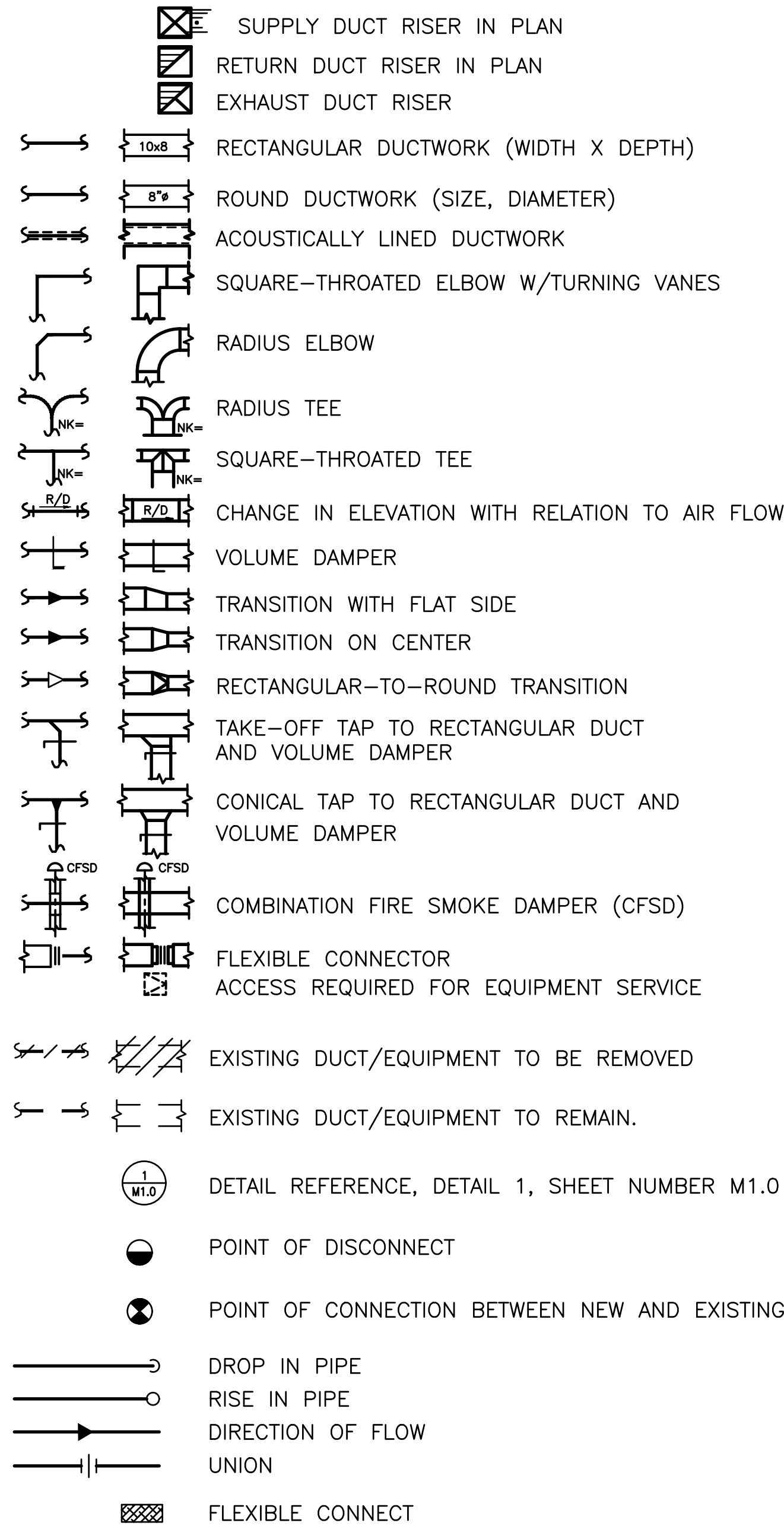


## GENERAL NOTES

1. ALL PIPES AND DUCTS SHALL BE SUPPORTED AND BRACED PER SMACNA GUIDELINES AND CMC CHAPTER 6.
2. ALL DUCTWORK AND CEILING PENETRATION SHALL BE COORDINATED WITH STRUCTURAL JOISTS AND BEAMS. PROVIDE OFFSETS IN PIPES AND DUCTS TO AVOID CUTTING OF BEAMS AND JOISTS.
3. SYMBOL AND ABBREVIATION LISTS ARE COMPOSITE. ALL SYMBOLS AND ABBREVIATIONS MIGHT NOT BE USED ON THIS PROJECT.
4. MAINTAIN CLEAR ACCESS TO SERVICE EQUIPMENT AND OTHER ACCESSORIES REQUIRING SERVICE, VISUAL INSPECTION OR HAND OPERATION. WHERE INDICATED OR REQUIRED, PROVIDE ACCESS PANELS OF THE TYPE SELECTED TO SUIT MATERIALS IN WHICH INSTALLED.
5. ALL WORK SHALL BE DONE IN ACCORDANCE WITH LATEST APPLICABLE CODES AND REGULATIONS PER CALIFORNIA AND OTHER AUTHORITIES HAVING JURISDICTION.
6. THE MECHANICAL DRAWINGS ARE DIAGRAMMATIC AND SHOULD NOT BE SCALED TO ESTABLISH LOCATION OF WORK. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND MAKE ADJUSTMENTS TO DIMENSIONS AS NECESSARY TO COMPLETE THE WORK.
7. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND SHALL ARRANGE FOR ALL INSPECTIONS AS REQUIRED.
8. CONTRACTOR SHALL THOROUGHLY EXAMINE PREMISES AND OBSERVE ALL CONDITIONS AND CIRCUMSTANCES UNDER WHICH THE WORK SHALL BE PERFORMED. NO ALLOWANCES WILL BE MADE FOR ERRORS OR NEGLIGENCE IN THIS RESPECT.
9. THE CONTRACTOR'S WORK SCHEDULE SHALL BE SUBMITTED TO AND APPROVED BY THE OWNER.
10. CONTRACTOR SHALL PERFORM WORK ONLY AFTER THE GATHERING OF EXACT FIELD DIMENSIONS OF THE BUILDING STRUCTURE AND CEILINGS, ETC. WHICH MAY AFFECT THE INSTALLATION OF THE NEW SYSTEMS.
11. THE CONTRACTOR SHALL FULLY COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO THE START OF THE WORK TO ASSURE ALL WORK CAN BE PROPERLY INSTALLED WITHOUT INTERFERENCE OR DELAY.
12. CLEAN UP ALL WASTE AND DEBRIS AT THE END OF EACH WORKING DAY AND AT THE COMPLETION OF THE JOB.
13. ALL SPECIFIED EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION, CMC CHAPTER 6, AND ASCE 7 CHAPTER 13.
14. PROVIDE ONE YEAR WARRANTY FOR ALL WORKMANSHIP AND MATERIALS AFTER THE DATE OF FINAL ACCEPTANCE.
15. PRIOR TO STARTING WORK, SUBMIT SHOP DRAWINGS FOR ALL MECHANICAL EQUIPMENT & DUCTWORK.
16. EXACT LOCATIONS OF ALL CEILING DIFFUSERS, REGISTERS, AND GRILLES SHALL BE COORDINATED WITH LIGHTING.
17. ALL DUCTWORK SHALL BE GALVANIZED STEEL PER CMC CHAPTER 6 AND SMACNA GUIDELINES.
18. ALL OPENINGS IN WALLS, CEILINGS, AND FLOORS RESULTING FROM DUCT DEMOLITION SHALL BE CLOSED AND FINISHED TO MATCH THE SURROUNDING.
19. RUN ALL DUCTWORK AND PIPING AS HIGH AS POSSIBLE UNLESS OTHERWISE NOTED. PIPING SHALL BE ABOVE DUCTWORK.
20. CONTRACTOR SHALL PROVIDE EXTERNAL TRAPS FOR CONDENSATE DRAIN LINES FOR ALL COOLING COILS.
21. ALL SUPPLY & RETURN DUCTWORK SHALL BE INSULATED PER TITLE-24 REQUIREMENTS.
22. PROVIDE VOLUME DAMPERS AT EACH BRANCH TAKE-OFF FROM MAIN SUPPLY, RETURN, AND EXHAUST DUCT SERVING EACH AIR DEVICE AND AS INDICATED.
23. PROVIDE DIFFUSERS AND GRILLES WITH BLOW PATTERNS INDICATED ON THE DRAWING.
24. CONTRACTOR SHALL FURNISH AND INSTALL DUCT AND PIPE SUPPORT AND BRACING PER SMACNA REQUIREMENT.
25. ANY EQUIPMENT, DUCTWORK, OR PIPING INSTALLED MORE THAN 1 FT FROM THE LOCATION SHOWN ON THE DRAWINGS SHALL BE CLEARLY DOCUMENTED IN THE FIELD. CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS TO CLEARLY SHOW THE LOCATION OF THE EQUIPMENT BEFORE COMPLETION OF THE PROJECT. ALL EXPENSE RELATING TO VERIFY THE AS-BUILT DRAWINGS BY THE CLIENT OR ITS REPRESENTATIVE(S) DUE TO INACCURATE OR INCOMPLETE RECORDS SHALL BE BORN BY THE CONTRACTOR.
26. ALL MECHANICAL WORK SHALL COMPLY WITH TITLE-24 PART 4 CMC 2013.
27. NOTE THE CRITICAL SPACE AVAILABLE ABOVE CEILINGS. PROVIDE TRANSITION PIECES AT CROSSOVERS, UNDER BEAMS, OVER/UNDER PIPES AS REQUIRED TO ACCOMMODATE DUCTS WITHIN SPACE AVAILABLE, PROVIDING EQUIVALENT DUCT SIZE TO THE DIMENSION SHOWN. COORDINATE CLOSELY WITH OTHER SECTIONS TO MINIMIZE NECESSITY OF TRANSITIONS. NO ADDITIONAL COSTS WILL BE PAID FOR ANY REQUIRED TRANSITIONS OR OTHER SPECIAL CHANGE SHAPE PIECES.

## SYMBOLS



28. PROVIDE NEW THERMOSTATS WHERE SHOWN ON DRAWINGS.
  29. THERMOSTAT SHALL BE INSTALLED BETWEEN 36" AND 48" ABOVE FINISHED FLOOR.
  30. ALL MECHANICAL EQUIPMENT SHALL BE BRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE ACTING IN ANY DIRECTION CONFORMING TO ASCE 7-05 SECTION 13.3.1 AND TABLE 13.6-1.
  31. CUTTING, BORING, SAWCUTTING OR DRILLING THROUGH THE NEW OR EXISTING STRUCTURAL ELEMENTS TO BE DONE ONLY WHEN SO DETAILED IN THE DRAWINGS OR ACCEPTED BY THE ARCHITECT.
  32. CONTRACTOR SHALL HIRE AN INDEPENDENT TESTING AND AIR BALANCING (TAB) COMPANY, AABC CERTIFIED, TO PROVIDE A COMPLETE AND CERTIFIED AIR BALANCE REPORT PER AABC STANDARDS. TAB CONTRACTOR SHALL TEST AND BALANCE ALL HVAC EQUIPMENT AND AIR DISTRIBUTION DEVICES TO DESIGN QUANTITIES AS SHOWN ON PLANS. TAB CONTRACTOR SHALL TEST, BALANCE AND RECORD AS DEFINED IN AABC STANDARDS.
- MECHANICAL EQUIPMENT BRACING AND ANCHORAGE
1. THE SEISMIC BRACING OF DUCTS AND PIPING SHALL BE IN ACCORDANCE WITH THE "GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING PIPING SYSTEMS" AS PUBLISHED BY SMACNA, LATEST EDITION.,
  2. WHERE BRACING AND ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS OR IN THE GUIDELINES, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT AND THE FIELD INSPECTOR.
  3. A COPY OF THE GUIDELINES PUBLISHED BY SMACNA SHALL BE PROVIDED BY THE CONTRACTOR AND KEPT ON THE JOB SITE AT ALL TIMES.

## ABBREVIATIONS

ABBREVIATION	DESCRIPTION				
AC	AIR CONDITIONING UNIT	MAX	MAXIMUM	UH	UNIT HEATER
AD	ACCESS DOOR	MBH	ONE THOUSAND BTUH	UON	UNLESS OTHERWISE NOTED
AF	AIR FILTER	MCA	MINIMUM CIRCUIT AMPS	V	VOLT
AFF	ABOVE FINISHED FLOOR	MOCp	MAXIMUM OVERCURRENT PROTECTION	VAV	VARIABLE AIR VOLUME
AFM	AIR FLOW MEASURING DEVICE	MIN	MINIMUM	VENT	VENTILATION, VENT
AHU	AIR HANDLING UNIT	MISC	MISCELLANEOUS	VERT	VERTICAL
APD	AIR PRESSURE DROP	MVD	MANUAL VOLUME DAMPER	VTR	VENT THROUGH ROOF
BAS	BUILDING AUTOMATION SYSTEM	(N)	NEW	W/	WITH
BDD	BACKDRAFT DAMPER (WEIGHTED)	N/A	NOT APPLICABLE	W	WATT
BFP	BACKFLOW PREVENTER	NIC	NOT IN CONTRACT	WBT	WET BULB TEMPERATURE
		NK	NECK	W.G.	WATER GAUGE
CC	COOLING COIL	NTS	NOT TO SCALE		
CD	CEILING DIFFUSER	OSA	OUTSIDE AIR		
CFM	CUBIC FEET PER MINUTE	OAI	OUTSIDE AIR INTAKE		
CLG	CEILING				
CO	CLEAN OUT	(R)	REMOVE		
COND	CONDENSATE, CONDENSER	RA	RETURN AIR		
CP	CONDENSATE PUMP	RAG	RETURN AIR GRILLE		
CU	CONDENSING UNIT	REFG	REFRIGERANT, ATION		
CFSD	COMBINATION FIRE/SMOKE DAMPER	RG	RETURN GRILLE		
		RH	RELATIVE HUMIDITY		
DB	DECIBELS	(RL)	RELOCATED		
DBT	DRY BULB TEMPERATURE	RLA	RATED LOAD AMPS		
DDC	DIRECT DIGITAL CONTROL	RM	ROOM		
DIA	DIAMETER	RPM	REVOLUTIONS PER MINUTE		
DN	DOWN	RR	RETURN REGISTER		
DPT	DEW POINT TEMPERATURE	(RS)	REMOVE AND SAVE FOR RELOCATION		
EA	EACH, EXHAUST AIR	SA	SUPPLY AIR		
EF	EXHAUST FAN	SD	SMOKE DAMPER		
EH	ELECTRIC HUMIDIFIER	SF	SUPPLY AIR FAN		
EG	EXHAUST GRILLE	SHR	SENSIBLE HEAT RATIO		
ER	EXHAUST REGISTER	SG	SPECIFIC GRAVITY		
ESP	EXTERNAL STATIC PRESSURE	SP	STATIC PRESSURE		
(E)	EXISTING	SPEC	SPECIFICATIONS		
(ER)	EXISTING TO REMAIN	SPS	STATIC PRESSURE SENSOR		
		SR	SUPPLY REGISTER		
FAU	FORCED AIR UNIT	SUCT	SUCTION		
FCU	FAN COIL UNIT	TD	TEMPERATURE DIFFERENCE		
FD	FIRE DAMPER	TEMP	TEMPERATURE		
FPM	FEET PER MINUTE	T	THERMOSTAT		
FT	FEET	TYP	TYPICAL		
FV	FACE VELOCITY	TSP	TOTAL STATIC PRESSURE		
GPM	GALLON PER MINUTE				
HZ	HERTZ				
HPU	HEAT PUMP UNIT				
HP	HORSE POWER, HEAT PUMP				
ID	INSIDE DIAMETER				
IN	INCHES				
IN. W.C.	INCHES OF WATER COLUMN				
IFM	INDOOR FAN MOTOR				
LBS	POUNDS				
LD	LINEAR DIFFUSER				
LRA	LOCKED ROTOR AMPS				

## PIPE AND FITTING MATERIALS

TYPE	MATERIAL	FITTINGS
EXHAUST	16 GAUGE STAINLESS STEEL	WELDED STAINLESS STEEL

## SHEET INDEX

M-1.1	LIBRARY FRONT SHEET
M-2.1	LIBRARY ENLARGED PARTIAL FLOOR PLANS



**CITY OF INGLEWOOD  
CIVIC CENTER  
COMPLEX**

ONE MANCHESTER BOULEVARD  
INGLEWOOD, CALIFORNIA 90301

**LIBRARY  
EMERGENCY  
GENERATOR  
SCAQMD  
COMPLIANCE**

CONSULTANT



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CAMARILLO, CA 93010  
TEL: (805)987-4001

JOB NO. 14-007.C2

STAMPS/SEALS

LIBRARY  
FRONT SHEET

PROJECT NO.14-007.C2	PROJECT ARCH: D.M..
DRAWN: A.S.	CHECKED: A.W.

