

GENERAL MECHANICAL NOTES:

1. DO NOT SCALE DRAWINGS, REFER TO ARCHITECTURAL DRAWINGS AND REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF DOORS, WINDOWS AND CEILING DEVICES. PROJECT IS A NEW STRUCTURE. ROUTE ALL PIPING AND CONDUIT AS INDICATED BUT DO NOT TO DEFACE EXTERIOR OF BUILDING, VERIFY EXISTING CONDITIONS PRIOR TO PERFORMING WORK.
2. DAMAGE TO STRUCTURE BEYOND CUTTING AND PATCHING FOR WORK INDICATED WILL BE REPAIRED TO EXISTING CONDITIONS AT CONTRACTOR'S EXPENSE.
3. COORDINATE ALL PIPING AND DUCT WORK LOCATIONS WITH OTHER DIVISIONS AND EXISTING CONDITIONS.
4. A 10" CLEARANCE SHALL BE MAINTAINED BETWEEN ALL EXHAUST OUTLETS AND AIR INTAKES.
5. CONTRACTOR SHALL CONFORM TO NATIONAL AND LOCAL CODES (BUILDING, MECHANICAL, PLUMBING, AND GAS) AS APPLIES TO PROJECT.
6. THERMOSTATS SHALL BE PROGRAMMABLE PER SECTION 6.4.3 OF ANSII ASHRAE/IESNA STANDARD 90.1-2004
7. GROUND LEVEL ONLY CONDENSATE TO BE ROUTED DIRECTLY TO EXTERIOR AND TERMINATE ABOVE A 12"x12"x30" GRAVEL PIT. ALL SYSTEMS ABOVE GROUND LEVEL SHALL BE TERMINATED IN A FUNNEL DRAIN PIPED DIRECTLY TO THE SANITARY SYSTEM BELOW GROUND LEVEL. TERMINATE IN A P-TRAP WITH TRAP PRIMER.

HVAC SYMBOL LEGEND

	CEILING DIFFUSER
	SLOT DIFFUSER
	CEILING RETURN GRILLE
	CEILING EXHAUST
	AIR TRANSFER GRILLE
	FIRE DAMPER
	MANUAL DAMPER
	SIDEWALL EXHAUST GRILLE
	DUCT SMOKE DETECTOR
	THERMOSTAT
	CUBIC FEET PER MINUTE
	OUTSIDE AIR
	RETURN AIR
	SUPPLY AIR
	EXHAUST FAN GRILL
	ABOVE CEILING
	ACCESS DOOR
	FLEX DUCT
	SHEETMETAL DUCT

GAS FURNACES WITH AC UNIT																						
MARK	BLOWER DATA				COOLING DATA			HEATING DATA			ELECTRICAL DATA						MODEL					
	TOTAL CFM	D.A. CFM	EXT SP	HP	TOTAL CAPACITY BTU/HR	SENSIBLE BTU/HR	SEER	INPUT CAPACITY BTU/HR	OUTPUT CAPACITY BTU/HR	% AFUE	FURNACE			COMPRESSOR								
											RLA	MCA	MDCP	RLA	MCA	MDCP						
FCU-1, CU-1	1600	120	0.4	3/4	46,000	33,800	15.0	98,000	95,000	92	9.3	13	20/1	20.9	26	45/2	RHEEM R92TA100521M	RHEEM RA1548AJ				
FCU-2, CU-2	2000	120	0.4	3/4	57,500	41,200	15.0	112,000	108,000	92	9.3	13	20/1	25.1	32	60/2	RHEEM R92TA115524M	RHEEM RA1560AJ				
FCU-3, CU-3	2000	120	0.4	3/4	57,500	41,200	15.0	112,000	108,000	92	9.3	13	20/1	25.1	32	60/2	RHEEM R92TA115524M	RHEEM RA1560AJ				

EXHAUST FANS									
MARK	CFM	S.P.	RPM	OUTLET	AMPS	HP	MODEL	DESCRIPTION	NOTE
EF-1	15,826	0.25	617	46"	-	5	GREENHECK CUBE 360	ROOF EXHAUST	1,2,3,4,5,6
EF-2	15,826	0.25	617	46"	-	5	GREENHECK CUBE 360	ROOF EXHAUST	1,2,3,4,5,6
EF-3	80	0.1	675	4"Ø	0.5	-	GREENHECK SP-B80	RESTROOM EXHAUST	
EF-4	80	0.1	675	4"Ø	0.5	-	GREENHECK SP-B80	RESTROOM EXHAUST	
EF-5	80	0.1	675	4"Ø	0.5	-	GREENHECK SP-B80	BREAKROOM EXHAUST	
EF-6	9127	0.25	665	35"	-	2	GREENHECK CUBE 300	SIDEWALL EXHAUST	3,4,5,6

