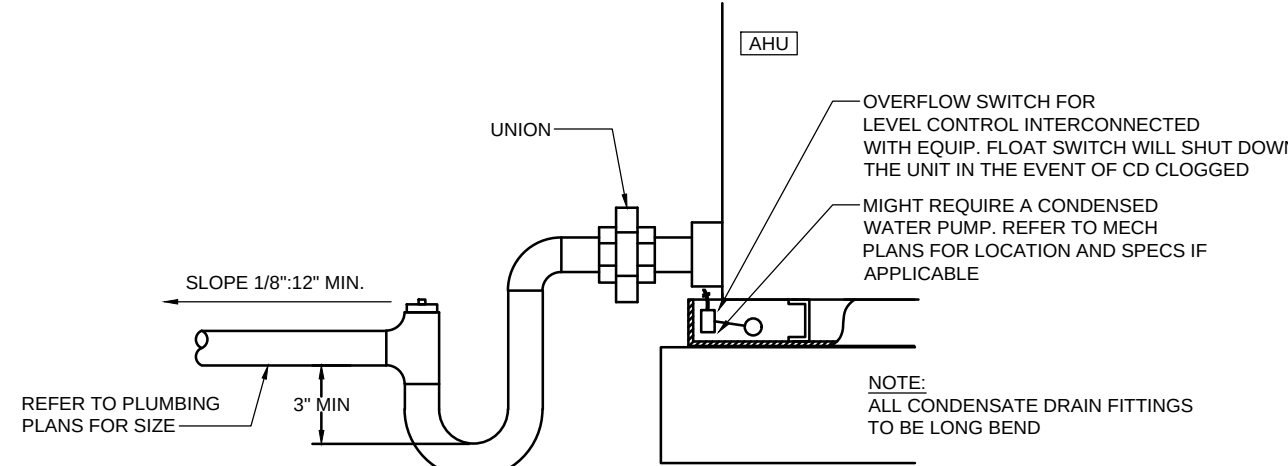


HANGER SPACING
1. STEEL PIPE: MAXIMUM 12ft. SPACING.
2. PROVIDE PIPE CLAMP AT EACH FLOOR FOR RISERS PENETRATING FLOOR.

Diagram illustrating the components of a hot water pipe hanger system:

- EXPANSION SHIELD WITH BOLT
- STRUCTURAL BEAM OR SLAB
- HANGER
- COOPER PIPE
- MINERAL FIBER FITTING INSULATION FOR EXPOSED PIPE INSULATION
- MINERAL FIBER WITH GLASS CLOTH JACKET
- COATED WITH ADHESIVE
- LIGHT CORD RIEF
- CLEVIS HANGER
- METAL SHIELD (IF APPLICABLE)
- HOT WATER PIPE

GAS WATER HEATER TANKLESS WITH BUILT-IN CIRCULATION PUMP SCHEDULE (EACH)											
MARK	QUANTITY	LOCATION	GAS CONSUMPTION	GAS CONSUMPTION	GPM AT 45°F TEMP RATE	ENERGY FACTOR	MANUFACTURER/ MODEL NUMBER	PUMP VOLTAGE/HP	EXHAUST VENT SIZE	AIR INTAKE SIZE	DIMENSIONS HxWxD (INCH)
WH-1	2	EXTERIOR MAIN HOUSE	¾"	199,000 BTU/H	8.5	0.95	WESTINGHOUSE WGRGH 199 O	120V-1PH-60Hz 100W	-	-	38.8" x 20" x 18", 120 LBS WEIGHT
WH-2	1	EXTERIOR STAFF ROOM	¾"	199,000 BTU/H	8.5	0.95	WESTINGHOUSE WGRGH 199 O	120V-1PH-60Hz 100W	-	-	38.8" x 20" x 18", 120 LBS WEIGHT
WH-3	2	EXTERIOR MAIN HOUSE	¾"	199,000 BTU/H	8.5	0.95	WESTINGHOUSE WGRGH 199 O	120V-1PH-60Hz 100W	-	-	38.8" x 20" x 18", 120 LBS WEIGHT
WH-4	1	EXTERIOR STUDIO	¾"	150,000 BTU/H	6.4	0.95	WESTINGHOUSE WGRGH 150 O	120V-1PH-60Hz 100W	-	-	36.8" x 17.6" x 16.7", 110 LBS WEIGHT
WH-5	1	EXTERIOR CABANA	¾"	199,000 BTU/H	8.5	0.95	WESTINGHOUSE WGRGH 199 O	120V-1PH-60Hz 100W	-	-	38.8" x 20" x 18", 120 LBS WEIGHT



NOTE:
1- CONTRACTOR TO OBTAIN APPROVAL FROM OWNER AND ARCHITECT FOR PLUMBING FIXTURES & FAUCETS SELECTION, STYLE, FINISH & COLOR BEFORE INSTALLATION.

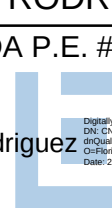
(a) IN ACCORDANCE WITH MIAMI-DADE COUNTY ARTICLE III, SECTION 08-31.

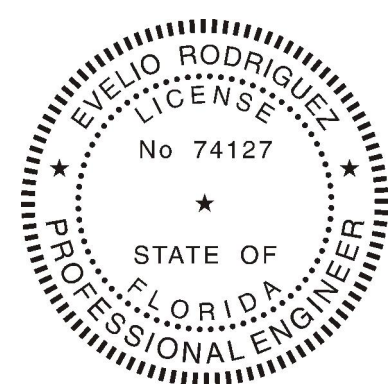
SYMBOL	DESCRIPTION
	COLD WATER PIPE (CW)
	HOT WATER PIPE (HW)
	HOT WATER RECIRCULATION PIPE (HWR)
	SANITARY PIPE (SAN)
	SANITARY VENT PIPE (V)
	STORM PIPE (SD)
	CONDENSATE DRAIN PIPE (CD)
	PRESSURE & TEMPERATURE RELIEF PIPE (PT)
	WATER HAMMER ARRESTOR
	AIR CHAMBER
	GATE OR BALL VALVE
	GATE OR BALL VALVE IN VERTICAL
	STRAINER
	HOSE BIBB WITH SHUTOFF VALVE & VB (HB)
	VALVE IN BOX
	BACK FLOW PREVENTER (BFP)
	"P" TRAP
	PIPE DOWN (DN)
	PIPE UP (UP)
	WALL CLEAN OUT (CO)
	AIR ADMITTANCE VALVE (AAV)
	FLOOR CLEAN OUT (FCO)
	POINT OF CONNECTION
VTR	VENT THRU ROOF
FU	FIXTURE UNIT
WSFU	WATER SUPPLY FIXTURE UNIT
PT	PRESSURE & TEMPERATURE RELIEF PIPE (PT)
SOV	SHUT OFF VALVE
HB	HOSE BIBB
VB	VACUUM BREAKER

NOTE:
NOT ALL SYMBOLS APLY TO THIS PROJECT.

