159943
4824/38316

DENR/DEH

ON-SITE WASTEWATER SECTION

Sheet 1 of 1
PROPERTY ID #:
COUNTY: Iredell

# SOIL/SITE EVALUATION
## *for* ON-SITE WASTEWATER SYSTEM

OWNER: Arlo Barr / Ray Natalie Bayles APPLICATION DATE: 2-10-16
ADDRESS: 524 - Zelo Road Union Grove 28689 DATE EVALUATED: 2-10-16
PROPOSED FACILITY: 4 br House PROPOSED DESIGN FLOW (.1949): 360 PROPERTY SIZE: 1.87
LOCATION OF SITE: 115 N (TO) Zelo 2nd on right after park PROPERTY RECORDED:
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 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 | L 10% | 0-32 | SBK/C | fr/ss,sp,p | 7.48 | 7.48 | NA | NA | PS 0.3 |
| | | 32-48+ | wSBK/C/1+sp | fr/ss,p | | | | | |
| 2 | L 10% | 0-31 | SBK/C | fr/ss,sp,p | 7.48 | 7.48 | NA | NA | PS 0.3 |
| | | 31-48+ | wSBK/C/1+sp | fr/ss,sp,p | | | | | |
| 3 | L 5% | 0-9 | CABK | SSSPSMPfr | Soil inclusions NA | 48 | NA | NA | B .25 |
| | | 9-38 | CMABK | SSSPSMPfr | | | | | |
| | | 38-48 | CWSBK FRAG | SSSPSMPfr | | | | | |
| 4 | L 10% | 0-10 | CABK | SSSPSMPfr | NA | 48 | NA | NA | .25 |
| | | 10-38 | CABK | SSSPSMPfr | | | | | |
| | | 38-48 | SCWSBK | SSSPSMPfr | | | | | |

| DESCRIPTION | INITIAL SYSTEM | REPAIR SYSTEM |
|---|---|---|
| Available Space (.1945) | 1480/1360 | 1480/240 |
| System Type(s) | 2540 C | 5024 |
| Site LTAR | .25 | .25 |

OTHER FACTORS (.1946): NA
SITE CLASSIFICATION (.1948): ~~Innovative~~ B
EVALUATED BY: Kelly Cook
OTHER(S) PRESENT: Heidi Higgins

COMMENTS:

# LEGEND

*use the following standard abbreviations*

| LANDSCAPE POSITION | GROUP | SOIL TEXTURE | CONVENTIONAL .1955 LTAR* | LPP .1957 LTAR* | MINERALOGY/ CONSI[illegible]ICE | STRUCTURE |
|---|---|---|---|---|---|---|
| CC (Concave Slope) | I | S (Sand) | 1.2 - 0.8 | 0.6 - 0.4 | NEXP (Non-expansive) | G (Single Grain) |
| CV (Convex Slope) | | LS (Loamy Sand) | | | SEXP (Slightly Expansive) | M (Massive) |
| D (Drainage Way) | | | | | EXP (Expansive) | CR (Crumb) |
| DS (Debris Slump) | II | SL (Sandy Loam) | 0.8 - 0.6 | 0.4 - 0.3 | | GR (Granular) |
| FP (Flood Plain) | | L (Loam) | | | | SBK (Subangular Blocky) |
| FS (Foot Slope) | | | | | | ABK (Angular Blocky) |
| H (Head Slope) | III | Si (Silt) | 0.6 - 0.3 | 0.3 - 0.15 | | PL (Platy) |
| L (Linear Slope) | | SiCL (Silty Clay Loam) | | | | PR (Prismatic) |
| N (Nose Slope) | | CL (Clay Loam) | | | | |
| R (Ridge) | | SCL (Sandy Clay Loam) | | | **MOIST** | **WET** |
| S (Shoulder Slope) | | SiL (Silt Loam) | | | | |
| T (Terrace) | | | | | VFR (Very Friable) | NS (Non-sticky) |
| | IV | SC (Sandy Clay) | 0.4 - 0.1 | 0.2 - 0.05 | FR (Friable) | SS (Slightly Sticky) |
| | | SiC (Silty Clay) | | | FI (Firm) | S (Sticky) |
| | | C (Clay) | | | VFI (Very Firm v. Very Sticky) | VS (Very Sticky) |
| | | O (Organic) | None | None | EFI (Extremely Firm) | NP (Non-plastic) |
| | | | | | | SP (Slightly Plastic) |
| | | | | | | P (Plastic) |
| | | | | | | VP (Very Plastic) |

*Adjust LTAR due to depth, consistence, structure, soil wetness, landscape, position, wastewater flow and quality.