1. ROOF EXHAUST FANS EF-1 AND EF-2 TO BE CONTROLLED BY GAS DETECTION DEVICE. INTERLOCK BOTH FANS WITH LV-1, LV-2 AND 2. GARAGE DOORS AS INDICATED.
2. PROVIDE WITH ROOF CURB, BIRD SCREEN AND DISCONNECT SWITCH
3. PROVIDE NON-SPARKING COMPONENTS
4. PROVIDE EXPLOSION PROOF MOTOR
5. PROVIDE DISCONNECT LISTED FOR CLASS 1, DIV 2
6. PROVIDE WITH GRAVITY BACKDRAFT DAMPERS

ELECTRONIC AUTOMATED LOUVERS						
MARK	SIZE	FREE AREA	VOLTS	DESCRIPTION	MANUFACTURER	MODEL
LV-1	36"x60"	8.25	120V	NORMALLY CLOSED	GREENHECK	EAD-635
LV-2	36"x60"	8.25	120V	NORMALLY CLOSED	GREENHECK	EAD-635
LV-3	42"x54"	8.73	120V	NORMALLY CLOSED	GREENHECK	EAD-635

1. LOUVERS LV-1, LV-2 ARE FOR PRESSURE RELIEF ONLY. GARAGE DOOR TO PROVIDE ADDITION FREE AREA ON FAN ACTIVATION.
2. LOCATE SILL 12" AFF.
3. INTERLOCK WITH EF-1, EF-2
4. INTERLOCK WITH EF-6

MINI-SPLIT A/C UNIT											
MARK	TONS	SEER	OA	CFM	FULL LOAD AMPS	TOTAL COOLING CAPACITY (BTU/H)	SENSIBLE COOLING CAPACITY (BTU/H)	ELECTRICAL	MODEL		
								MCA	MDCP	INDOOR UNIT	OUTDOOR UNIT
MS-1A	0.75	24.6	-	200	0.45	9,000	6480	8	15/2	DAIKIN	DAIKIN
MS-1B										DAIKIN	DAIKIN

ELECTRIC RADIANT HEATERS			
MARK	KW	VOLTAGE	BREAKER
UH-1	6.0	480V, 1Ø	20/2
			FOSTORIA CH-648-30

EXHAUST RECOVERY VENTILATOR						
MARK	CFM	S.P.	RECOVERY	OUTLET	AMPS	VOLTS
ERV	600	0.6	65%	10"Ø	3.6	240V, 1Ø
						DAIKIN LGH-F600RX5-E