SHEET NUMBER

# M-1.1

DATE: 08-26-2015

SHEET:	OF
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PARTIAL  
FLOOR PLANS

PROJECT NO. 14-007.C2 PROJECT ARCH. D.M..

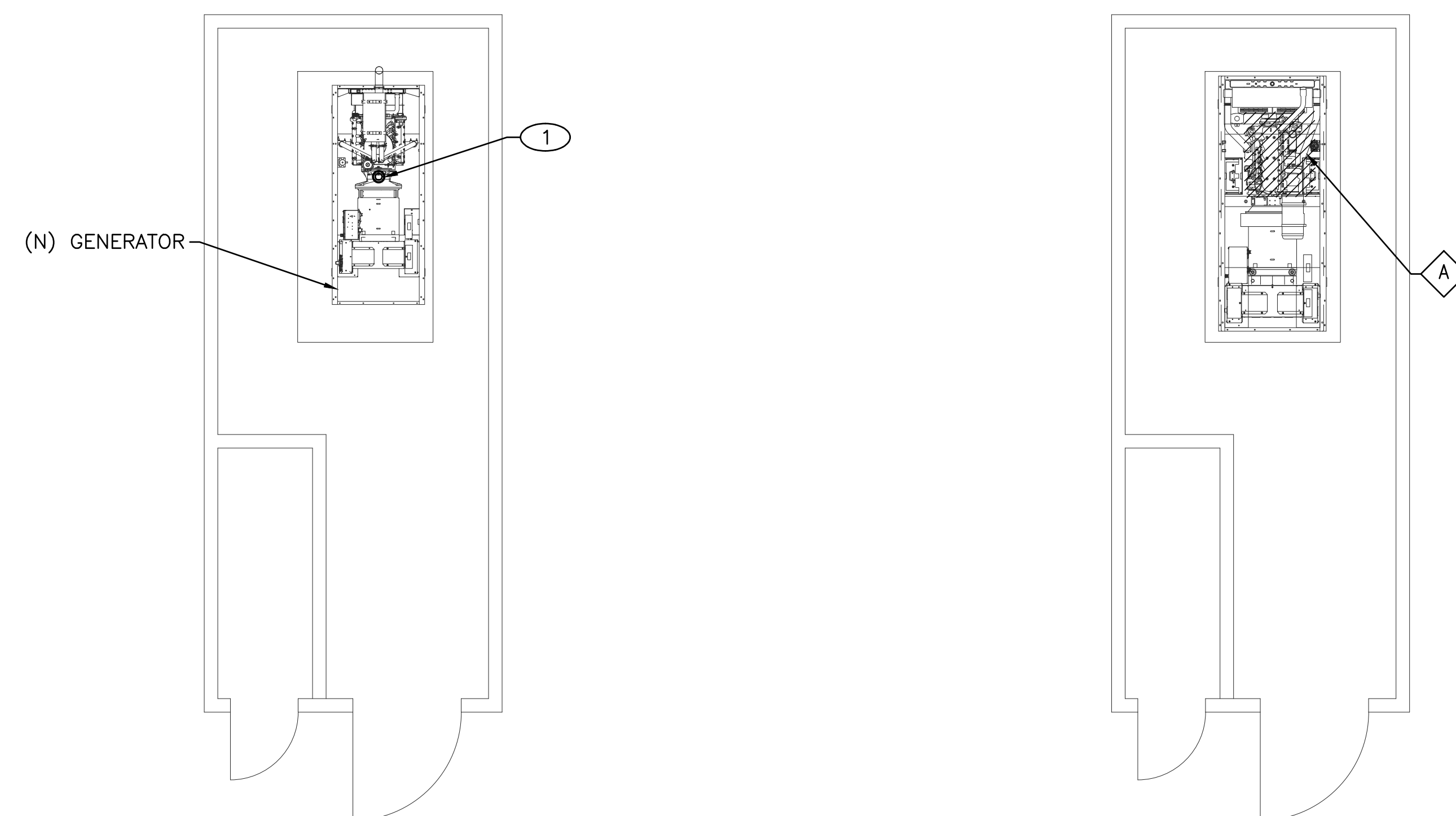
DRAWN: A.S. CHECKED: A.W.

SHEET NUMBER

M-2.1

DATE: 08-26-2015

SHEET: OF:



3 CONSTRUCTION FLOOR PLAN  
Scale: 1/4"=1'-0"

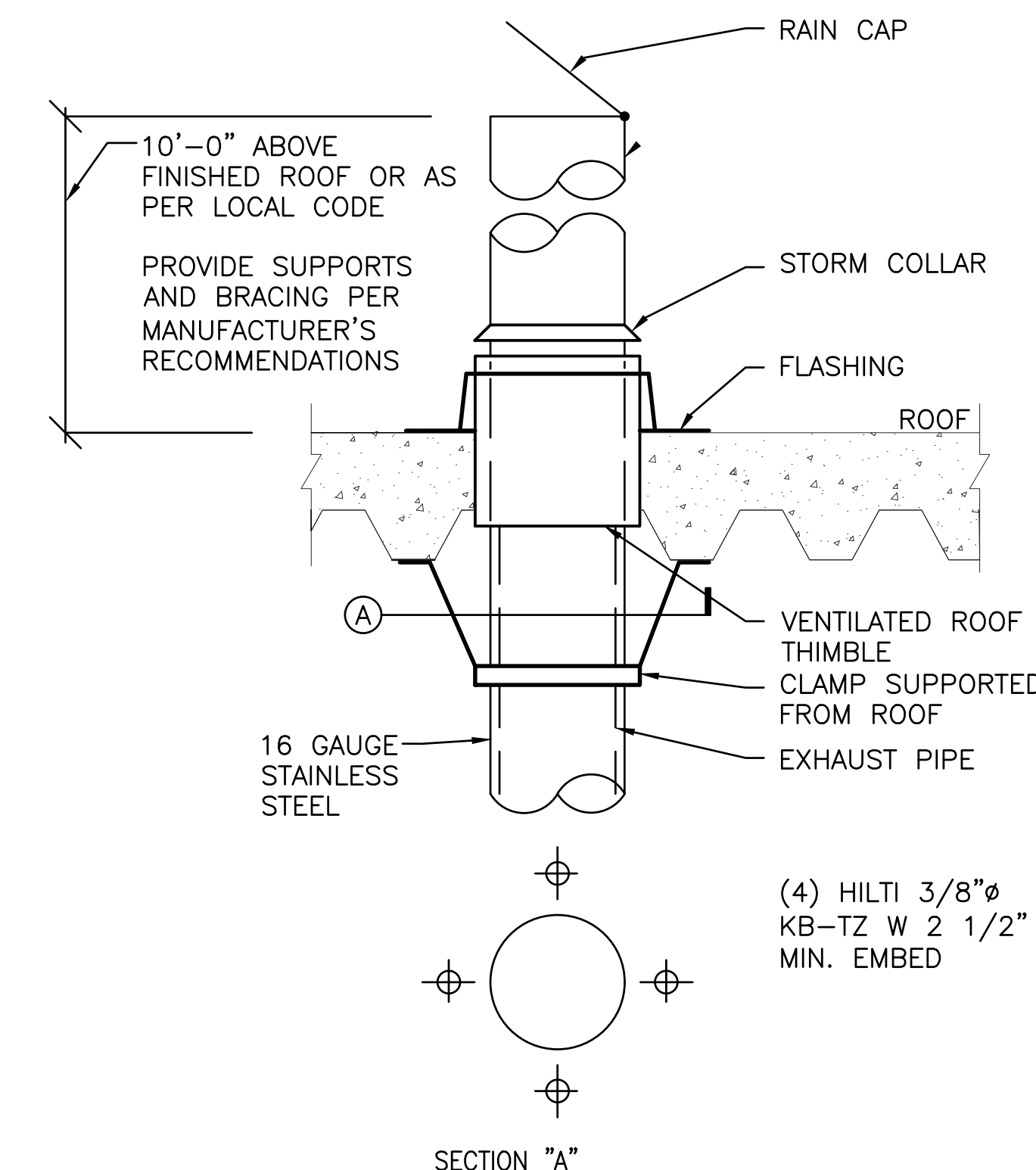
2 DEMOLITION FLOOR PLAN  
Scale: 1/4"=1'-0"

DEMOLITION NOTES

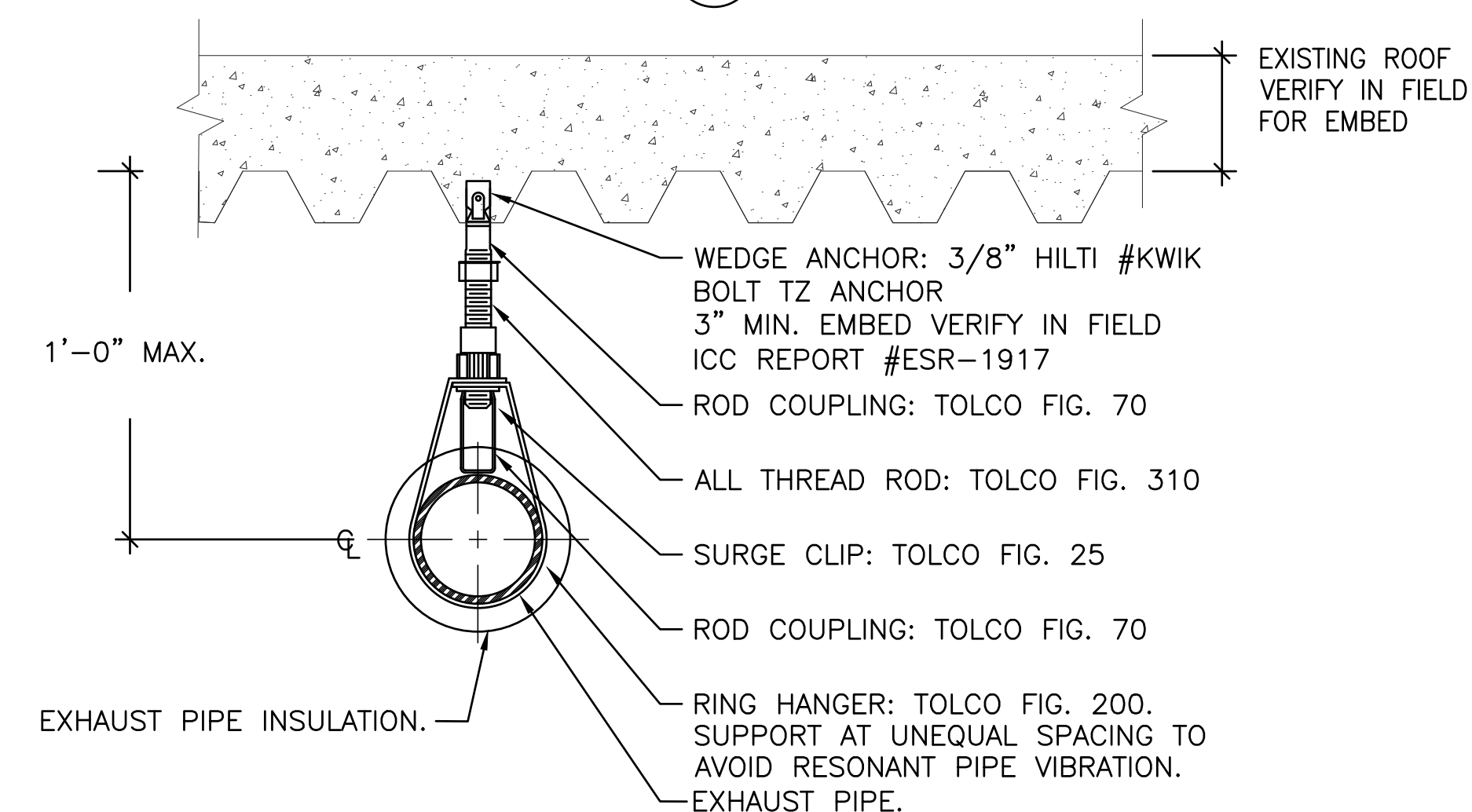
- A REMOVE EXISTING EXHAUST UP THRU ROOF. REPAIR ROOF TO BE WATER TIGHT PER ROOF MANUFACTURER'S RECOMMENDATIONS

GENERAL NOTES

1. REPAIR WALL SURFACE AFTER INSTALLATION AND INSPECTION OF EQUIPMENT, FIXTURES, CONDUIT AND PIPING, ETC. FINISH TO MATCH EXISTING SURROUNDINGS.
2. THERE SHALL BE NO SERVICE INTERRUPTION.
3. ALL PENETRATIONS SHALL BE WATER TIGHT.



1 EXHAUST PIPE  
SCALE: NONE

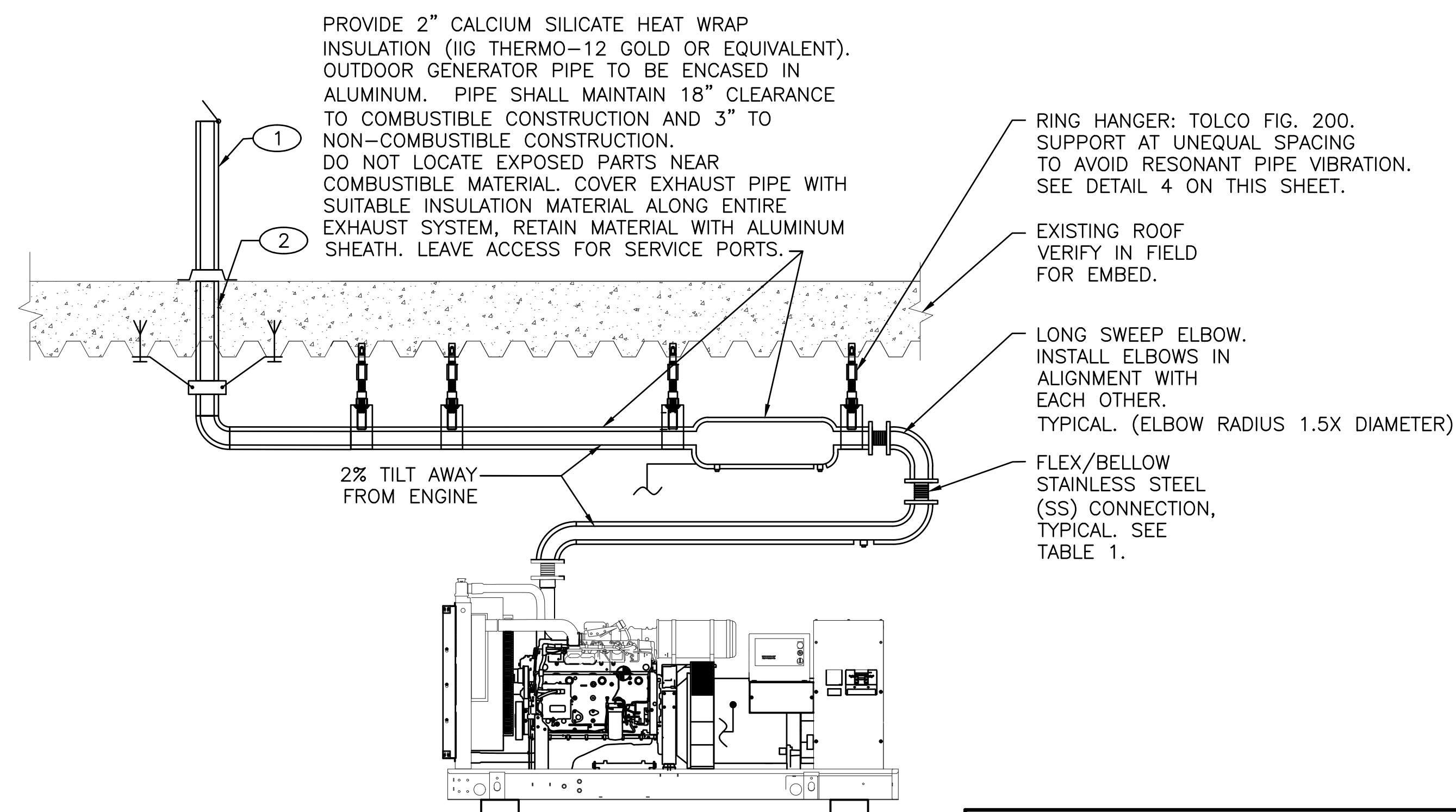


PIPE SIZE	ROD DIAMETER	BOLT LENGTH	MINIMUM EMBEDMENT
1" - 4"	3/8"	3-3/4"	2-1/4"
5" - 8"	1/2"	3-3/4"	2-1/4"

NOTE:

1. SEISMIC BRACING IS NOT REQUIRED. DISTANCE OF PIPES TO SUPPORTING STRUCTURE IS LESS THAN 12".
2. LOCATE (E) REINFORCEMENT BEFORE DRILLING HOLES. DO NOT CUT OR NICK (E) REINFORCEMENT

4 PIPE HANGER DIAGRAM  
SCALE: NONE



CONSTRUCTION KEY NOTES

- 1 NEW 5"Ø EXHAUST PIPE UP THRU ROOF. PROVIDE NEW WATER TIGHT ROOF PENETRATION PER ROOF MANUFACTURER'S REQUIREMENTS. EXTEND PIPE 10' MIN ABOVE ROOF.
- 2 REUSE EXISTING PENETRATION

INSTALLATION LIMITS OF BELLOWS (TABLE 1)

FLEX/BELLOW DIAMETER	MAX OFFSET BETWEEN FLANGES	MIN ACCEPTABLE CONVOLUTION GAP	MAX EXTENSION FROM FREE LENGTH
5" SS	0.04"	0.089"	0.08"
DO NOT ALLOW GAPS IN CONVOLUTIONS TO BE LESS THAN VALUE INDICATED IN PART. LOCATE ONE BELLOW AS CLOSE AS POSSIBLE TO TURBOCHARGER.			

5 GENERATOR EXHAUST INSTALLATION DIAGRAM  
SCALE: NONE



GENERAL NOTES

1.
- ALL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH 2013 CALIFORNIA PLUMBING CODE AND BE IN COMPLIANCE WITH MANUFACTURERS RECOMMENDATIONS.
2.
- THE CONTRACTOR IS REQUIRED BY THE CONTRACT DOCUMENTS TO BE FULLY FAMILIAR WITH ALL ASPECTS OF THE PROJECT THAT AFFECT THE INSTALLATION OF THE WORK, AND SUCH IS RESPONSIBLE FOR COORDINATING THAT WORK WITH THE WORK OF OTHERS AT THE SITE.
3.
- KEEP ALL PIPING CLEAR FROM LOAD BEARING FOOTINGS.
4.
- PROVIDE NECESSARY PROVISIONS FOR PIPE MOVEMENT WHERE PIPING EXPANSION JOINTS OCCUR.
5.
- CLEANOUTS SHALL BE INSTALLED PER LATEST CPC CODE.
6.
- THE CONTRACTOR WHEN NECESSARY MAY REQUEST INFORMATION CONCERNING THE DESIGN PROVIDED SUCH REQUEST IS DELIVERED IN A TIMELY FASHION THROUGH PROPER CHANNELS.
7.
- COORDINATE LOCATION AND SIZE OF ACCESS PANELS SO THEY WILL PROVIDE USEFUL ACCESS TO SERVICE SYSTEM COMPONENTS.
8.
- ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURERS RECOMMENDATIONS. PROVIDE ALL COMPONENTS REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
9.
- PROVIDE FLASHING AND/OR COUNTER FLASHING OF ALL EXTERIOR PENETRATIONS.
10.
- PIPES PASSING THRU FIRE RATED WALLS OR FLOORS SHALL BE SEALED ALL AROUND WITH FIRE RATED SEALANT.

EQUIPMENT SCHEDULE

EQUIPMENT NUMBER	EQUIPMENT	REMARKS
PST-1	PROPANE STORAGE TANK	50 GALLON LIQUID PROPANE STORAGE TANK WITH 90 MINUTE RUN TIME. WORTHINGTON (PART NUMBER 294590) 200# ASME WITH SERVICE VALVE, RELIEF VALVE, FILL VALVE, GAUGE, ETC.
NGPR-1	NATURAL GAS PRESSURE REGULATOR	FISHER MODEL #CS400 1-1/2" NATURAL GAS PRESSURE REGULATOR. ORIFICE 1/2 INCH, SPRING RANGE 7.5 TO 11 INCH W.C.
PGPR-1	PROPANE GAS PRESSURE REGULATOR	FISHER MODEL #299H 1-1/2" PROPANE GAS PRESSURE REGULATOR. PILOT SPRING RANGE 7 TO 20 INCH W.C., SPRING NUMBER 1N3112 AND SPRING COLOR SILVER.
LPV-1	LIQUID PROPANE VAPORIZER	PENGUIN LIQUID VAPORIZER CABINET MODEL #PE3-1-24-2

LEGEND

SYMBOL	ABBR.	DESCRIPTION
	V	VENT PIPING ABOVE GRADE
	LP	LIQUEFIED PROPANE VAPOR GAS PIPING ABOVE GRADE
	G	NATURAL GAS PIPING ABOVE GRADE
	D	DRAIN PIPING ABOVE GRADE
	EV	EXISTING VENT PIPING ABOVE GRADE
	ED	EXISTING DRAIN PIPING ABOVE GRADE
	EMPG	EXISTING MEDIUM PRESSURE GAS PIPING BELOW/ABOVE GRADE
	MPG	MEDIUM PRESSURE GAS PIPING BELOW/ABOVE GRADE
	-	DROP IN PIPE
	-	RISE IN PIPE
	-	DIRECTION OF FLOW
	U	UNION
	BV	BALL VALVE
	CV	CHECK VALVE
	POC	POINT OF CONNECTION
	-	SHUT-OFF COCK
	-	FLEXIBLE CONNECT
	AP	ACCESS PANEL
	CFH	CUBIC FOOT PER HOUR
	GPM	GALLONS PER MINUTE
	I.E.	INVERT ELEVATION
	TDL	TOTAL DEVELOPED LENGTH
	VTR	VENT THROUGH ROOF
	NG	NATURAL GAS

APPLICABLE STANDARDS

CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING PARTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR):

2013 CALIFORNIA BUILDING CODE (CBC), TITLE 24 C.C.R. (2012 INTERNATIONAL BUILDING CODE OF THE INTERNATIONAL CODE COUNCIL WITH 2013 CALIFORNIA AMENDMENTS).

2013 CALIFORNIA ELECTRICAL CODE (CEC), TITLE 24 C.C.R. (2012 NATIONAL ELECTRIC CODE OF THE NATIONAL FIRE PROTECTION ASSOCIATION, NFPA)

2013 CALIFORNIA MECHANICAL CODE (CMC), TITLE 24 C.C.R. (2012 UNIFORM MECHANICAL CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS IAPMO).

2013 CALIFORNIA PLUMBING CODE (CPC), TITLE 24 C.C.R. (2012 UNIFORM MECHANICAL CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS IAPMO).

2013 CALIFORNIA FIRE CODE (CFC), TITLE 24 (2012 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL).

PARTIAL LIST OF APPLICABLE STANDARDS:

2013 CALIFORNIA BUILDING CODE (FOR SFM) REFERENCED STANDARDS CHAPTER 35.

NFPA 30,	FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE	2013 EDITION
NFPA 37,	STANDARD FOR THE INSTALLATION AND USE OF STATIONARY COMBUSTION ENGINEERS AND GAS TURBINES	2013 EDITION
NFPA 54,	NATIONAL GAS CODE	2013 EDITION
NFPA 58,	STANDARD FOR THE STORAGE AND HANDLING OF LIQUEFIED PETROLEUM GASES	2013 EDITION
ANSI/UL 144,	PRESSURE REGULATING VALVES FOR LP GAS	2013 EDITION
AMERICAN GAS ASSOCIATION (AGA) CODES AND STANDARDS		CURRENT EDITION
LOCAL UTILITY COMPANY RULES AND REGULATIONS		CURRENT EDITION

PIPE AND FITTING MATERIALS

TYPE	MATERIAL	FITTINGS	LOCATION
GAS AND LP	SCHEDULE 40 BLACK STEEL	THREADED FITTINGS ANSI B16.3, BLACK MALLEABLE IRON150 LBS. OR ANSI B16.11 FORGED STEEL	ABOVE GRADE

SHEET INDEX

- P-1.1
- PLUMBING FRONT SHEET
- P-2.1
- PLUMBING PARKING LEVEL FLOOR PLAN
- P-2.2
- PLUMBING PENTHOUSE FLOOR PLAN
- P-3.1
- PLUMBING ENLARGED FLOOR PLANS
- P-4.1
- PLUMBING DETAILS
- P-4.2
- PLUMBING DETAILS



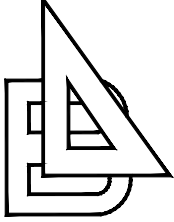
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JOB NO. 14-007.C2

STAMPS/SEALS



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SHEET TITLE:

PLUMBING  
FRONT SHEET

PROJECT NO.14-007.C2

PROJECT ARCH: D.M.

DRAWN:

CHECKED:

SHEET NUMBER

P-1.1

DATE:

SHEET:

OF:





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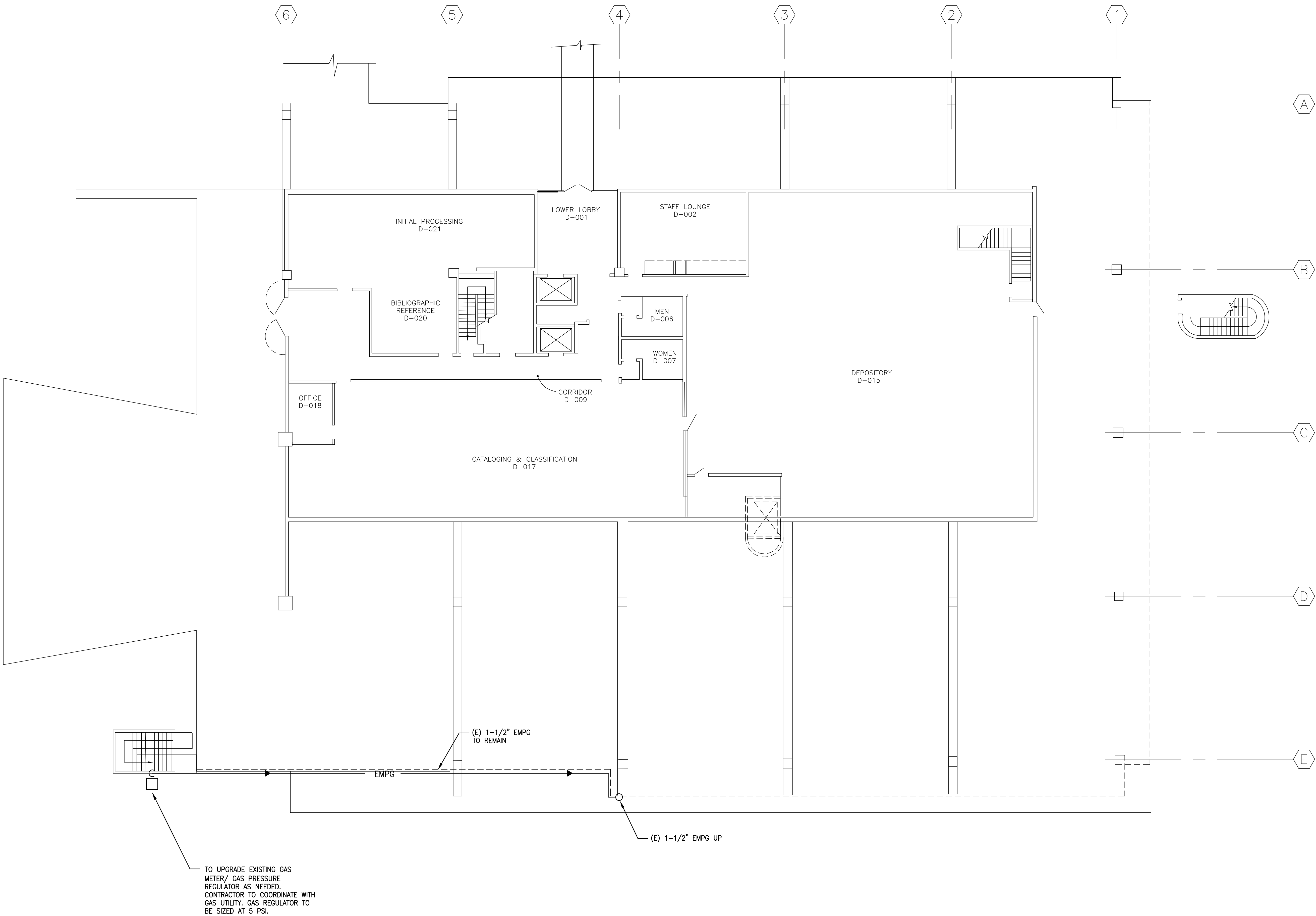
STAMPS/SEALS



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SHEET TITLE:  
**PLUMBING  
PARKING LEVEL  
FLOOR PLAN**

PROJECT NO. 14-007.C2	PROJECT ARCH: D.M.
DRAWN:	CHECKED:
SHEET NUMBER	
<b>P-2.1</b>	
DATE:	SHEET: OF:



