

Owner: LGI Applicant: _____
 Address: 225 Empress Date Evaluated: _____
 Proposed Facility: SFD Design Flow (.1949): 480 GPD Property Size: _____
 Location of Site: _____ Property Recorded: _____
 Water Supply: ☒ Public ☐ Individual ☐ Well ☐ Spring ☐ Other
 Evaluation Method: ☒ Auger Boring ☐ Pit ☐ Cut
 Type of Wastewater: ☒ Sewage ☐ Industrial Process ☐ Mixed

Description	Initial System	Repair System	Other Factors (.1946): Site Classification (.1948): Evaluated By: <i>MDR</i> Others Present:
Available Space (.1945)	<i>✓</i>	<i>✓</i>	
System Type(s)	<i>✓</i>	<i>✓</i>	
Site LTR	<i>.4</i>	<i>.4</i>	

Curtain Drain will be placed Around
Septic Area

COMMENTS: _____

LANDSCAPE POSITIONS	GROUP	TEXTURES	.1955 LTAR	CONSISTENCE MOIST	WET
R-RIDGE	I	S-SAND	1.2 - 0.8	VFR-VERY FRIABLE FR-FRIABLE	NS-NON-STICKY
S-SHOULDER SLOPE		LS-LOAMY SAND			SS-SLIGHTLY STICKY
L-LINEAR SLOPE	II	SL-SANDY LOAM	0.8 - 0.6	FI-FIRM VFI-VERY FIRM	S-STICKY
FS-FOOT SLOPE		L-LOAM			VS-VERY STICKY
N-NOSE SLOPE	III	SI-SILT	0.6 - 0.3	EFI-EXTREMELY FIRM	NP-NON-PLASTIC
H-HEAD SLOPE		SIL-SILT LOAM			SP-SLIGHTLY STICKY
CC-CONCLAVE SLOPE		CL-CLAY LOAM			P-PLASTIC
CV-CONVEX SLOPE		SCL-SANDY CLAY LOAM			VP-VERY PLASTIC
T-TERRACE	IV	SIC-SILTY CLAY	0.4 - 0.1		
FP-FLOOD PLAN		C-CLAY			
		SC-SANDY CLAY			