METHANE EXHAUST SYSTEM CALCULATION

VOLUME = AREA X AVG CEILING HEIGHT
= 12260 FT² X 30 FT
= 367,800 FT³

EXHAUST = (VOLUME X AIR CHANGE/HOUR)X60
= (367,800 X 5)/60
= 30,650 CFM

2 FANS @ 15,325 CFM EA REQUIRED

GENERAL EXHAUST CALCULATION

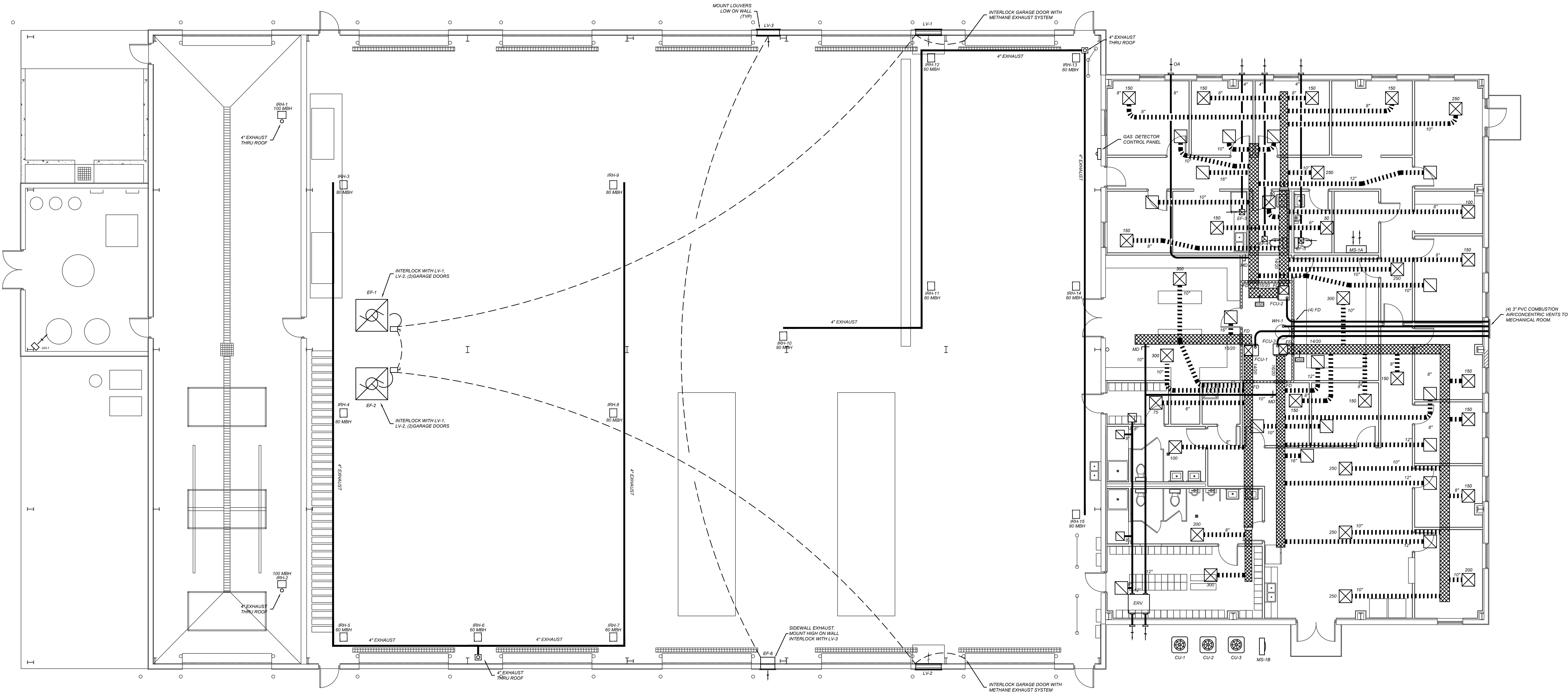
CFM = AREA X 0.75
= 12260 X 0.75
= 9195 CFM

LOUVER/INLET AREA REQUIREMENT

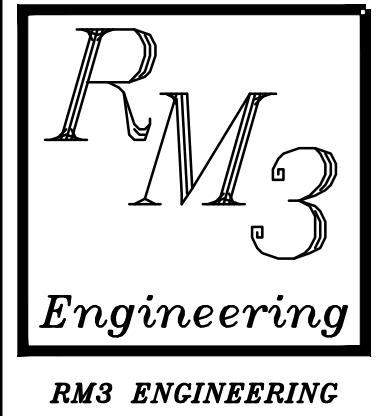
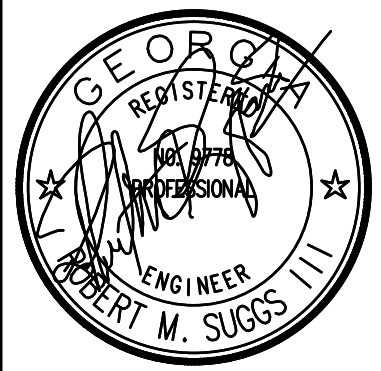
1000 FPM FACE VELOCITY