1. ALL WORK TO BE DONE IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2020 (7TH EDITION), STATE AND LOCAL ORDINANCES.
2. BUILDING DRAINAGE SYSTEM TO BE SLOPED AT 1/8" PER FT. MIN. FALL FOR 3" PIPE AND LARGER 1/4" PER FT. SLOPE FOR 2" PIPE SIZE AND SMALLER DEVIATIONS SHALL BE APPROVED BY ARCHITECT/ENGINEER.
3. PROVIDE CLEAN OUTS EVERY 75 FT. AND AT BASE OF EVERY WASTESTACK. ALL CLEAN-OUTS TO BE FLUSH MOUNTED.
4. MATERIALS SHALL BE ALL NEW AND AS FOLLOWS:
 - A. SANITARY DRAINAGE WASTE AND VENT PIPING: UNDERGROUND: PVC (DWV) PIPING SCHEDULE 40 CONFORMING ASTM D-2665. ABOVE GROUND: CAST IRON NO HUB PIPE AS PER CISPI STANDARD 301. OR PVC DRAINAGE WASTE & VENT (DWV) SCHEDULE 40 CONFORMING ASTM D-2665. INSTALL PLASTIC (PVC) PIPES ONLY WHEN ITS APPROVED BY LOCAL AUTHORITIES AND NOT TO BE INSTALLED IN AIR RETURN PLENUM.
 - B. PROVIDE 1" THICK FIBERGLASS INSULATION TO SAN WASTE PIPING FOR NOISE ABATEMENT.
 - C. WATER PIPING: ABOVE GROUND PIPE AND FITTINGS COOPER TYPE "L" AND COPPER TYPE "K" ASTM B-88 UNDERGROUND. PROVIDE 1" THICK MIN. FIBERGLASS INSULATION TO ALL HOT WATER AND HOT WATER RECIRCULATION PIPING. & 1/2" THICK FIBERGLASS INSULATION TO COLD WATER PIPING. FOR NOISE REDUCTION.
 - D. CONDENSATE DRAIN PIPING: PVC SCHEDULE 40 ABOVE ROOF AND UNDERGROUND. PROVIDE 1/2" ARMAFLEX PIPE INSULATION TO ALL CONDENSATE DRAIN PIPING.
 - E. FLOOR CLEAN OUTS: JOSAM SERIES 56020 OR EQUAL.
 - F. WALL CLEAN OUTS: JOSAM SERIES 58750 WITH ACCESS COVER OR EQUAL.
 - G. VALVES: 125 PSI NIBCO SCOTT, STOCKHAM OR EQUAL.
 - H. HOSE BIBBS: CHICAGO MFR OR EQUAL WITH VACUUM BREAKER.
 - I. AIR ADMITTANCE VALVE: STUDOR® MINI-VENT® OR APPROVED EQUAL.
 - J. WATER HAMMER ARRESTORS (SHOCK ABSORBERS): AS PER PDI STANDARDS WH-201 "J.R. SMITH" MODEL: HYDROTROL OR APPROVED EQUAL. PROVIDE ACCESS PANEL.
5. PERFORM THE FOLLOWING TEST:
 - A. WATER PIPING SHALL BE SUBJECTED TO HYDROSTATIC PRESSURE TEST OF 100 PSI FOR A PERIOD OF TIME SUFFICIENT TO EXAMINE ENTIRE SYSTEM BUT NOT LESS THAN ONE HOUR.
 - B. DRAINAGE SYSTEM: BEFORE INSTALLATION OF ANY DRAINS, THE END OF THE SYSTEM SHALL BE CAPPED & ALL LINES FILLED WITH WATER TO HIGHEST POINT & ALLOWED TO STAND UNTIL INSPECTION IS MADE AND WATER LEVELS REMAIN CONSTANT.
 - C. CORRECT ALL DEFECTS DISCLOSED BY ABOVE TESTS.
 - D. COMPLETE SYSTEM FIXTURE & EQUIPMENT SHALL BE GIVEN AN IN-SERVICE TEST AFTER COMPLETION OF THE INSTALLATION.
 - E. STERILIZE ALL WATER LINES WITH A MIXTURE OF (2) POUNDS OF CHLORINATED LIME TO EACH 1000 gal. OF WATER (60 PPM OF AVAILABLE CHLORINE). RETAIN MIXTURE IN PIPES FOR 24 HOURS AND FLUSH THOROUGHLY WITH POTABLE WATER BEFORE PLACING IN SERVICE.
6. PLUMBING CONTRACTOR SHALL FURNISH A WRITTEN GUARANTEE THAT ALL PLUMBING WORK SHALL BE FREE FROM DEFECTS OF MATERIALS AND WORKSMANSHIP FOR A PERIOD OF ONE YEAR FROM DAY OF FINAL ACCEPTANCE, AND THAT HE WILL, AT HIS EXPENSE, REPAIR AND REPLACE ALL WORK WHICH BECOMES DEFECTIVE DURING GUARANTEE PERIOD.
7. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION OF EXISTING UTILITIES AND POINTS OF CONNECTION BEFORE COMMENCING ANY WORK.
8. PLUMBING CONTRACTOR SHALL PAY ALL FEES AND INSPECTION CHARGES REQUIRED.
9. SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL OF ALL EQUIPMENT, MATERIALS AND LAYOUTS PRIOR INSTALLATION.
10. OFFSET PIPING AS REQUIRED TO CLEAR BUILDING STRUCTURE, DUCTWORK, ETC. AS SHOWN ON DRAWINGS AND AS REQUIRED BY FIELD CONDITIONS.
11. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL A/C CONDENSATE DRAIN AND TRAP. SEE A/C PLANS FOR LOCATION OF UNITS AND DRAINS.
12. PLUMBING CONTRACTOR SHALL VERIFY ALL SPACE CONDITIONS AND DIMENSIONS AT JOB SITE PRIOR TO FABRICATION AND INSTALLATION OF MATERIALS AND EQUIPMENT.
13. COORDINATE WORK WITH OTHER TRADES.
14. FURNISH AND INSTALL FIXTURE AS SPECIFIED IN PLUMBING FIXTURE SCHEDULE.
15. EACH PLUMBING FIXTURE SHALL BE PROVIDE WITH AIR CHAMBER OR WATER HAMMER ARRESTORS (SHOCK ABSORBER) AS PER FBC 604.9
16. PROVIDE SHUTOFF VALVE FOR EACH FIXTURE, JUST BEFORE CONNECTING TO FIXTURE.
17. WHEREVER DISSIMILAR METALS ARE TO BE JOINED, A DIELECTRIC FITTING SHALL BE PROVIDED TO CONNECT BOTH TYPES OF PIPES.
18. ALL PLUMBING FIXTURES & FAUCETS SHALL COMPLY WITH THE MAXIMUM FLOW RATE & CONSUMPTION STATED ON F.B.C. TABLE 604.4, AND SHALL MEET MIAMI DADE COUNTY CODE 8-31.2 SECTION
19. PLUMBING FIXTURES & EQUIPMENT SHALL CONFORM WITH THE SPECIFICATIONS, CONNECTIONS AND TESTING LABORATORIES APPROVALS AS STATED ON F.B.C. SECTION 406 THRU 421

PLUMBING DRAWING INDEX		
SHEET	DESCRIPTION	ISSUED
P-00.0	PLUMBING LEGEND, GENERAL NOTES, SCHEDULES AND DETAILS	YES
P-01.0	PLUMBING SITE PLAN	YES
P-02.0	PLUMBING FLOOR PLAN – FIRST FLOOR	YES
P-03.0	PLUMBING FLOOR PLAN – SECOND FLOOR	YES
P-04.0	PLUMBING ROOF PLAN	YES
P-05.0	PLUMBING FLOOR PLAN – CABANA & POOL	YES
P-06.0	PLUMBING ISOMETRIC – DOMESTIC WATER	YES
P-07.0	PLUMBING ISOMETRIC – SANITARY WATER	YES
P-08.0	PLUMBING ISOMETRICS – SANITARY & DOMESTIC WATER	YES
P-09.0	PLUMBING ISOMETRICS – GAS	YES

LUSEO ENGINEERING	
LUSEO ENGINEERING CA#32708	
7875 1400 14th Street, SUITE 203 MIAMI, FL 33156 TEL: +1(305)351-2960 WWW.LUSEOGRP.COM	
ENGINEER OF RECORD: EVELIO RODRIGUEZ FLORIDA P.E. #74127	
 Evelio Rodriguez Professional Engineer State of Florida License No. 74127 Mechanical Engineering	
NOT VALID UNLESS SIGNED & SEALED "IN MY PROFESSIONAL JUDGEMENT AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, THESE PLANS AND SPECIFICATIONS COMPLY WITH APPLICABLE BUILDING CODES."	



PACHECO-MARTINEZ
& ASSOCIATES LLC.

NEW RESIDENCE FOR:
MR. & MRS. DE LA CONCEPCION

NEW RESIDENCE FOR:

date 07-28-2020 revisions _____

P-00.0

SEPTIC TANK SYSTEM NOTES

- THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF A COMPLETE SEPTIC TANK SYSTEM IN ACCORDANCE WITH THIS DRAWING, THE APPLICABLE EDITION OF CHAPTER 64E-6, FLORIDA ADMINISTRATIVE CODE, STANDARDS FOR ON SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.
- THE CONTRACTOR SHALL PAY ALL COST OF PERMIT, INSPECTIONS AND OTHER COSTS INCIDENTAL TO THE COMPLETION AND TESTING OF THIS WORK. UPON FINAL INSPECTION, A CERTIFICATE FROM THE LOCAL STATE INSPECTION AUTHORITY SHALL BE FURNISHED TO THE OWNER.
- ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND MUST BE FURNISHED SO AS TO PREVENT ANY DELAY IN THE PROGRESS OF THE WORK.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL WITH ALL EQUIPMENT, MATERIALS AND LAYOUTS PRIOR TO INSTALLATION.
- CONTRACTOR SHALL VERIFY ALL SPACE CONDITIONS AND DIMENSIONS AT JOB SITE PRIOR TO FABRICATION AND INSTALLATION OF MATERIALS, PIPING AND EQUIPMENT.
- COORDINATE WORK WITH OTHER TRADES.
- PROVIDE PIPING AS FOLLOWS:
DRAIN FIELD: PE PLASTIC PERFORATED FIELD TUBING.
SANITARY PIPING & CONNECTIONS: PVC SCHEDULE 40 (DWV) PIPE
- THERE ARE NO PERTINENT FEATURES ON ADJACENT PROPERTIES AND ACROSS THE STREET THAT MAY AFFECT THE SYSTEM INSTALLATION.
- CONTRACTOR SHALL PROVIDE DOCUMENTATIONS CONCERNING CONSTRUCTION PERMIT, PERCOLATION TEST, SITE EVALUATION & SYSTEM SPECIFICATION FORMS.
- THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL & EQUIPMENT NECESSARY FOR THE INSTALLATION OF A COMPLETE SEPTIC TANK SYSTEM IN ACCORDANCE WITH THIS DRAWING, THE APPLICABLE EDITION OF CHAPTER 64E-6 (EFFECTIVE JULY 31, 2018) FLORIDA ADMINISTRATIVE CODE, STANDARDS FOR ON SITE SEWAGE TREATMENT & DISPOSAL SYSTEMS.
- THERE ARE NO POTABLE OR NON POTABLE WELLS AFFECTED BY THIS SEPTIC SYSTEM.
- NO TREES, VEGETATION OR OBSTRUCTIONS CAN BE ON TOP OF THE SEPTIC SYSTEM (TANK, DRAINFIELD, RESERVE AREA).

SEPTIC TANK-1 (ST-1) CHAMBERS CALCULATION:

168 SF**
210 SF = MIN AREA FOR 24" TRENCH BED

TOTAL CHAMBERS = 14 CHAMBERS

SEPTIC TANK-2 (ST-2) CHAMBERS CALCULATION:

479 SF = 32.0 CHAMBERS

TOTAL CHAMBERS = 32 CHAMBERS

SEPTIC TANK-3 (ST-3) CHAMBERS CALCULATION:

455 SF = 31.0 CHAMBERS

TOTAL CHAMBERS = 31 CHAMBERS

TRENCH SYSTEM NOTES

- EXCAVATE TRENCHES TO PROPER WIDTH, AND PROPER DEPTH AS REQUIRED BY STATE AND LOCAL CODES.
- SMOOTH IRREGULARITIES IN THE EXCAVATION. A LEVEL, FLAT SURFACE IS REQUIRED.
- INSTALL END CAP AND SECURE IN PLACE WITH BACKFILL.
- PUNCH OUT HOLE OPENINGS IN THE END PLATES AS NEEDED AND CONNECT INLET PIPES.
- FILL SIDEWALL AREA TO TOP CHAMBERS WITH NATIVE SOIL (COARSE SAND OR FINE GRAVEL, MAY ALSO BE USED: NO HEAVY CLAY, SILT, OR DEBRIS SHALL BE INCLUDED.)
- "WALK IN" FILL TO COMPACT SOIL ALONG SIDES OF CHAMBER. THIS IS VERY IMPORTANT TO ACHIEVE LOAD RATING
- COVER CHAMBERS TO A MINIMUM OF 12" OF GRANULAR COVER AFTER CONSOLIDATION. AVOID LARGE ROCKS OR DEBRIS IN COVER MATERIAL. COVER HEIGHTS AND LIVE LOADING LIMITS ARE IMPACTED BY BOTH SOIL TYPE AND COMPACTION REQUIREMENTS. CONTACT SUPPLIER WHEN POOR SOIL ARE ENCOUNTERED AND FOR MAXIMUM FILL HEIGHTS.

	ST-1	ST-2 & 3					
GAL.	900	1050	1200	1350	1500	1650	2000
W	3'-8"	3'-8"	4'-0"	4'-0"	5'-0"	5'-0"	5'-8"
L	9'-3"	9'-3"	10'-0"	10'-0"	12'-0"	12'-0"	12'-0"
H	4'-10"	4'-10"	4'-10"	5'-6"	5'-6"	5'-6"	5'-2"
T min.	3"	3"	3"	3"	4"	4"	6"
D min.	4'-0"	4'-0"	4'-0"	4'-6"	4'-6"	4'-6"	4'-6"
REINF.	6 x 6	10/10			4 x 4	4/4	
CONC.		4000 PSI, 28 DAY					
NOTE: INFLUENT INVERT SHALL BE 1" MIN. / 3" MAX. ABOVE EFFLUENT INVERT ELEVATION.							

AVERAGE SEWAGE FLOW GALLONS/DAY	SEPTIC TANK MINIMUM EFFECTIVE CAPACITY GALLONS		PUMP TANK MINIMUM TOTAL CAPACITY GALLONS	
	Residential	Commercial	Residential	Commercial
0-200	900	150	225	225
201-300	900	225	375	375
301-400	1050	300	450	450
401-500	1200	375	600	600
501-600	1350	450	600	600
601-700	1500	525	750	750
701-800	1650	600	900	900
801-1000	1900	750	1050	1050
1001-1250	2200	900	1200	1200
1251-1750	2700	1350	1900	1900
1751-2500	3200	1650	2700	2700
2501-3000	3700	1900	3000	3000
3001-3500	4300	2200	3000	3000
3501-4000	4800	2700	3000	3000
4001-4500	5300	2700	3000	3000
4501-5000	5800	3000	3000	3000

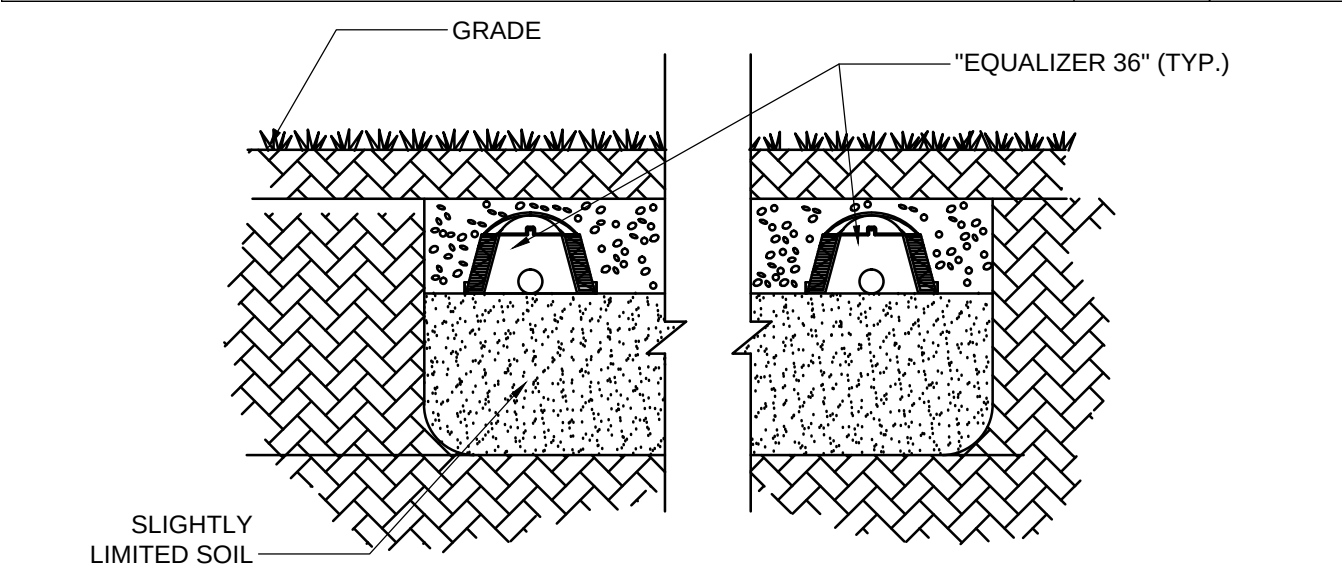
Single Unit in 24" Trench or Bed

Comparable Square Feet of Drainfield	Number of Arc 24 Chambers Required	Comparable Square Feet of Drainfield	Number of Arc 24 Chambers Required
210	14 ST-1	555	37
225	15	570	38
240	16	585	39
255	17	600	40
270	18	615	41
285	19	630	42
300	20	645	43
315	21	660	44
330	22	675	45
345	23	690	46
360	24	705	47
375	25	720	48
390	26	735	49
405	27	750	50
420	28	765	51
435	29	780	52
450	30	795	53
465	31 ST-3	810	54
480	32 ST-2	825	55
495	33	840	56
510	34	855	57
525	35	etc.	add 15 sq ft each
540	36		