**1 PARKING LEVEL FLOOR PLAN**  
Scale: 3/32"=1'-0"





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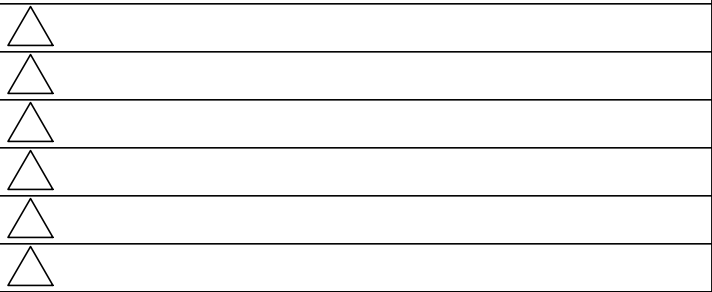
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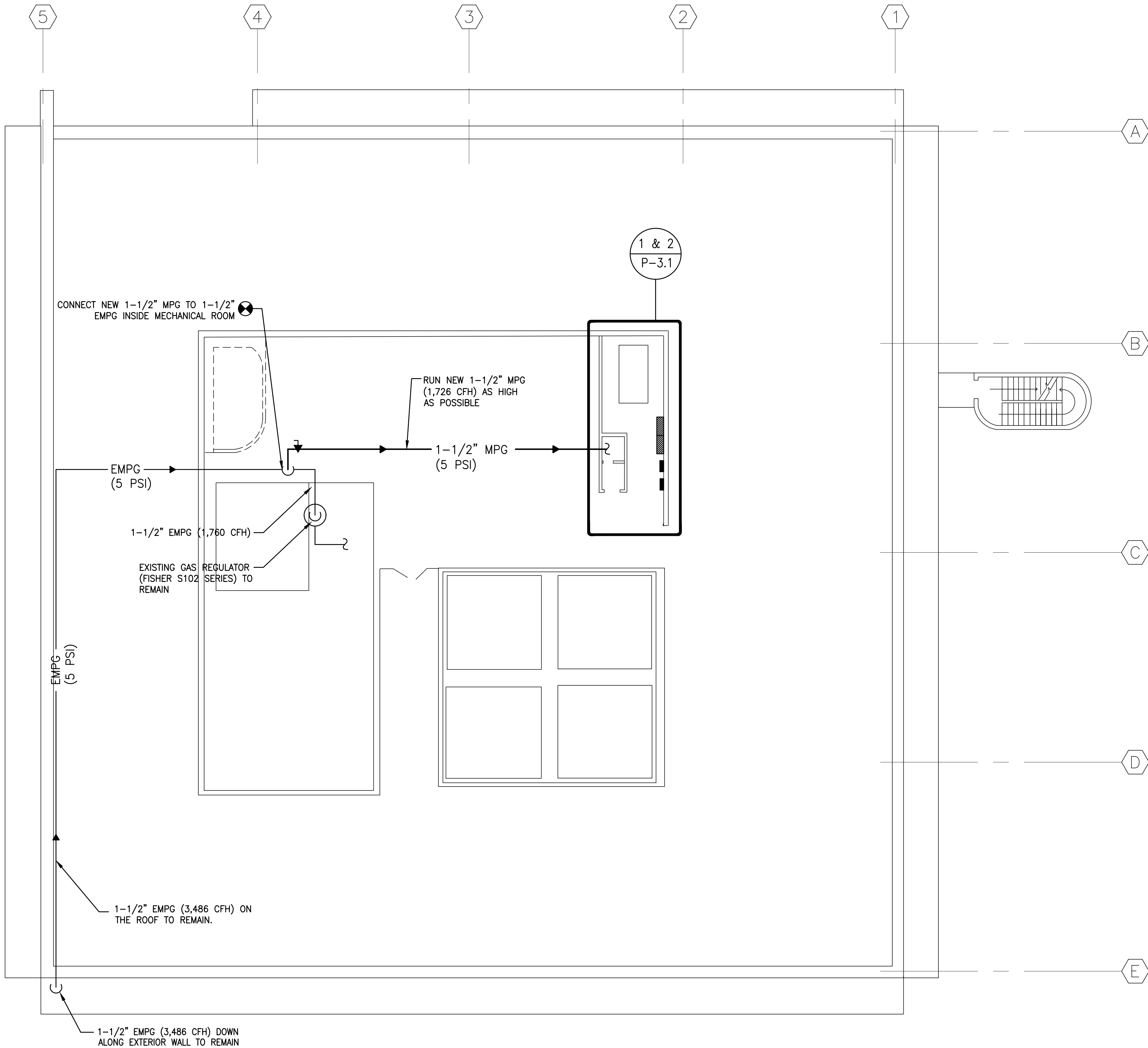
JOB NO. 14-007.C2

STAMPS/SEALS



SHEET TITLE:  
**PLUMBING  
PENTHOUSE  
FLOOR PLAN**

PROJECT NO. 14-007.C2 PROJECT ARCH: D.M.  
DRAWN: CHECKED:  
SHEET NUMBER  
**P-2.2**  
DATE: SHEET: OF:



MEDIUM PRESSURE GAS SIZING CHART	
175' TDL @ 5 PSI	
PIPE	MAX. CFH
1/2"	728
3/4"	1470
1"	2690
1-1/4"	5520
1-1/2"	8270
2"	15900

**1 PENTHOUSE FLOOR PLAN**  
Scale: 3/32"=1'-0"





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JOB NO. 14-007.C2

STAMPS/SEALS



SHEET TITLE:

PLUMBING  
ENLARGED  
FLOOR PLANS

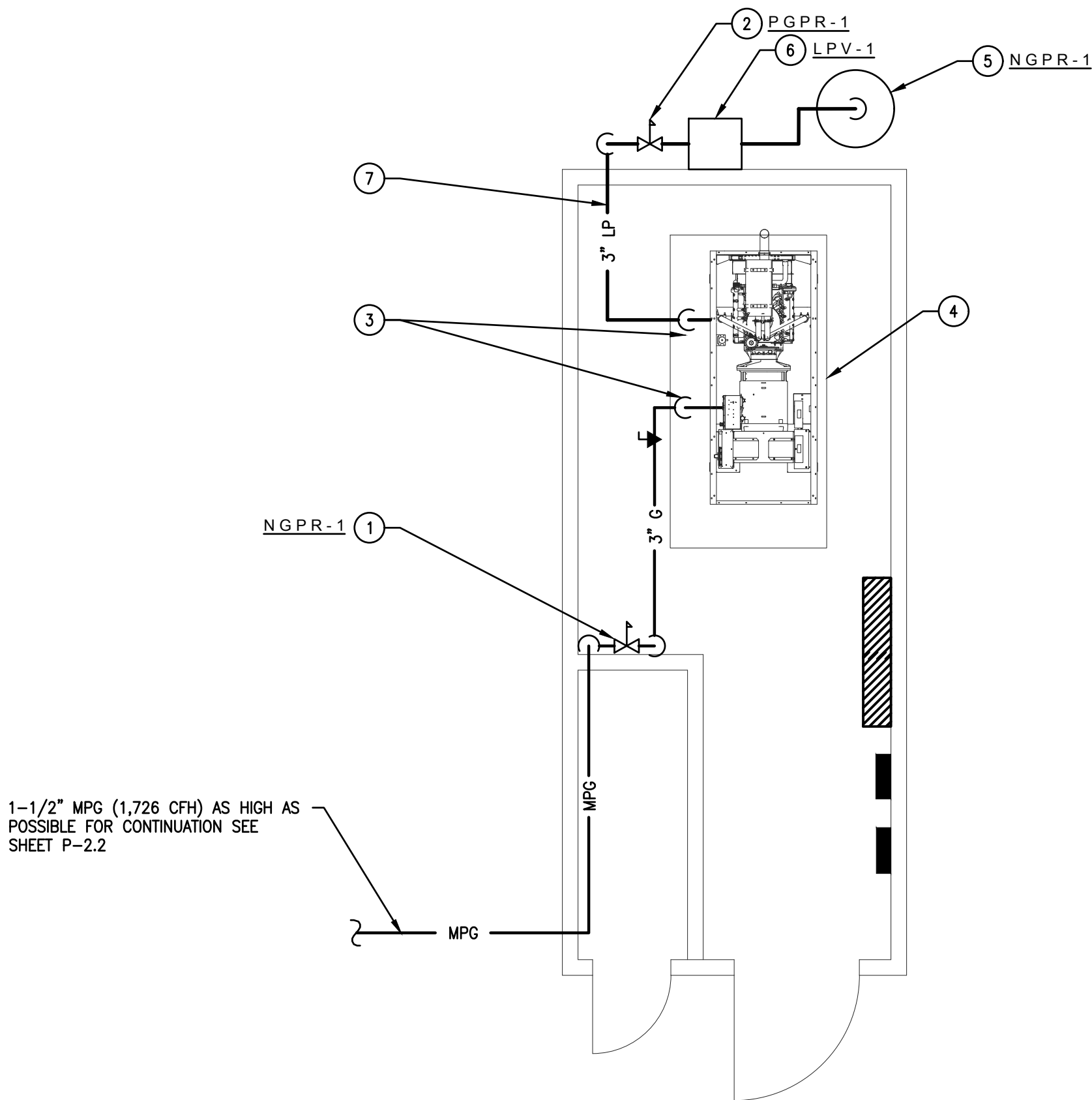
PROJECT NO. 14-007.C2 PROJECT ARCH: D.M.

DRAWN: CHECKED:

SHEET NUMBER

P-3.1

DATE: SHEET: OF:



LOW PRESSURE NATURAL GAS SIZING CHART	
20' TDL @ 11" W.C.	
PIPE	MAX. CFH
1/2"	118
3/4"	247
1"	466
1-1/4"	927
1-1/2"	1430
2"	2760

NOTES

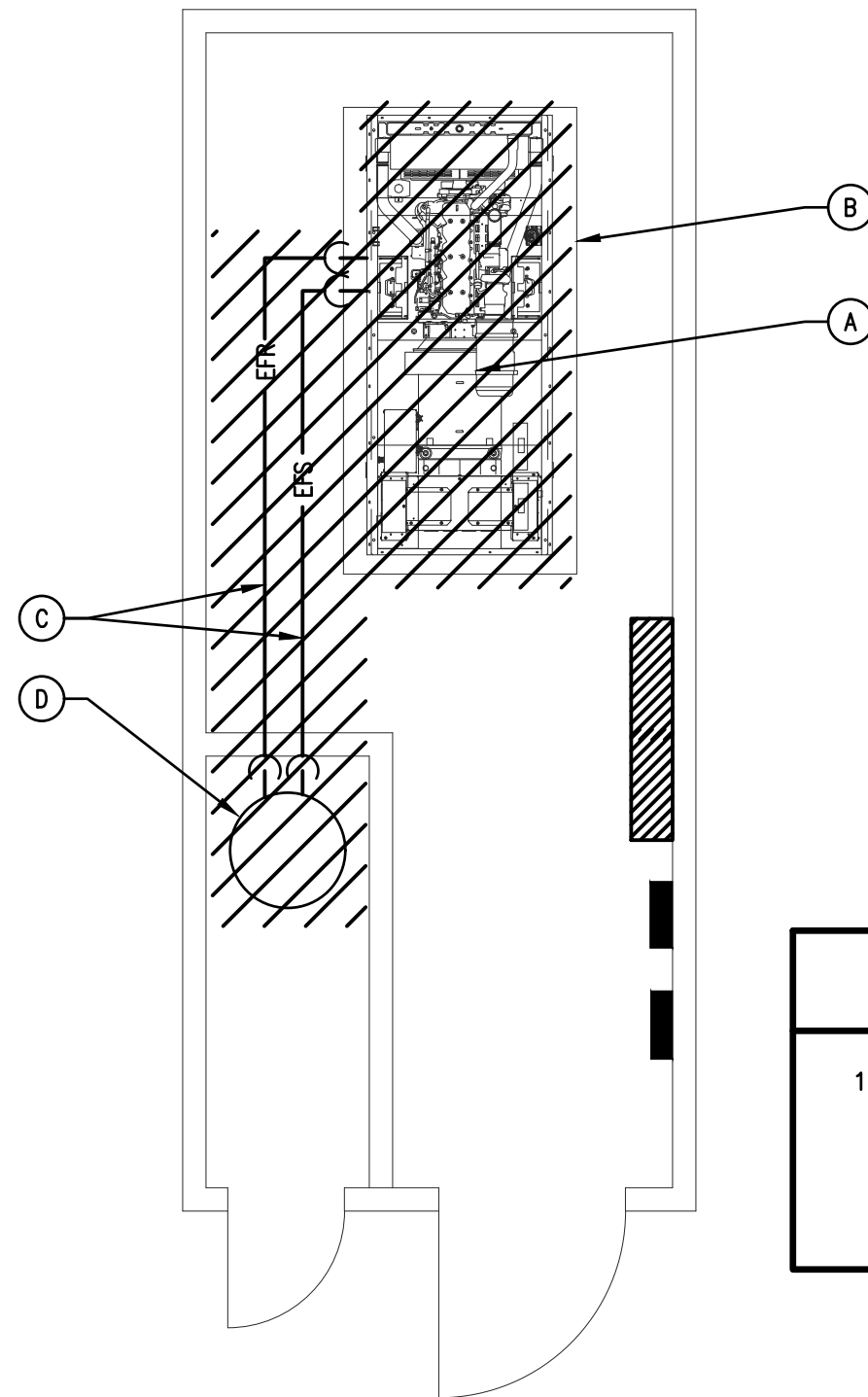
1. SEE DETAIL #1/P-1.1 FOR LIQUID PROPANE STORAGE TANK AND PIPING COMPONENTS.

CONSTRUCTION NOTES

1. SET NGPR-1 AT 11" W.C. DELIVERY PRESSURE. RUN FULL SIZE RELIEF VENT FROM GPR-1 THROUGH ROOF AND TERMINATE WITH DOWN TURN ELBOW AND INSECT SCREEN.
2. PGPR-1, PROPANE GAS REGULATOR. SET AT 11" W.C. PRESSURE DELIVERY.
3. PROVIDE SHUT-OFF VALVE, DIRT LEG AND CONNECT TO GENERATOR WITH FACTORY PROVIDED FLEXIBLE CONNECTOR.
4. DUAL FUEL OPERATED EMERGENCY GENERATOR. SEE ELECTRICAL DRAWINGS FOR DETAILS.
5. PST-1 50 GALLON PROPANE STORAGE TANK.
6. LPV-1 LIQUID PROPANE VAPORIZER.
7. 3" PROPANE GAS HEADER. PROVIDE MINIMUM 15'-0" HORIZONTAL LENGTH HEADER.

2 CONSTRUCTION FLOOR PLAN (PENTHOUSE)

Scale: 1/4"=1'-0"



NOTES

1. SEAL ALL UNUSED EXISTING WALL/FLOOR PENETRATIONS TO MATCH EXISTING STRUCTURE.

DEMOLITION NOTES

- A. REMOVE EXISTING 150 KW GENERATOR ASSEMBLY WITH ALL RELATED ACCESSORIES. DISCONNECT, IDENTIFY AND PROTECT EXISTING BATTERY CHARGER, HEAT BLOCK AND STARTER CIRCUITS AND CONDUITS FOR RECONNECTION TO NEW GENERATOR ASSEMBLY. REMOVE EXISTING FEEDING CONDUCTORS REMOVE EXISTING FLUE UP THRU ROOF. REPAIR ROOF TO BE WATER TIGHT PER ROOF MANUFACTURER'S RECOMMENDATIONS
  - B. EXISTING CONCRETE PAD TO REMAIN
  - C. REMOVE ALL EXISTING 1/2" FUEL SUPPLY AND RETURN PIPING
  - D. REMOVE EXISTING 200 GALLON DIESEL STORAGE TANK ASSEMBLY AND ALL RELATED ACCESSORIES.
- NOTE: SEAL ALL UNUSED EXISTING WALL/FLOOR PENETRATIONS TO MATCH EXISTING STRUCTURE.

