

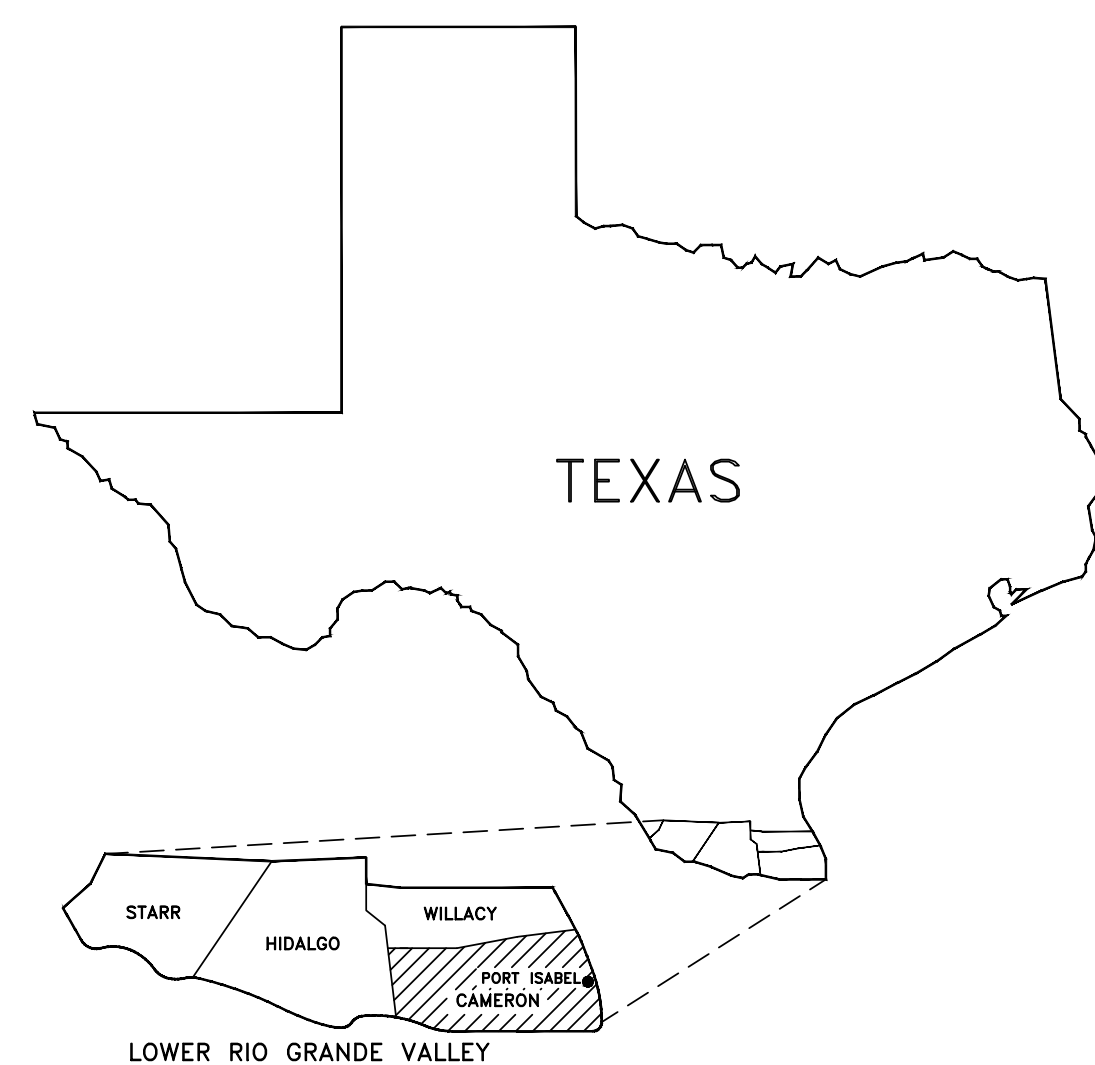


*REHABILITATION AND IMPROVEMENTS OF
CLARIFIER 'A' AT WATER TREATMENT PLANT #1
ADMINISTRATION BUILDING
-GENERATOR ADDITION-*

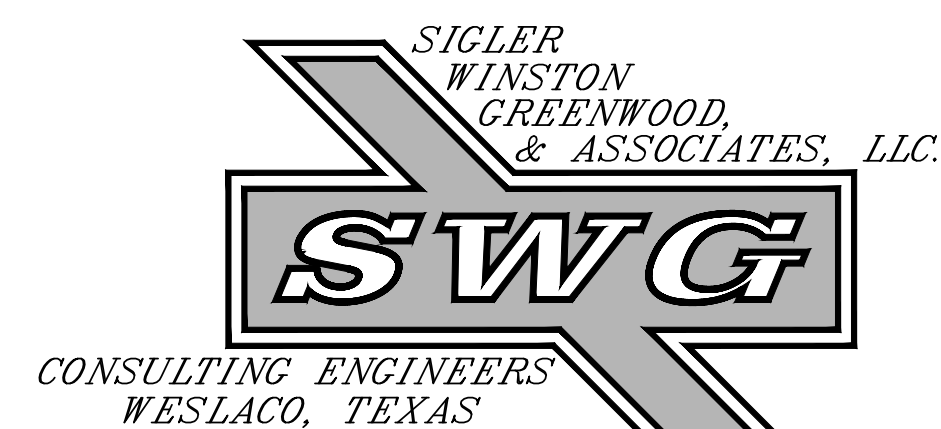
BOARD OF DIRECTORS

*SCOTT D. FRIEDMAN-----CHAIRMAN
HERB HOUSTON-----VICE CHAIRMAN
ALEX AVALOS-----SECRETARY
JASON STARKEY-----DIRECTOR
ADAM LALONDE-----DIRECTOR*

*CARLOS J. GALVAN Jr.-----GENERAL MANAGER
CHARLES ORTIZ-----DISTRICT ENGINEER*



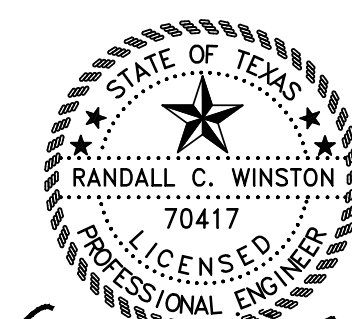
2020



SINCE 1945

*611 BILL SUMMERS INTL. BLVD.
WESLACO, TEXAS 78596
(956)-968-2194 OFFICE
(956)-968-8300 FAX*

TEXAS FIRM REGISTRATION NO. F-592
COPYRIGHT 2020 SWG ENGINEERING, LLC



Randall C. Winston, P.E.

07/07/2020



PROJECT NO. 20-107B
PLAN SET NO. _____
DATE _____



CITY OF PORT ISABEL

LOCATION MAP
SCALE: 1" = 500'

VERTICAL/HORIZONTAL CONTROL INFORMATION:

SWG_001
ELEV.= 18.18 FEET
N: 16552898.02
E: 1404874.25
DESCRIPTION: SQUARE CUT ON CURB & GUTTER

SHEET INDEX

- C1. INDEX, LOCATION MAP, & NOTES
- C2. SITE PLAN
- C3. GENERATOR CONCRETE SLAB DETAIL
- E1. ELECTRICAL SITE PLAN
- E2. ELECTRICAL RISER DIGRAM
- E3. RISER, SCHEDULE, TB DETAILS
- E4. ATS DETAILS
- E5. ENCLOSURE DETAILS
- E6. OPEN SET DETAILS
- E7. CONDUIT STUB UP DETAILS



Contractor's Spotting of Utilities

Spotting of Utilities based upon by Dig Tess Ticket No. 2065770217, June 5, 2020.

Spotting of Utilities based upon by Dig Tess Ticket No. 2067445092, June 22, 2020.

Spotting of Utilities based upon by Dig Tess Ticket No. 2067667309, June 24, 2020.

The Contractor is responsible for and his insurance should remain in effect for the entire Project and time of Project and Contractor shall be responsible for all spotting of below ground, above ground and any other utilities.

Prior to commencement of work, Contractor shall:

- (1) Have either
 - (a) Contracted the appropriate local underground service, or
 - (b) Verified that a local underground locating contact has been made by another with that responsibility; and
 - (c) The locating service has responded, and prior to the commencement of your work, marked all underground property including, but not limited to, all underground lines, pipes, cables or utilities.

FLOOD ZONE DATA

Zone X- Areas of minimal flooding, Zone X is the area determined to be outside the 500-year flood and protected by levee from 100-year flood.

COMMUNITY-PANEL NUMBER 48061C 0505 F
Effective Date: February 16, 2018

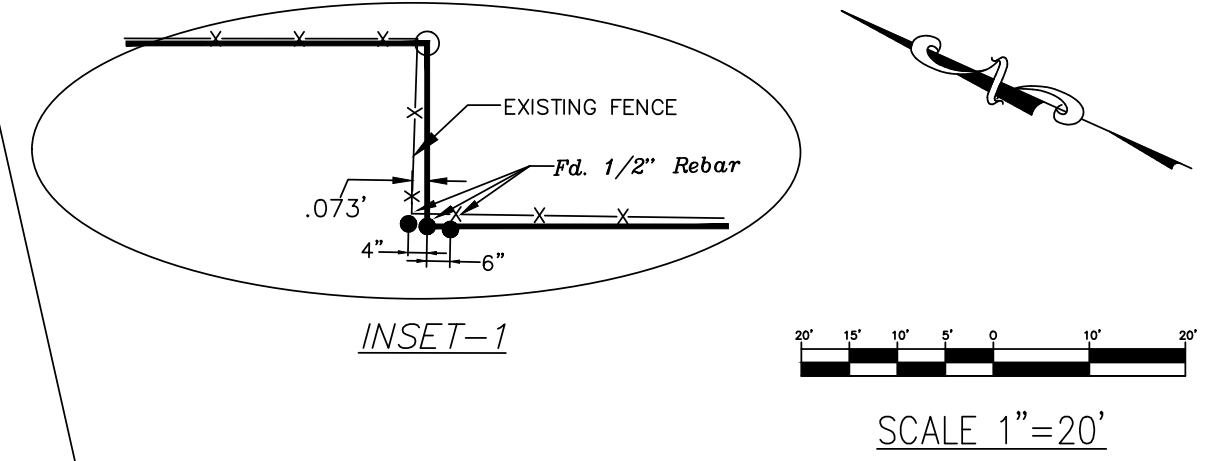
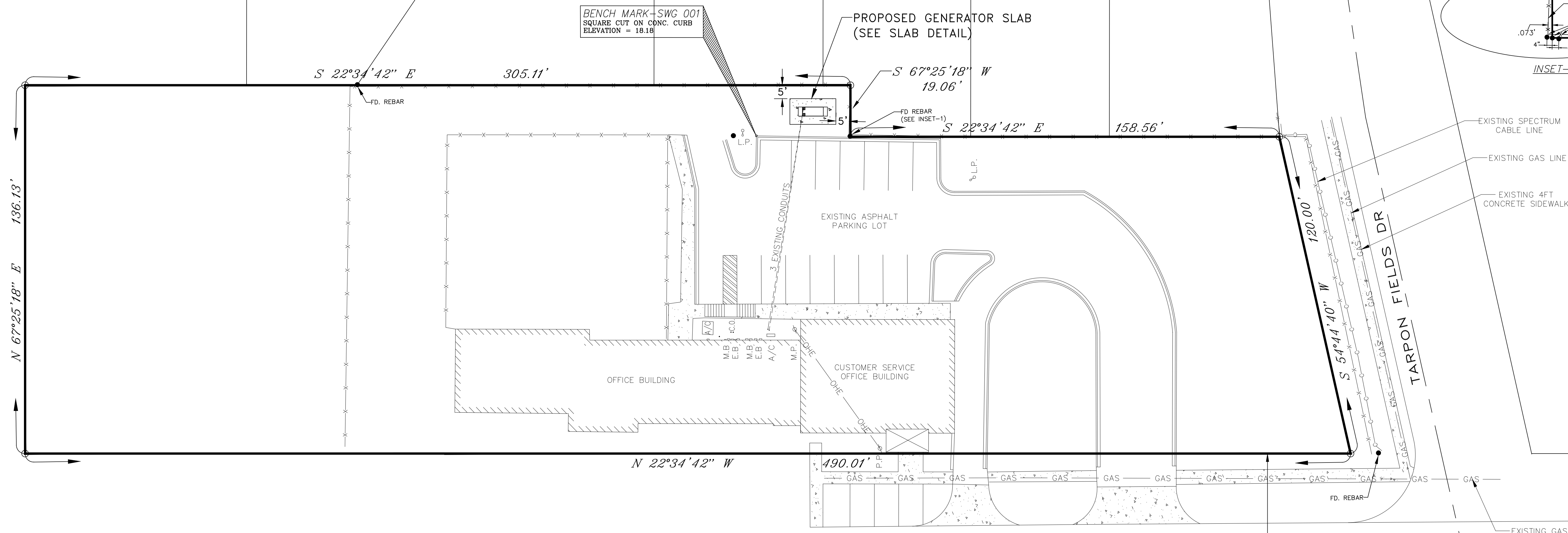
UTILITIES NOTE:

Existing above ground utilities and topography have been plotted by direct field information. Underground utilities have been plotted from various sources and locators. Contractor will be required to establish their exact location, depth, and size. The contractor is also responsible for the replacement or repair of all cut or broken water lines, irrigation lines, force mains, sprinkler systems, gas lines, electrical lines, cables, etc.