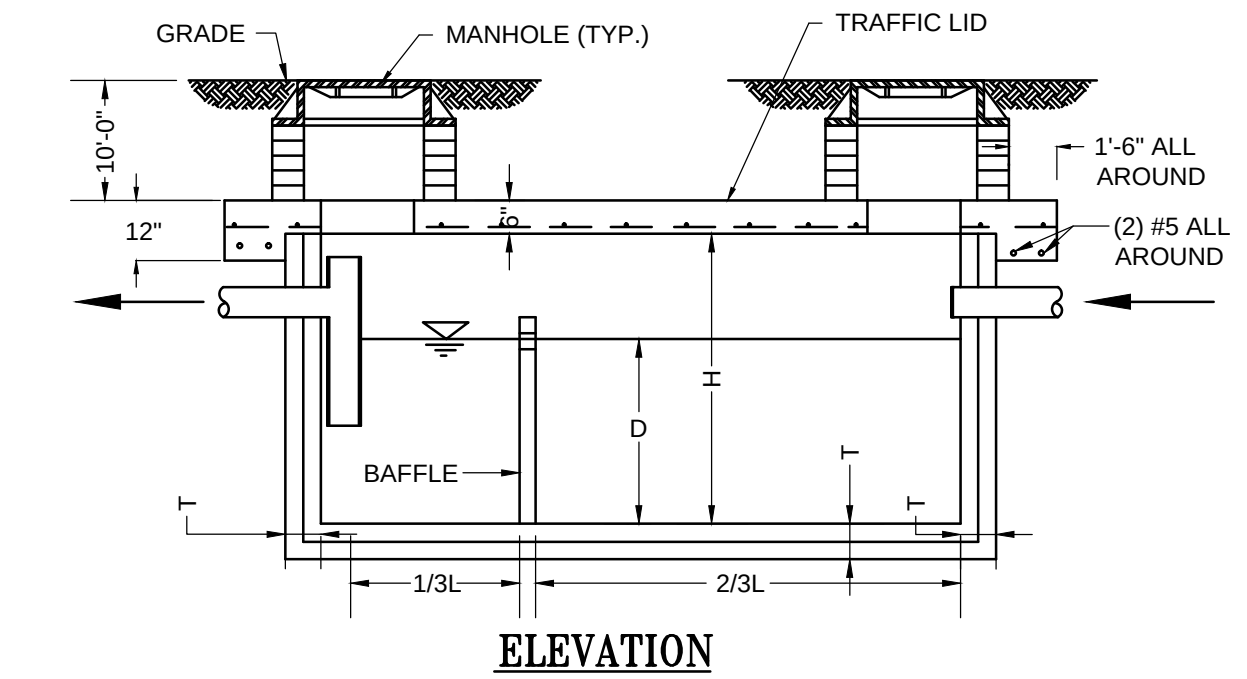
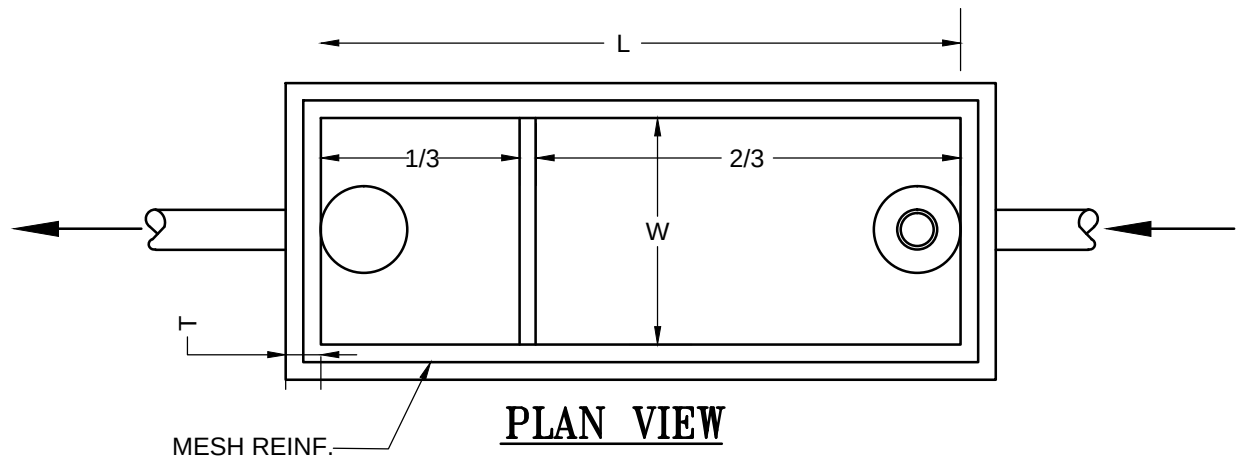
DESIGN CRITERIA SYSTEM SEPTIC TANK-1			
BUILDING TYPE	RESIDENCE		
AIR CONDITIONED AREA (WHOLE HOUSE)	5	8580	SQFT
TOTAL BEDROOMS (WHOLE HOUSE)	5	FU	
TOTAL PLUMBING FIXTURE UNIT (WHOLE HOUSE)	92	FU	
TOTAL PLUMBING FIXTURE UNIT (FOR DRAINFIELD)	14	FU	
% PLUMBING FIXTURE UNIT (FOR DRAINFIELD)	15	%	
4 Bedrooms with 2251-3300 sq. ft. of building area	400	GPD	
Each additional 750 SF of area, system sizing shall be increased by 60 gallons per dwelling unit.	480	GPD	
ESTIMATED SEWAGE FLOW (WHOLE HOME): 400 GPD + ((8580-3300)/750 GPD)*60 = 880 GPD	880	GPD	
ESTIMATED SEWAGE FLOW (SEPTIC TANK 1): 14/92 = 15% THEREFORE 0.15*880 GPD = 135 GPD	135	GPD	
SEPTIC TANK REQUIRED (TABLE II SEPTIC TANK AND PUMP TANK CAPACITY)	900	GALLONS	
MAIN DRAIN FIELD AREA REQUIRED (TRENCH SYSTEM)	168	SQFT	
RESERVED AREA REQUIRED	85	SQFT	
TOTAL UNOBSTRUCTED AREA REQUIRED (Main Drain Field + Reserved Area)	253	SQFT	

DESIGN CRITERIA SYSTEM SEPTIC TANK-2			
BUILDING TYPE	RESIDENCE		
AIR CONDITIONED AREA (WHOLE HOUSE)	5	8580	SQFT
TOTAL BEDROOMS (WHOLE HOUSE)	5	FU	
TOTAL PLUMBING FIXTURE UNIT (WHOLE HOUSE)	92	FU	
TOTAL PLUMBING FIXTURE UNIT (FOR DRAINFIELD)	40	FU	
% PLUMBING FIXTURE UNIT (FOR DRAINFIELD)	44	%	
4 Bedrooms with 2251-3300 sq. ft. of building area	400	GPD	
Each additional 750 SF of area, system sizing shall be increased by 60 gallons per dwelling unit.	480	GPD	
ESTIMATED SEWAGE FLOW (WHOLE HOME): 400 GPD + ((8580-3300)/750 GPD)*60 = 880 GPD	880	GPD	
ESTIMATED SEWAGE FLOW (SEPTIC TANK 3): 40/92 = 44% THEREFORE 0.44*880 GPD = 383 GPD	383	GPD	
SEPTIC TANK REQUIRED (TABLE II SEPTIC TANK AND PUMP TANK CAPACITY)	1050	GALLONS	
MAIN DRAIN FIELD AREA REQUIRED (TRENCH SYSTEM)	479	SQFT	
RESERVED AREA REQUIRED	240	SQFT	
TOTAL UNOBSTRUCTED AREA REQUIRED (Main Drain Field + Reserved Area)	718	SQFT	