1 DEMOLITION FLOOR PLAN (PENTHOUSE)

Scale: 1/4"=1'-0"





CITY OF INGLEWOOD  
CIVIC CENTER  
COMPLEX

ONE MANCHESTER BOULEVARD  
INGLEWOOD, CALIFORNIA 90301

PROJECT TITLE

LIBRARY  
EMERGENCY  
GENERATOR  
SCAQMD  
COMPLIANCE

CONSULTANT

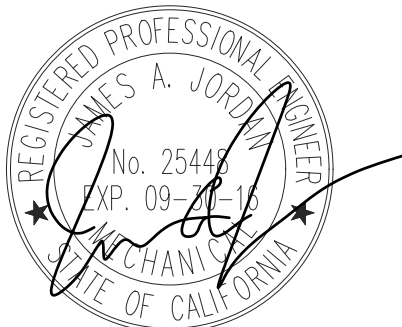


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JOB NO. 14-007.C2

STAMPS/SEALS



SHEET TITLE:

PLUMBING  
DETAILS

PROJECT NO. 14-007.C2

PROJECT ARCH: D.M.

DRAWN:

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SHEET NUMBER

P-4.1

DATE:

SHEET:

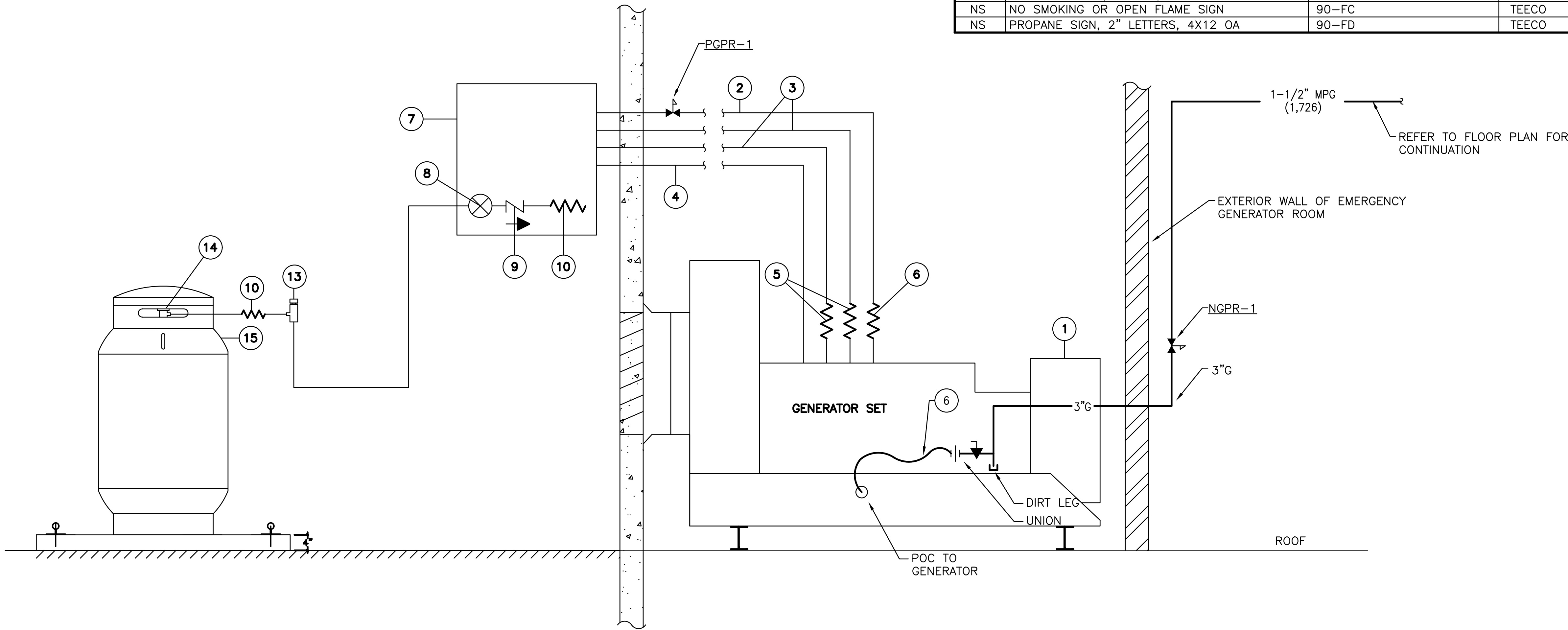
OF:

GENERAL NOTES

1. ALL PLUMBING VENTS AND/OR INTAKES WITHIN 25' RADIUS SHALL BE AT LEAST 4'-0" HIGHER THAN THE TOP OF THE TANK.
2. INSTALLATION TO CONFORM TO STATE OF CALIFORNIA DIVISION OF OCCUPATIONAL SAFETY AND HEALTH TITLE 8, UNFIRED PRESSURE VESSELS SAFETY ORDERS AND NFPA 37 AND 58.

MATERIALS LIST

ITEM	DESCRIPTION	PART NUMBER	MANUFACTURER
1	GENERATOR	MODEL SG 150	GENERAC
2	LP VAPOR FUEL PIPE, BLACK IRON	2" SCH 40	-
3	LP VAPORIZER WATER PIPING	-	-
4	FUEL SOLENOID WIRING	1/2" EMT W/ 2-#14 THHN	-
5	WATER FLEX CONNECTORS (2)	-	-
	FLEX CLAMP (8)	-	-
	FLEX ADAPTER	-	-
6	FUEL FLEX CONNECTOR, 2X18 LPG	-	GENERAC
7	LPG VAPORIZER CABINET	PE3-1-24-2	PENGUIN
8	LPG SHUTOFF W/ HYDROSTATIC RELIEF	7705P W/ 3127H	REGO
9	EXCESS FLOW VALVE	12472	REGO
10	FLEX CONNECTOR	FC321-06	AEROQUIP
	FLEX FITTING	190299-6S	AEROQUIP
	FLEX FITTING	4401-6S	AEROQUIP
11	FUEL PIPING, 3/4" BELOW GROUND	ASTM A-53 GRADE B	-
12	NOT IN USE	-	-
13	HYDROSTATIC RELIEF VALVE	3127J	REGO
14	TANK VALVE W/ HYDROSTATIC RELIEF	9101P6H W/ 3127J	REGO
15	LPG TANK	-	-
NS	UN CODE 10-1/2x10-1/2 DIAMOND SIGN	90-FZ-1	TEECO
NS	NO SMOKING OR OPEN FLAME SIGN	90-FC	TEECO
NS	PROPANE SIGN, 2" LETTERS, 4X12 OA	90-FD	TEECO

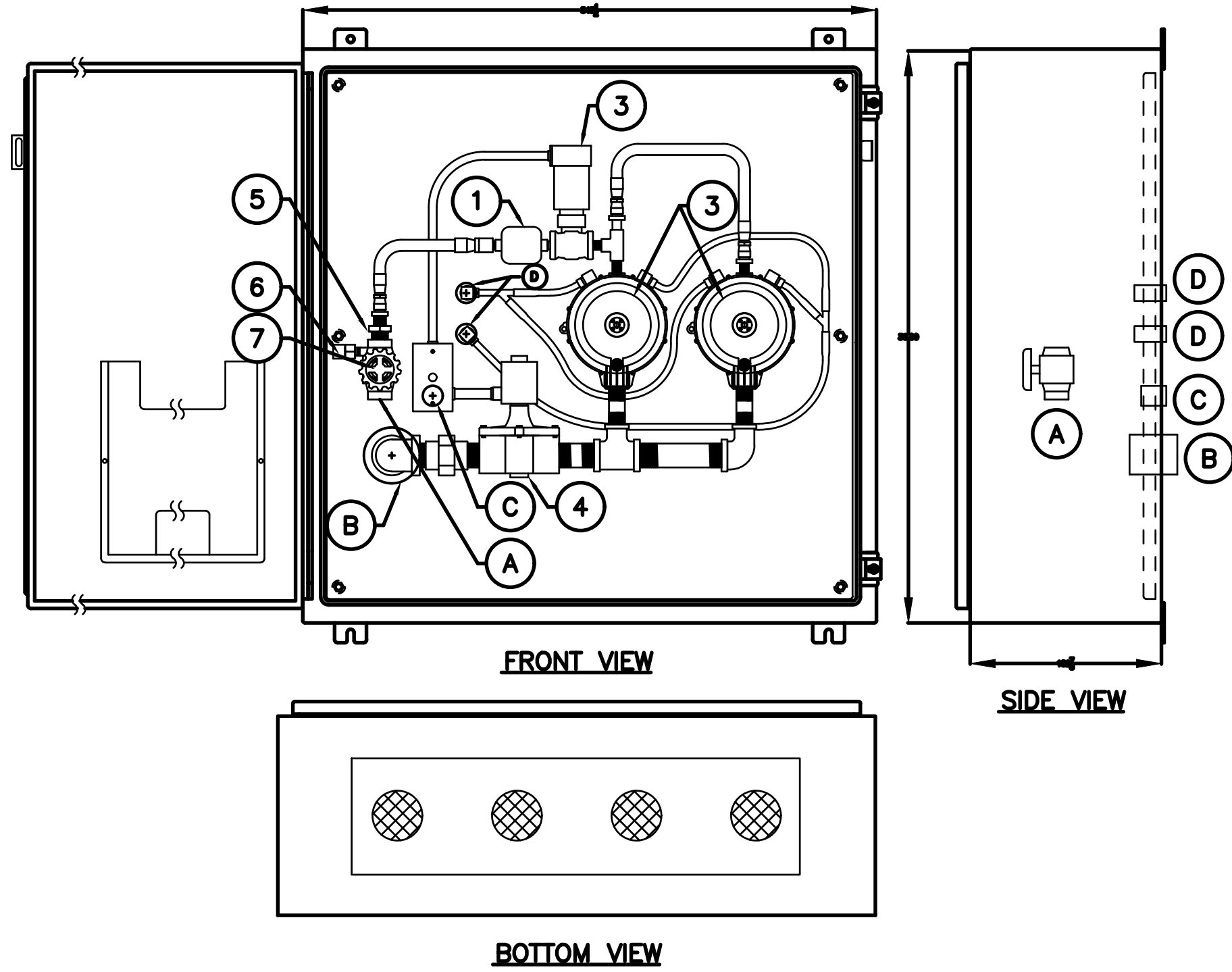


NOTE:  
RISER DIAGRAM AMY NOT SHOW ALL OFFSETS  
NECESSARY FOR A FULL FUNCTIONING SYSTEM

3 GAS RISER DIAGRAM  
Scale: 1/4"=1'-0"



MATERIALS LIST				
ITEM	PART NUMBER	QTY	DESCRIPTION	MANUFACTURER
1	408A2F2M	1	LP GAS FILTER	TEECO
2	B-4000	1	LIQUID SOLENOID VALVE, 1/4", 24VDC	ATKOMATIC
3	PE	2	VAPORIZER	IMPCO
4	8215B70	1	VAPOR SOLENOID VALVE, 1 1/2", 24VDC	ASCO
5	12472	1	EXCESS FLOW VALVE	RECO
6	3127H	1	RELIEF VALVE	REGO
7	7705P	1	VALVE	REGO



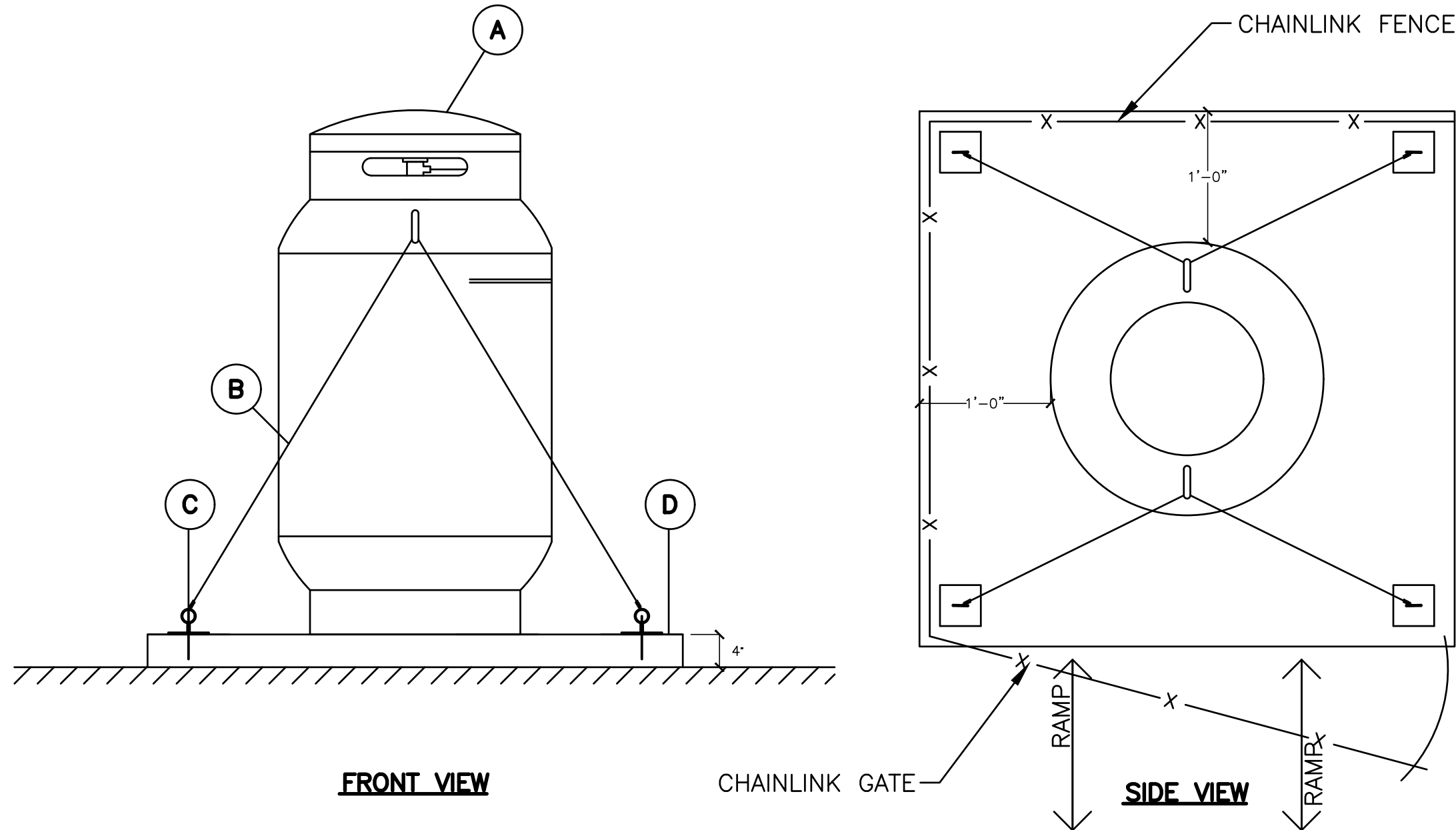
### GENERAL NOTES

1. VERIFY PIPING LOCATIONS IN FIELD
2. LOCATE TOP OF VAPORIZER 3" OR 6" BELOW TOP OF RADIATOR (COORDINATE WITH GENERATOR MFR.)
3. LPG SHUTOFF VALVE SHIPPED UNMOUNTED FOR INSTALLATION ON LPG SUPPLY LINE

### CONNECTION LEGEND

- (A) LPG INLET, 3/4" FNPT
- (B) LPG VAPOR OUTLET, 2" FNPT
- (C) 24 VDC CONTROL, 1/2" GRS COUPLING
- (D) JACKET WATER, 3/8" FNPT

2 LIQUID PROPANE VAPORIZER DETAIL  
Scale: 1/4"=1'-0"



### GENERAL NOTES

1. ALL PLUMBING VENTS AND/OR INTAKES WITHIN 25' RADIUS SHALL BE AT LEAST 4'-0" HIGHER THAN THE TOP OF THE TANK.
2. INSTALLATION TO CONFORM TO STATE OF CALIFORNIA DIVISION OF OCCUPATIONAL SAFETY AND HEALTH TITLE 8, UNFIRED PRESSURE VESSELS SAFETY ORDERS AND NFPA 37 AND 58.

