Design Specifications Proposal Lot 11 Washam Road, Iredell North Carolina

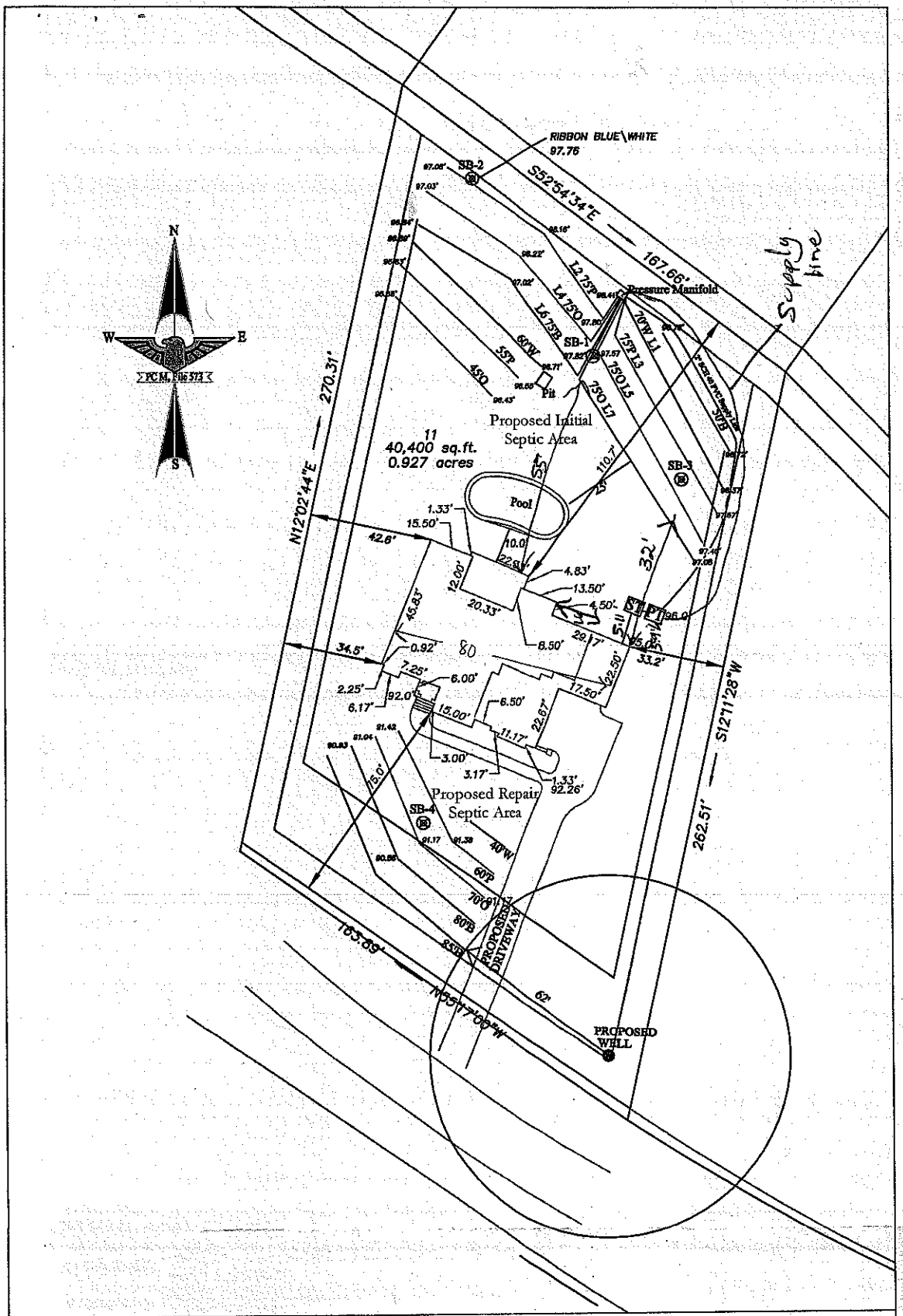
Daily Design Flow:	600 gpd
Number of Bedrooms	5 bedroom
Basement or Crawlspace	Craw
Septic Tank Size	1500 gal, Delliger Tank with effluent filter Poly Lock PL68
Pump Tank Size	1500 gal, Delliger Tank
Primary System Loading Rate (LTAR)	0.30 gpd/ft^{2,} LTAR including Soils Evaluations were determined by Septic Environmental Solutions, Inc.
Primary System	Pump to 25% reduction pressure manifold, all lines to be a minimum of 9-ft on center with 3-ft wide trench widths. Trench depth shall be maximum 36-inches. See scale map for total length.
Number and Length of Lines	7 See attached drawing.
Total foot of Primary System	requires 500-ft, provided 520-ft
Distribution Device	Pressure Manifold
Tap Size	½"
Tap Material	SCH 80 PVC
Barrel Size	4"
Barrel Material	SCH 80 PVC
Maintenance Agreement Required	No
Dosing Volume	234 gal
Depth of dose draw down	8.07"
Supply Line	126-ft, 2" SCH 40 PVC
~~Size of Laterals~~	~~1 1/4" SCH 40 PVC~~