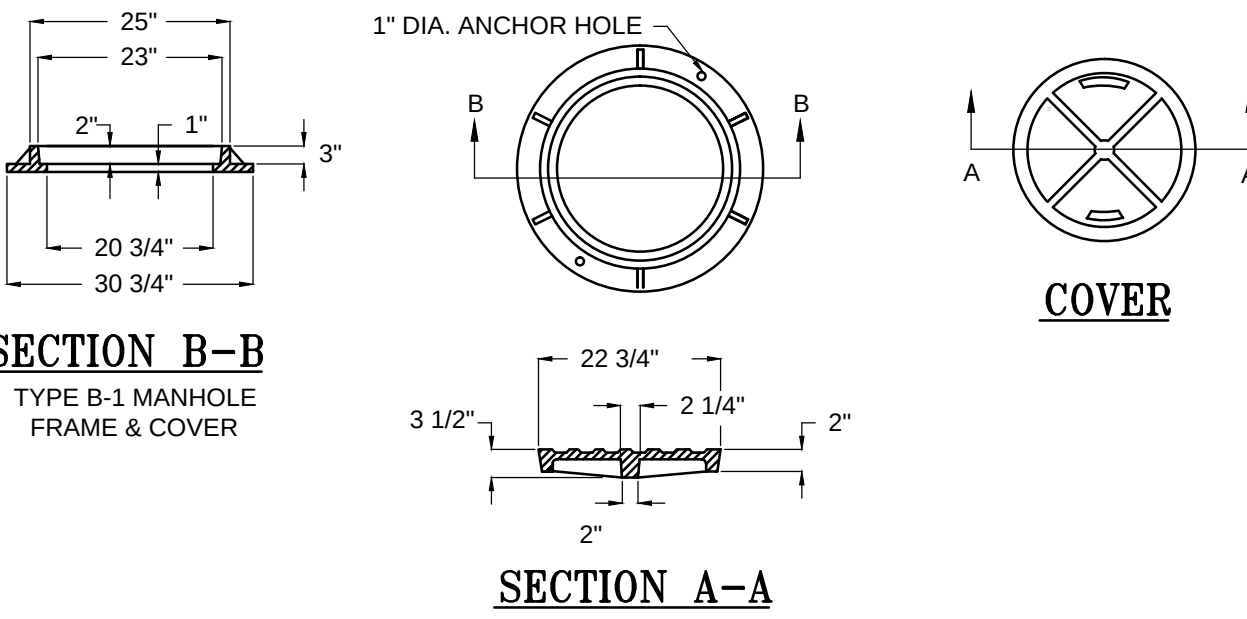
DESIGN CRITERIA SYSTEM SEPTIC TANK-3			
BUILDING TYPE	RESIDENCE		
AIR CONDITIONED AREA (WHOLE HOUSE)	5	8580	SQFT
TOTAL BEDROOMS (WHOLE HOUSE)	5	FU	
TOTAL PLUMBING FIXTURE UNIT (WHOLE HOUSE)	92	FU	
TOTAL PLUMBING FIXTURE UNIT (FOR DRAINFIELD)	38	FU	
% PLUMBING FIXTURE UNIT (FOR DRAINFIELD)	41	%	
4 Bedrooms with 2251-3300 sq. ft. of building area	400	GPD	
Each additional 750 SF of area, system sizing shall be increased by 60 gallons per dwelling unit.	480	GPD	
ESTIMATED SEWAGE FLOW (WHOLE HOME): 400 GPD + ((8580-3300)/750 GPD)*60 = 880 GPD	880	GPD	
ESTIMATED SEWAGE FLOW (SEPTIC TANK 2): 38/92 = 41% THEREFORE 0.41*880 GPD = 364 GPD	364	GPD	
SEPTIC TANK REQUIRED (TABLE II SEPTIC TANK AND PUMP TANK CAPACITY)	1050	GALLONS	
MAIN DRAIN FIELD AREA REQUIRED (TRENCH SYSTEM)	455	SQFT	
RESERVED AREA REQUIRED	229	SQFT	
TOTAL UNOBSTRUCTED AREA REQUIRED (Main Drain Field + Reserved Area)	684	SQFT	



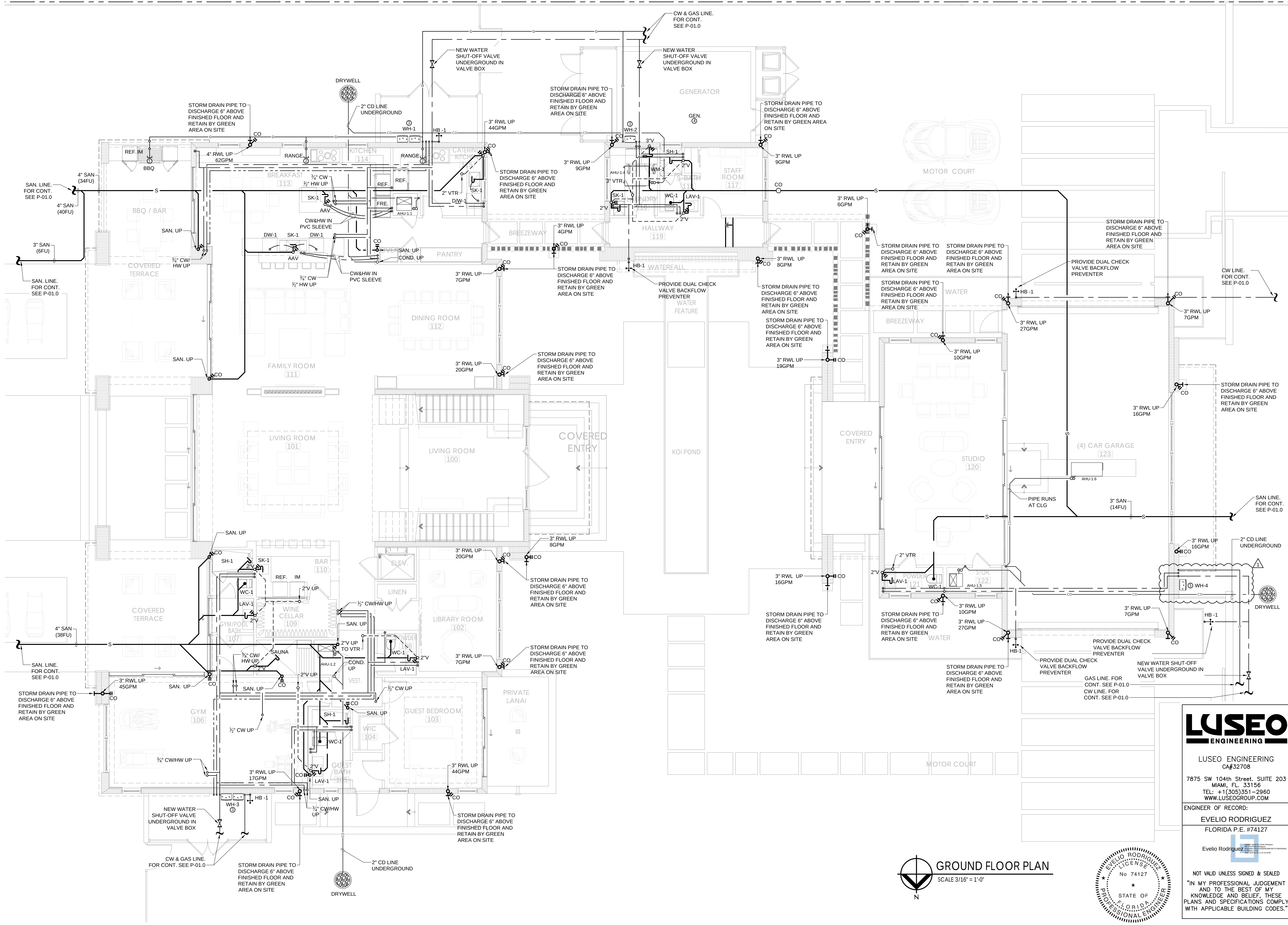
DRAINFIELD CROSS SECTION DETAIL N.T.S.



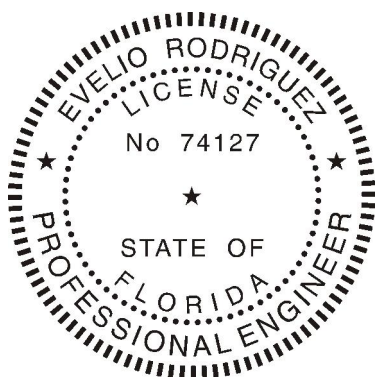
SEPTIC TANK DETAIL N.T.S.



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ENGINEER OF RECORD:
EVELIO RODRIGUEZ
FLORIDA P.E. #74127
Evelio Rodriguez
NOT VALID UNLESS SIGNED & SEALED
"IN MY PROFESSIONAL JUDGEMENT AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, THESE PLANS AND SPECIFICATIONS COMPLY WITH APPLICABLE BUILDING CODES."