### LEGEND

- (A) 50 GALLON LIQUID PROPANE TANK
- (B) 1/4" COATED STEEL CABLE
- (C) EYEBOLTS W/ICBO DROP IN ANCHORS
- (D) 4" CONCRETE PAD

1 PROPANE TANK LAYOUT & SEISMIC BRACING DETAIL  
Scale: 1/4"=1'-0"



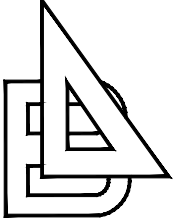
### CITY OF INGLEWOOD CIVIC CENTER COMPLEX

ONE MANCHESTER BOULEVARD  
INGLEWOOD, CALIFORNIA 90301

PROJECT TITLE

### LIBRARY EMERGENCY GENERATOR SCAQMD COMPLIANCE

CONSULTANT

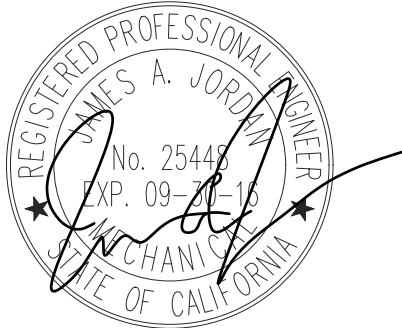
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JOB NO. 14-007.C2

STAMPS/SEALS



SHEET TITLE:

### PLUMBING DETAILS

PROJECT NO.14-007.C2	PROJECT ARCH: D.M.
DRAWN:	CHECKED:
SHEET NUMBER	
P-4.2	
DATE:	SHEET: OF:



## GENERAL NOTES

1. CONSULT WITH THE OWNER AND ARCHITECT BEFORE STARTING WORK.
2. NO CONDUITS ARE TO BE INSTALLED ON ARCADES OR ROOF U.O.N. ALL EXPOSED CONDUITS, SUPPORTS AND JUNCTION BOXES SHALL BE PAINTED TO MATCH THE PREDOMINANT COLOR OF THE BUILDING, AS APPROVED BY ARCHITECT AND ENGINEER OF RECORD.
3. COORDINATE THE ELECTRICAL WORK WITH THE WORK OF OTHER TRADES.
4. THE CONTRACTOR SHALL USE SUFFICIENT BARRICADES AND TEMPORARY PROTECTION DEVICES TO PREVENT PEDESTRIANS OR NON-AUTHORIZED PERSONNEL ACCESS TO ANY OPEN TRENCHES OR CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL ERECT A SAFETY BARRICADE AT ALL OPEN TRENCHES, DITCHES, PITS, SUMPS, ETC FOR THE PROTECTION AND SAFETY OF THE PUBLIC. ALL TRENCHES OUTSIDE OF THE BARRICADE LIMITS SHALL BE BACKFILLED AND PAVED NOT LATER THAN 72 HOURS AFTER BEING OPENED. DURING THE TIME THE TRENCHES ARE OPEN IN TRAFFIC AREAS, THE CONTRACTOR SHALL PROVIDE TRAFFIC PLATES, SAFETY BARRICADES SHALL BE PANELIZED CHAIN LINK FENCE. EACH FENCE PANEL SHALL BE 6FT TALL X 10FT WIDE WITH STAND AND TIED TOGETHER END TO END WITH A MINIMUM 8-GAUGE WIRE. NO TRENCHES SHALL BE LOCATED OUTSIDE BARRICADES.
5. WHERE STRUCTURAL WALLS ARE CORED FOR NEW CONDUIT RUNS, SEPARATION BETWEEN CORED HOLES SHALL BE THREE INCHES FROM NEW HOLES, UNLESS DIRECTED OTHERWISE BY THE ARCHITECT AND APPROVED BY OSHPD FIELD ENGINEER. ALL SAW CUTS OF EXISTING STRUCTURAL MEMBERS SHALL BE APPROVED BY ARCHITECT AND OSHPD FIELD ENGINEER.
6. THE REPRESENTATION OF PHYSICAL PLACEMENT OF EXISTING UNDERGROUND CONDUITS HAS BEEN DEVELOPED FROM THE BEST INFORMATION AVAILABLE TO THE OWNER AT THE TIME THE DRAWINGS WERE PREPARED. THE ENGINEER PROVIDES THIS ONLY AS A GENERAL GUIDELINE FOR THE CONVENIENCE OF BIDDERS/CONTRACTORS AND DOES NOT PROVIDE A GUARANTEE OR WARRANTY IN ANY WAY EXPRESS OR IMPLIED, AS TO THE ACCURACY OF THESE REPRESENTATIONS. NOTHING IN THIS DISCLAIMER AFFECTS IN ANY WAY THE DUTY OF THE CONTRACTOR TO PROTECT THE EXISTING INSTALLATION AND TO FURNISH ACCURATE "AS BUILT" DRAWINGS AFTER THE COMPLETION OF THE CONTRACT.
7. ALL FEEDERS AND BRANCH CIRCUITS SHALL CARRY A GROUND WIRE, SIZED AS PER N.E.C. ARTICLE 250 AND BONDED TO THE METALLIC COMPONENTS OF THE RACEWAY SYSTEM.
8. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND EQUIPMENT AND MATERIAL APPROVED FOR USE UNDER THIS CONTRACT.
9. PRIOR TO PULLING ANY CONDUCTORS, CLEAN AND MANDREL ALL CONDUITS.
10. CONTRACTOR SHALL INSTALL EQUIPMENT PER ADA (AMERICAN DISABILITIES ACT) REQUIREMENTS.
11. EXTERIOR EQUIPMENT, JUNCTION BOXES, ENCLOSURES AND CONNECTIONS SHALL BE WEATHERPROOF TYPE SUITABLE FOR EXTERIOR INSTALLATION.
12. COORDINATION:
 

A. IN THE EVENT THAT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN ON THE CONSTRUCTION DOCUMENTS, THE FEATURES SHALL BE OF THE SAME CHARACTER AS SIMILAR CONDITIONS THAT ARE SHOWN.
14. ALL DIMENSIONS, ELEVATIONS AND EXISTING CONDUITS SHALL BE ON THE SITE BY GENERAL CONTRACTOR, AND EACH SUB-CONTRACTOR BEFORE THE WORK BEGINS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION BEFORE CONSTRUCTION BEGINS.
15. THE ENGINEER HAS PREPARED THESE DOCUMENTS ONLY FOR IMPROVEMENTS SPECIFIED, DETAILED OR SHOWN AS NEW WORK, AND ASSUMES NO RESPONSIBILITY FOR OTHER CONSTRUCTION, MATERIAL OR EQUIPMENT NOTED AS "PROVIDED BY OTHERS".
16. DEMOLITION AND/OR REMOVAL OF ELECTRICAL EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. ALL REMOVED EQUIPMENT NOT TO BE REUSED SHALL BE RETURNED TO OWNER'S OR AS DIRECTED BY THE OWNER'S INSPECTOR.
17. ALL JUNCTION BOX COVER PLATES FOR BRANCH CIRCUIT SYSTEM SHALL BE CLEARLY MARKED WITH PERMANENT INK FELT PEN IDENTIFYING THE BRANCH CIRCUIT (BOTH PANEL NUMBER AND CIRCUIT NUMBER) CONTAINED IN THE BOX.
18. THE CONTRACTOR SHALL MAINTAIN THE UNIFORMITY AND CONTINUITY OF THE GROUNDING SYSTEM IN ALL CONDUITS/RACEWAYS.
19. TEST THE ENTIRE SYSTEM TO DEMONSTRATE TO THE ENGINEER THAT THE ELECTRICAL COMPONENTS AND SPECIAL SYSTEMS ARE COMPLETE AND FUNCTION PROPERLY. MAKE NECESSARY CORRECTIONS AND LEAVE SYSTEMS READY FOR OPERATION.
20. EXPOSED CONDUITS SHALL BE INSTALLED ALONG MECHANICAL PIPES. INSIDE BUILDING THE EXPOSED CONDUITS UP TO 7'-0" SHALL BE RIGID STEEL AND ABOVE 7'-0" MAY BE EMT. ALL EXPOSED EXTERIOR CONDUITS SHALL BE GALVANIZED RIGID CONDUITS. THREADED CONNECTORS & COUPLINGS SHALL NOT BE USED FOR RIGID CONDUIT. CONDUIT LARGER THAN 1 1/4" SHALL BE GALVANIZED RIGID CONDUIT. ALL EXPOSED CONDUITS, RACEWAYS, AND BOXES SHALL BE PAINTED TO MATCH THE SURFACE WHERE INSTALLED. DO NOT PAINT THE WIREMOLD.
21. DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND THE SIZE AND LOCATION OF EQUIPMENT IS INDICATED TO SCALE WHENEVER POSSIBLE. COORDINATE LOCATION AND LAYOUT WITH OTHER WORK. CONTRACTOR SHALL PROVIDE TO THE ENGINEER A 1/8"=1'-0" SCALED DRAWING OF ELECTRICAL EQUIPMENT ROOMS SHOWING LOCATION AND CLEARANCES OF SUBMITTED EQUIPMENT FOR REVIEW AND APPROVAL PRIOR TO ORDERING OF ELECTRICAL EQUIPMENT.
22. THE SEISMIC BRACING AND ANCHORAGE OF ELECTRICAL CONDUITS AND WIREWAY SHALL BE IN ACCORDANCE WITH THE "GUIDELINE FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING PIPING SYSTEMS", PUBLISHED BY SMACNA AND PPIC. COPY OF THE "GUIDELINE FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING PIPING SYSTEMS", SHALL BE APPROVED BY STRUCTURAL ENGINEER PRIOR TO INSTALLATION.
23. PROVIDE HANGERS, SUPPORTS, SEISMIC RESTRAINTS AND/OR BRACING FOR ALL EQUIPMENT, CONDUIT, AND LIGHTING FIXTURES TO SUSTAIN VERTICAL LOADS AND RESIST HORIZONTAL FORCES IN ANY DIRECTION TO COMPLY WITH 2007 EDITION OF TITLE 24, PART 2, CALIFORNIA BUILDING CODE, CHAPTER 16, TABLE 16A AND ASSOCIATED NOTES.
24. PER CEC 300-21, "OPENINGS AROUND ELECTRICAL PENETRATIONS THROUGH FIRE-RESISTANT-RATED WALLS, PARTITIONS, FLOORS, CEILINGS SHALL BE FIRESTOPPED USING APPROVED METHODS TO MAINTAIN THE FIRE RESISTANCE RATING."
25. ALL CONDUCTORS FOR FEEDERS AND BRANCH CIRCUITS SHALL BE COPPER, TYPE THWN/THHN, RATED FOR 75°C. SIZES #12 AWG MAY BE SOLID OR STRANDED, #10 AND LARGER SHALL BE STRANDED. PROVIDE 75°C RATED AND APPROVED TERMINATION FOR ALL CONDUCTORS.
26. ALL ELECTRICAL WORK SHALL BE PER THE APPLICABLE CEC CODE. CONTRACTOR SHALL INCLUDE IN HIS BID ALL REQUIRED LABOR, MATERIAL, EXPERTISE AND QUALIFIED PERSONNEL TO COMPLETELY INSTALL IN A CODE COMPLIANT MANNER, ALL WORK SHOWN ON THE PLANS OR REFERRED TO IN THE SPECIFICATIONS.
27. WHEN THERE ARE DISCREPANCIES BETWEEN CONTRACT DOCUMENTS (DRAWINGS AND/OR SPECIFICATIONS), OBTAIN CLARIFICATION FROM THE ENGINEER PRIOR TO BID. FOR BIDDING PURPOSES THE MORE STRINGENT OR MORE EXPENSIVE REQUIREMENT(S) SHALL APPLY.
28. DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN A DAILY RECORD OF ALL DEVIATIONS FROM THE BID DRAWINGS. ALL DIMENSIONS AND OTHER INFORMATION NECESSARY TO COMPLETELY EXPLAIN AND LOCATE ALL ELEMENTS OF THESE DEVIATIONS SHALL BE RECORDED. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL SUBMIT TO THE OWNER, ONE COMPLETE SET OF REPRODUCIBLE DRAWINGS CORRECTED TO REFLECT "AS-BUILT" CONDITIONS OF THE WORK.
29. ANY SUBMITTALS FOR EQUIPMENT DIFFERENT FROM THE SPECIFIED ITEMS SHOWN ON THE PLANS SHALL BE ACCOMPANIED BY CUT SHEETS FOR THE ORIGINAL SPECIFIED ITEM(S). SUBMITTALS WITHOUT THE SPECIFIED CUT SHEETS WILL BE REJECTED AS INCOMPLETE.
30. "PROVIDE" SHALL BE DEFINED AS: FURNISH AND INSTALL.
31. ALL MATERIALS, EQUIPMENT, CONDUIT AND WIRING SHALL BE NEW AND PROVIDED BY THE CONTRACTOR. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR EQUIPMENT AND MATERIAL APPROVED FOR USE UNDER THIS CONTRACT.
32. WIRING FOR ALL LOW VOLTAGE SYSTEMS SHALL BE ENCLOSED IN CONDUIT AND/OR RACEWAY.
33. ALL DIMENSIONS AND ELEVATIONS SHALL BE CHECKED AND VERIFIED ON THE SITE BY THE GENERAL CONTRACTOR AND EACH SUBCONTRACTOR BEFORE THE WORK BEGINS. ALL PERCEIVED ERRORS, OMISSIONS AND DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION BEFORE CONSTRUCTION BEGINS.
34. ALL RACEWAYS INSIDE OF BUILDING SHALL BE CONCEALED. INCLUDE ALL REQUIRED DEMOLITION, CUTTING, PATCHING AND FINISH TO MATCH EXISTING INSTALLATION AS REQUIRED TO INSTALL NEW CONDUIT AND RACEWAYS IN EXISTING BUILDING.
35. ALL CONDUIT PENETRATIONS THROUGH FIRE-RATED FLOOR SLABS, SHAFTS AND WALLS SHALL BE SEALED AGAINST THE SPREAD OF FIRE OR SMOKE WITH APPROVED CABLE & CONDUIT FIRE STOPS OR FIRE RESISTANT SEALANT TO GIVE THE EQUIVALENT FIRE RATING OF THE STRUCTURE BEFORE THE PENETRATION. ALL OTHER NON-RATED PENETRATIONS OF STRUCTURES SHALL BE SEALED.
36. EXPOSED AND CONDUITS ABOVE T-BAR CEILINGS SHALL BE INSTALLED PARALLEL TO OR AT RIGHT ANGLES TO EXISTING BEAMS OR WALLS. EXPOSED CONDUITS UP TO 7'-0" ABOVE FINISH FLOOR SHALL BE RIGID GALVANIZED STEEL AND ABOVE 7'-0" MAY BE EMT.
37. PROVIDE ELECTRICAL PANELS WITH TYPEWRITTEN "AS-BUILT" PANEL SCHEDULE. PANEL SCHEDULE SHALL INCLUDE LOCATION, QUANTITY AND TYPE OF DEVICES SERVED.
38. PROVIDE ELECTRICAL PANELS WITH ENGRAVED NAMEPLATE ON OUTSIDE OF PANEL ABOVE DOOR OPENING.
39. SUPPORT CONDUIT 2-1/2 INCH TRADE SIZE OR SMALLER WITH U.L. LISTED CLAMPS AND HANGERS IN ACCORDANCE WITH SMACNA STANDARDS.
40. THE SEISMIC ANCHORAGE OF ELECTRICAL EQUIPMENT SHALL CONFORM TO C.C.R. 2010 CHAPTER 16 AND ASCE 7-05 CHAPTER 13.
41. ALL PIPING CROSSING BUILDING SEISMIC SEPARATIONS SHALL BE PROVIDED WITH APPROVED FLEXIBLE CONNECTORS.
42. THE SEISMIC BRACING AND ANCHORAGE OF ELECTRICAL CONDUITS, BUS DUCTS, WIREWAYS AND CABLE TRAYS SHALL BE IN ACCORDANCE WITH THE "GUIDELINE FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING PIPING SYSTEMS" PUBLISHED BY SMACNA LATEST VERSION AND APPROVED BY OSHPD. A COPY OF THE APPROVED GUIDELINE SHALL BE PROVIDED BY THE CONTRACTOR AND BE KEPT AT THE JOB SITE AT ALL TIMES. WHERE BRACING AND ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS OR IN THE GUIDELINE, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT, ELECTRICAL ENGINEER AND OSHPD FIELD ENGINEER.
43. CONTRACTOR SHALL SUBMIT A CALCULATIONS AND DETAILS FOR APPROVAL WHEN USING AN INSTALLATION METHOD NOT COVERED UNDER ANY OF THE STRUCTURAL DRAWINGS STANDARD DETAILS.

EQUIPMENT SCHEDULE		
EQUIPMENT NUMBER	EQUIPMENT	REMARKS
EG-1	EMERGENCY GENERATOR	GENERAC MODEL SG150. 150 KW NATURAL GAS GENERATOR, 89 dBA, 2,940 LBS, 3 PHASE 277/480 VAC. PROVIDE WITH OPTIONAL BATTERY CHARGER SEE DIAGRAM #1/E-3.1

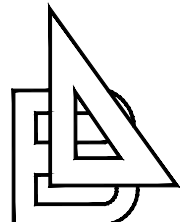
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PROJECT TITLE

**LIBRARY  
EMERGENCY  
GENERATOR  
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COMPLIANCE**

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JOB NO. 14-007.C2

STAMPS/SEALS



## GENERAL NOTES

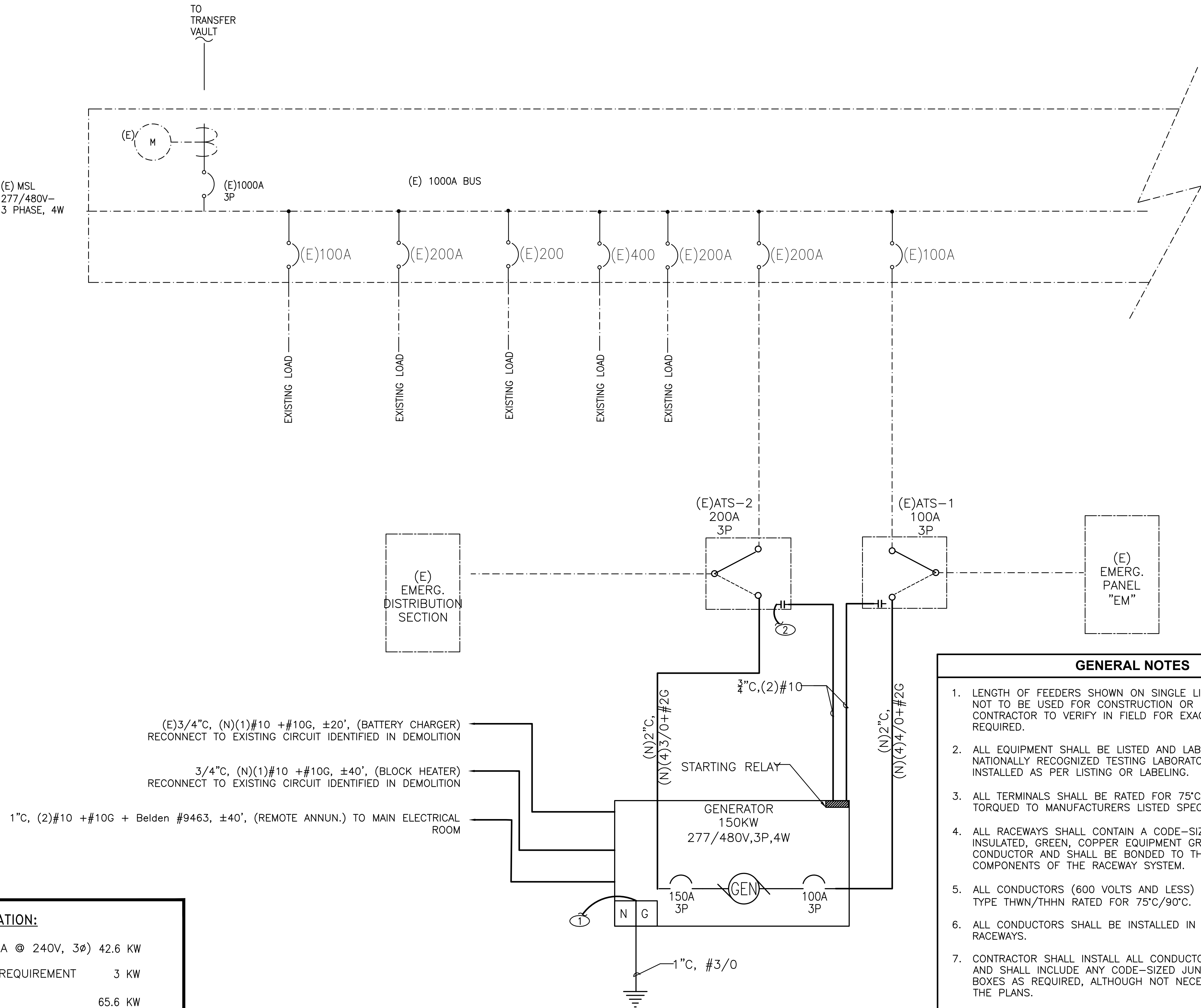
1. LENGTH OF FEEDERS SHOWN ON SINGLE LINE DIAGRAM ARE NOT TO BE USED FOR CONSTRUCTION OR BIDDING PURPOSE, CONTRACTOR TO VERIFY IN FIELD FOR EXACT DISTANCE REQUIRED.
2. ALL EQUIPMENT SHALL BE LISTED AND LABELED BY A NATIONALLY RECOGNIZED TESTING LABORATORY AND SHALL BE INSTALLED AS PER LISTING OR LABELING.
3. ALL TERMINALS SHALL BE RATED FOR 75°C (MIN.) AND TORQUED TO MANUFACTURERS LISTED SPECIFICATIONS.
4. ALL RACEWAYS SHALL CONTAIN A CODE-SIZED (NEC-250), INSULATED, GREEN, COPPER EQUIPMENT GROUNDING CONDUCTOR AND SHALL BE BONDED TO THE METALLIC COMPONENTS OF THE RACEWAY SYSTEM.
5. ALL CONDUCTORS (600 VOLTS AND LESS) SHALL BE COPPER, TYPE THWN/THHN RATED FOR 75°C/90°C.
6. ALL CONDUCTORS SHALL BE INSTALLED IN APPROVED RACEWAYS.
7. CONTRACTOR SHALL INSTALL ALL CONDUCTORS WITHOUT DAMAGE AND SHALL INCLUDE ANY CODE-SIZED JUNCTION OR PULL BOXES AS REQUIRED, ALTHOUGH NOT NECESSARILY SHOWN ON THE PLANS.

## CONSTRUCTION NOTES

- ① PROVIDE DEDICATED COPPER GROUND CONDUCTOR FROM MAIN SERVICE GROUND TO DRIVEN GROUND (D.G.) ROD AT GENERATOR, BOND TO GENERATOR GROUND POINT.
- ② RE-USE EXISTING 3" CONDUIT AND PROVIDE NEW (2) #10 TO ELEVATOR DISPATCH PANEL WHICH WHEN PROGRAMMED ALLOWS ONLY ONE ELEVATOR TO OPERATE DURING EMERGENCY. PROVIDE ALL NECESSARY ACCESSORIES TO MATCH PREVIOUS INSTALLATION AND VERIFY FULLY OPERATIONAL SYSTEM.

GENERATOR LOAD CALCULATION:

SINGLE ELEVATOR (52 HP, 68A @ 240V, 3Ø)	42.6 KW
CONTROL SYSTEM ESTIMATED REQUIREMENT	3 KW
EMERGENCY PANEL "EM"	65.6 KW
TOTAL CONTINUOUS LOAD:	111.2 KW
CONTINUOUS LOAD X 1.25%	139 KW
PROVIDED CAPACITY:	150 KW



SHEET TITLE:

## SINGLE LINE DIAGRAM

PROJECT NO. 14-007.C2

PROJECT ARCH: D.M

**DRAWN:**

HECKED:

SHEET NUMBER

# E-1.2

DATE: \_\_\_\_\_

**MEET:**

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CITY OF INGLEWOOD  
CIVIC CENTER  
COMPLEX

ONE MANCHESTER BOULEVARD  
INGLEWOOD, CALIFORNIA 90301

PROJECT TITLE  
**LIBRARY  
EMERGENCY  
GENERATOR  
SCAQMD  
COMPLIANCE**

CONSULTANT  
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GLENDALE OFFICE: 315 ARDEN AVENUE #23, GLENDALE, CA 91203, TEL: (818)638-8780

JOB NO. 14-007.C2

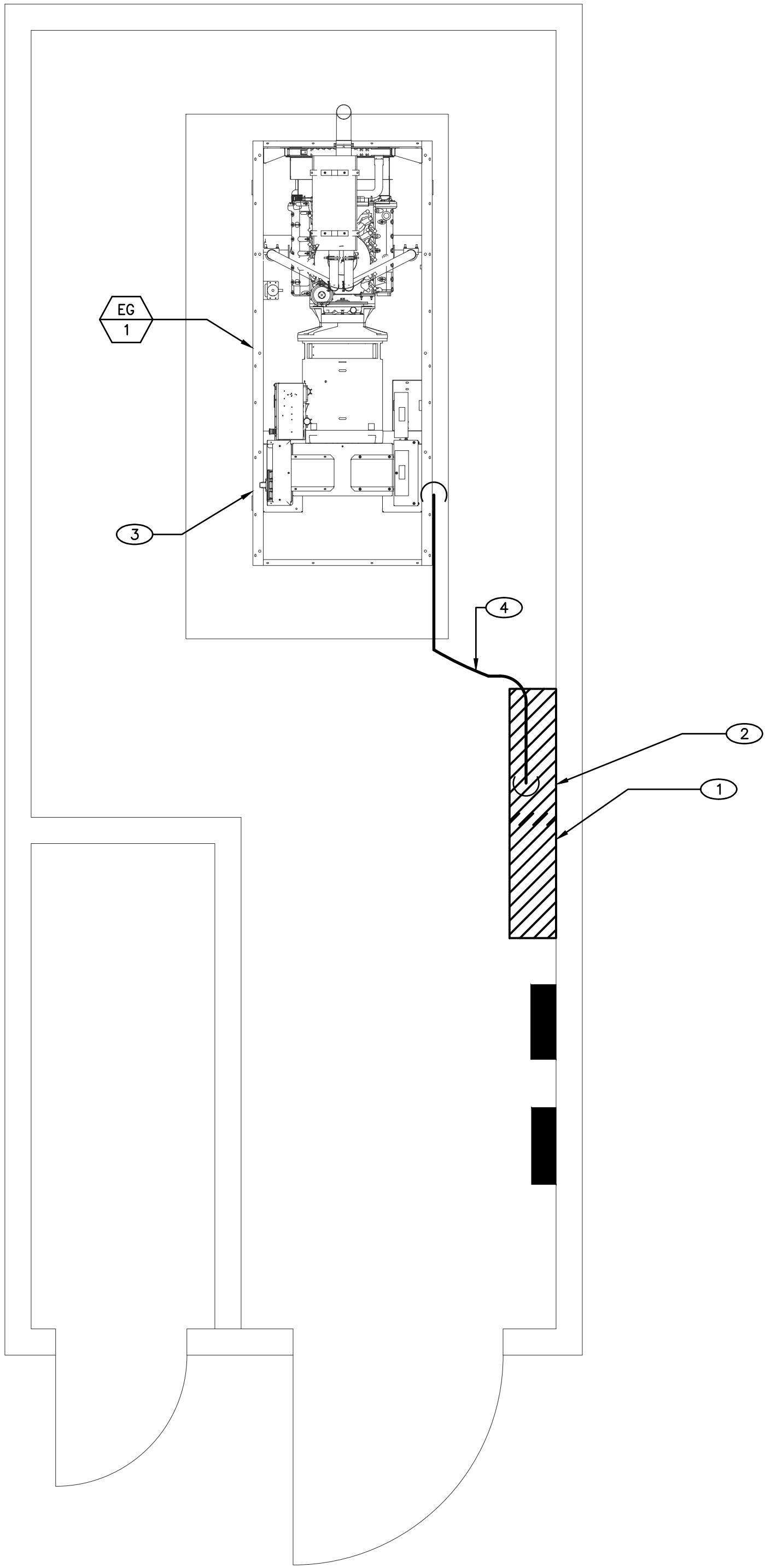
STAMPS/SEALS



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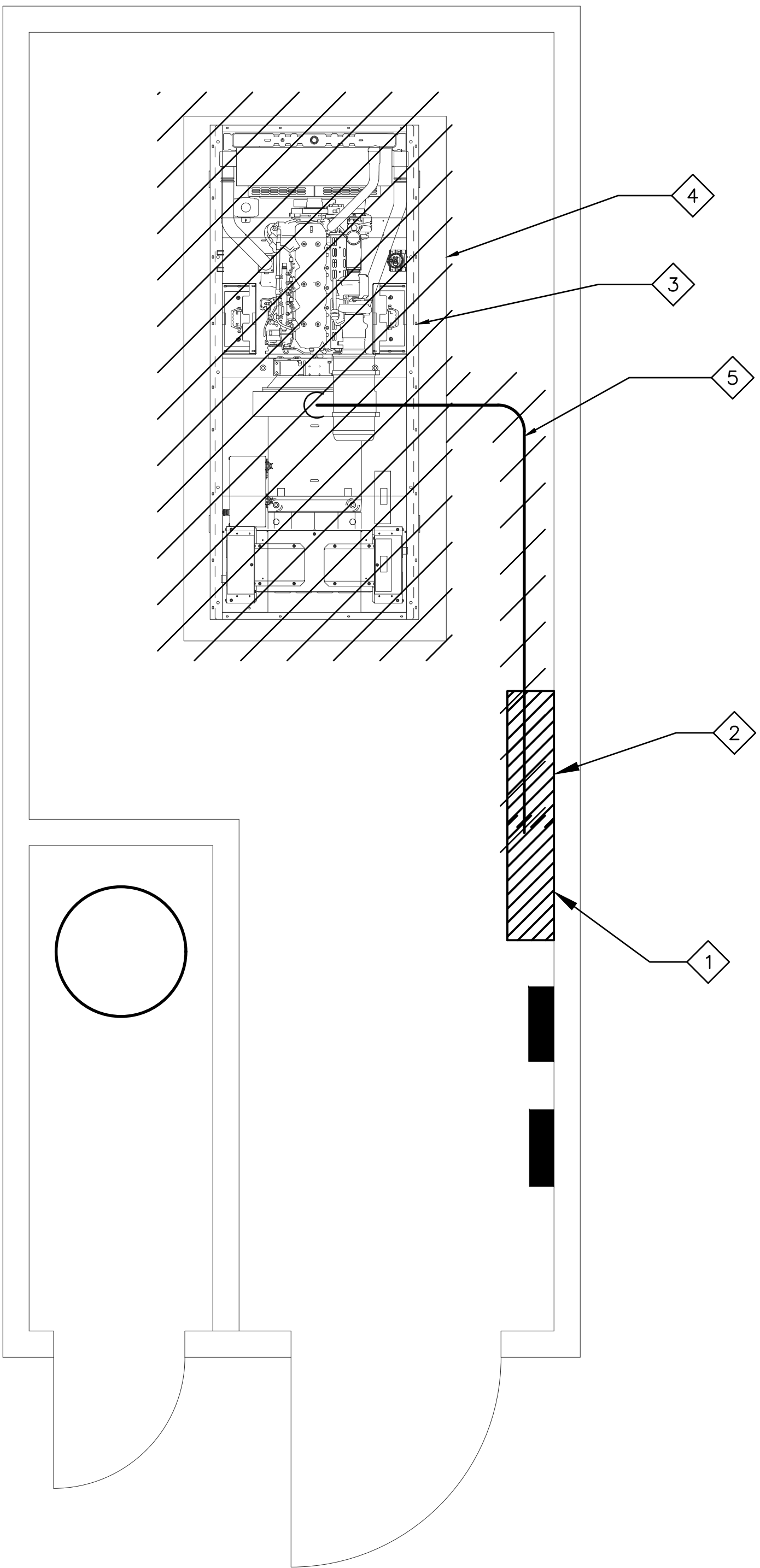
SHEET TITLE:  
**LIBRARY  
ENLARGED  
FLOOR PLANS**