METHANE EXHAUST FREE AREA = 30650/1000 = 30.6 SF

GENERAL EXHAUST FREE AREA = 9185/1000 = 9.1 SF



1
M1 HVAC PLAN
1/4"=1"



HVAC PLAN

WASTE MANAGEMENT
HAULING FACILITY
HIGHWAY 17
HARDEEVILLE, SC

NO.	REVISIONS

DATE: 11/1/2017
PROJECT No. 3E17-068

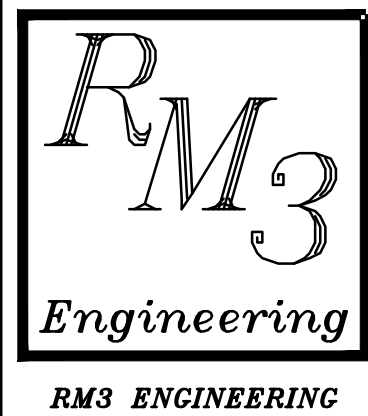
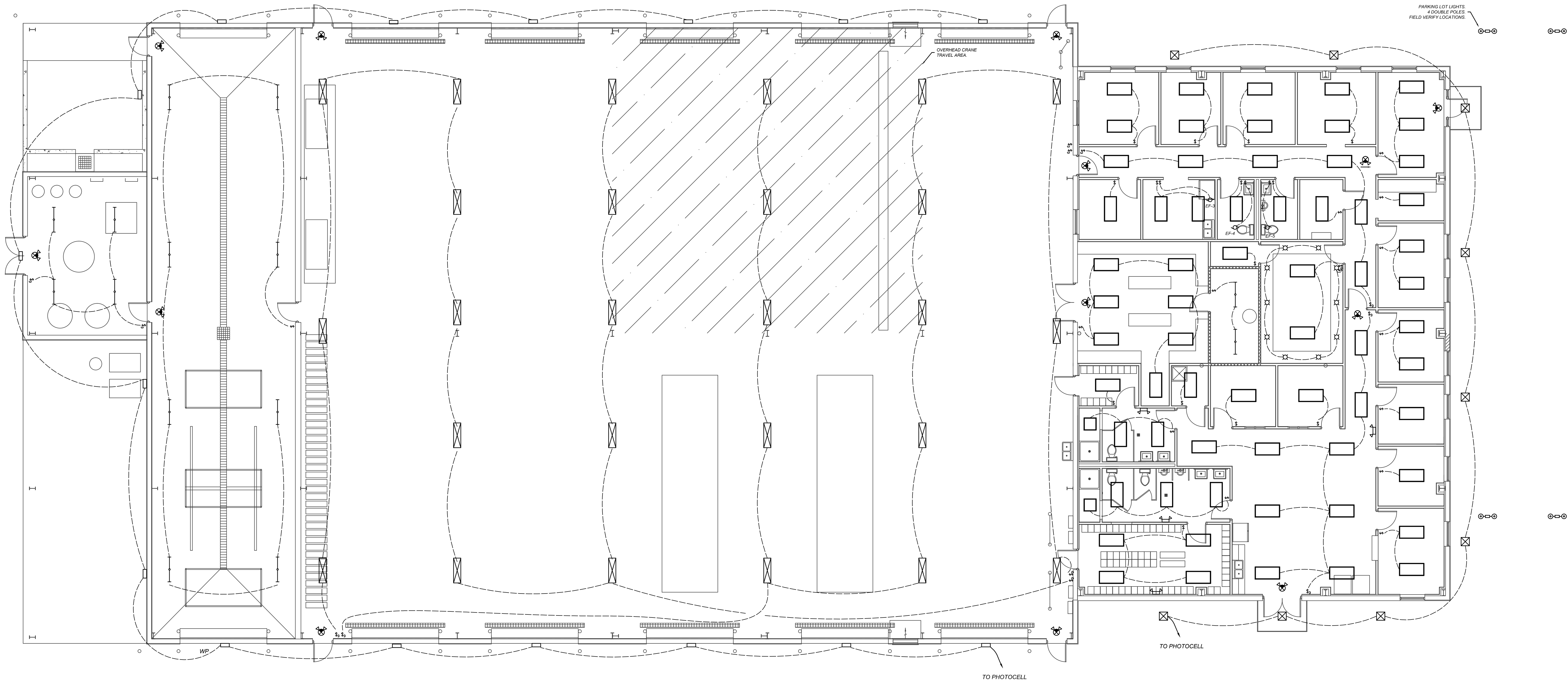
SHEET NO.

M1

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2. DAMAGE TO STRUCTURE BEYOND CUTTING AND PATCHING FOR WORK INDICATED WILL BE REPAIRED TO EXISTING CONDITION AT CONTRACTORS EXPENSE
3. ALL ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE IN FORCE AT TIME OF BID AND ALL GOVERNING LOCAL CODES OR ORDINANCES.
4. ALL MATERIALS SHALL BE NEW AND SHALL BE UNDERWRITER'S LABORATORIES APPROVED.
5. COORDINATE ALL CIRCUITING REQUIREMENTS WITH OTHER DISCIPLINES. REVIEW ALL DIVISIONS AND SECTIONS FOR ADDITIONAL REQUIREMENTS OR COORDINATION.
6. UNLESS OTHERWISE NOTED ON THE PLANS, ALL WALL-MOUNTED OUTLETS SHALL BE MOUNTED 15' ABOVE FINISHED FLOOR TO OUTLET BOTTOM. ALL COVER PLATES FOR ELECTRICAL AND TELEPHONE OUTLETS SHALL BE IVORY, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
7. PULL LINES SHALL BE INSTALLED IN EMPTY TELEPHONE CONDUIT AND RACEWAYS CONDUITS SHALL BE 3/4" MINIMUM AND TERMINATED ABOVE CEILING WITH INSULATED BUSHINGS
8. ALL CONDUCTORS SHALL BE COPPER AND COLOR CODED IN ACCORDANCE WITH NEC. UNLESS SPECIFICALLY INDICATED OTHERWISE.
9. EXTERIOR LIGHTING CONDUCTORS SHALL BE MINIMUM #8 AWG.
10. FURNISH AND INSTALL "GROUNDING" IN ACCORDANCE WITH NEC ARTICLE 250.

	RECESSED DOWNLIGHT		220V OUTLET
	RECESSED WALLWASH		SMOKE DETECTOR
	RECESSED 2 x 4 LIGHTING FIXTURE		FLOOR OR CEILING MOUNTED RECEPTACLE
	RECESSED 2 x 2 LIGHTING FIXTURE		COMPUTER OUTLET
	FLUORESCENT STRIP FIXTURE		FLOOR MOUNTED TELEPHONE OUTLET
	EMERG. LTG. FIXT. - REC. MTD. W/ BAT. PACK		J-BOX AND 1' CONDUIT TO ABOVE CEILING
	EMERG. LTG. FIXT. - WALL MTD. W/ BAT. PACK		WALL MOUNTED TELE/DATA OUTLET, PROVIDE DISCONNECT SWITCH
	EXIT SIGN		PANEL BOARD
	TOGGLE SWITCH		TELEPHONE BACKBOARD
	3-WAY SWITCH		MOTOR
	4-WAY SWITCH		GFI RECEPTACLE
	SWITCH WITH PILOT LIGHT		FLOOR MOUNTED COMPUTER OUTLET
	DIMMER SWITCH		EXPOSED CONDUIT
	MOTOR RATED SWITCH		GROUND CONNECTION AS NOTED
	JUNCTION BOX		TRANSFORMER
	DUPLEX RECEPTACLE		MANUAL FIRE ALARM PULL STATION
	EXISTING DUPLEX RECEPTACLE		WALL MOUNTED FIRE ALARM SIGNAL
	MOUNTED ABOVE COUNTER OR 42" AFF		WEATHERPROOF
	DOUBLE DUPLEX RECEPTACLE		ABOVE FINISHED FLOOR
	FIRE ALARM CONTROL PANEL		GROUND FAULT INTERRUPTING
	CABLE TV OUTLET		CEILING MOUNTED
	GAS DETECTOR		
	WALL MOUNTED GAS HORN/STROBE		

SYMBOL	DESCRIPTION	LAMPS	MODEL
	2' x 4' LAY-IN LED TROFFER	LED	LSI LPE24-HO-NW-UE
	2' x 2' LAY-IN LED TROFFER	LED	LSI LPE22-HO-NW-UE
	LINEAR HIGH BAY	LED	LSI LH811-LED=30L-S-UNV-50-ELDS
	LED CANOPY LIGHTS	LED	LSI XSPS-S-LED-SS-CW-120-GWT-DFL
	WALL PACK	LED	LSI TMWP-64W-45K-BZ
	LINEAR FLUORESCENT SHOP LGHT	LED	LSI EG3-8-S-LED-HO-50-UNV
	RECESSED CAN LIGHTS	LED	LSI LCD6-41-LED-40-52-UE-TR6B-SF-HAZ-WH
	EMERGENCY LIGHT W/BATTTERY PACK	LED	LSI LTEM-WH2
	EXIT SIGN W/EMERGENCY LIGHT	LED	LSI LPRX-R-U-WH-LD11-R