GROUND FLOOR PLAN
SCALE 3/16" = 1'-0"



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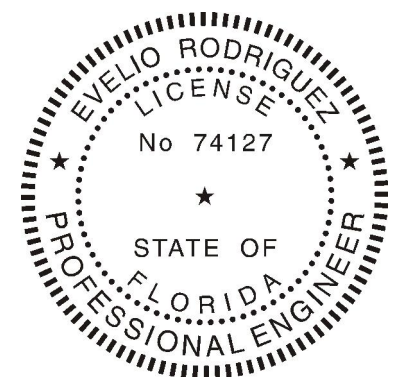
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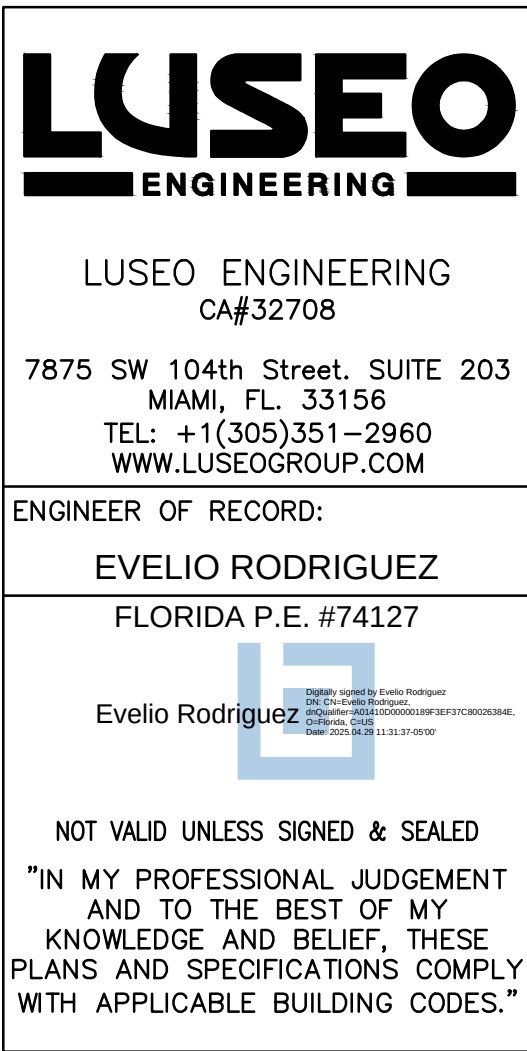
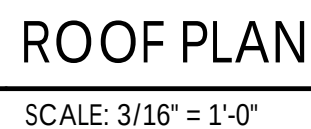
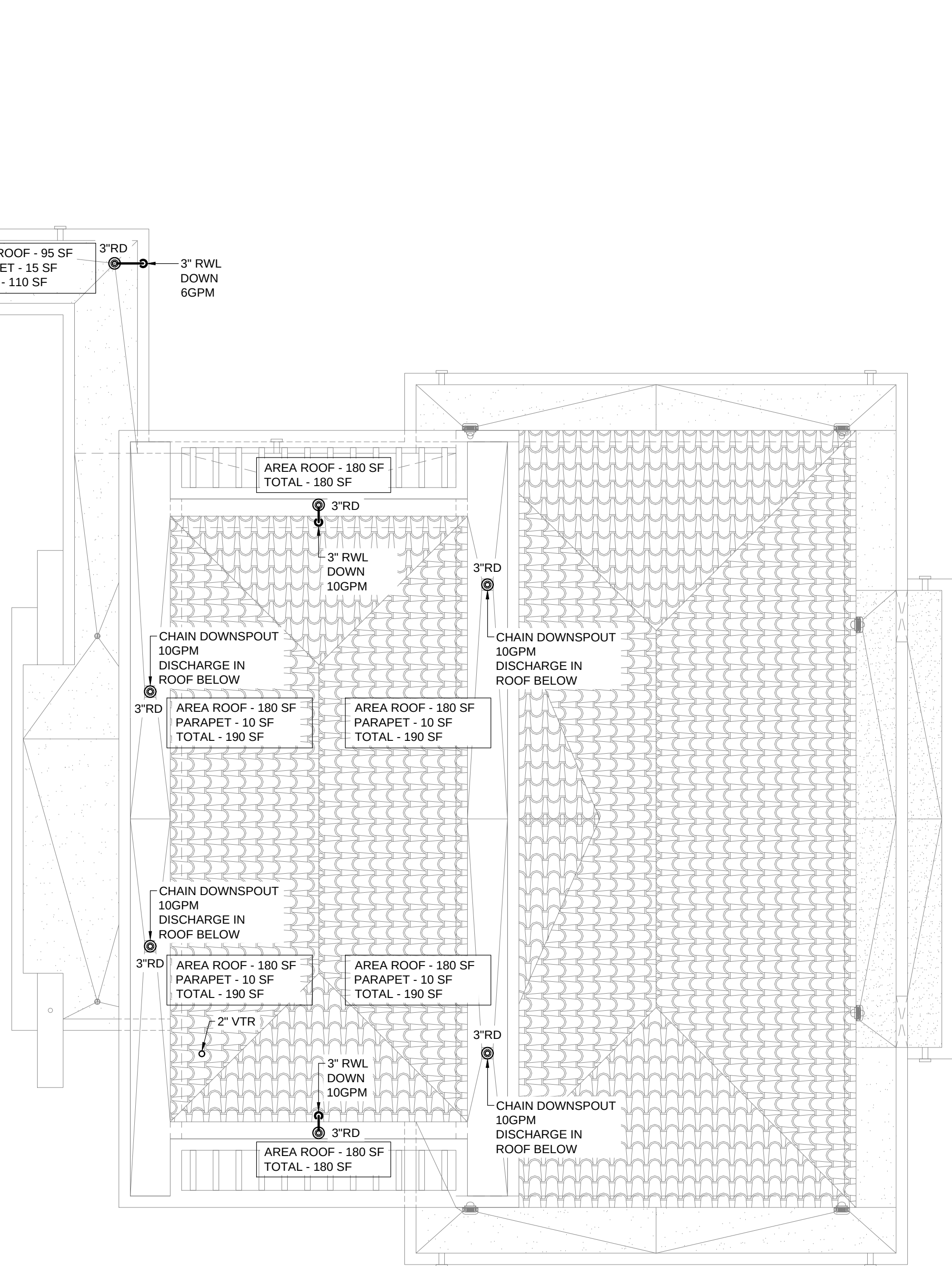
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07-28-2020	1	HM		2024	P-02.0

NEW RESIDENCE FOR:

MR. & MRS. DE LA CONCEPCION

8965 SW 63rd COURT PINECREST, FLORIDA 33156

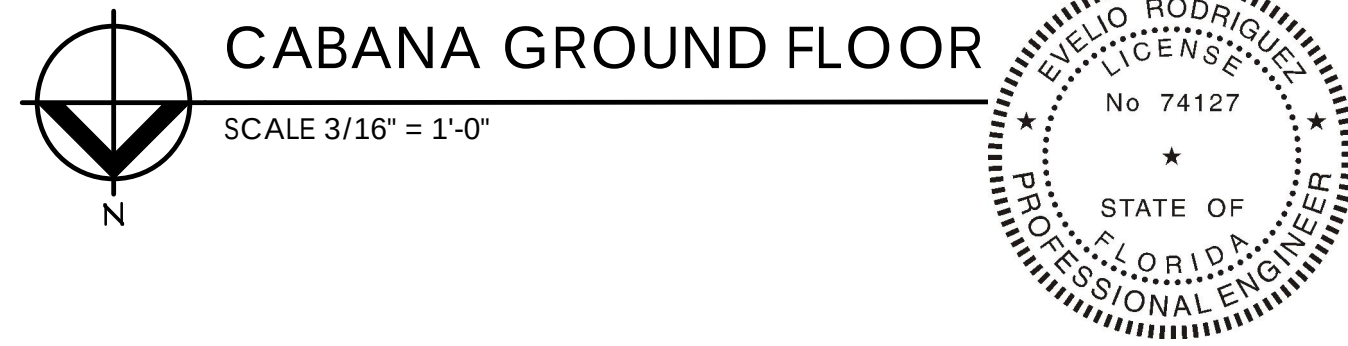
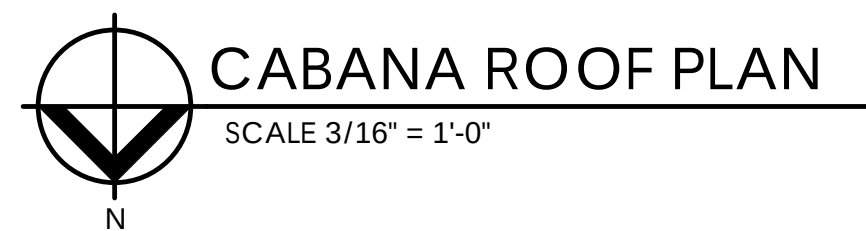