PROJECT NO. 14-007.C2	PROJECT ARCH: D.M.
DRAWN:	CHECKED:
SHEET NUMBER <b>E-2.1</b>	
DATE:	SHEET: OF:



**2 CONSTRUCTION FLOOR PLAN**  
Scale: 1/4"=1'-0"

GENERAL NOTES	CONSTRUCTION NOTES
1. ALL ITEMS SHOWN ARE NEW UNLESS OTHERWISE NOTED AS EXISTING. 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAINTING AND/OR REPLACING ANY BROKEN OR DAMAGED ITEMS, (PRE-EXISTING AS WELL AS DAMAGED ITEMS AS A RESULT OF THIS CONSTRUCTION), INCLUDING PATCHING WALLS AND PAINTING AS REQUIRED, TO BRING THE AREA TO ITS ORIGINAL CONDITION, INCLUDING CEILING SUSPENSION SYSTEMS, EQUIPMENT SUPPORT SYSTEM, LIGHTING FIXTURES, J-BOXES, OR OTHER ITEMS REQUIRED TO BE REMOVED TO PERFORM THE WORK. 3. WATERPROOFING AND FIRE STOP SHALL BE USED ON ALL PENETRATIONS THRU FIRE RATED WALLS. 4. ALL RACEWAYS SHALL CONTAIN A CODE-SIZED EQUIPMENT GROUNDING CONDUCTOR THAT IS BONDED TO THE METALLIC COMPONENTS OF THE ELECTRICAL SYSTEM. 5. ALL CONDUCTORS TO BE COPPER, TYPE THWN/THHN.	1 EMERGENCY SWITCH BOARD "EM" TO REMAIN. 2 EXISTING AUTOMATIC TRANSFER SWITCH TO REMAIN. 3 INSTALL NEW 150 KW NATURAL GAS GENERATOR ASSEMBLY WITH ALL RELATED ACCESSORIES. EXTEND AND RECONNECT BATTERY CHARGER, HEAT BLOCK AND STARTER POWER CIRCUITS TO NEW ASSEMBLY. PROVIDE ALL CONDUIT, CONDUCTORS AND ACCESSORIES AS NEEDED FOR FULLY FUNCTIONAL SYSTEM. 4 PROVIDE NEW (2) 2" CONDUIT WITH NEW (4) #4/0 + #2 GROUND FROM NEW GENERATOR ASSEMBLY TO EXISTING AUTOMATIC TRANSFER SWITCHES ASSEMBLY. REFER TO SINGLE LINE DIAGRAM ON SHEET E-1.2. PROVIDE ALL CONNECTION FOR NECESSARY OPERATION.



**1 DEMOLITION FLOOR PLAN**  
Scale: 1/4"=1'-0"

DEMOLITION GENERAL NOTES	DEMOLITION NOTES
1. CONTRACTOR TO CONSULT OAR AND OTHER TRADES FOR SCHEDULE AND SEQUENCE OF DEMOLITION. 2. NOT ALL DEVICES, RACEWAYS, ETC. FOR REMOVAL ARE SHOWN. CONTRACTOR TO SURVEY SITE FOR COMPLETE DEMOLITION SCOPE. 3. AS A RESULT OF ANY DEMOLITION, ALLOW NO 'ORPHANED' OR ISOLATED DEVICES OUTSIDE OF WORK SCOPE AREA TO REMAIN DISCONNECTED. PROTECT AND RE-CONNECT ALL EXISTING DEVICES TO REMAIN TO THE ORIGINAL CIRCUIT OF ORIGIN AND LABEL ACCORDINGLY. PROVIDE TERMINATION OF EXISTING CONDUCTORS, NEW J-BOXES, CONDUIT, ETC. AS NECESSARY. 4. MARK ALL EXPOSED JUNCTION BOXES WITH THE PANEL AND CIRCUIT NUMBERS OF THE CIRCUITS ENCLOSED WITHIN THE JUNCTION BOX USING A PERMANENT, FELT TIP MARKER. 5. PAINT ALL FIRE ALARM JUNCTION BOXES COLOR RED, MARK ALL FIRE ALARM CONDUIT COLOR RED. 6. PROTECT EXISTING FIRE ALARM INSTALLATION IN WORKING ORDER THROUGHOUT THE DURATION OF THE PROJECT. 7. TRACE CIRCUIT ORIGIN FOR ALL RECEPTACLES TO BE REMOVED AND NOTE FOR CONNECTION OF ADDED LOADS. UTILIZE IDENTIFIED CIRCUITS FOR THE NEW RECEPTACLES AND LOADS TO BE INSTALLED.	1 EMERGENCY SWITCH BOARD "EM" TO REMAIN. 2 EXISTING AUTOMATIC TRANSFER SWITCH TO REMAIN. 3 REMOVE EXISTING 150 KW GENERATOR ASSEMBLY WITH ALL RELATED ACCESSORIES. DISCONNECT, IDENTIFY AND PROTECT EXISTING BATTERY CHARGER, HEAT BLOCK AND STARTER CIRCUITS AND CONDUITS FOR RECONNECTION TO NEW GENERATOR ASSEMBLY SHOWN ON CONSTRUCTION PLAN 2/E-2.1. REMOVE EXISTING FEEDING CONDUCTORS. 4 EXISTING CONCRETE PAD TO REMAIN 5 REMOVE EXISTING 2" CONDUIT AND CONDUCTORS FROM GENERATOR TO EMERGENCY SWITCH BOARD "EM".





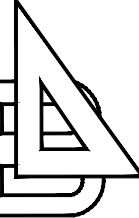
CITY OF INGLEWOOD  
CIVIC CENTER  
COMPLEX

ONE MANCHESTER BOULEVARD  
INGLEWOOD, CALIFORNIA 90301

PROJECT TITLE

LIBRARY  
EMERGENCY  
GENERATOR  
SCAQMD  
COMPLIANCE

CONSULTANT



BUDLONG  
& ASSOCIATES, INC.

CONSULTING ENGINEERS

WWW.BUDLONG.COM


400 W. VENTURA BLVD #240  
CAMARILLO, CA 93010  
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GLENDALDE OFFICE

JOB NO. 14-007.C2

STAMPS/SEALS



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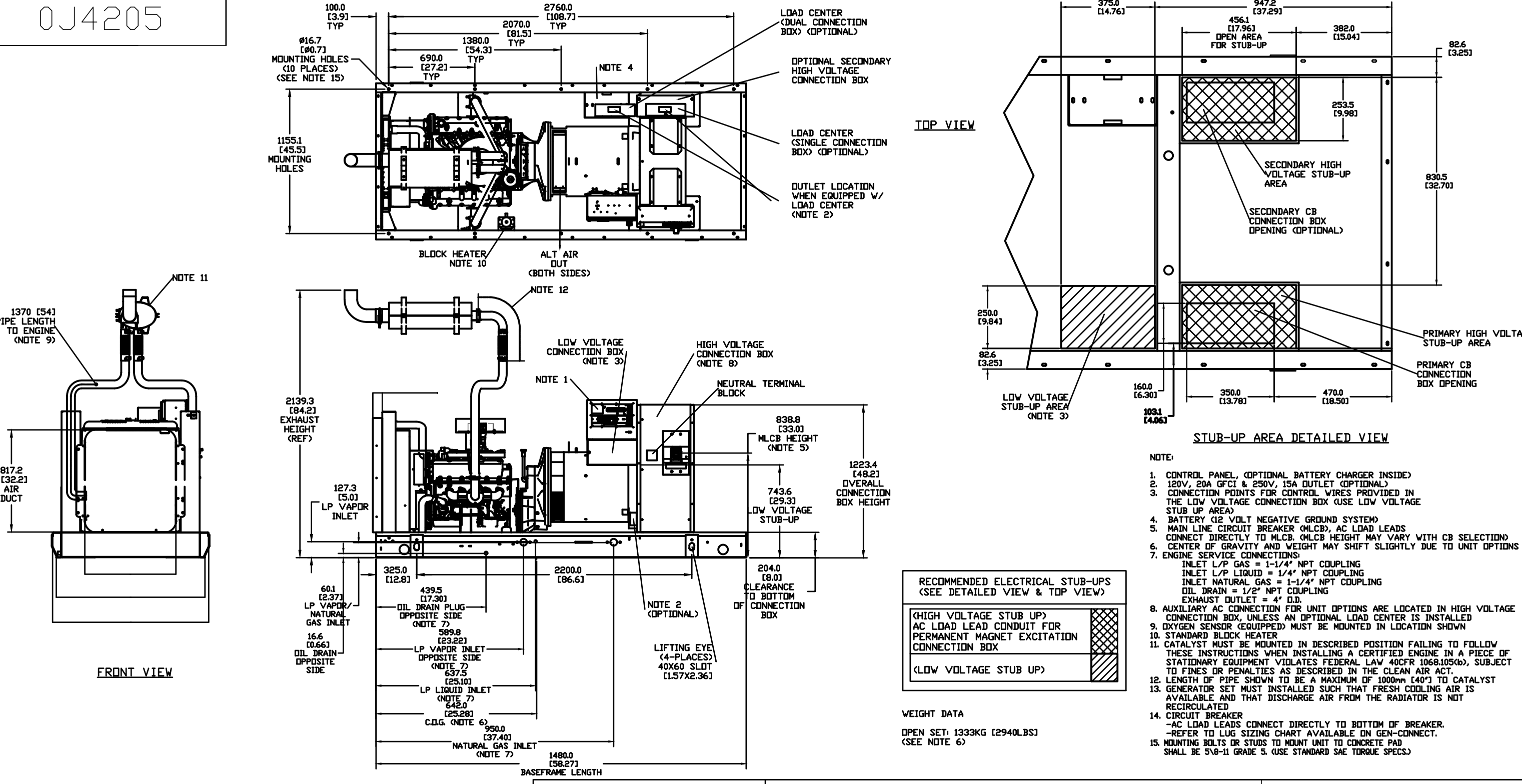
E-3.1

DATE:

SHEET:

OF:

0J4205



FRONT VIEW

TOP VIEW

STUB-UP AREA DETAILED VIEW

WEIGHT DATA

RECOMMENDED ELECTRICAL STUB-UPS

NOTE:

1. CONTROL PANEL, OPTIONAL BATTERY CHARGER INSIDE

2. 120V, 20A GFCI & 200V, 15A OUTLET (OPTIONAL)

3. CONNECTION POINTS FOR CONTROL WIRES PROVIDED IN THE LOW VOLTAGE CONNECTION BOX (SEE LOW VOLTAGE STUB UP AREA)

4. BATTERY W/ VOLT NEGATIVE GROUND SYSTEM

5. MAIN LINE CIRCUIT BREAKER (OLCB), AC LEAD LEADS CONNECT DIRECTLY TO MLCB. OLCB HEIGHT MAY VARY WITH CB SELECTION

6. CENTER OF GRAVITY AND WEIGHT MAY SHIFT SLIGHTLY DUE TO UNIT OPTIONS

7. ENGINE SERVICE CONNECTIONS

8. INLET L/P GAS = 1-1/4" NPT COUPLING

9. INLET L/P LIQUID = 1-1/4" NPT COUPLING

10. INLET NATURAL GAS = 1-1/4" NPT COUPLING

11. OIL DRAIN = 1/2" NPT COUPLING

12. EXHAUST OUTLET = 4" O.D.

13. AUXILIARY AC CONNECTION FOR UNIT OPTIONS ARE LOCATED IN HIGH VOLTAGE CONNECTION BOX, UNLESS AN OPTIONAL LOAD CENTER IS INSTALLED

14. OXYGEN SENSOR EQUIPPED MUST BE MOUNTED IN LOCATION SHOWN

15. STANDARD BLOCK HEATER

16. CATALYST MUST BE MOUNTED IN DESCRIBED POSITION FAILING TO FOLLOW THESE INSTRUCTIONS WHEN INSTALLING A CERTIFIED ENGINE IN A PIECE OF STATUTORY EQUIPMENT VIOLATES FEDERAL LAW (49CFR500.00), SUBJECT TO FINES OR PENALTIES AS DESCRIBED IN THE CLEAN AIR ACT

17. LENGTH OF PIPE SHOWN TO BE A MAXIMUM OF 1000mm (40") TO CATALYST

18. GENERATOR SET MUST BE INSTALLED SUCH THAT FRESH COOLING AIR IS AVAILABLE AND THAT DISCHARGE AIR FROM THE RADIATOR IS NOT RECIRCULATED

19. CIRCUIT BREAKER

20. AC LEAD LEADS CONNECT DIRECTLY TO BOTTOM OF BREAKER

21. REFER TO LUG SIZING CHART AVAILABLE ON GEN-CONNECT

22. MOUNTING BOLTS OR STUDS TO MOUNT UNIT TO CONCRETE PAD SHALL BE 5/8"-11 GRADE 5 (SEE STANDARD SAE TORQUE SPECS)

INSTALLATION DRAWING

SG150KW

SG080-130 W/ 150 OR 200KW UPSIZE

6.8 LITER GEAR DRIVE - DUAL FUEL

OPEN GENSET

ISSUE DATE 3/31/11

GENERAC POWER SYSTEMS

Waukesha

P.O. BOX 8

WAUKESHA, WIS. 53187

FILE NAME

0J4205.DWG

SIZE B

SCALE

FIRST USE

6.8L G3

DWG NO.

0J4205

REV

F

1 EMERGENCY GENERATOR DIAGRAM

Scale: AS NOTED