Randall C. Winston, P.E.
07/07/2020

REV.	DATE	DESCRIPTION	BY
PORT ISABEL, TEXAS LAGUNA MADRE WATER DISTRICT WATER TREATMENT PLANT # 1 ADMINISTRATION BUILDING GENERATOR ADDITION INDEX SHEET & LOCATION MAP			
SIGLER, WINSTON, GREENWOOD AND ASSOCIATES SWG ENGINEERING, LLC TEXAS FIRM REGISTRATION NO. F-592 WESLACO, TEXAS			
DRAWN: D.F.	CHECKED: J.H.	APPROVED: R.C.W.	SCALE: NO.
DATE: JUNE 2020	NO. 1	OF 3	20-107B-C1



LEGEND

- Property Line.....
- Fence Line.....X-X
- Power Pole.....P.P.
- Cable Box.....C.B.
- Man Hole.....M.H.
- Vent Pipe.....V.P.
- Irrigation Valve.....I.V.
- Water Meter.....W.M.
- Meter Pole.....M.P.
- Road Side Ditch.....R.S.D.
- Drain Line.....
- Electrical Box.....E.B.
- Water Valve.....W.V.
- Fire Hydrant.....F.H.
- Light Pole.....L.P.
- Telephone Box.....T.B.
- Cable Line.....C
- Water Line.....W
- Sewer Line.....S
- Gas Meter.....G.M.
- Sprinkler Head.....S.H.
- Gas Line.....GAS
- R.O.W. Line.....
- Over Head Electric.....OHE

BENCH MARK - SWG 001:
 SQUARE CUT ON TOP OF CURB &
 GUTTEER, EL. 18.18

UTILITIES NOTE:
 Existing above ground utilities and topography have been plotted by direct field information. Underground utilities have been plotted from various sources and locators. Contractor will be required to establish their exact location, depth, and size. The contractor is also responsible for the replacement or repair of all cut or broken water lines, irrigation lines, force mains, sprinkler systems, gas lines, electrical lines, cables, etc.

Randall C. Winston, P.E.
 07/07/2020



REV.	DATE	DESCRIPTION	BY
PORT ISABEL, TEXAS LAGUNA MADRE WATER DISTRICT WATER TREATMENT PLANT # 1 ADMINISTRATION BUILDING GENERATOR ADDITION SITE PLAN			
SIGLER, WINSTON, GREENWOOD AND ASSOCIATES SWG ENGINEERING, LLC TEXAS FIRM REGISTRATION NO. F-592 WESLACO, TEXAS			
DRAWN: D.F. DATE: JUNE 2020	CHECKED: J.H.	APPROVED: R.C.W.	DRAWING NO.: 20-107B-C2

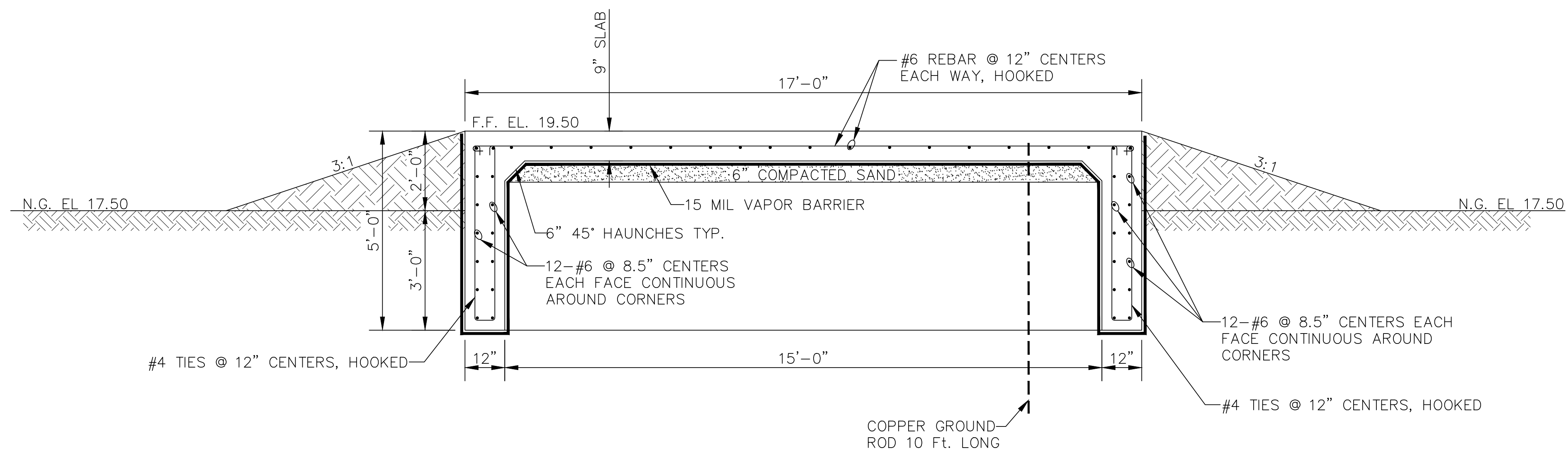
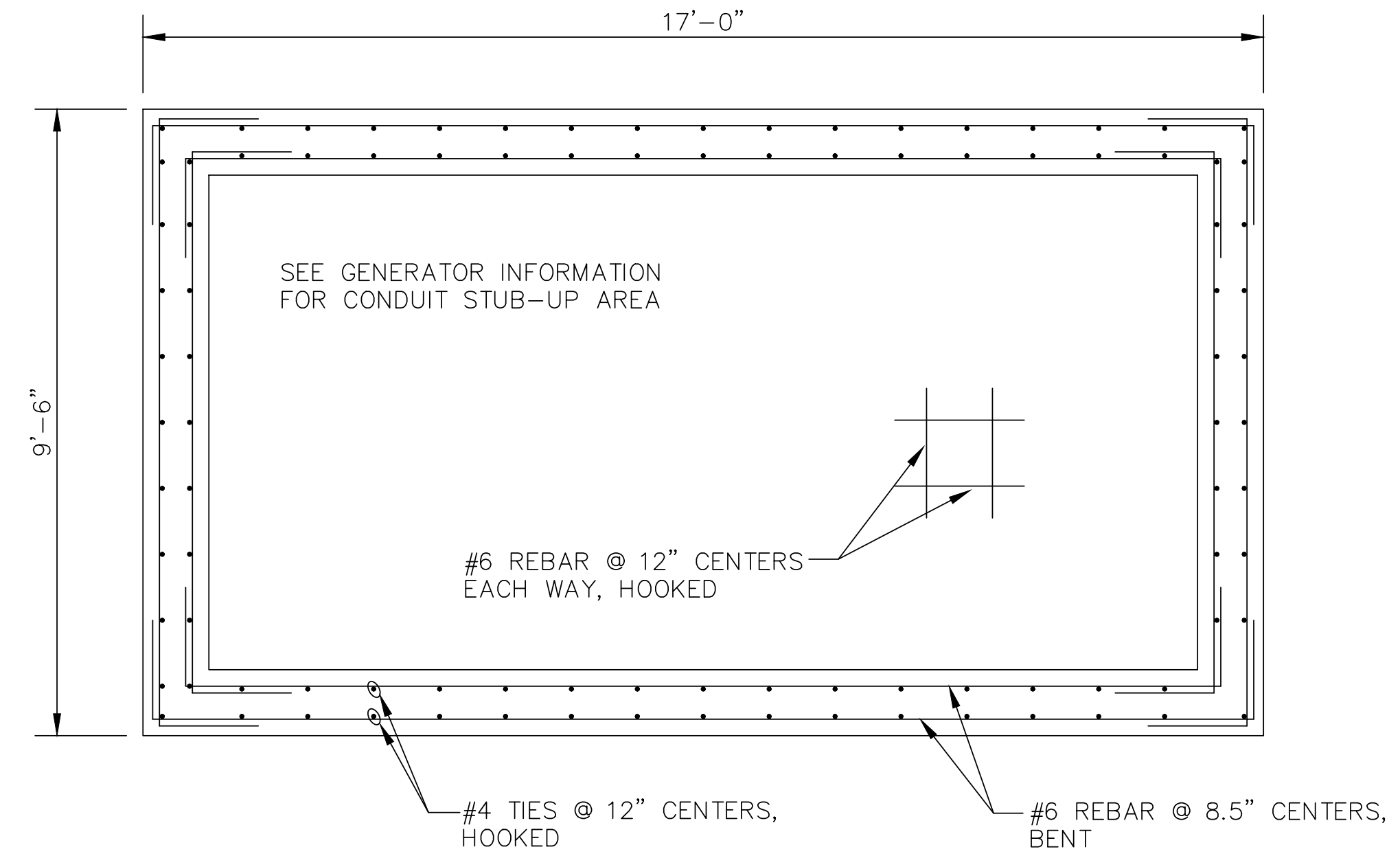
NOTE:
ALL HARDWARE TO BE
STAINLESS STEEL

EQUIPMENT NOTES:

1. THE DIMENSIONS SHOWN FOR PUMPS, PIPING AND VALVE LAYOUT ARE BASED ON ONE OR MORE MANUFACTURE'S DESIGN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY DIMENSIONS OF PARTICULAR EQUIPMENT BEING FURNISHED AND TO MAKE SUCH CHANGES AS REQUIRED TO INSTALL EQUIPMENT IN THE SPACE PROVIDED.
2. SEE ELECTRICAL SPECS. FOR TYPE AND SIZES OF ELECTRICAL EQUIPMENT.

STEEL NOTES:

1. CHAMFER ALL EXPOSED CONC. CORNERS 1"
2. REINFORCING STEEL CLEARANCES
FACES EXPOSED TO WATER = 2-1/2"
FACES EXPOSED TO EARTH = 3"
FACES EXPOSED TO AIR = 2"
3. LAP OR ANCHOR ALL STEEL A MINIMUM OF 40 DIA'S. ALL HORIZ. STEEL CONTINUOUS AROUND CORNERS.
4. ALL REINFORCING STEEL TO BE 60KSI
5. CONCRETE SLAB TO HAVE A COMPRESSIVE STRENGTH OF 3000 P.S.I. AT 28 DAYS (5-1/2 MINIMUM SKS.)



NOTES:

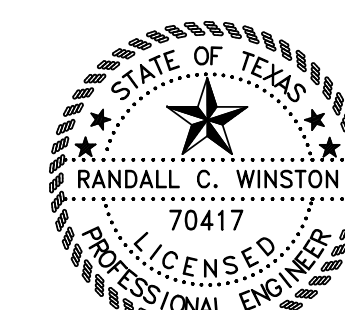
1. COMPACT SOIL UNDER FOUNDATION TO 95% STANDARD PROCTOR DENSITY
2. GENSET TO BE ANCHORED AS PER MANUFACTURER RECOMMENDATION
3. ALL ANCHOR & HARDWARE TO BE STAINLESS STEEL.

CONCRETE SLAB FOR GENERATOR

SCALE: 1/2" = 1'-0"

UTILITIES NOTE:

Existing above ground utilities and topography have been plotted by direct field information. Underground utilities have been plotted from various sources and locators. Contractor will be required to establish their exact location, depth, and size. The contractor is also responsible for the replacement or repair of all cut or broken water lines, irrigation lines, force mains, sprinkler systems, gas lines, electrical lines, cables, etc.