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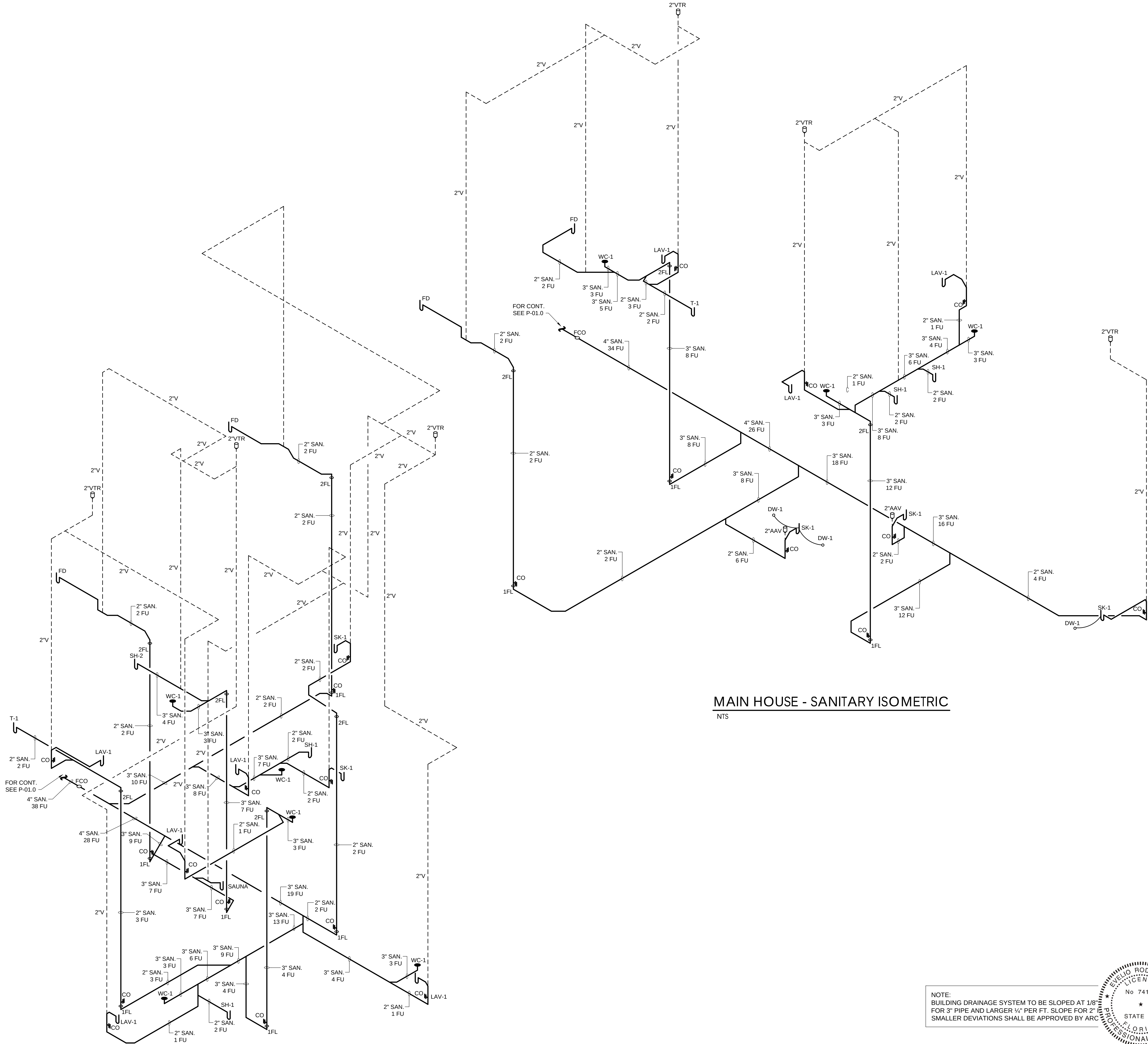
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EVELIO RODRIGUEZ	
FLORIDA P.E. #74127	
	
Evelio Rodriguez	
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MR. & MRS. DE LA
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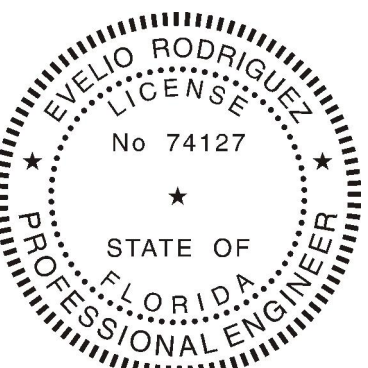
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MAIN HOUSE - SANITARY ISOMETRIC

NTS

NOTE:
BUILDING DRAINAGE SYSTEM TO BE SLOPED AT 1/8"
FOR 3" PIPE AND LARGER 1/4" PER FT. SLOPE FOR 2"
SMALLER DEVIATIONS SHALL BE APPROVED BY ARC



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issued				
drawn	HM			
checked				
project no.	2024			
sheet no.				

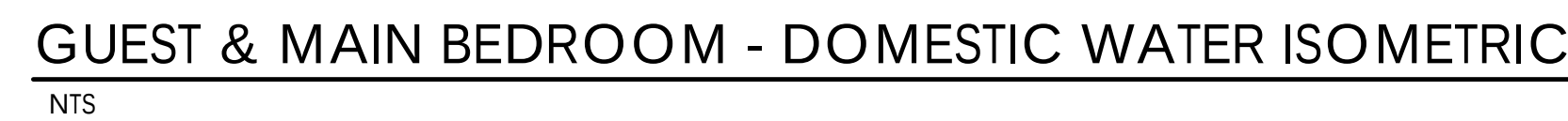
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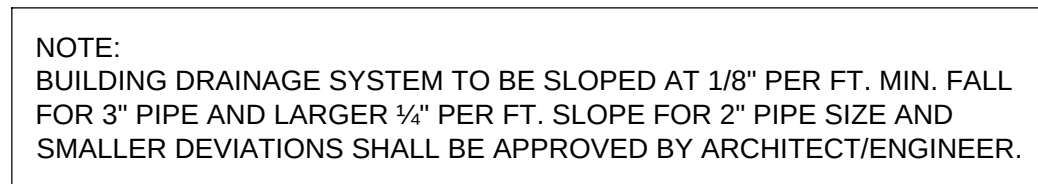
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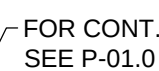
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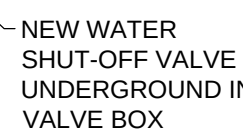




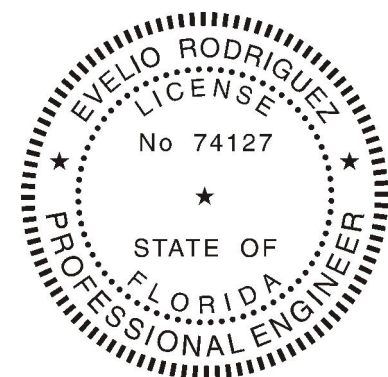
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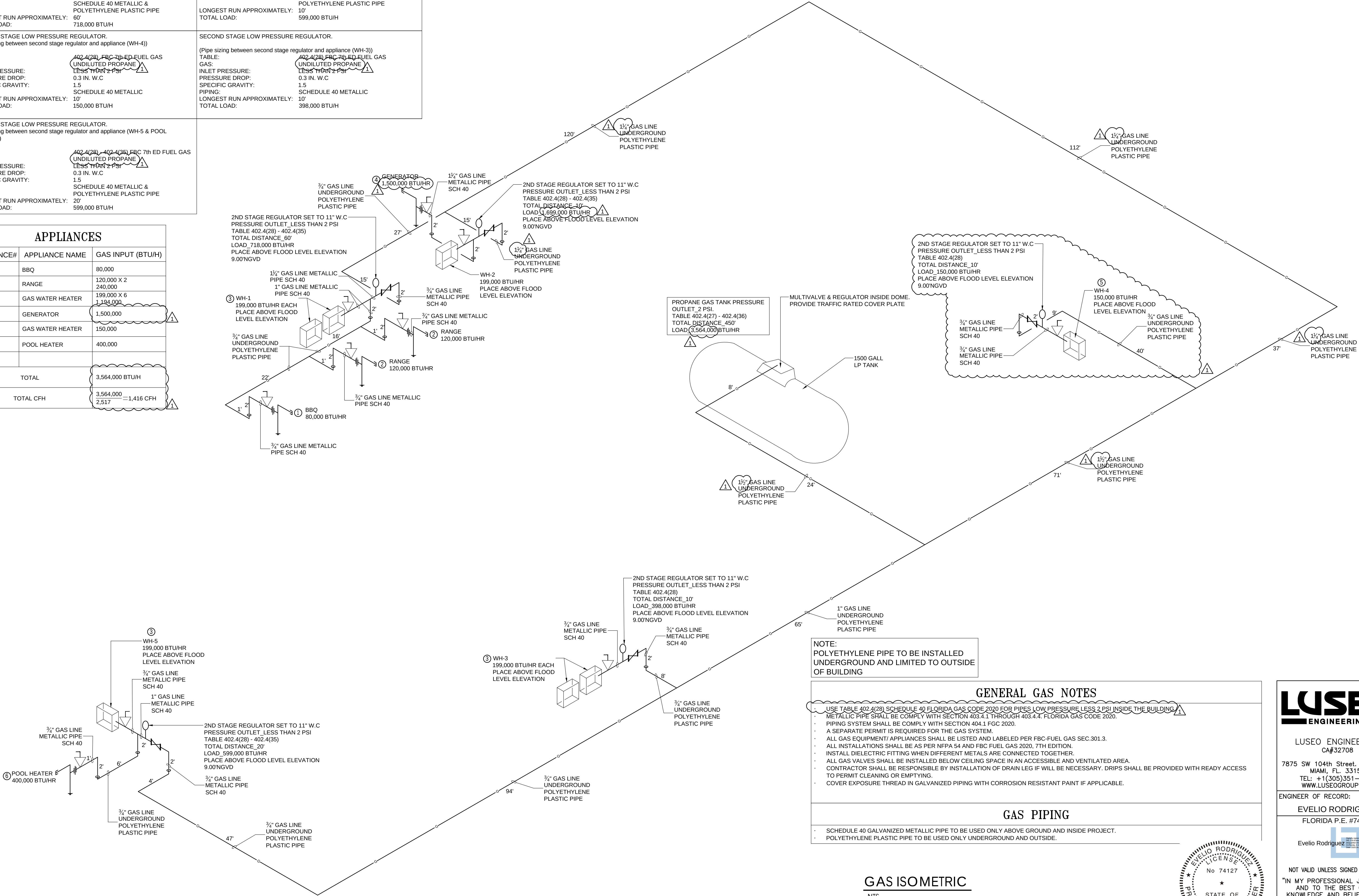
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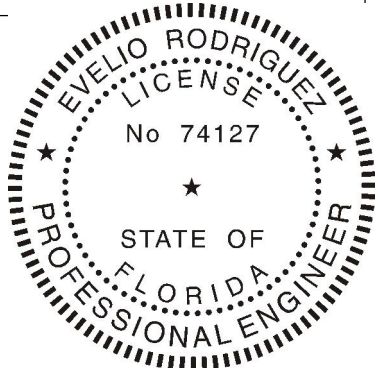
SIZING SUMMARY (LONGEST LENGTH METHOD) GAS LOAD	
SECOND STAGE LOW PRESSURE REGULATOR. (Pipe sizing between second stage regulator and appliance (BBQ, COOKTOP X 2 & WH-1))	SECOND STAGE LOW PRESSURE REGULATOR. (Pipe sizing between second stage regulator and appliance (WH-2 & GENERATOR))
TABLE: GAS: UNDILUTED PROPANE INLET PRESSURE: LESS THAN 2 PSI PRESSURE DROP: 0.3 IN. W.C SPECIFIC GRAVITY: 1.5 PIPING: SCHEDULE 40 METALLIC & POLYETHYLENE PLASTIC PIPE LONGEST RUN APPROXIMATELY: 60' TOTAL LOAD: 718,000 BTU/H	TABLE: GAS: UNDILUTED PROPANE INLET PRESSURE: LESS THAN 2 PSI PRESSURE DROP: 0.3 IN. W.C SPECIFIC GRAVITY: 1.5 PIPING: SCHEDULE 40 METALLIC & POLYETHYLENE PLASTIC PIPE LONGEST RUN APPROXIMATELY: 10' TOTAL LOAD: 599,000 BTU/H
SECOND STAGE LOW PRESSURE REGULATOR. (Pipe sizing between second stage regulator and appliance (WH-4))	SECOND STAGE LOW PRESSURE REGULATOR. (Pipe sizing between second stage regulator and appliance (WH-3))
TABLE: GAS: UNDILUTED PROPANE INLET PRESSURE: LESS THAN 2 PSI PRESSURE DROP: 0.3 IN. W.C SPECIFIC GRAVITY: 1.5 PIPING: SCHEDULE 40 METALLIC LONGEST RUN APPROXIMATELY: 10' TOTAL LOAD: 150,000 BTU/H	TABLE: GAS: UNDILUTED PROPANE INLET PRESSURE: LESS THAN 2 PSI PRESSURE DROP: 0.3 IN. W.C SPECIFIC GRAVITY: 1.5 PIPING: SCHEDULE 40 METALLIC LONGEST RUN APPROXIMATELY: 10' TOTAL LOAD: 398,000 BTU/H
SECOND STAGE LOW PRESSURE REGULATOR. (Pipe sizing between second stage regulator and appliance (WH-5 & POOL HEATER))	
TABLE: GAS: UNDILUTED PROPANE INLET PRESSURE: LESS THAN 2 PSI PRESSURE DROP: 0.3 IN. W.C SPECIFIC GRAVITY: 1.5 PIPING: SCHEDULE 40 METALLIC & POLYETHYLENE PLASTIC PIPE LONGEST RUN APPROXIMATELY: 20' TOTAL LOAD: 599,000 BTU/H	

APPLIANCES		
APPLIANCE#	APPLIANCE NAME	GAS INPUT (BTU/H)
①	BBQ	80,000
②	RANGE	120,000 X 2 240,000
③	GAS WATER HEATER	199,000 X 6 1,194,000
④	GENERATOR	1,500,000
⑤	GAS WATER HEATER	150,000
⑥	POOL HEATER	400,000
TOTAL		3,564,000 BTU/H
TOTAL CFH		$\frac{3,564,000}{2,517} = 1,416$ CFH



NOTE:
POLYETHYLENE PIPE TO BE INSTALLED
UNDERGROUND AND LIMITED TO OUTSIDE
OF BUILDING

GENERAL GAS NOTES	
USE TABLE 402.4(28) SCHEDULE 40 FLORIDA GAS CODE 2020 FOR PIPES LOW PRESSURE LESS 2 PSI INSIDE THE BUILDING	
- METALLIC PIPE SHALL BE COMPLY WITH SECTION 403.4.1 THROUGH 403.4.4. FLORIDA GAS CODE 2020. - PIPING SYSTEM SHALL BE COMPLY WITH SECTION 404.1 FGC 2020. - A SEPARATE PERMIT IS REQUIRED FOR THE GAS SYSTEM. - ALL GAS EQUIPMENT/ APPLIANCES SHALL BE LISTED AND LABELED PER FBC-FUEL GAS SEC.301.3. - ALL INSTALLATIONS SHALL BE AS PER NFPA 54 AND FBC FUEL GAS 2020, 7TH EDITION. - INSTALL DIELECTRIC FITTING WHEN DIFFERENT METALS ARE CONNECTED TOGETHER. - ALL GAS VALVES SHALL BE INSTALLED BELOW CEILING SPACE IN AN ACCESSIBLE AND VENTILATED AREA. - CONTRACTOR SHALL BE RESPONSIBLE BY INSTALLATION OF DRAIN LEG IF WILL BE NECESSARY. DRIPS SHALL BE PROVIDED WITH READY ACCESS TO PERMIT CLEANING OR EMPTYING. - COVER EXPOSURE THREAD IN GALVANIZED PIPING WITH CORROSION RESISTANT PAINT IF APPLICABLE.	
GAS PIPING	
- SCHEDULE 40 GALVANIZED METALLIC PIPE TO BE USED ONLY ABOVE GROUND AND INSIDE PROJECT. - POLYETHYLENE PLASTIC PIPE TO BE USED ONLY UNDERGROUND AND OUTSIDE.	



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