

DEEP TEST PIT DATA

WITNESSED AND RECORDED BY CHERYL HAASE RS, LEDGE LIGHT HEALTH DISTRICT ON JULY 21, 2021.

TEST PIT 1
0-8" TOPSOIL
8-31" ORANGE-BROWN FINE SANDY LOAM
31-84" LIGHT BROWN MED-FINE SAND/GRAVEL (LARGE BOULDERS THROUGHOUT)

TEST PIT 2
0-10" TOPSOIL W/FINE ROOTS
10-30" ORANGE FINE SANDY LOAM
30-84" LIGHT BROWN MED-COARSE SAND/GRAVEL

TEST PIT 3
0-16" TOPSOIL W/ LEAF DEBRIS
16-22" ORANGE FINE SANDY LOAM
22-80" TAN-GRAY SAND W/SILT (COMPACT)

TEST PIT 4
0-12" TOPSOIL
12-24" ORANGE FINE SANDY LOAM
24-64" LIGHT BROWN MED-COARSE SAND/GRAVEL

NO MOTTLING
NO GROUNDWATER
NO LEDGE

MOTTLING AT 18"
GROUNDWATER 80", SEEPAGE AT 26"
NO LEDGE

NO MOTTLING
NO GROUNDWATER
LEDGE AT 64"

PERCOLATION TESTS
PERFORMED BY DIETER & GARDNER, INC. ON AUGUST 2, 2021.

PERC A 15" DEEP		PERC B 15" DEEP	
TIME	READING	TIME	READING
10:31	0"	10:31	0"
10:36	2 1/2"	10:36	4 1/2"
10:41	4 1/2"	10:41	8 1/2"
10:46	6 1/2"	10:46	11"
10:51	7 1/2"	10:51	12"
10:56	8 1/2"	10:56	13"
11:01	9 1/2"	11:01	14"
11:06	10 1/2"	11:06	15"
11:11	11 1/8"		