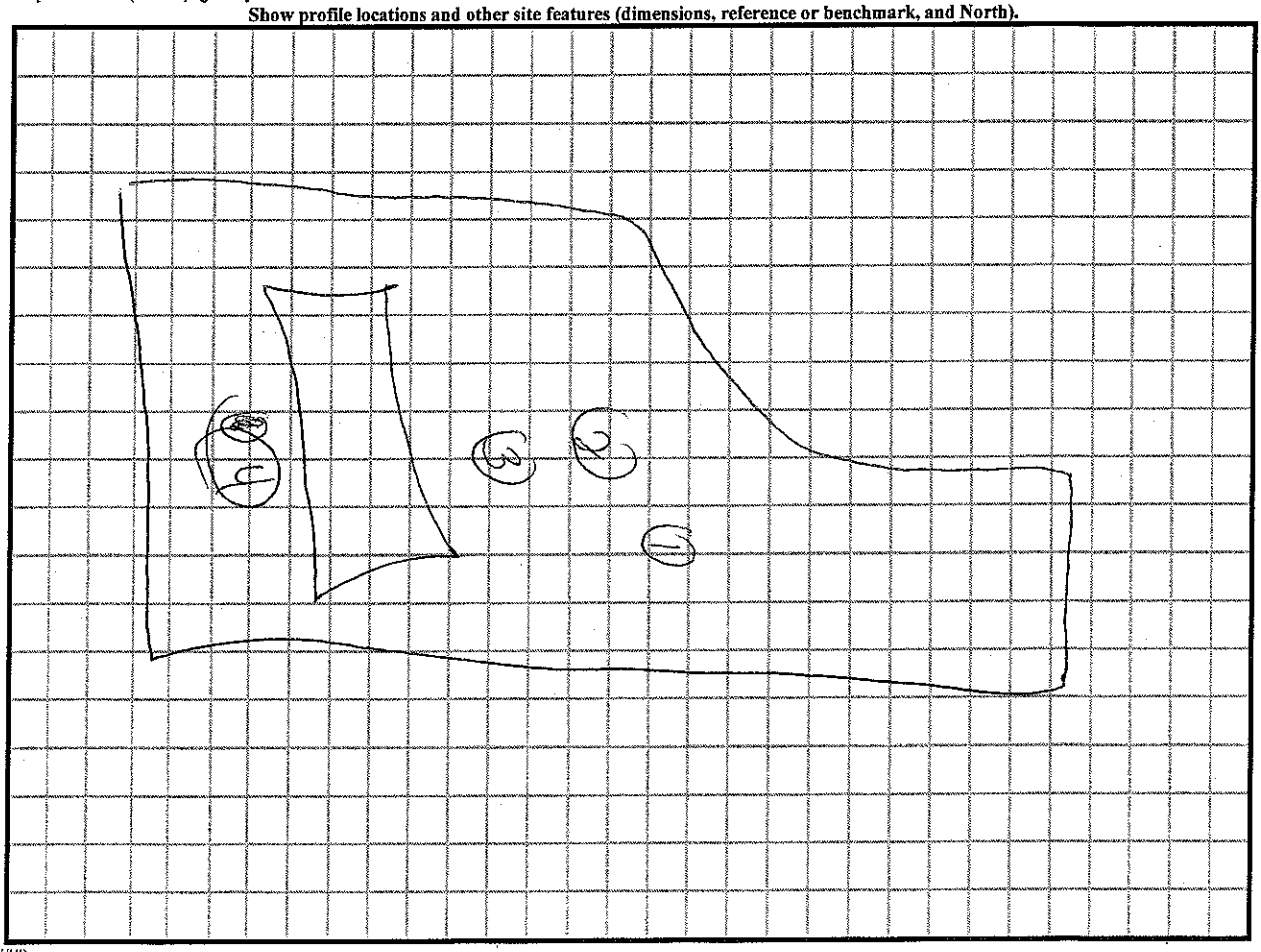
***NOTES***

| | |
|---|---|
| *HORIZON DEPTH* | In inches below natural soil surface |
| *DEPTH OF FILL* | In inches from land surface |
| *RESTRICTIVE HORIZON* | Thickness and depth from land surface |
| *SAPROLITE* | S(suitable) or U(unsuitable) |
| *SOIL WETNESS* | Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color chip designation |
| *CLASSIFICATION* | S (Suitable), PS (Provisionally Suitable), or U (Unsuitable) |

Evaluation of saprolite shall be by pits.

Long-term Acceptance Rate (LTAR): gal/day/ft$^2$

**Show profile locations and other site features (dimensions, reference or benchmark, and North).**



DENR (######)
Review (#####)