STRUCTURE

SG-SINGLE GRAIN

M- MASSIVE

CR-CRUMB

GR-GRANULAR

SBK-SUBANGULAR BLOCKY

ABK-ANGULAR BLOCKY

PL-PLATY

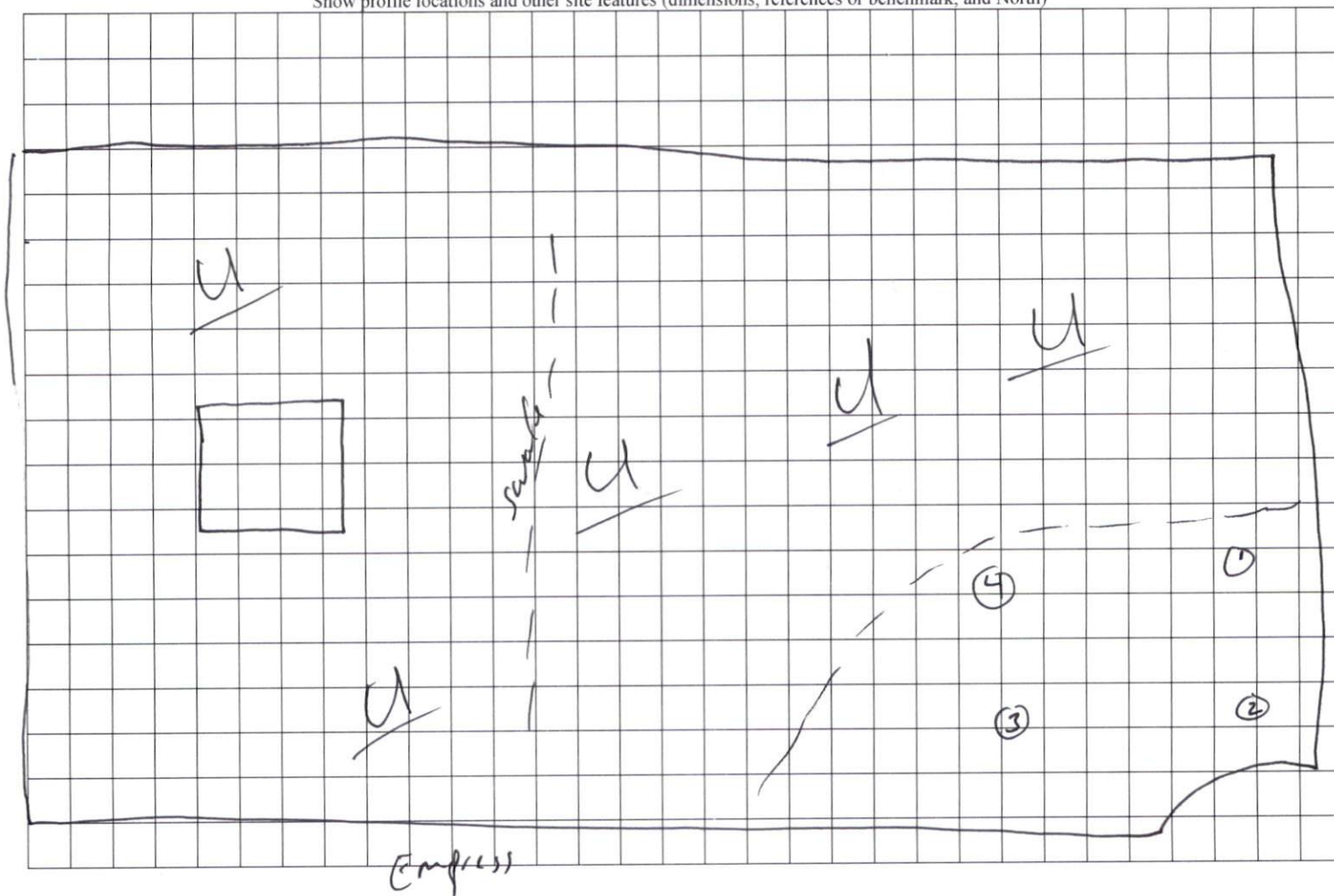
PR-PRISMATIC

MINERALOGY

SLIGHTLY EXPANSIVE

EXPANSIVE

Show profile locations and other site features (dimensions, references or benchmark, and North)



PRESSURE MANIFOLD DESIGN

Name: LGI Homes P.I.N. #: 0600-66-3589 D #: N/A
 Address: 225 Empress Street Subdiv: Brayden Preseve Lot#: 40
 # of BDR: 4 Daily Flow: 480 gal/day L.T.A.R.: 0.350 gal/day/sq.ft
 Septic Tank: 1000 gals (min.) Pump Tank: 1000 gals (min.) Sq. Foot: 693 Stone Depth: N/A
 Number of Taps: 3 Length of Trenches: 77 ft(See Tap Chart for Details) (Panel Block)
 Depth of Trenches: see Harnett County permit Manifold Length: 36 in
 Manifold Diameter: 4 in sch 80pvc (minimum) Tap Configuration: 6 in spacing 1 side(s) of manifold
 Supply Line: length: 200 ft Diameter: 1.5 in sch 40pvc
 Friction Loss + Fitting Loss: 7.52 ft(supply line length + 70' for fittings in pump tank)
 Design Head: 2.0 ft Elevation Head: 8.24 ft
 Vent Hole Size: 3/16 in Orifice Coefficient of Discharge: 0.60
 Orifice Coefficient of Contraction: 0.62 Orifice Coefficient of Velocity: 0.97
 Maximum Head Supplied by Selected Pump(s) at Total Design Flowrate: 23 ft
 Orifice / Vent Hole Flowrate: 1.99 gpm Head Loss at Orifice / Vent Hole: 1.46 ft
 Total Head: 19.22 ft Pump to Deliver: 18.43 gals/min at 19.22 ft head
 Dosing Volume: 217.72 gals.
 Drawdown: 217.72 gals divided by 18 gals/in = 12.10 inches

SJE Rhombus Installer Friendly Series simplex control panel, or equivalent, required
 A septic tank filter, or equal is required.
 Possible pumps: Hydromatic: Goulds: Myers:
 Zoeller: 137 Other:

TAP CHART

Bench Mark	4.30	is = 100.00	set at	Transformer Pad right front corner			Design Head:	2.0	
Pump tank elev.	8	96.30		Pump elev.	91.30		Manifold elev.	99.54	
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR
8	Green	5.76	98.54	77	1/2in SCH 80	5.48	160.00	231	0.6926
9	Pink	6.07	98.23	77	1/2in SCH 80	5.48	160.00	231	0.6926
10	Blue	6.70	97.60	77	1/2in SCH 80	5.48	160.00	231	0.6926

total	feet =	231	gal/min =	16.4	LTAR =	0.3500
% of Pipe Vol.	145	Des. Flow	480.00	(ltar + 5%)	0.3675	
Dose Volume	217.72	Pump Run=	29.20	(ltar W/ PB)	0.7000	
Dose Pump Time	13.24	Tank Gal/IN	18	(ltar + 5%)	0.7350	
Drawdown in Inches	12.10	Elev. Head	8.24			
Supply Line Length	200					

Comments:

Repair System

PRESSURE MANIFOLD DESIGN

Name: LGI Homes P.I.N. #: 0600-66-3589 D #: N/A
Address: 225 Empress Street Subdiv: Brayden Preseve Lot#: 40
of BDR: 4 Daily Flow: 480 gal/day L.T.A.R.: 0.300 gal/day/sq.ft
Septic Tank: 1000 gals (min.) Pump Tank: 1000 gals (min.) Sq. Foot: 804 Stone Depth: N/A
Number of Taps: 4 Length of Trenches: Varies ft(See Tap Chart for Details) (Panel Block)
Depth of Trenches: see Harnett County permit Manifold Length: 42 in
Manifold Diameter: 4 in sch 80pvc (minimum) Tap Configuration: 6 in spacing 1 side(s) of manifold
Supply Line: length: 215 ft Diameter: 1.5 in sch 40pvc
Friction Loss + Fitting Loss: 17.47 ft(supply line length + 70' for fittings in pump tank)
Design Head: 2.0 ft Elevation Head: 10.44 ft
Vent Hole Size: 3/16 in Orifice Coefficient of Discharge: 0.60
Orifice Coefficient of Contraction: 0.62 Orifice Coefficient of Velocity: 0.97
Maximum Head Supplied by Selected Pump(s) at Total Design Flowrate: 40 ft
Orifice / Vent Hole Flowrate: 2.62 gpm Head Loss at Orifice / Vent Hole: 2.54 ft
Total Head: 32.45 ft Pump to Deliver: 27.80 gals/min at 32.45 ft head
Dosing Volume: 252.59 gals.
Drawdown: 252.59 gals divided by 18 gals/in = 14.03 inches

SJE Rhombus Installer Friendly Series simplex control panel, or equivalent, required
A septic tank filter, or equal is required.
Possible pumps: Hydromatic: Goulds: Myers:
Zoeller: 140 Other:

TAP CHART

Bench Mark	4.30	is = 100.00	set at	Transformer Pad right front corner			Design Head:	2.0	
Pump tank elev.		8	96.30	Pump elev.	91.30		Manifold elev.	101.74	
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR
4	Green	3.56	100.74	58	1/2in SCH 80	5.48	104.46	174	0.6004
5	Blue	4.38	99.92	58	1/2in SCH 80	5.48	104.46	174	0.6004
6	lime	4.78	99.52	76	1/2in SCH 40	7.11	135.54	228	0.5945
7	Red	5.48	98.82	76	1/2in SCH 40	7.11	135.54	228	0.5945
		total	feet =	268	gal/min =	25.2	LTAR =		0.3000
% of Pipe Vol.		145		Des. Flow	480.00			(ltar + 5%)	0.3150
Dose Volume		252.59		Pump Run=	19.06			(ltar W/ PB)	0.6000
Dose Pump Time		10.03		Tank Gal/IN	18			(ltar + 5%)	0.6300
Drawdown in Inches		14.03		Elev. Head	10.44				
Supply Line Length		215							
Comments:									