PERCOLATION RATE: 10.0 MIN./INCH PERCOLATION RATE: 10.0 MIN./INCH

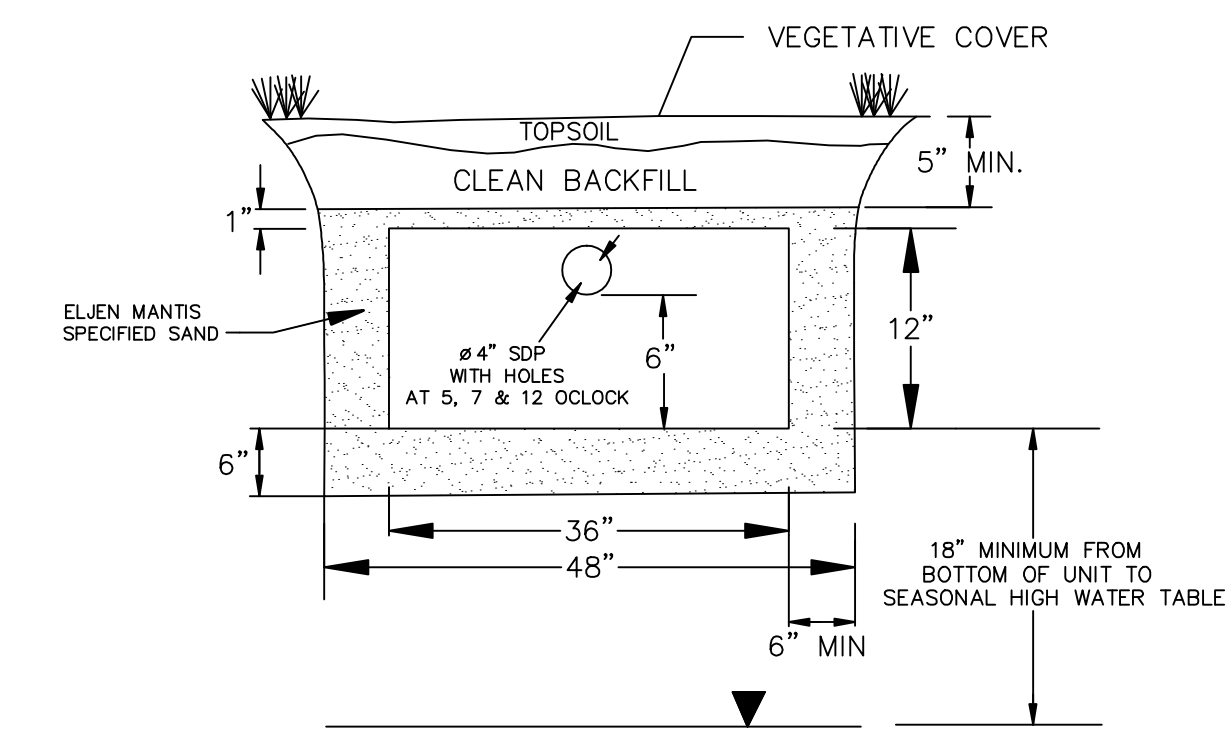
SANITARY DESIGN CRITERIA

- A. PROPOSED 430 Sq. Ft. OFFICE (430; 200 Sq. Ft. GROSS AREA/PERSON) = 2.15 EMPLOYEES X 20 GPD = 43 GPD
GARAGE AREA (INDUSTRIAL BUILDING) 1840 Sq. Ft. x 0.1 GPD = 184 GPD
TOTAL = 227 GPD. (PER TABLE IV OF THE CODE)
- B. 1000 GALLON TWO COMPARTMENT SEPTIC TANK REQUIRED BY CODE AND PROVIDED.
- C. DESIGN PERCOLATION RATE: 10.0 MIN./IN.
- D. MINIMUM LEACHING SYSTEM SPREAD: NOT APPLICABLE
APPLICATION RATE (TABLE B) 1.5 GPD PER S.F. 227 GPD/1.5=151.3 S.F. E.A
- E. EFFECTIVE LEACHING AREA REQUIRED PER CODE: 152 S.F.
- F. MANTIS 536-8 LOW PRO SELECTED FOR PRIMARY SYSTEM DESIGN.
EFFECTIVE LEACHING AREA PROVIDED PER L.F. PER CODE: 6.5 S.F./L.F.
MINIMUM LENGTH OF TRENCH REQUIRED: 152 S.F. / 6.5 S.F./L.F. = 23.4'
- G. EFFECTIVE LEACHING AREA PROVIDED:
1 - ROW - 25' LONG MANTIS 536-8 LOW PRO 1 x 25' x 6.5 S.F./L.F. = 162.5 S.F.
- H. 100% RESERVE AREA REQUIRED AND PROVIDED AS 25' LONG 536-8 MANTIS LOW PRO.