2302 Brockett Road
Tucker, Georgia
30084

770 934 0944
770 934 0945

LIGHTING PLAN

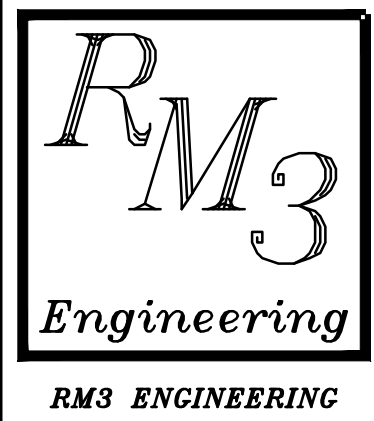
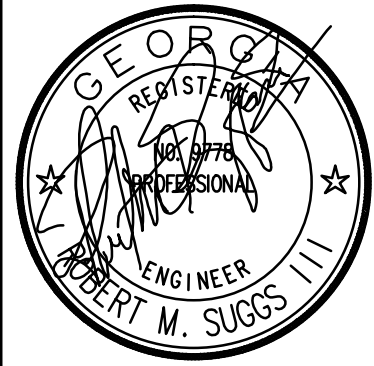
**WASTE MANAGEMENT
HAULING FACILITY**
HIGHWAY 17
HARDEEVILLE, SC

[illegible]

DATE:	11/1/2017
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SHEET NO.

E1



2302 Brockett Road
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30084
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POWER PLAN

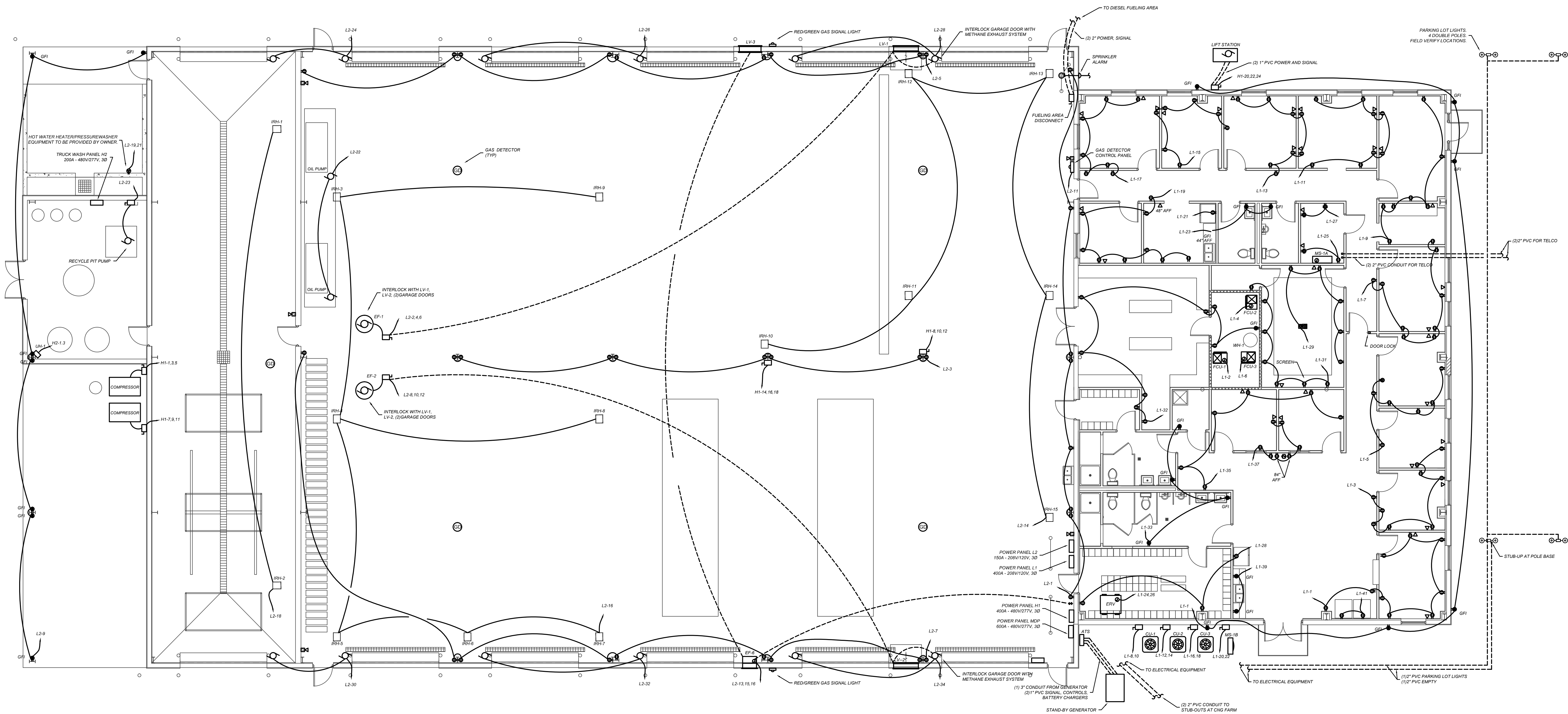
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SHEET NO.

E2



1
E2 POWER PLAN
1/8"=1'

GENERAL PLUMBING NOTES:

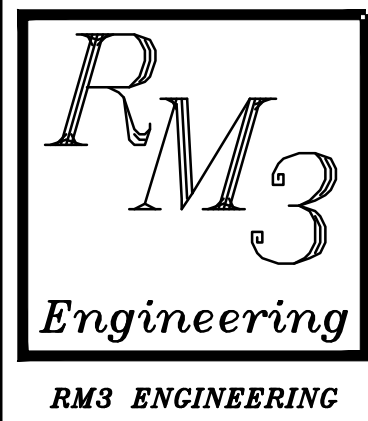
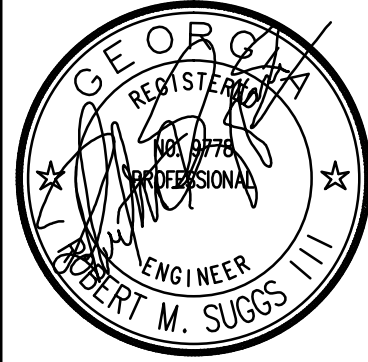
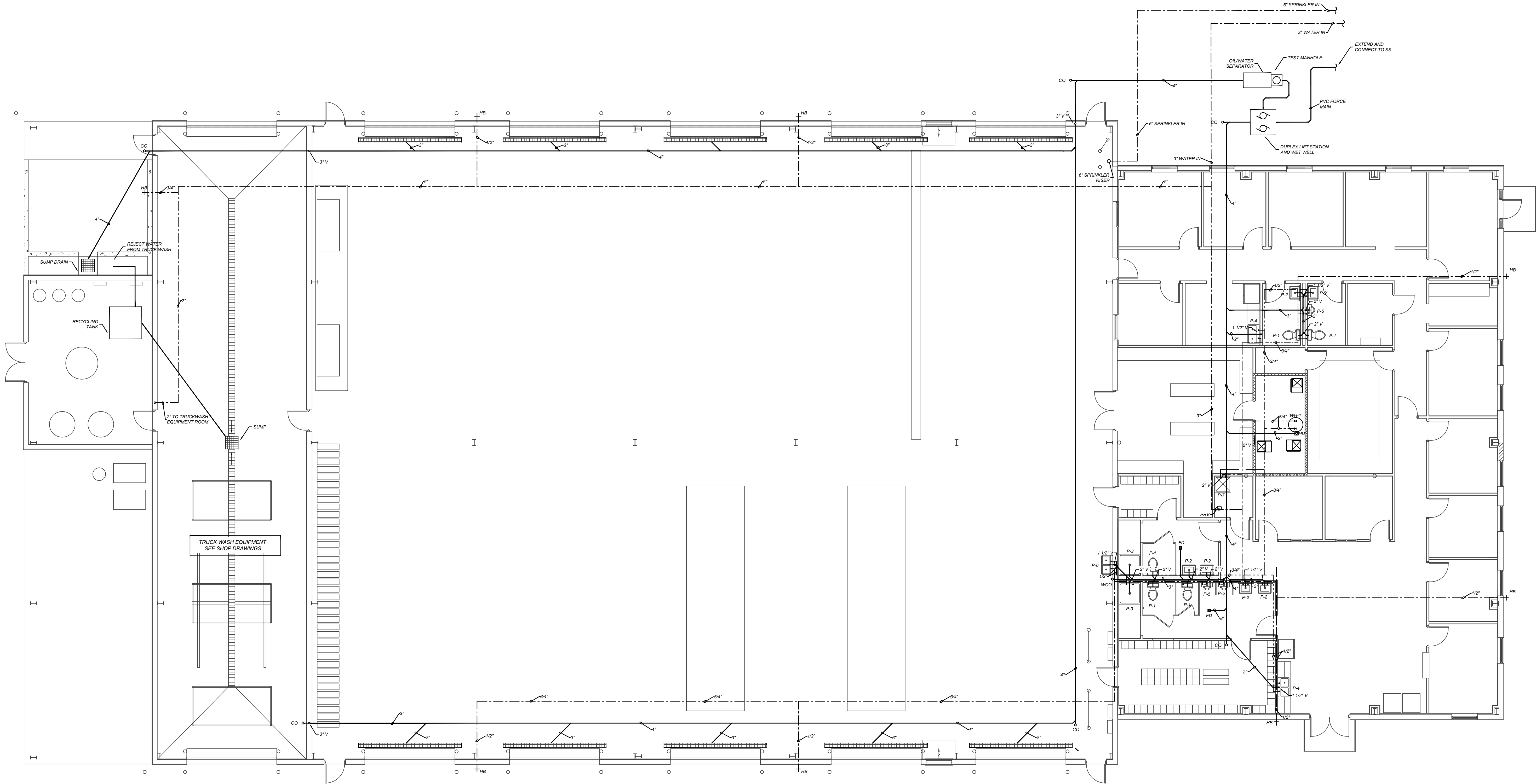
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- FURNISH AND INSTALL ALL SYSTEMS OF WASTE AND VENT PIPING, HOT WATER PIPING AND COLD WATER PIPING, INCLUDING ALL FITTINGS, VALVES, ETC., AS REQUIRED.
- FURNISH AND INSTALL ALL PLUMBING FIXTURES AND EQUIPMENT AS SHOWN ON THE DRAWINGS.
- PROVIDE SHUT-OFF VALVES AT EACH FIXTURE.
- ALL PLUMBING PIPING SHALL BE CONCEALED WITHIN THE BUILDING STRUCTURE AND ABOVE DROP CEILINGS.
- ALL HOT AND COLD WATER PIPING ABOVE DROP CEILINGS SHALL BE INSULATED WITH 1/2" THICK FIBERGLASS PIPE INSULATION.
- HOT AND COLD WATER PIPING SHALL BE TYPE 'L' COPPER.
- CLEANOUTS SHALL BE INSTALLED IN ACCORDANCE WITH PLUMBING CODE REQUIREMENTS AT EACH CHANGE IN DIRECTION. CLEANOUTS SHALL BE PLACED IN READILY ACCESSIBLE LOCATIONS.
- THE PLUMBING CONTRACTOR SHALL COORDINATE WITH THE HVAC AND ELECTRICAL DIVISIONS TO AVOID INTERFERENCE WITH TRADES.