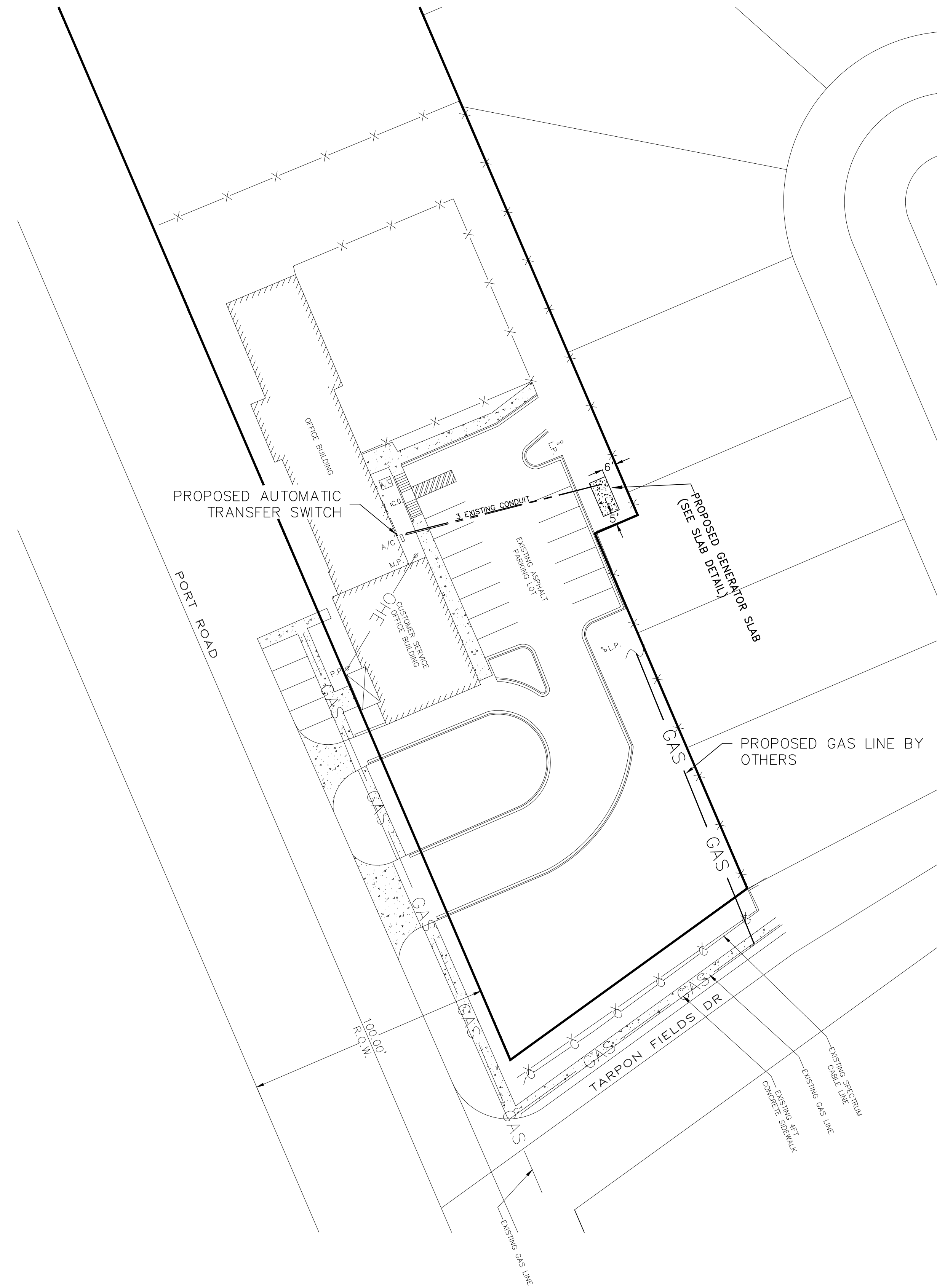


Randall C. Winston, P.E.
07/07/2020

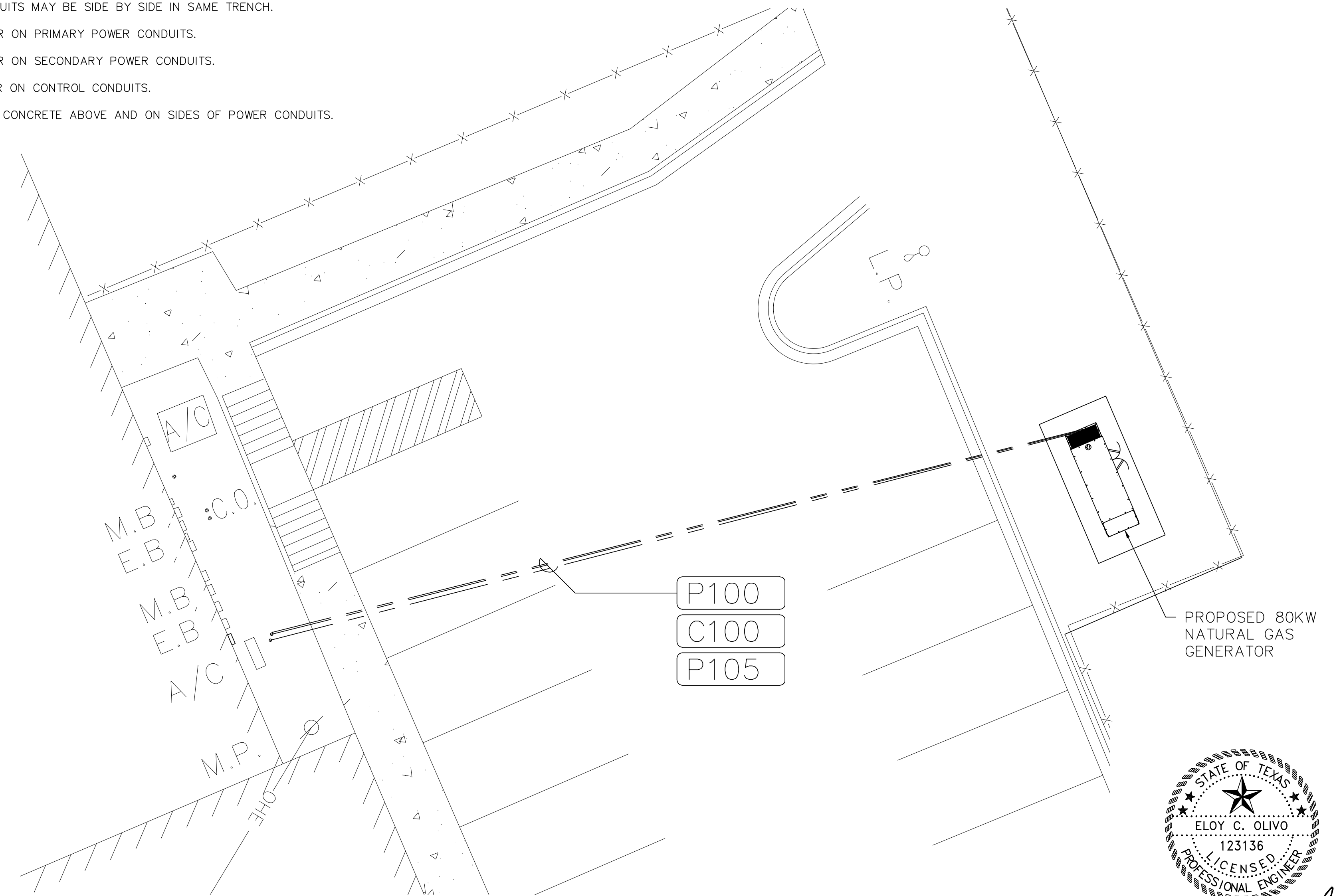
REV.	DATE	DESCRIPTION	BY
PORT ISABEL, TEXAS LAGUNA MADRE WATER DISTRICT WATER TREATMENT PLANT # 1 ADMINISTRATION BUILDING GENERATOR ADDITION GENERATOR CONCRETE SLAB DETAIL			
SIGLER, WINSTON, GREENWOOD AND ASSOCIATES SWG ENGINEERING, LLC TEXAS FIRM REGISTRATION NO. F-592 WESLACO, TEXAS			
DRAWN: D.F. DATE: JUNE 2020	CHECKED: J.H.	APPROVED: R.C.W.	DRAWING NO. 20-107B-C3

GENERAL ELECTRICAL NOTES:

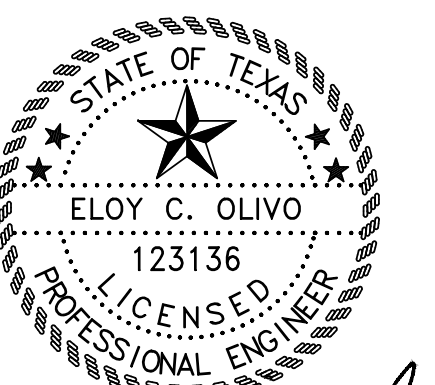
1. ALL WORK SHALL BE IN COMPLIANCE WITH LATEST EDITION OF NATIONAL ELECTRICAL CODE AND IN ACCORDANCE WITH LOCAL CODES.
2. SERVICE EQUIPMENT DETAILS ARE SHOWN DIAGRAMMATICALLY ON PLANS. INSTALLATION SHALL COMPLY STRICTLY WITH LOCAL POWER COMPANY STANDARDS IN EVERY RESPECT. CONSULT LOCAL POWER COMPANY FOR REQUIREMENTS FOR THIS SPECIFIC PROJECT BEFORE STARTING CONSTRUCTION. COORDINATE LOCATION OF SERVICE OUTLET. VERIFY MAXIMUM AVAILABLE FAULT CURRENT & PROVIDE EQUIPMENT TO WITHSTAND CURRENT RATING ACCORDINGLY.
3. CONDUITS SHALL NOT BE ROUTED ACROSS WALKWAYS, PATHS OF ACCESS, TRAVEL OR EGRESS. ROUTE BENEATH GRATING, IN CONCRETE STRUCTURES OR AROUND EQUIPMENT. DO NOT ROUTE IN CONFLICT WITH OTHER PIPING, CONDUITS, EQUIPMENT OR STRUCTURES.
4. FIELD VERIFY EXACT LOCATION OF ALL UNDERGROUND PIPES, CONDUITS, AND STRUCTURES BEFORE DIGGING. REPAIR ANY DAMAGES DONE TO ORIGINAL CONDITION.
5. ALL CONDUITS AND DEVICES MAY NOT BE SHOWN ON THIS SHEET. REFER TO CONTROL DIAGRAM AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
6. ALL CONDUCTORS SHALL BE COPPER, 75°C RATED, WITH THWN INSULATION.
7. CONDUITS NOT ACCEPTABLE AS SUBSTITUTE FOR GROUNDING CONDUCTOR.
8. OUTDOORS CONDUITS OR WHERE EXPOSED TO WET OR DAMP CONDITIONS SHALL BE GALVANIZED STEEL WITH THREADED FITTINGS. INDOOR CONDUITS SHALL BE EMT WITH COMPRESSION FITTINGS. SCHEDULE 80 PVC SUITABLE FOR UNDERGROUND ONLY.
9. VERIFY AT JOB SITE GENERAL WORK TO BE DONE AS SPECIFIED, NOTED, OR REQUIRED FOR INSTALLATION OF ELECTRICAL EQUIPMENT AND FIELD VERIFY EXISTING CONDITIONS AND EQUIPMENT TO BE REMOVED, RELOCATED, REPLACED PRIOR TO SUBMISSION OF BID.
10. CONTRACTOR TO NOTIFY ENGINEER OF ANY PROBLEM ARISING FROM INTERPRETATION OF THESE DOCUMENTS IMMEDIATELY AS IT IS DISCOVERED.
11. LOCATION OF EXISTING BURIED UTILITIES WHERE SHOWN ARE APPROXIMATE ONLY. THERE MAY EXIST UTILITIES WHICH ARE NOT SHOWN. CONTRACTOR RESPONSIBLE FOR LOCATING AND PROTECTION OF ALL BURIED UTILITIES. LOCATE ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
12. THESE PLANS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
13. CONDUITS SHOWN SEPARATED ON PLAN FOR DETAIL.
14. FOR NEW CONDUIT, MAINTAIN MIN. 42" SEPARATION BETWEEN PARALLEL POWER AND CONTROL CONDUITS.
15. CONTROL CONDUITS MAY BE SIDE BY SIDE IN SAME TRENCH.
16. MIN. 48" COVER ON PRIMARY POWER CONDUITS.
17. MIN. 36" COVER ON SECONDARY POWER CONDUITS.
18. MIN. 18" COVER ON CONTROL CONDUITS.
19. PLACE MIN. 4" CONCRETE ABOVE AND ON SIDES OF POWER CONDUITS.



ELECTRICAL PLAN – ADMINISTRATION BUILDING
SCALE 1"=30'

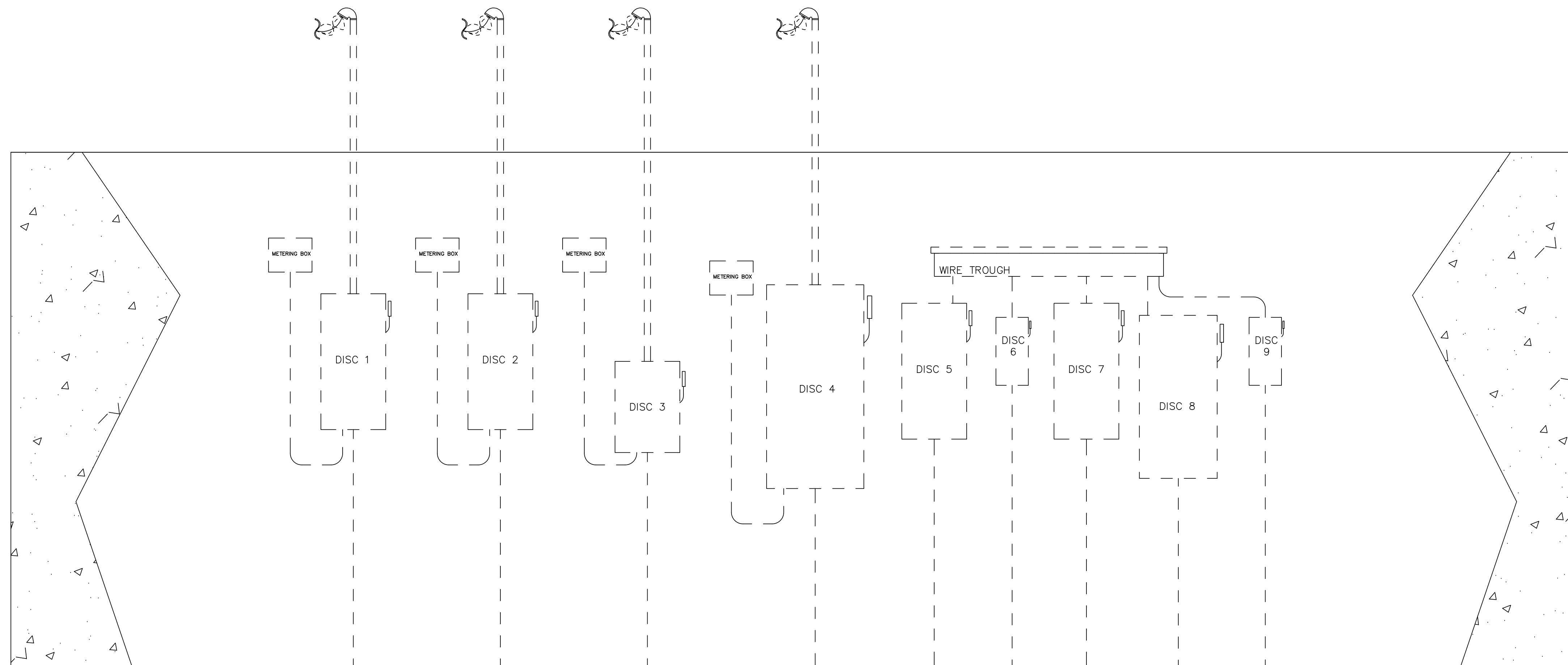


ELECTRICAL PLAN – ADMINISTRATION BUILDING
SCALE: N.T.S.



Eloy C. Olivo
07/04/2020

REV.	DATE	DESCRIPTION	BY
PORT ISABEL, TEXAS LAGUNA MADRE WATER DISTRICT ADMINISTRATION BUILDING PROPOSED GENERATOR ADDITION ELECTRICAL SITE PLAN			
SIGLER, WINSTON, GREENWOOD AND ASSOCIATES SWG ENGINEERING, LLC TEXAS FIRM REGISTRATION NO. F-592 WESLACO, TEXAS			
DRAWN:	E.C.O.	CHECKED:	E.C.O.
DATE:	JUNE 2020	APPROVED:	E.C.O.
		NO.	1 OF 7
		20-107B-E1	



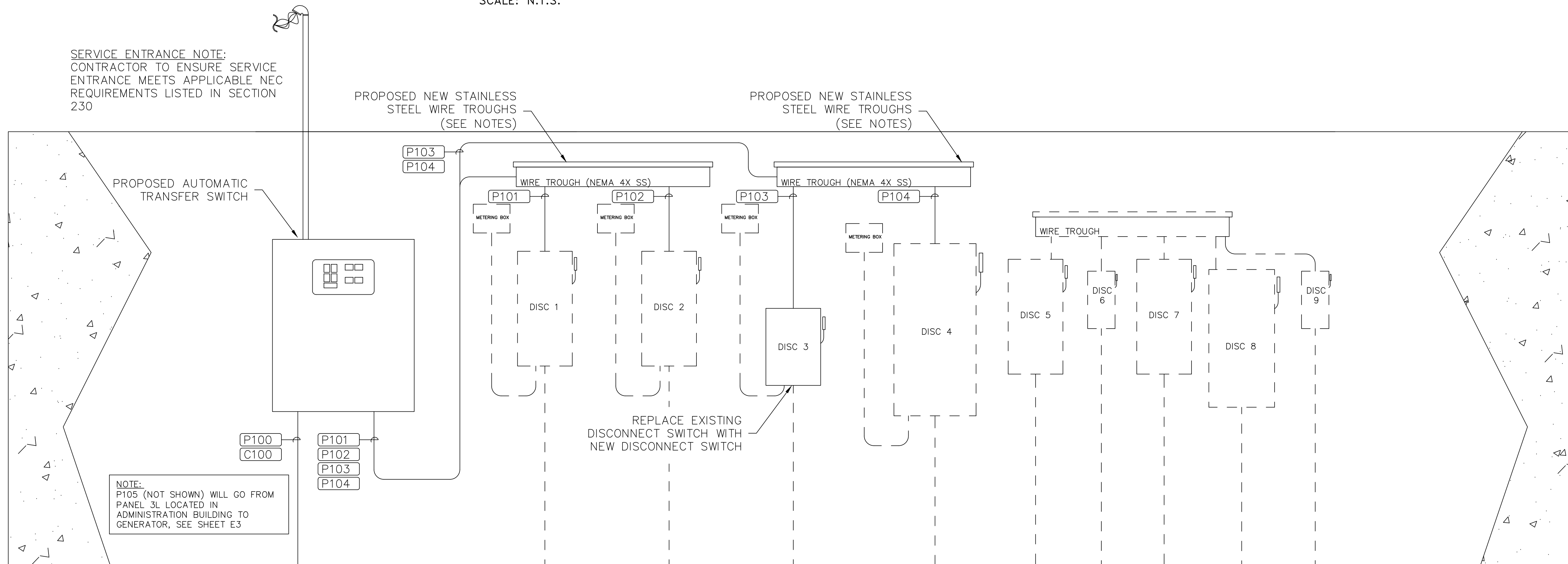
GENERAL NOTES:

- ALL WIRE SHALL BE COPPER WITH THWN INSULATION AND ALL CONNECTORS COPPER UNLESS OTHERWISE SPECIFIED.
- CONDUIT WILL NOT BE ACCEPTABLE AS GROUNDING CONDUCTOR.
- AIC VALUES AND FRAME SIZE OF CIRCUIT BREAKERS SHALL BE EQUAL TO OR GREATER THAN AS SPECIFIED.
- NEMA 4 ENCLOSURES SHALL BE STAINLESS STEEL.
- MATERIAL SPECIFIED SHALL BE BID BASE. IF ELECTRICAL CONTRACTOR WISHES TO SUBSTITUTE HE SHALL SUBMIT A SEPERATE BID WITH A STATE OF WHY AND THE SAVINGS TO THE OWNER THAT WILL RESULT.
- ALL CONDUITS MUST HAVE SEALS PRIOR TO ENTERING ANY SWITCHGEAR, JUNCTION BOX, WIREWAY, OR ENCLOSURE.
- ALL CONDUIT HOLES AT WIREWAY MUST BE SILICONED AT MYERS HUB CONNECTOR IN THE WIRELESS WITH 3M FIRE RATED CAULKING.
- INSTALLATION BY A LICENSED MASTER ELECTRICIAN IS THE MINIMUM ACCEPTABLE STANDARD.

EQUIPMENT NOTES:

- ATS AUTOMATIC TRANSFER SWITCH
- DISC1 EXISTING DISCONNECT 1, 200A, 3P3F, 150AF, S/N, 240V, NEMA 4XSS TO REMAIN.
- DISC2 EXISTING DISCONNECT 2, 200A, 2P2F, 200AF, S/N, 240V, NEMA 4XSS TO REMAIN.
- DISC3 EXISTING DISCONNECT 3, 200A, 2P2F, 150AF, S/N, 240V, NEMA 3R TO BE REPLACED WITH NEW DISCONNECT, SQUARE D H223 FUSIBLE SWITCH, FUSED AT 150A COOPER BUSSMANN LPN-RK-150SP, 2 POLE, NEMA 4XSS.
- DISC4 EXISTING DISCONNECT 4, 600A, 3P3F, 400AF S/N, 240V, NEMA 3R TO REMAIN.
- DISC 5 EXISTING DISCONNECT 5, 100A, 3P3F, 100AF, S/N, 240V, NEMA 3R TO REMAIN.
- DISC 6 EXISTING DISCONNECT 6, 60A, 3P3F, 60AF, S/N, 240V, NEMA 3R TO REMAIN.
- DISC 7 EXISTING DISCONNECT 7, 100A, 3P3F, 100AF, S/N, 240V, NEMA 3R TO REMAIN.
- DISC 8 EXISTING DISCONNECT 8, 200A, 2P2F, 200AF, S/N, 240V, NEMA 3R TO REMAIN.
- DISC 9 EXISTING DISCONNECT 9, 30A, 2P1F, 30AF, S/N, 240V, NEMA 3R TO REMAIN.
- WIRE TROUGH NEW EATON 6624-4XSWT NEMA 4X STAINLESS STEEL, TO BE 6"W X 24" L X 6" H

ADMINISTRATION BUILDING -- REAR ELEVATION VIEW
SCALE: N.T.S.



ADMINISTRATION BUILDING -- PROPOSED REAR ELEVATION VIEW
SCALE: N.T.S.



Eloy C. Olivo
07/04/2020

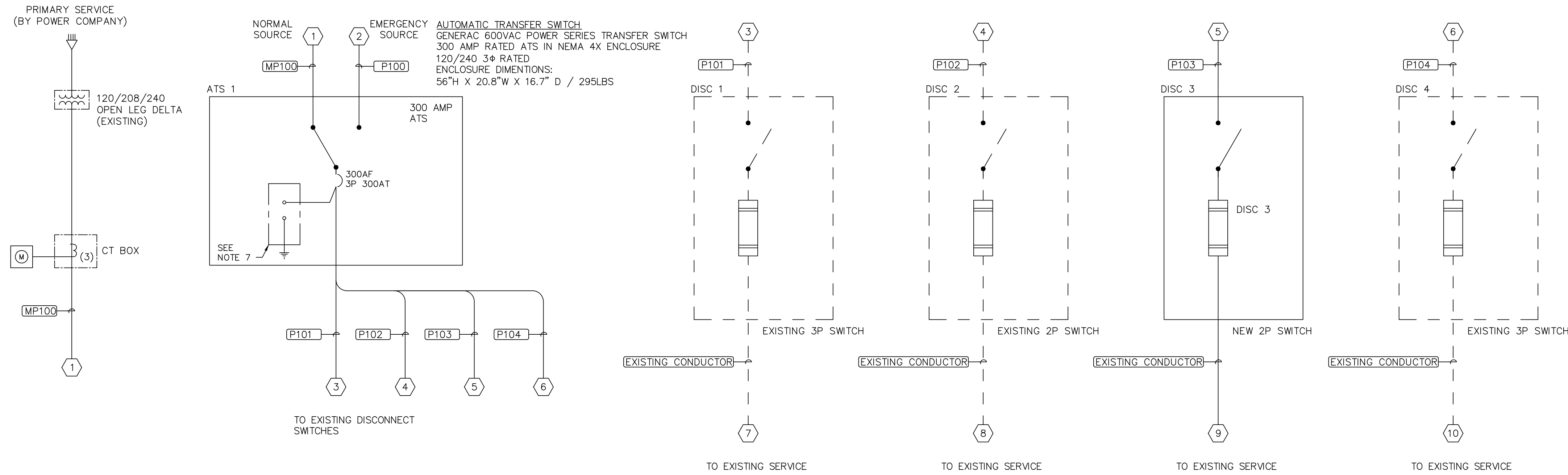
REV.	DATE	DESCRIPTION	BY
PORT ISABEL, TEXAS LAGUNA MADRE WATER DISTRICT ADMINISTRATION BUILDING PROPOSED GENERATOR ADDITION ELECTRICAL RISER DIAGRAM			
SIGLER, WINSTON, GREENWOOD AND ASSOCIATES SWG ENGINEERING, LLC TEXAS FIRM REGISTRATION NO. F-592 WESLACO, TEXAS			
DRAWN: E.C.O. DATE: JUNE 2020	CHECKED: E.C.O.	APPROVED: E.C.O.	DRAWING NO.: 20-107B-E2

POWER AND CONTROL CONDUIT SCHEDULE

NOTES

CONDUIT No.	SERVING	DISTANCE ONE WAY	% V.D.	HP	KVA	CND SIZE	POWER CONDUCTORS				CONTROL CONDUCTORS			ROUTING		REMARKS
							No.	SIZE	TYPE	NEU.	GND.	No.	SIZE	TYPE	FROM	
ADMINISTRATION BUILDING																
MP100	AUTOMATIC TRANSFER SWITCH (NORMAL)	-	-	-	-	-	-	-	-	-	-	-	-	UTILITY	GENERAC AUTOMATIC TS	SERVICE ENTRANCE
P100	AUTOMATIC TRANSFER SWITCH (EMERGENCY)	85'	2.5%	-	-	4.5"	3	350 MCM	-	350	#4	-	-	EMERGENCY GENERATOR	GENERAC AUTOMATIC TS	EXISTING CONDUIT
P101	DISCONNECT 1	10'	-	-	-	2"	3	#1/0	-	#1/0	#6	-	-	GENERAC AUTOMATIC TS	DISCONNECT 1	-
P102	DISCONNECT 2	15'	-	-	-	2"	2	#1/0	-	#1/0	#6	-	-	GENERAC AUTOMATIC TS	DISCONNECT 2	-
P103	DISCONNECT 3	20'	-	-	-	1.5"	2	#2	-	#2	#6	-	-	GENERAC AUTOMATIC TS	DISCONNECT 3	NEW DISCONNECT 3 SWITCH
P104	DISCONNECT 4	25'	-	-	-	4"	3	350 MCM	-	350	#1	-	-	GENERAC AUTOMATIC TS	DISCONNECT 4	-
P105	GENERATOR BATTERY CHARGER/HEATERS	100'	-	-	-	4.5"	1	#10	-	#10	#10	-	-	PANEL 3L	GENERAC GENERATOR	EXISTING CONDUIT
C100	AUTOMATIC TRANSFER SWITCH	85'	-	-	-	0.75"	-	-	-	-	-	1	#24	80 KW GENERATOR	GENERAC AUTOMATIC TS	EXISTING CONDUIT

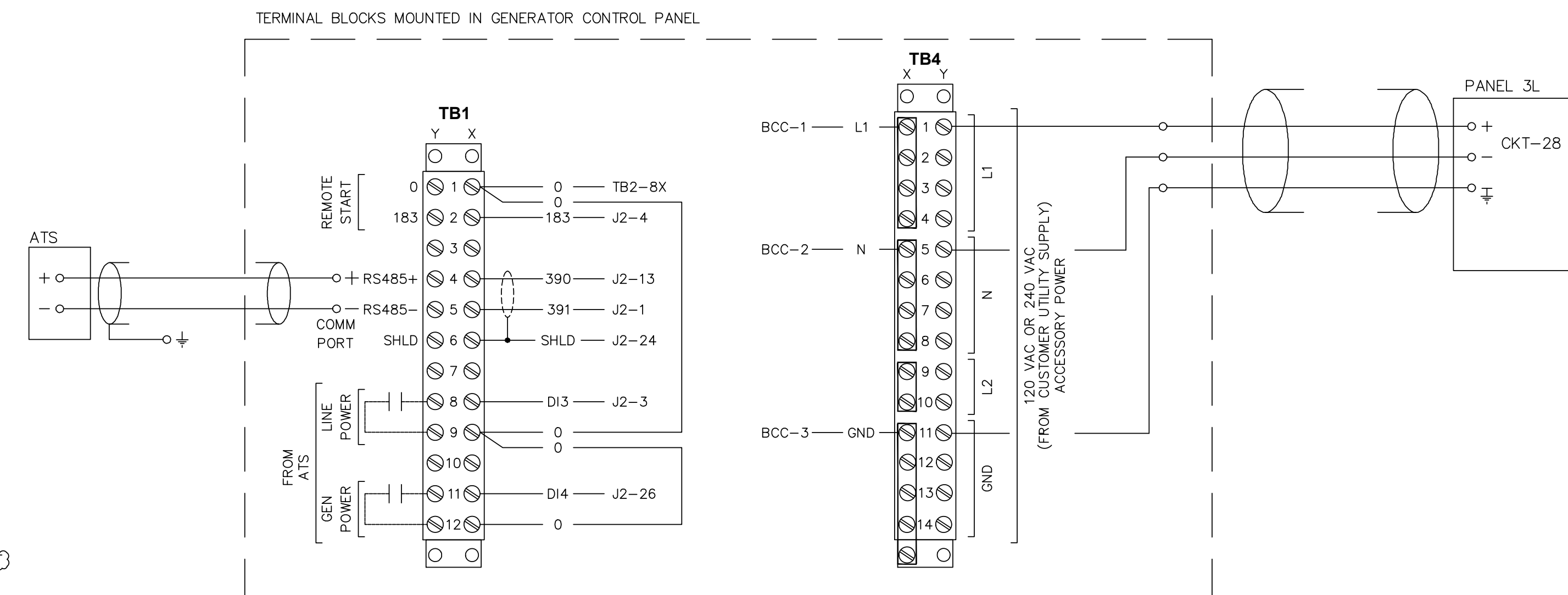
1. P105 - CONTRACTOR RESPONSIBLE FOR PROVIDING 40A/120VAC BREAKER FOR HEATER, LIGHTS, AND BATTERY CHARGER FOR GENERATOR TB4 FROM EXISTING LIGHTING PANEL 3L IN ADMINISTRATION BUILDING.
2. C100 - CABLE TO BE BELDEN 7206A FOR RS485 SIGNAL FROM AUTOMATIC TRANSFER SWITCH TO GENERATOR TB1.