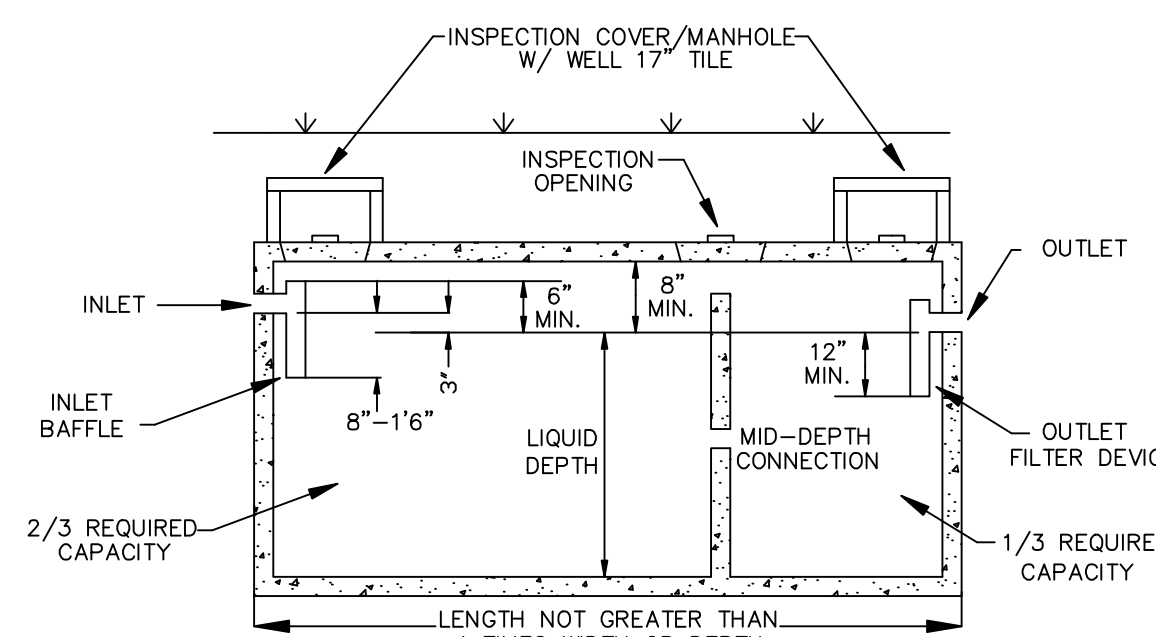
SANITARY ELEVATION DATA:

- ① SANITARY INVERT AT FOUNDATION: 209.00
- ② 18"-4" DIA. SCHEDULE 40 ASTM D1785 OR EQUAL PIPE (MIN. SLOPE = 1/4" PER FT.)
INVERT IN: 208.50
INVERT OUT: 208.25
- ③ 9" - 4" DIA. SDR 35 PVC PIPE
- ④ "D" BOX
INVERT IN: 207.70
INVERT OUT: 207.50
- ⑤ 25' LONG MANTIS 536-8 LOW PRO
BOTTOM TRENCH ELEV.: 207.00
TRENCH INV.: 207.50

MANTIS 536-8 LowPro CROSS SECTION



NOTE: VENTING REQUIRED WHEN MORE THAN 18" OF COVER AS MEASURED FROM THE TOP OF THE UNIT TO FINISHED GRADE
NOT TO SCALE

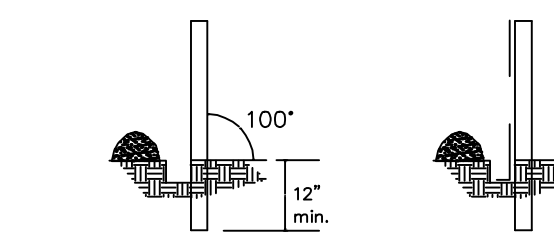


NOTE: CLEANOUT MANHOLES AND ALL BAFLED INSPECTION MANHOLES SHALL BE LOCATED AT A DEPTH NOT GREATER THAN 12" BELOW FINAL GRADE.

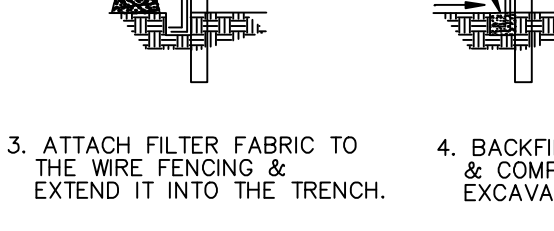
SEPTIC TANK DETAIL

NOT TO SCALE

- 1. SET POSTS & EXCAVATE A 6" x 6" TRENCH. SET POSTS DOWN SLOPE ANGLE UPSLOPE FOR STABILITY & SELF-CLEANING.
- 2. STAPLE THE WIRE MESH FENCING TO END POST.



- 3. ATTACH FILTER FABRIC TO THE WIRE FENCING & COMPACT WITH EXTEND IT INTO THE TRENCH.
- 4. BACKFILL THE TRENCH & COMPACT WITH EXCAVATED SOIL.



FILTER FABRIC SEDIMENT BARRIER

NOT TO SCALE

PLAN SHOWING

PROPOSED BUILDING

ON PROPERTY OF

A & R ASSOCIATES INC.

5A LORENZ INDUSTRIAL PARKWAY

LEDYARD, CONNECTICUT

SCALE: 1"=20'

OCTOBER 2024

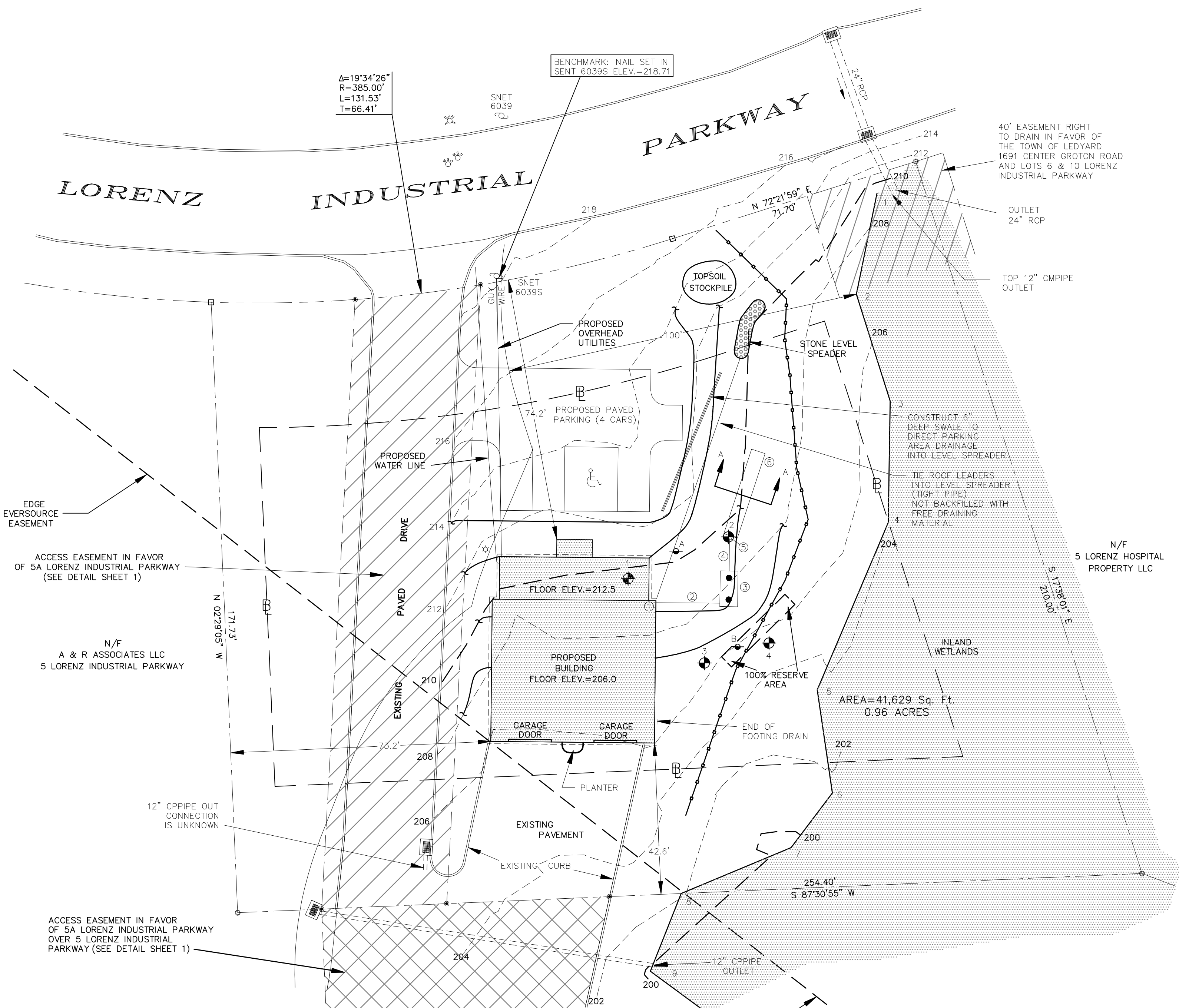
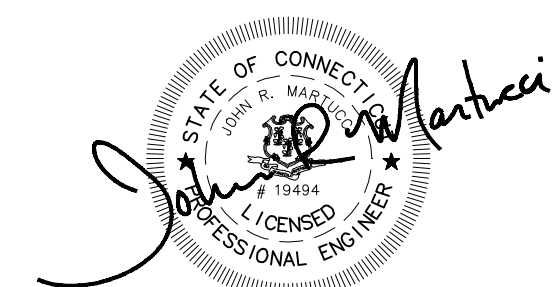
REVISED: DECEMBER 11, 2024

SHEET 2 OF 2

THIS MAP AND SURVEY HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300B-1 THROUGH 20-300B-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES-MINIMUM STANDARDS OF ACCURACY, CONTENT AND CERTIFICATION FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT, ADOPTED EFFECTIVE JUNE 21, 1996; REVISED OCTOBER 26, 2018. IT IS A BOUNDARY SURVEY BASED ON A DEPENDENT RESURVEY CONFORMING TO HORIZONTAL ACCURACY CLASS A-2, TOPOGRAPHIC ACCURACY T-2 TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

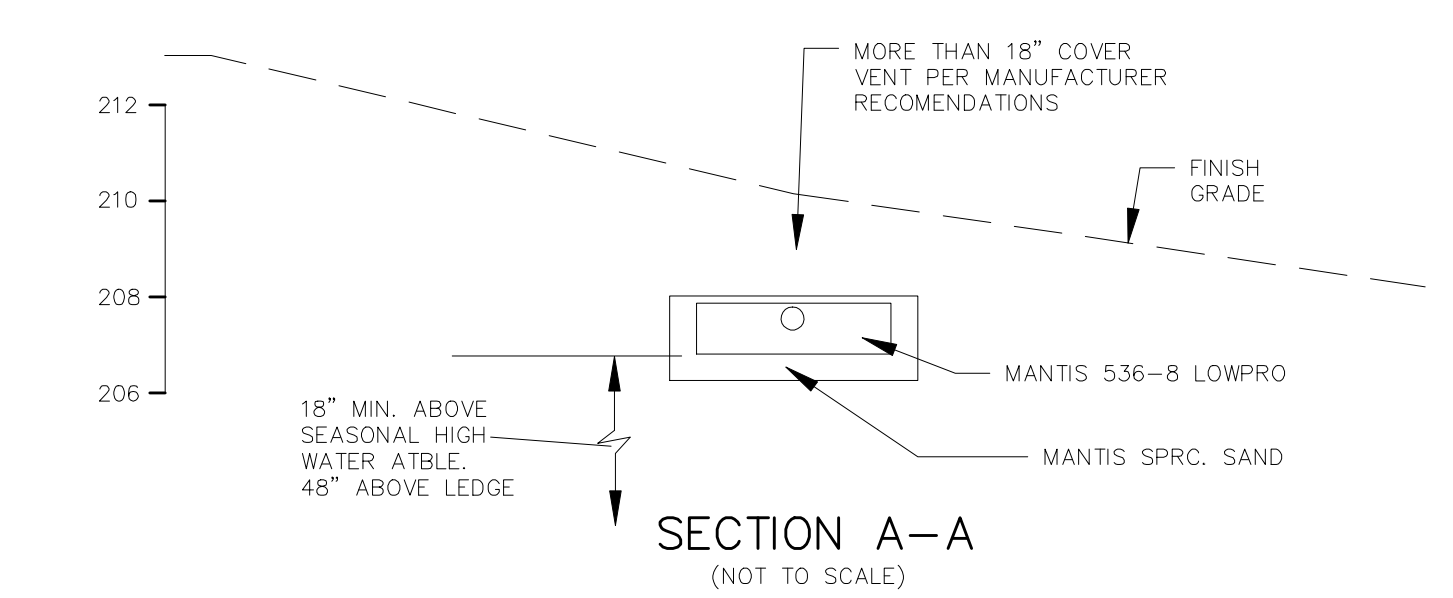
TITLE: LAND SURVEYOR CT No. 14208

DATE: OCTOBER 1, 2024

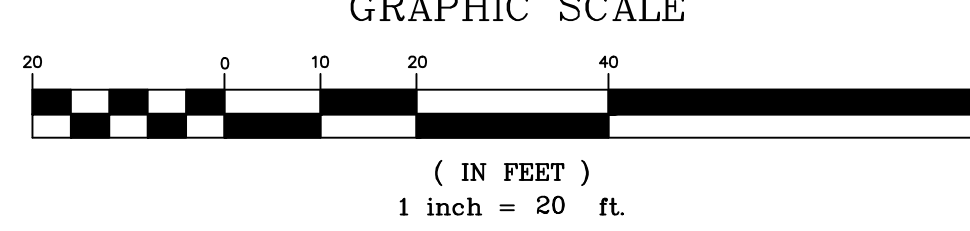


LEGEND

- PROPERTY LINE
- STREET LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- BUILDING SETBACK LINE
- DEEP TEST PIT LOCATION
- PERCOLATION TEST LOCATION
- UTILITY POLE
- CATCH BASIN
- SILTFENCE/HAYBALES/WOODCHIPS
- EDGE OF WETLANDS & FLAG NUMBER
- CURBING
- WATER GATE
- HYDRANT

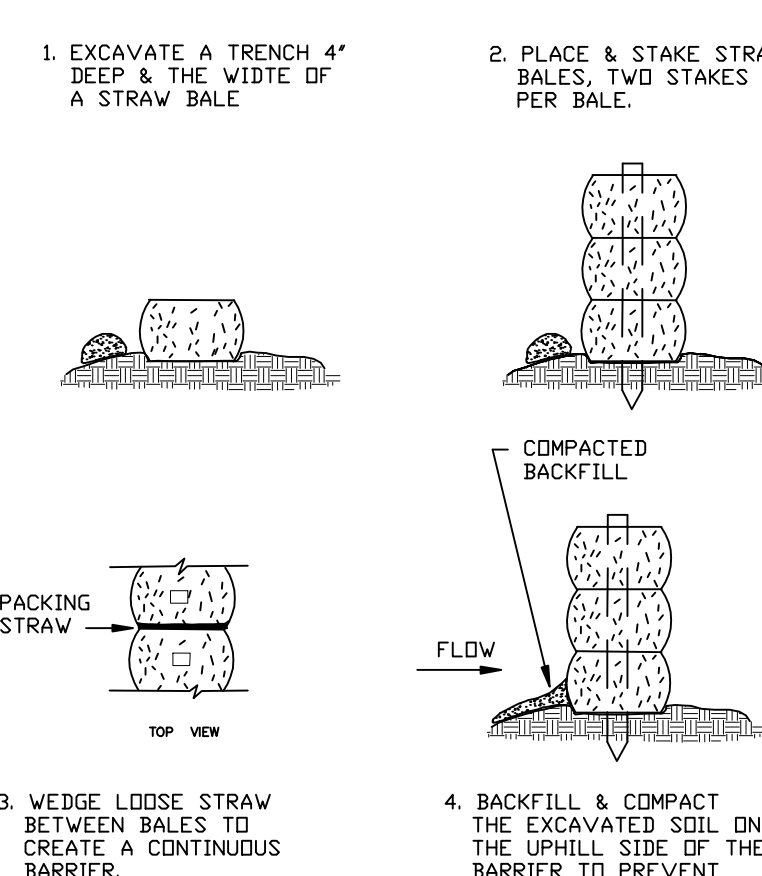


GRAPHIC SCALE



CONSTRUCTION OF A STRAW BALE BARRIER

NOT TO SCALE



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