PLUMBING SYMBOL LEGEND

VTR	VENT THRU ROOF
○ CO	CLEANOUT
⊠ FD	FLOOR DRAIN
---	VENT
---	WASTE
---	COLD WATER
---	HOT WATER
⊕	LOW PRESSURE GAS
Ⓐ	COMPRESSED AIR

PLUMBING FIXTURE SCHEDULE					
MARK	HOT WATER	COLD WATER	VENT	WASTE	REMARKS
P-1	-	1/2"	2"	3"	WATER CLOSET
P-2	1/2"	1/2"	1 1/4"	1 1/2"	LAVATORY
P-3	1/2"	1/2"	1 1/2"	2"	SHOWER
P-4	1/2"	1/2"	1 1/2"	2"	KITCHEN SINK
P-5	1/2"	-	1 1/2"	2"	URINAL
P-6	1/2"	1/2"	2"	2"	SHOP
P-7	1/2"	1/2"	2"	2"	MDP SINK
FD	-	-	2"	3"	FLOOR DRAIN
HB	-	1/2"	-	-	HOSE BIBB
HD	-	-	1 1/2"	2"	HUB DRAIN
WF	-	1/2"	1 1/4"	1 1/2"	WATER FOUNTAIN

GAS WATER HEATERS									
MARK	STORAGE GALLONS	RECOVERY	FIRST HOUR RATING	GAS INPUT BTU/HR	THERMAL EFFICIENCY	CONNECTIONS		MODEL*	NOTES
WH	60	95 GPH @ 90 F	124 GAL	76,000	0.95	COLD	HOT	A.D.SMITH GPHE-50	1



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PLUMBING PLAN

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SHEET NO.

1. ALL GAS PIPING TO BE SCHEDULE 40 STEEL, BLACK FOR INTERIOR, GALVANIZED FOR EXTERIOR.
2. PROVIDE GLOBE VALVE SHUT-OFF AT ALL GAS LINE CONNECTIONS TO EQUIPMENT.

