ASSEMBLY (LUM. PLUG ON/OFF)	1
J 3196	FLANGE, 6", CONTAINMENT E-VENT	1
K 3196	FLANGE, 3", FITTING W/ PLUG	8
L 3190	FLANGE, 3/8", FITTING W/ PLUG	1
M 3191	F. CPLG, 1/2", FITTING W/ PLUG	2
8220	7 GAL. SPILL CONTAINMENT BOX	1
8303	6" I-BEAM GENSET SUPPORT	6
8420	ISOLATOR SUPPORT PLATE	12
8426	GPC SUPPLIED ISOLATORS (MSS-1E-2575)	12
1380	SERIES 400 CONTROLLER (SINGLE/REVERSE)	1
2025	SINGLE SUPPLY PUMP SYSTEM	1
6040	1/3 HP CARBONATE MOTOR, 1φ 115/230V, 50/60Hz, 487Z FRAME	1
6040	BRONZE CLOSED COUPLED 4GPM ROTARY GEAR PUMP, 3/8" PORTS	1
6400	REAR PUMP BASE W/ END FOR SUPPLY PUMP	1
2010	REVERSE PUMP SYSTEM	1
6070	1/2 HP CAPACITOR START MOTOR 1φ, 115/230V, 60Hz, 48 FRAME	1
700-1025	BRONZE CLOSED COUPLED 7GPM ROTARY GEAR PUMP, 1/2" PORTS	1
700-1025	1/2" FUEL STRAINER	1
700-1065	1/2" SPRING CHECK VALVE	1
700-1096	1/2" SOLENOID VALVE (120VAC, NC)	1
UL2085	2HR FIRE RATED DOUBLE WALL TANK	1
9638	PAINT COLOR GLOSS BLACK	1

GENSET OFFSET 6" TO LEFT SIDE



REVISIONS				REVISIONS			
REV	DATE:	CHANGE MADE	BY	REV	DATE:	CHANGE MADE	BY
				SUB BASE TANK W/ RUPTURE BASIN & STUB UP			

TANK



ENGINEERING
FOR ARCHITECTURE
5757 Blue Lagoon Dr.
Suite 400
Miami, FL 33126
Phone: 305.266.6593
Fax: 305.266.6595
www.tlc-engineers.com
www.tlc-architects.com
TLC #0000015
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PROPERTY MANAGEMENT FACILITY
GENERATOR
1833 BAY ROAD
MIAMI BEACH, FL. 33139

Revisions:	
No.	Description

Seal
Manuel Molinero, P.E.
Florida License #63096

Project No.:	618043
Issue Date:	04-11-2018
Drawn By:	TLC
Approved By:	TLC
Scale:	1/8" = 1'-0"
Drawing Title:	SUB-BASE DAILY FUEL TANK

Drawing No.:
E-103

100% PROGRESS SET



TAW POWER SYSTEMS, INC.
1500 NW 15th Ave
Pompano Beach, FL 33069
Ph.: (954) 977-0202 x1759 (800) 876-0990
Fax: (954) 977-9249
John.Potts@tawinc.com
Kohler Generator Systems Distributors

KOHLER POWER SYSTEMS DISTRIBUTOR FOR ALABAMA, SOUTH GEORGIA, FLORIDA, LOUISIANA AND MISSISSIPPI

Date: August 8, 2018
Contact: John Potts

Offer No: P1808-0105
Contact Cell #: (954)-234-4226

Project: City of Miami Beach – Public Works

One New **KOHLER Model 600REOZVB**, EPA Certified **Diesel** Generator Set,
600KW, @ 0.8 PF, 60 Hz, 3 Phase, UL 2200, 277/480 Volt with the following:

CONTROLLER:

APM402
Controller meets NFPA 110

ENCLOSURE:

Aluminum Sound Enclosure
181 MPH Wind Load Rated
Load Center
Critical Silencer

COOLING:

Unit Mounted Radiator
Block Heater, 120 Volt

FUEL SYSTEM:

Flexible Fuel Lines
Sub-base Fuel Tank, 550 Gallon, UL142 Listed
FDEP Package
Fuel Transfer Pumps – Supply & Return
Fuel Water Separator

GENERATOR ACCESSORIES (Electrical):

Line Circuit Breakers, 3 Pole, 100 % Rated
Qty (1) 800 Amps, Electronic,

ENGINE ELECTRICAL ACCESSORIES:

Battery Rack and Cables
Starting Battery, Lead Acid
Battery Charger: 10 Amps

CONTROLLER ACCESSORIES LOOSE:

Remote Emergency Stop, Break Glass
Remote Annunciator Panel

AUTOMATIC TRANSFER SWITCH:

Qty (1) Kohler Model KEP-DMTA-0800-NK
208 Volt, 3 Ph., 3 Pole, 800A, NEMA 1,
Service Entrance Rated

ADDITIONAL ACCESSORIES:

Certified Factory Test @ 0.8 P.F.
3 Engine, Generator Parts, Maintenance Manuals
1 Electronic Manual
Vibration Isolators: Internal
5 Year Comprehensive Warranty

SUPPLIED BY OTHERS

New Fuel – First Fill of New Tank
Installation
Local and State Permitting by Others
All Infrared, 3rd Party and NETA Testing if Required

TOTAL NET LOT: \$125,870.00

ESTIMATED LEAD TIME:

16 to 18 weeks after release of the order. This
estimated lead time is subject to change daily due to
availability

F.O.B. FACTORY, FREIGHT ALLOWED TO JOB SITE

SALES TAX NOT INCLUDED

Regards,

TAW Power Systems, Inc.
John Potts
Senior Sales Engineer

**OFFER VALID FOR 30 DAYS FROM THIS OFFER DATE
(LISTED ABOVE)**

EXCEPTIONS/ CLARIFICATIONS/ NOTES:

Delivery, start up, and load testing are quoted as during normal business hours. If after hour, weekend, or holiday work hours are required, the Contractor will be responsible for the overtime differential unless otherwise noted.

OFFER BASED UPON:

- Drawing E-101

NOTE: TAW's STANDARD TERMS and CONDITIONS apply to all offers for purchase and any purchase orders accepted by TAW. You may find a copy under the terms and conditions section at TAWINC.com or please contact our office at 800-456-9449 and we will forward you a copy. TAW will transmit a written delivery schedule based on the manufacturer's confirmation, approximately fifteen (15) days after product release. Also included will be the related progress invoice values based on material shipments.

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(OFFER ACCEPTANCE BELOW)

COMPANY

AUTHORIZED SIGNATURE

TITLE

PRINT NAME

DATE

TERMS & CONDITIONS ACKNOWLEDGED:

INITIAL