GENERAL NOTES:

1. INSTALLATION SHALL COMPLY WITH NATIONAL ELECTRIC CODE IN EVERY RESPECT. ALL WORK SHALL BE PERFORMED IN A PROFESSIONAL MANNER. ROUTE ALL CONDUITS PARALLEL OR PERPENDICULAR TO BUILDING LINES TO FORM A NEAT INSTALLATION.
2. ALL CONDUITS AND DEVICES MAY NOT BE SHOWN ON THIS SHEET. REFER TO CONTROL DIAGRAMS, LOOP SHEETS, SITE PLANS, AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
3. DISCONNECT LAYOUT IS TYPICAL AND MAY NOT SHOW ALL CONNECTIONS REQUIRED.
4. COORDINATE EXACT LOCATION OF DISCONNECT LOCATIONS WITH FIELD PERSONNEL PRIOR TO INSTALLATION.
5. MAINTAIN SEPARATION OF 120V, DISCRETE, AND ANALOG SIGNALS VIA SEPARATE CONDUIT.
6. ELECTRICAL CONTRACTOR TO MAKE ALL REQUIRED CONNECTIONS TO DISCONNECTS AND EQUIPMENT AS REQUIRED TO ENSURE A COMPLETE OPERATING SYSTEM.
7. INTEGRAL TRANSIENT VOLTAGE SURGE SUPPRESSOR MOUNTED INSIDE OF AUTOMATIC TRANSFER SWITCH (ATS VENDOR SUPPLIED).

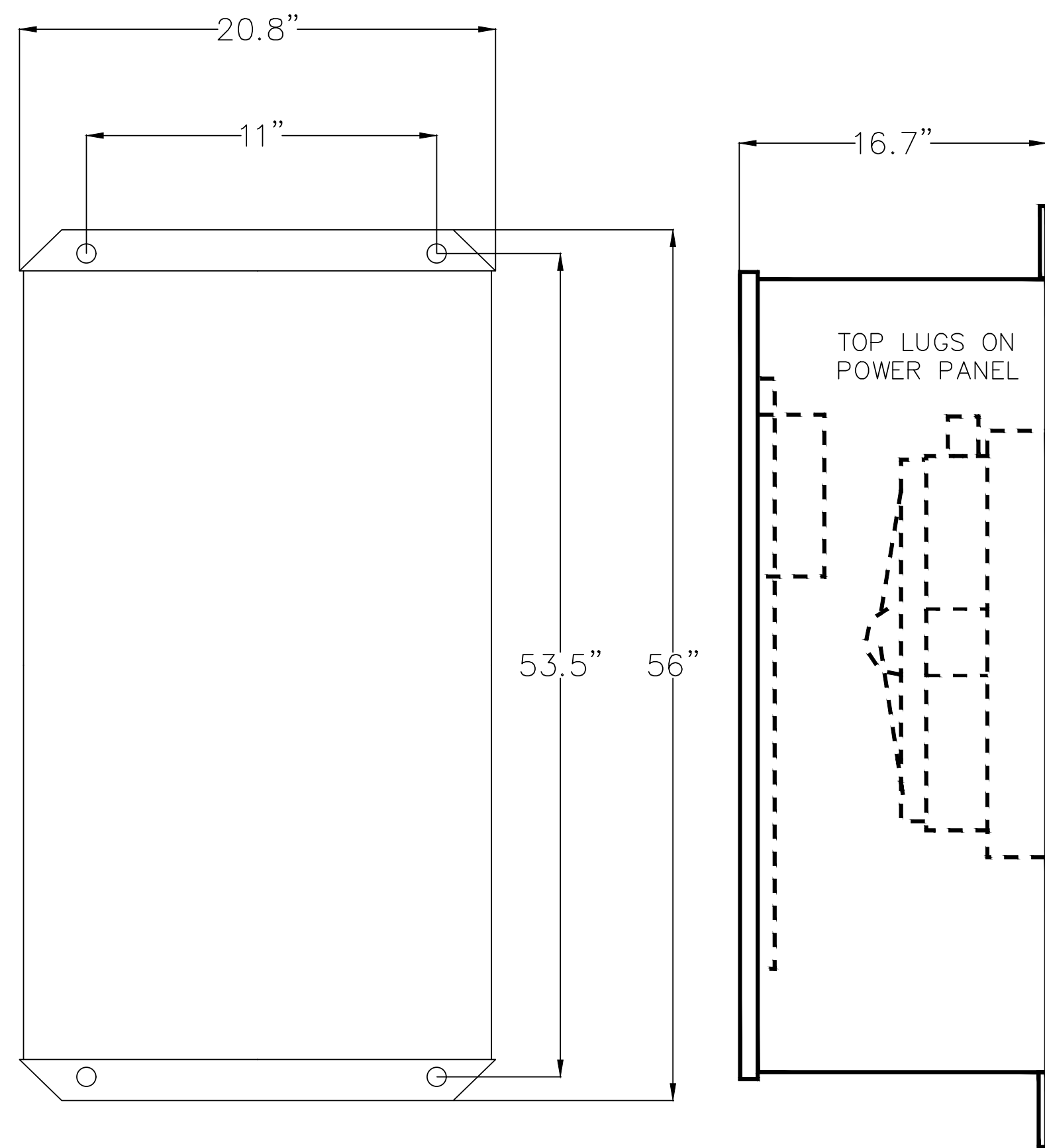
EXISTING PANEL 3L - IN ADMINISTRATION BLDG.											
LOAD SERVED		WIRE SIZE	PHASE LOAD IN VA	BKR SIZE	POLES	A	B	BKR SIZE	PHASE LOAD IN VA	WIRE SIZE	LOAD SERVED
RECEPS COMP 109	-	-	1200	20	2	1	2	20	1200	-	LTG OFFICES
RECEPS COMP 109	-	-	1200	20	3	3	4	20	1400	-	LTG OFFICES
RECEPS COMP 103, 104	-	-	1200	20	5	5	6	20	900	-	LTG OFFICES
RECEPS 108, 116	-	-	1200	20	7	7	8	20	1300	-	LTG OFFICES
RECEPS COMP 108-115	-	-	1200	20	9	9	10	20	1120	-	LTG OFFICES
RECEP COPY 108	-	-	1200	20	11	11	12	20	900	-	RECEPS 102, 103, 104
RECEP COMP MACHINE	-	-	1200	20	13	13	14	20	1200	-	RECEPS 201, 204-205
RECEPS COMP 203-210	-	-	1200	20	15	15	16	20	1000	-	RECEPS 213, 214, 209
RECEPS COMP 211-214	-	-	1200	20	17	17	18	20	1600	-	RECEPS 150, 106, 118, 116
RECEPS COMP ROOM	-	-	1200	20	19	19	20	20	900	-	RECEPS 113-114
RECEPS COMP ROOM	-	-	1200	20	21	21	22	20	1500	-	WATER HEATER
TELEPHONE	-	-	1200	20	23	23	24	20	1000	-	RECEPS 204 COUNTER
-	-	-	-	25	25	26	26	-	-	-	-
-	-	-	-	27	27	28	28	40	3540	#10	GENERATOR HEATERS/CHARGERS **ADDED CIRCUIT
-	-	-	-	29	29	30	30	-	-	-	-
-	-	-	-	31	31	32	32	-	-	-	-
-	-	-	-	33	33	34	34	-	-	-	-
-	-	-	-	35	35	36	36	-	-	-	-
-	-	-	-	37	37	38	38	-	-	-	-
-	-	-	-	39	39	40	40	-	-	-	-
-	-	-	-	41	41	42	42	-	-	-	-
TOTAL CONNECTED PHASE LOADS IN VA		A	13640	B	17240	TOTAL CONNECTED LOAD IN VA		30880	DEMAND LINE AMPERES		128
				ESTIMATED DEMAND LOAD IN VA				30880			



ADMINISTRATION BUILDING - PROPOSED RISER DIAGRAM, PANEL SCHEDULES, TERMINAL BLOCK DETAILS
SCALE: N.T.S.

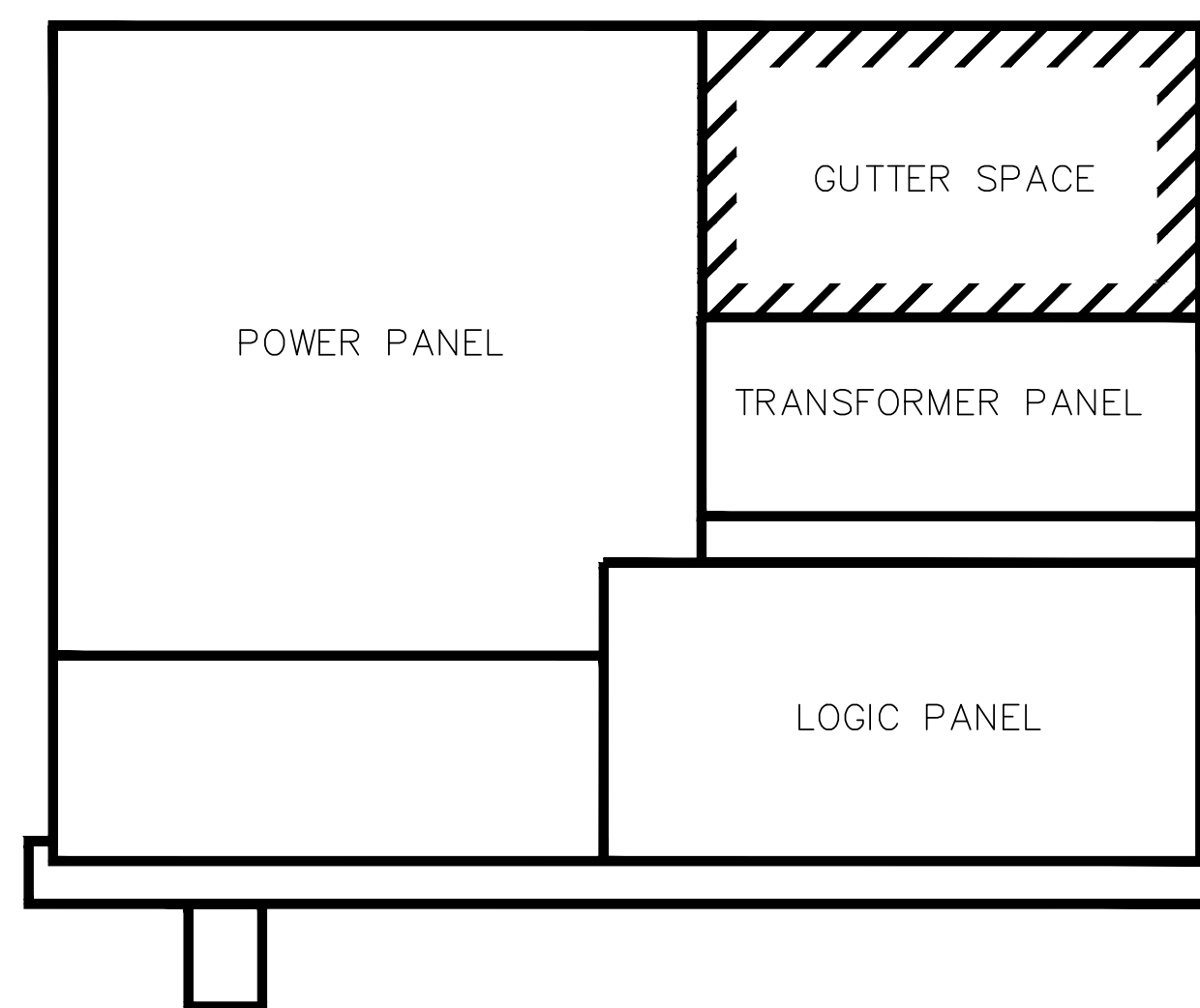
ELOY C. OLIVO
 123136
 PROFESSIONAL ENGINEER
 07/04/2020

DATE	DESCRIPTION	BY
	PORT ISABEL, TEXAS LAGUNA MADRE WATER DISTRICT ADMINISTRATION BUILDING PROPOSED GENERATOR ADDITION RISER, SCHEDULE, TB DETAILS	
SIGLER, WINSTON, GREENWOOD AND ASSOCIATES SWG ENGINEERING, LLC TEXAS FIRM REGISTRATION NO. F-592 WESLACO, TEXAS		
E.C.O.	CHECKED: E.C.O.	APPROVED: E.C.O.
DATE: JUNE 2020	NO. 3	OF 7
		DRAWING NO. 20-107B-E3



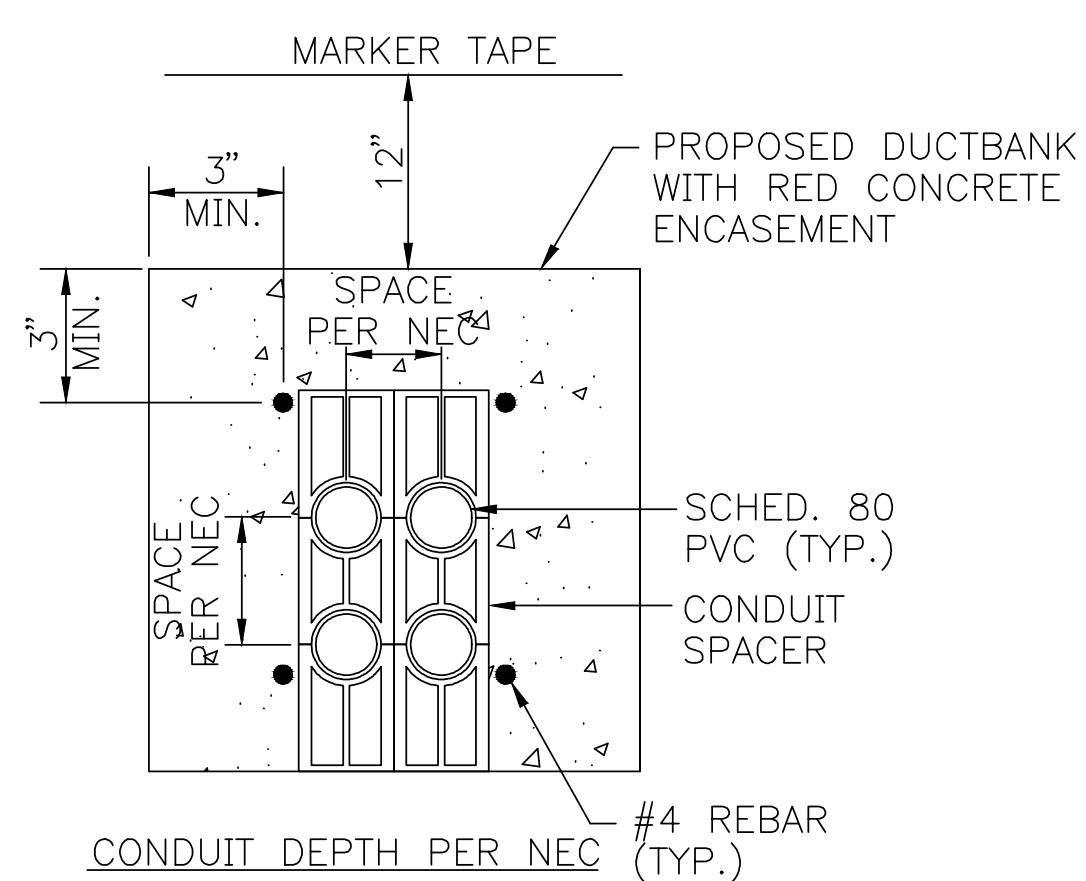
FRONT VIEW

SIDE VIEW

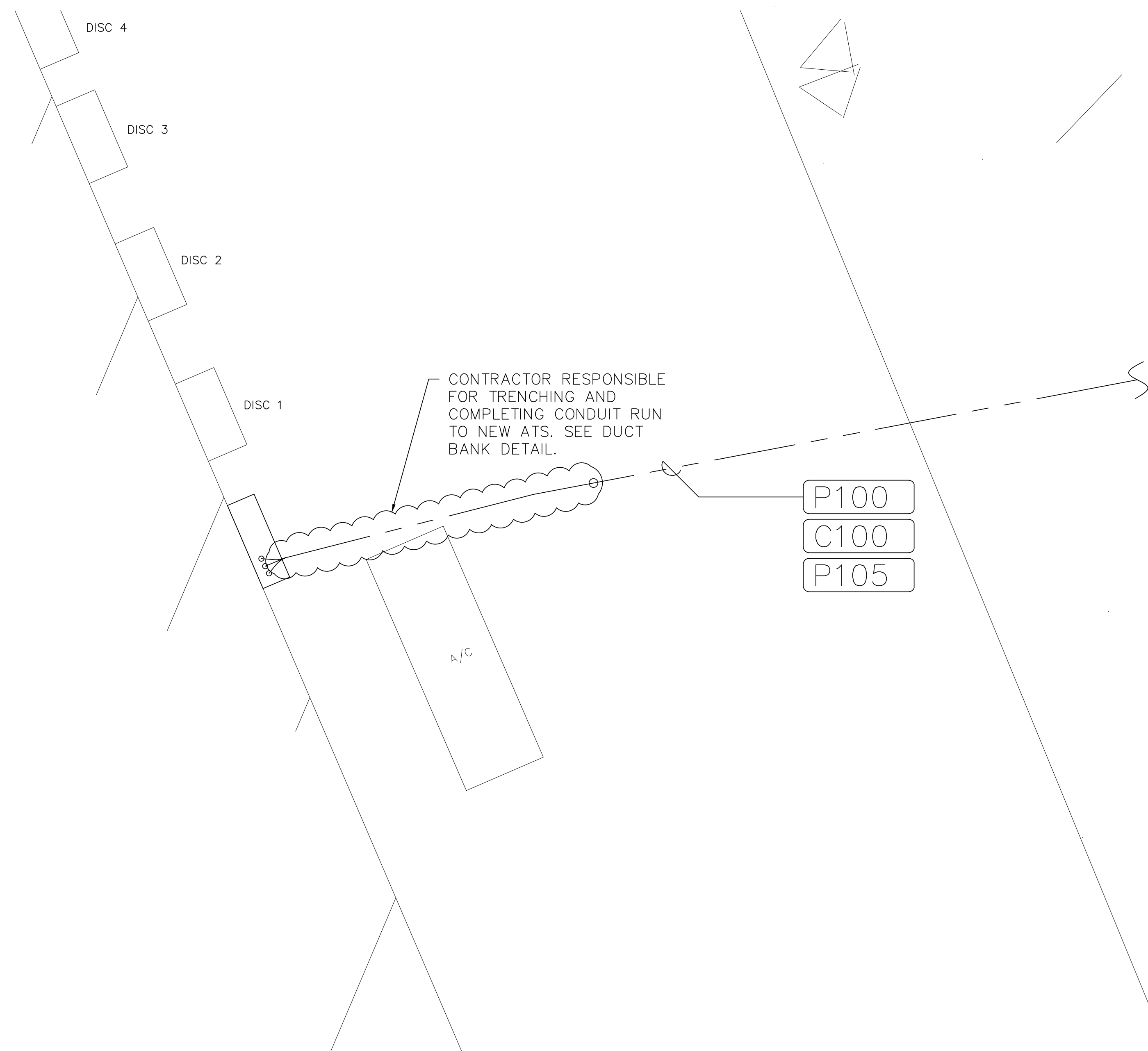


TOP VIEW

AUTOMATIC TRANSFER SWITCH DETAIL
SCALE: N.T.S.




AUTOMATIC TRANSFER SWITCH AND DUCTBANK CONSTRUCTION DETAIL
SCALE: N.T.S.

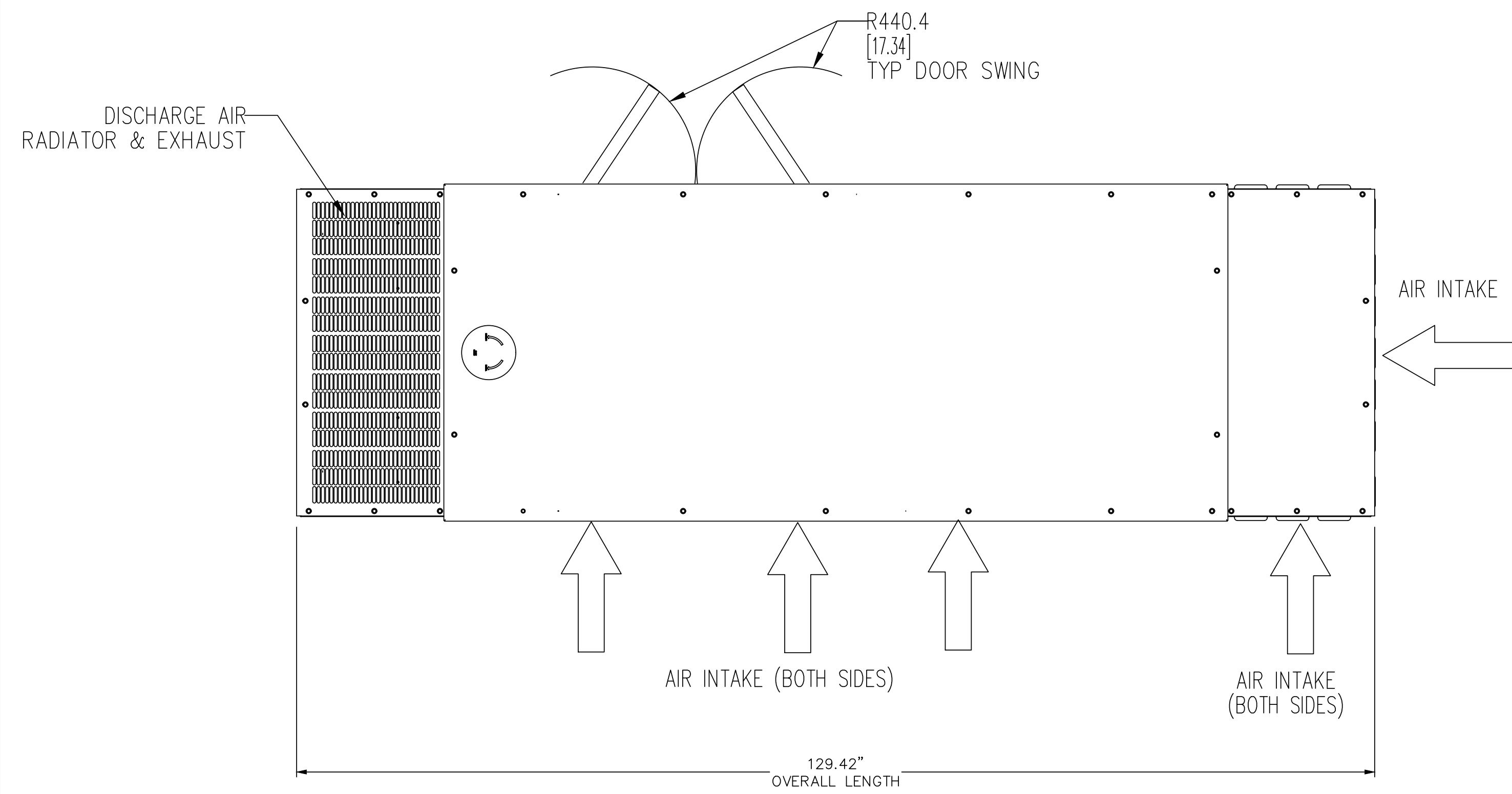


AUTOMATIC TRANSFER SWITCH DUCTBANK CONSTRUCTION DETAIL
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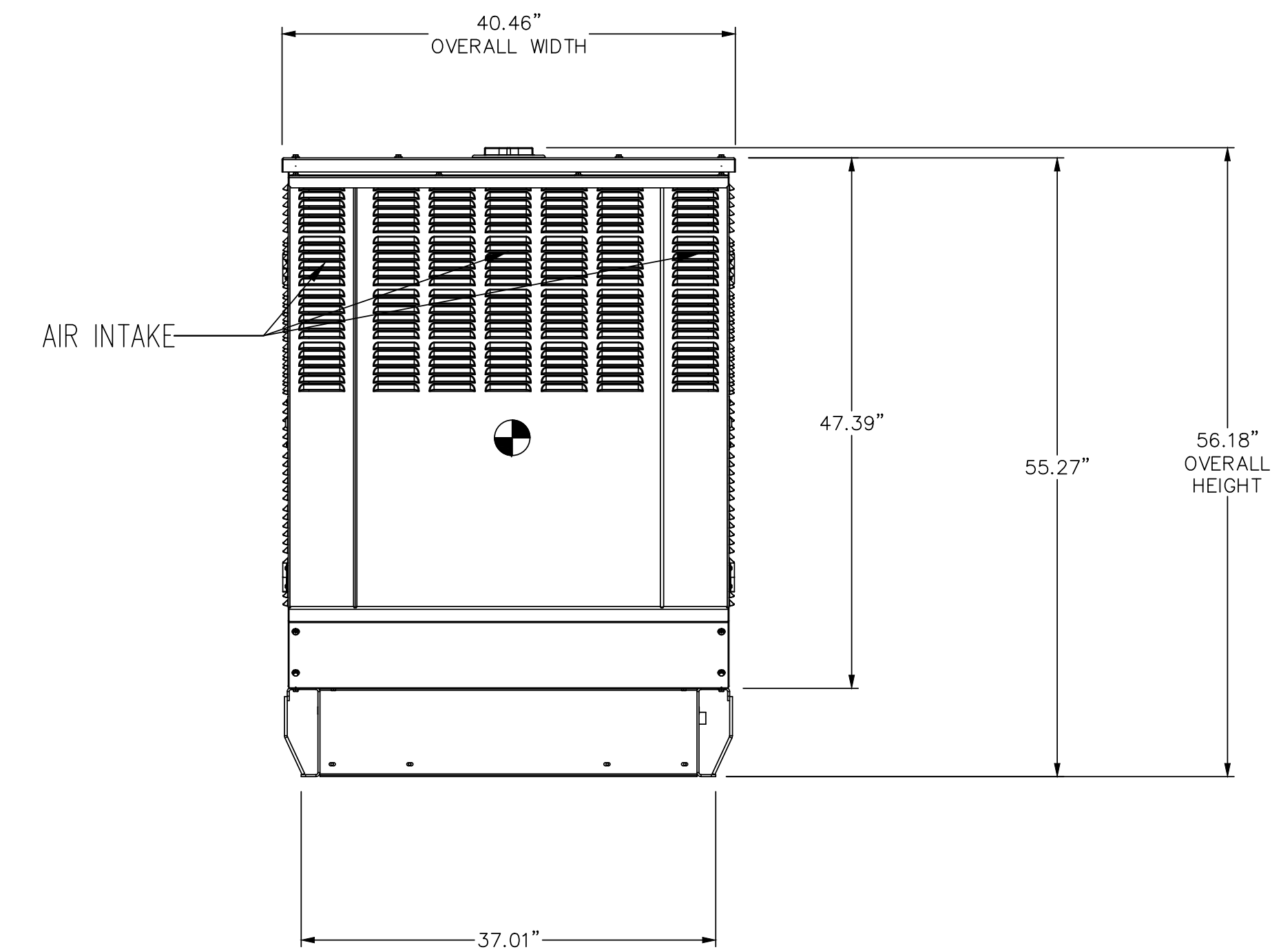
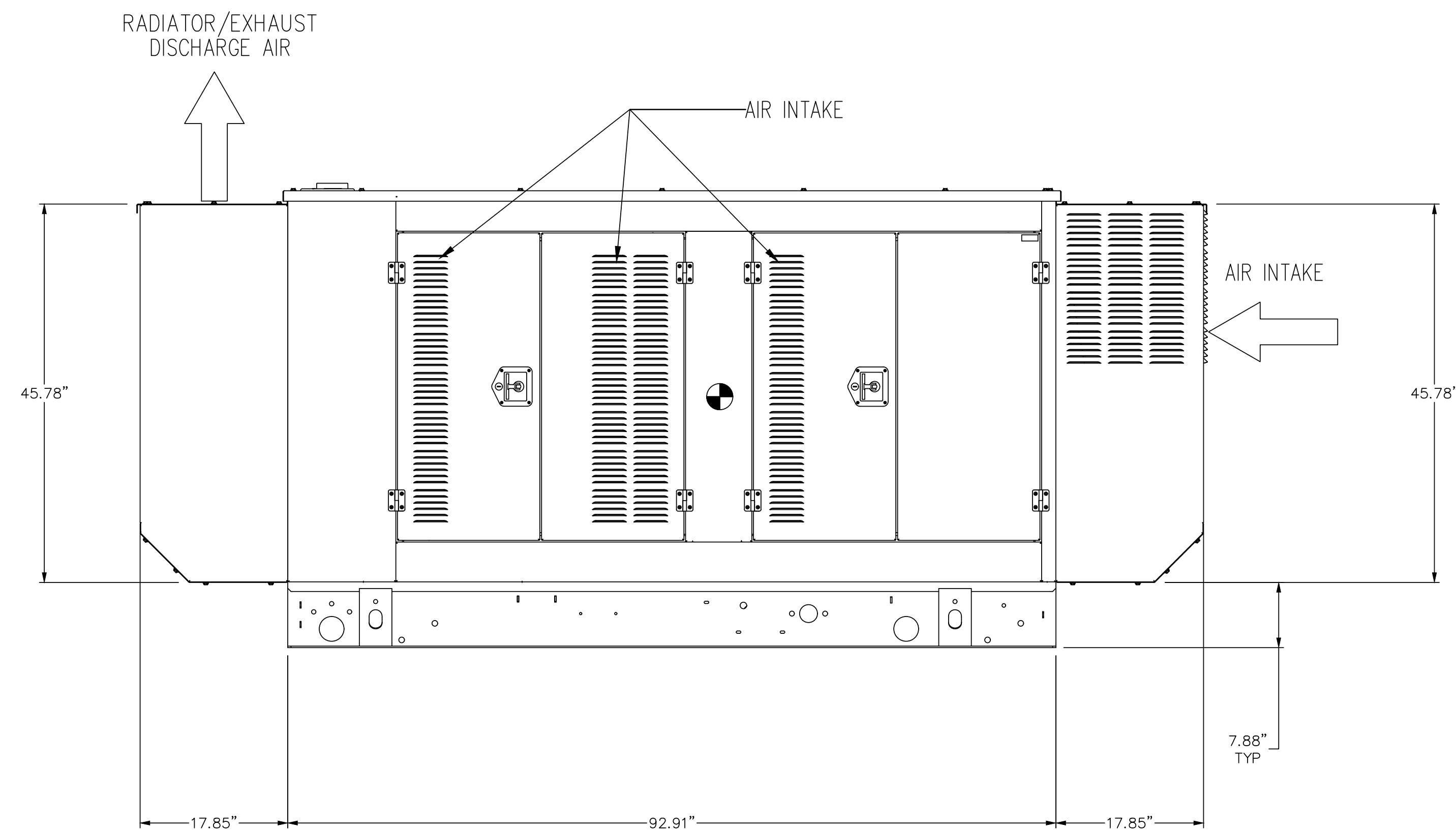
STATE OF TEXAS
ELOY C. OLIVO
123136
LICENSED PROFESSIONAL ENGINEER

Eloy C. Olivo
07/04/2020

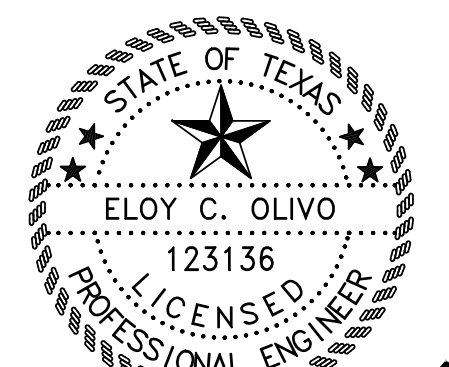
DATE	DESCRIPTION	BY
PORT ISABEL, TEXAS LAGUNA MADRE WATER DISTRICT ADMINISTRATION BUILDING PROPOSED GENERATOR ADDITION ATS DETAILS		
SIGLER, WINSTON, GREENWOOD AND ASSOCIATES SWG ENGINEERING, LLC TEXAS FIRM REGISTRATION NO. F-592 WESLACO, TEXAS		
E.C.O.	CHECKED: E.C.O.	APPROVED: E.C.O.
DATE: JUNE 2020	NO. 4	OF 7
		20-107B-E4



FOR ALL STUB-UP, WEIGHT, AND COG DETAILS, SEE
CORRESPONDING OPEN SET DRAWING PER UNIT CONFIGURATION



GENERATOR DETAIL - SOUND ATTENUATED ENCLOSURE DETAILS
SCALE: N.T.S.



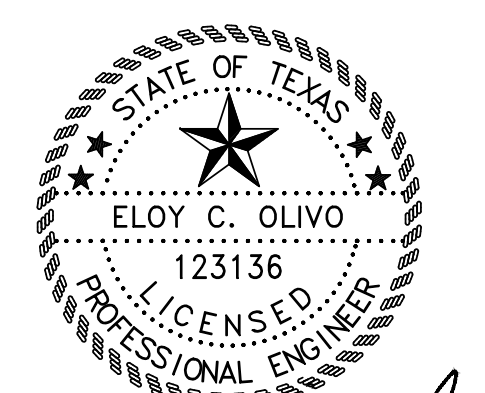
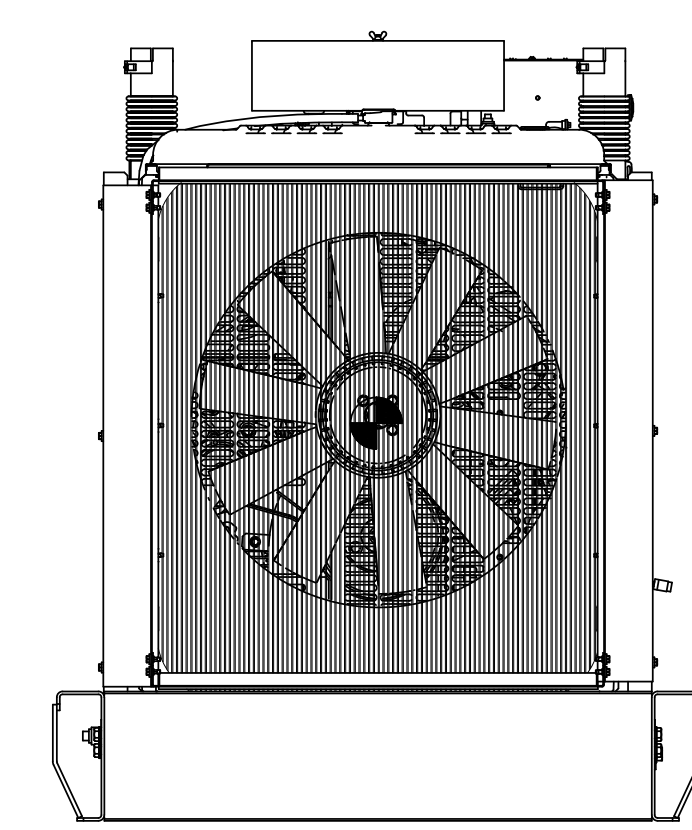
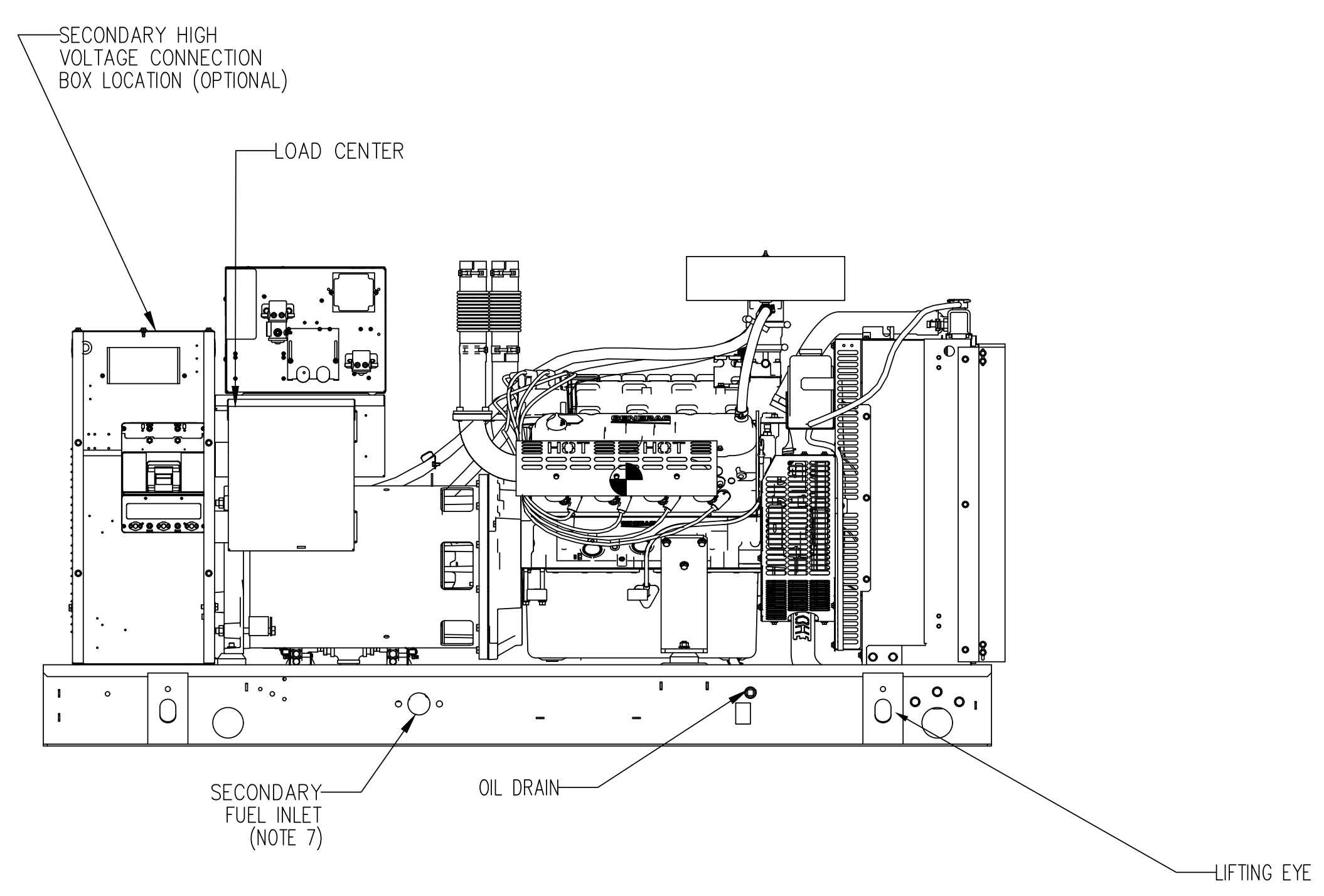
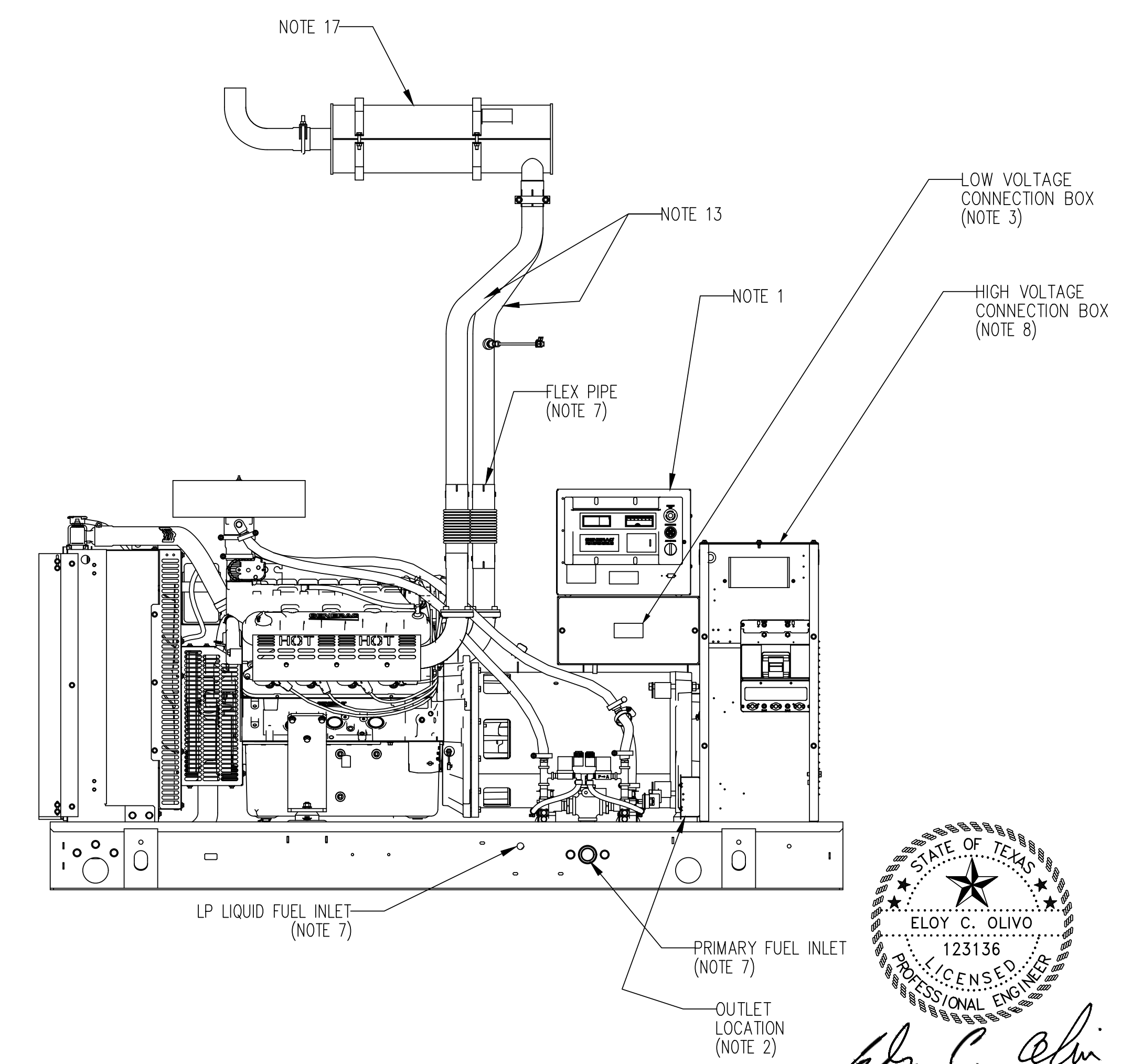
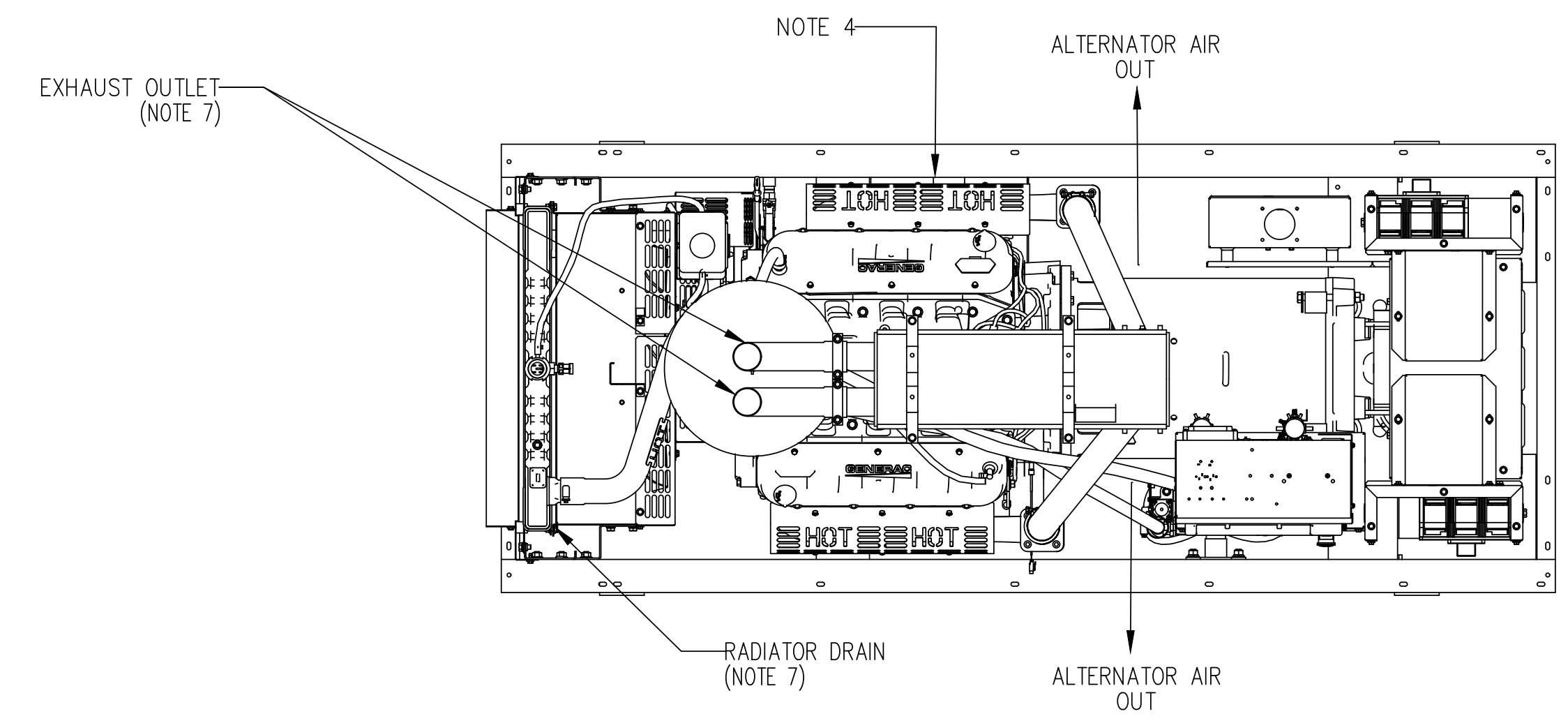
Eloy C. Olivo
07/04/2020

DATE	DESCRIPTION	BY
PORT ISABEL, TEXAS LAGUNA MADRE WATER DISTRICT ADMINISTRATION BUILDING PROPOSED GENERATOR ADDITION ENCLOSURE DETAILS		
SIGLER, WINSTON, GREENWOOD AND ASSOCIATES SWG ENGINEERING, LLC TEXAS FIRM REGISTRATION NO. F-592 WESLACO, TEXAS		
E.C.O. DATE: JUNE 2020	CHECKED: E.C.O. NO. 5 OF 7	APPROVED: E.C.O. DRAWING NO. 20-107B-E5

- Notes:
- CONTROL PANEL, (OPTIONAL BATTERY CHARGER INSIDE).
 - 120V, 20A GFCI & 250V, 15A OUTLET (OPTIONAL).
 - CONNECTION POINTS FOR CONTROL WIRES PROVIDED IN THE LOW VOLTAGE CONNECTION BOX (USE LOW VOLTAGE STUB-UP AREA).
 - BATTERY (12 VOLT NEGATIVE GROUND SYSTEM).
 - MAIN LINE CIRCUIT BREAKER (MLCB), AC LOAD LEADS. (DIMENSIONS MAY VARY DUE TO UNIT CONFIGURATION)
 - CENTER OF GRAVITY AND WEIGHT MAY CHANGE DUE TO UNIT OPTIONS.

7. ENGINE SERVICE CONNECTIONS:
- INLET NATURAL GAS = 1-1/4" FEMALE NPT COUPLING
 - INLET DIESEL = N/A
 - RETURN DIESEL = N/A
 - OIL DRAIN = 1/2" NPT FEMALE COUPLING
 - RADIATOR DRAIN = 3/8" BARB FITTING
 - FLEX PIPE OUTLET = 2.5" I.D.
 - EXHAUST OUTLET = 2.5" O.D.
- ***** SEE GENERATOR SIZING GUIDE FOR FUEL PIPE SIZING TO SUIT APPLICATION *****

- AUXILIARY AC CONNECTION FOR UNIT OPTIONS ARE LOCATED IN HIGH VOLTAGE CONNECTION BOX, UNLESS AN OPTIONAL LOAD CENTER IS INSTALLED.
 - EXHAUST PIPES MAY BE ROTATED TO ALLOW MUFFLER TO POINT OUT TO THE RIGHT OR LEFT SIDE OF GENERATOR. (MAY NOT APPLY TO ALL UNITS)
 - GENERATOR SET MUST BE INSTALLED SUCH THAT FRESH COOLING AIR IS AVAILABLE AND DISCHARGE AIR FROM THE RADIATOR IS NOT RECIRCULATED.
 - BOTTOM OF GENERATOR SET MUST BE ENCLOSED TO PREVENT PEST INTRUSION AND RECIRCULATION OF DISCHARGE AIR AND/OR IMPROPER COOLING AIR FLOW.
 - EXHAUST SYSTEM MAXIMUM BACK PRESSURE = 37 INCHES H2O.
 - INSTALL EXHAUST BLANKETS ALONG THIS LINE.
 - CONNECT THE OPEN SET EXHAUST PER NFPA 37
 - BLANKETS SHOULD NOT COVER OXYGEN SENSOR.
 - OXYGEN SENSOR MUST BE MOUNTED BETWEEN ENGINE OUTLET AND SILENCER INLET AS SHOWN. IF ELBOW IS REQUIRED, ONLY SINGLE ELBOW MAY BE USED.
 - CATALYZED SILENCER (FOR EPA UNITS) MUST BE MOUNTED IN DESCRIBED POSITION. FAILING TO FOLLOW THESE INSTRUCTIONS WHEN INSTALLING A CERTIFIED ENGINE IN A PIECE OF STATIONARY EQUIPMENT VIOLATES FEDERAL LAW 40 CFR 1068.105(b), SUBJECT TO FINES OR PENALTIES AS DESCRIBED IN THE CLEAN AIR ACT.
 - BOLTS OR STUDS USED TO MOUNT UNIT TO PAD SHALL BE 5/8 - 11 GRADE 5.
- ADDITIONAL NOTES: FOR WEIGHT AND CENTER OF GRAVITY DATA SEE NOTE 6, AND SHEET 3.

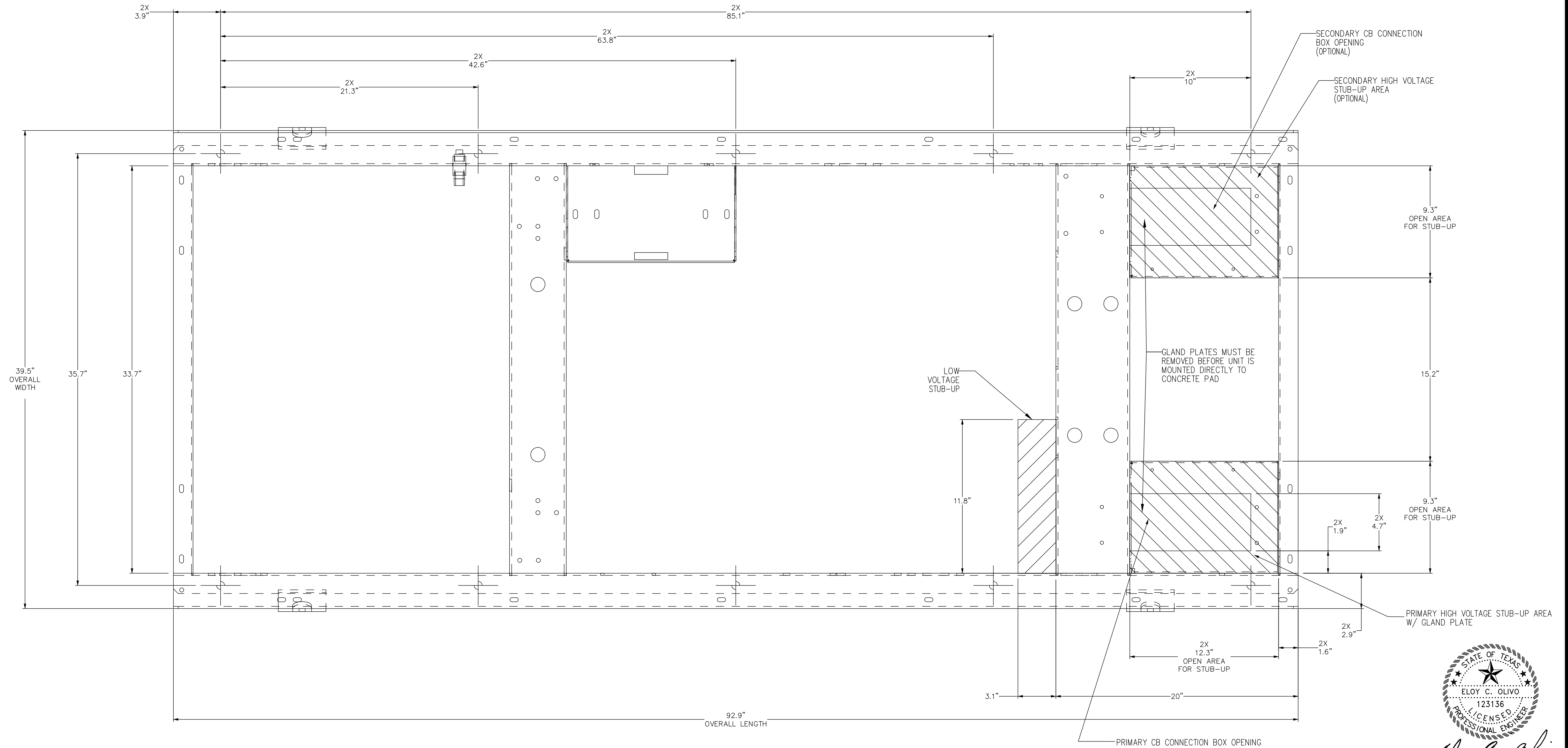


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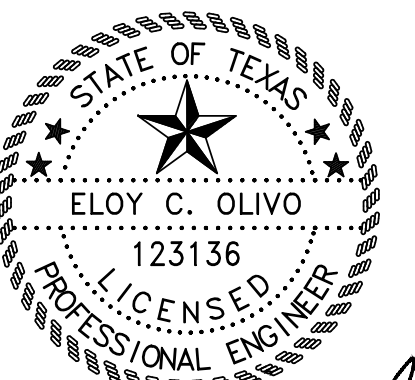
GENERATOR DETAIL - OPEN SET DETAILS
SCALE: N.T.S.

DATE	DESCRIPTION	BY
PORT ISABEL, TEXAS LAGUNA MADRE WATER DISTRICT ADMINISTRATION BUILDING PROPOSED GENERATOR ADDITION OPEN SET DETAILS		
<i>SIGLER, WINSTON, GREENWOOD AND ASSOCIATES</i> SWG ENGINEERING, LLC TEXAS FIRM REGISTRATION NO. F-592 WESLACO, TEXAS		
E.C.O.	CHECKED: E.C.O.	APPROVED: E.C.O.
DATE: JUNE 2020	NO. 6	OF 7
		DRAWING NO. 20-107B-E6

RECOMMENDED ELECTRICAL STUB-UP	
(HIGH VOLTAGE STUB-UP) AC LOAD LEAD CONDUIT FOR PERMANENT MAGNET EXCITATION CONNECTION BOX	
LOW VOLTAGE STUB-UP	



GENERATOR DETAIL - CONDUIT STUB UP DETAILS
SCALE: N.T.S.



Eloy C. Olivo
07/04/2020

DATE	DESCRIPTION	BY
PORT ISABEL, TEXAS LAGUNA MADRE WATER DISTRICT ADMINISTRATION BUILDING PROPOSED GENERATOR ADDITION CONDUIT STUB UP DETAILS		
SIGLER, WINSTON, GREENWOOD AND ASSOCIATES SWG ENGINEERING, LLC TEXAS FIRM REGISTRATION NO. F-592 WESLACO, TEXAS		
E.C.O.	CHECKED: E.C.O.	APPROVED: E.C.O.
DATE: JUNE 2020	NO. 7	OF 7
		20-107B-E7