Pressure Manifold

No. of Lines	Line Length (ft)	Tap Size/Type	GPM/Linear Ft	% GPM/Linear Ft
1 (L1)	70	5.48 ½ sch 80	0.07829	0.933
2 (L2)	75	5.48 ½ sch 80	0.07307	1.00
3 (L3)	75	5.48 ½ sch 80	0.07307	1.00
4 (L4)	75	5.48 ½ sch 80	0.07307	1.00
5 (L5)	75	5.48 ½ sch 80	0.07307	1.00

6 (L6)	75	5.48 ½ sch 80	0.07307	1.00
7 (L7)	75	5.48 ½ sch 80	0.07307	1.00
Total		38.36 Gallon		

Flow rate through the system	38.36 gpm, use 39 gpm
Elevation head	Approximately 15-ft
Pressure head	3
Friction head	4.71-ft
20% Contingency	4.54-ft
Total Head	27.25-ft
Pump Type	39.0 gpm@27.25-ft of head; Use Goulds WE05H Pump or equivalent with compatible electrical.
Pump Run Time	6.0 minutes
Check Valve	Yes
Siphon Break Hole	Yes
Repair System Loading Rate	0.30 gpd/ft^2
Repair System	25% Reduction Chamber, See attached drawing
Total foot of Line	500+, See attached drawing



EAGLE ENGINEERING

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PLOT PLAN

LOT 11, WASHAM POINT

DAVIDSON TOWNSHIP, IREDELL COUNTY, N.C.

SCALE 1" = 40'

FOR THE BENEFIT OF LINNANE CONSTRUCTION

MAP REFERENCE IN BOOK 52 PAGE 149

DEED REFERENCE IN BOOK 1899 PAGE 1432

EEI PROJECT NUMBER:

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH, ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

Sheet 1 of 1
PROPERTY ID #: 4624344116
COUNTY: Lincoln

SOIL/SITE EVALUATION
***for* ON-SITE WASTEWATER SYSTEM**
(Complete all fields in full)

OWNER: Kimberly & Billy Lawrence LOT 11 APPLICATION DATE: July 1,
ADDRESS: 214 WASHAM ROAD Moorestown DATE EVALUATED: July
PROPOSED FACILITY: 3 Bedroom PROPOSED DESIGN FLOW (.1949): 600 PROPERTY SIZE: < 1.0 acre
LOCATION OF SITE: 214 WASHAM PT PROPERTY RECORDED: After 19
WATER SUPPLY: ☐ Private ☐ Public ☒ Well ☐ Spring ☐ Other
EVALUATION METHOD: ☒ Auger Boring ☒ Pit ☐ Cut TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	<2%	A	0-10	1GR-SL/FR/VFS	NS-NP	5YR 4/6	48"	NA	48"	0.30
		Bt1	10-24	2ABK/FR/C	WS-SHS	10YR 4/6		↓		0.30
		Bt2	24-48	2ABK/FR/CL	NS-SHP	2.5YR 4/8				0.30
2	<2%	A	0-10	1GR-SL/FR/VFS	NS-NP	5YR 3/4	48"	NA	48"	0.30
		Bt1	10-30	2ABK/FR/C	NS-SHP	10YR 4/6		↓		0.30
		Bt2	30-48	2ABK/FR/CL	NS-NP	2.5YR 4/8				0.30
3	<2%		0-16	1GR-FSL/VFS	NS-NP	5YR 4/4	48"	NA	48"	0.30
			16-32	2ABK/FR/C	NS-SHP	10YR 4/6		↓		0.30
			32-48	2ABK/FR/CL	NS-NP	2.5YR 4/8				0.30
4	<2%		0-12	1GR/FSL	NS-NP	5YR 3/4	48"	NA	↓	0.20
			12-28	2ABK/FR/C	NS-SHP	10YR 4/6		↓	48"	0.30
			28-48	2ABK/FR/CL	NS-NP	2.5YR 4/8				0.30

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	100%	100%
System Type(s)	2 Bedroom Conventional	3 Bedroom Conventional
Site LTAR	0.30	0.30

OTHER FACTORS (.1946): NA
SITE CLASSIFICATION (.1948): 5 - Stable
EVALUATED BY: Kenny Owen
OTHER(S) PRESENT: NA

COMMENTS: