

**GENERAL NOTES:**

- THIS PLAN WAS COMPILED USING THE FOLLOWING REFERENCE INFORMATION:  
 A) A CLASS A-2 SURVEY MAP ENTITLED "LIMITED PROPERTY/TOPOGRAPHIC SURVEY, LAND OF THE OLD BLACK POINT ASSOCIATION, INC., TAX MAP 02.1 LOT 13, 201 OLD BLACK POINT ROAD, EAST LYME, CONNECTICUT", SCALE: 1"=40', DATED: JUNE 3, 2021 WITH REVISIONS THROUGH FEBRUARY 5, 2024, PREPARED BY ANNINO SURVEY, LLC.  
 B) ARCHITECTURAL PLANS ENTITLED "OLD BLACK POINT PAVILION, 201 OLD BLACK POINT ROAD" SCALE: 1/8"=1", RECEIVED: APRIL 2023 WITH REVISIONS THROUGH FEBRUARY 2024, PREPARED BY: POINT ONE ARCHITECTS.
- THE APPLICANT IS OLD BLACK POINT BEACH ASSOCIATION OF PO BOX 260 NIAN TIC, CT 06357.
- THE SUBJECT PARCEL IS IDENTIFIED AS LOT 13 ON TAX ASSESSOR'S MAP 02.1. THE DEED REFERENCE OF THE PROPERTY IS VOLUME 66 PAGE 514. THE AREA OF THE PARCEL IS ±17.25 ACRES PER EAST LYME GIS.
- THE SUBJECT PROPERTY IS LOCATED WITHIN THE 'RU-40/20' ZONING DISTRICT. THE PARCEL LIES WITHIN FEMA FLOOD HAZARD ZONES AE (EL. 13) AND VE (EL. 13) (NAVD--88).
- THE APPLICANT IS PROPOSING TO DEMOLISH THE EXISTING BEACH CABANAS & REMOVE A PORTION OF THE EXISTING PAVED PARKING AREA, CONSTRUCT NEW BEACH CABANAS AND DECKS, INSTALL A NEW 100% CONNECTICUT PUBLIC HEALTH CODE-COMPLIANT SEPTIC SYSTEM AS WELL AS OTHER ASSOCIATED IMPROVEMENTS. THE PROPOSED STRUCTURE WILL BE CONSTRUCTED ON A PILE SUPPORTED FOUNDATION AND WILL NOT HAVE FOOTING DRAINS. THE STRUCTURE IS PROPOSED TO BE IN COMPLIANCE WITH FEMA REGULATIONS AND LOCAL FLOOD ORDINANCES EFFECTIVE 2/6/2013.
- THE PURPOSE OF THIS PLAN IS FOR REVIEW BY EAST LYME ZONING COMMISSION FOR A CAM REVIEW, INLAND WETLANDS AGENCY, AND THE LEDGE LIGHT HEALTH DISTRICT TO DEMONSTRATE COMPLIANCE WITH THE CONNECTICUT PUBLIC HEALTH CODE.
- THIS PROPERTY IS SERVED BY PUBLIC WATER AND A SUBSURFACE SEWAGE DISPOSAL SYSTEM. THERE ARE NO KNOWN WELLS WITHIN 150 FEET OF THE PROPOSED SEPTIC SYSTEM.
- REFER TO ARCHITECTURAL DRAWINGS (REF. B) FOR ADDITIONAL PROPOSED STRUCTURE INFORMATION.
- ALL ELEVATIONS SHOWN HEREON ARE REFERENCED TO NAVD--88 DATUM PER REFERENCE MAP A.

**CONSTRUCTION NOTES:**

- THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON FIELD LOCATIONS AND INFORMATION PROVIDED BY OTHERS. THEIR ACTUAL LOCATION MAY VARY FROM THOSE INDICATED AND ALL UNDERGROUND UTILITIES MAY NOT BE SHOWN. THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT 800-922-4455 TO MARK OUT ALL UNDERGROUND UTILITIES A MINIMUM OF 3 DAYS PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITY. CONTRACTOR SHALL VERIFY ALL LOCATIONS, DIMENSIONS AND ELEVATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL ADHERE TO ALL APPLICABLE TOWN OF EAST LYME STANDARDS AND REGULATIONS.
- ALL UTILITIES SHALL BE INSTALLED IN CONFORMANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE TOWN OF EAST LYME AND THE CUSTODIAL UTILITY COMPANIES. ALL UTILITY TRENCHES SHALL BE NO LESS THAN 5 FEET FROM THE SEPTIC SYSTEM AND NOT BACKFILLED WITH FREE DRAINING MATERIAL. ALL WATER LINES SHALL BE A MINIMUM OF 10 FEET FROM ANY PART OF THE SEPTIC SYSTEM.
- ALL PROPERTY LINES SHALL BE VERIFIED IN THE FIELD. NO PRIVATE PROPERTY SHALL BE DISTURBED UNLESS PROPER RIGHTS ARE OBTAINED PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONFIRM AND ABIDE BY ANY APPLICABLE 'NO HAMMER' TIME PERIODS OF THE COMMUNITY.
- THE CONTRACTOR SHALL OBTAIN, REVIEW AND ADHERE TO ALL REQUIREMENTS AND ANY CONDITIONS OF APPROVAL OF THE TOWN OF EAST LYME & THE LEDGE LIGHT HEALTH DISTRICT.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT ADJACENT PROPERTIES FROM ANY EROSION AND/OR SEDIMENTATION. SILT FENCE SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION.
- THE PROPOSED STRUCTURES WILL BE CONSTRUCTED ON A PILE SUPPORTED FOUNDATION AND WILL HAVE NO FOOTING DRAINS.
- ALL MECHANICALS AND STRUCTURAL MEMBERS SHALL BE INSTALLED AT OR ABOVE ELEVATION 14.0 (NAVD--88) IN ACCORDANCE WITH FEMA FLOOD REGULATIONS AND LOCAL FLOOD ORDINANCES.
- ALL EXISTING DRAINAGE PATTERNS SHALL BE MAINTAINED. THE CONTRACTOR SHALL GRADE THE PROPERTY IN SUCH A MANNER TO MAINTAIN EXISTING LOCAL DRAINAGE PATTERNS AND TO PREVENT EXCESS RUNOFF AND/OR PONDING ON ADJACENT PROPERTIES BOTH DURING AND AFTER CONSTRUCTION.
- GENERAL LOT GRADING AND THE FINISHED FLOOR ELEVATION OF THE PROPOSED DECKS AND CABANAS ARE BASED ON AVAILABLE INFORMATION. THESE ELEVATIONS MAY BE ADJUSTED BY THE CONTRACTOR TO CONFORM TO ACTUAL FIELD CONDITIONS UPON REVIEW AND APPROVAL OF THE DESIGN ENGINEER.
- PAVEMENT JOINTS SHALL BE PROPERLY SAWCUT, TACK COATED AND SEALED AS NECESSARY.
- ALL EXISTING SEPTIC SYSTEM COMPONENTS SHALL BE PUMPED DRY AS NECESSARY AND REMOVED AND/OR PROPERLY ABANDONED IN ACCORDANCE WITH THE CONNECTICUT PUBLIC HEALTH CODE AND ALL APPLICABLE LOCAL REGULATIONS.

ZONING DATA TABLE			
EAST LYME RESIDENCE 'RU-40/20' DISTRICT			
ITEM	REQUIRED	EXISTING	PROPOSED
MIN. LOT AREA	40,000 S.F.	1,187,010± S.F.	1,187,010± S.F. (NO CHANGE)
MIN. FRONTAGE	150 FT.	451± FT. (1)	451± FT. (NO CHANGE) (1)
STREET LINE SETBACK (OLD BLACK POINT ROAD)	40 FT.	388.7± FT. (EX. DECK)	338.5± FT. (PR. DECK)
OTHER LINE SETBACK (SOUTHERN BOUNDARY)	20 FT.	318.6± FT. (EX. DECK)	319.6± FT. (PR. DECK)
OTHER LINE SETBACK (LONG ISLAND SOUND)	20 FT.	30.4± FT. (EX. DECK)	40.0± FT. (PR. DECK)
MAX. BUILDING HEIGHT	30 FT.	UNKNOWN	±22.0 FT. (PR. CABANAS)
MAX. TOTAL LOT COVERAGE	20% (±237,402 S.F.)	±3.4% (39,910± S.F.)	±3.7% (43,415± S.F.) (+0.3%) (+3,505 S.F.)

(1) PER EAST LYME GIS MAPS.  
 (2) BUILDING HEIGHT WAS ESTIMATED PER ARCHITECTURAL DRAWINGS (REF. B) AND AN AVERAGE ELEVATION OF 7.0.

**TIDAL WETLAND BUFFER PLANTING SCHEDULE**

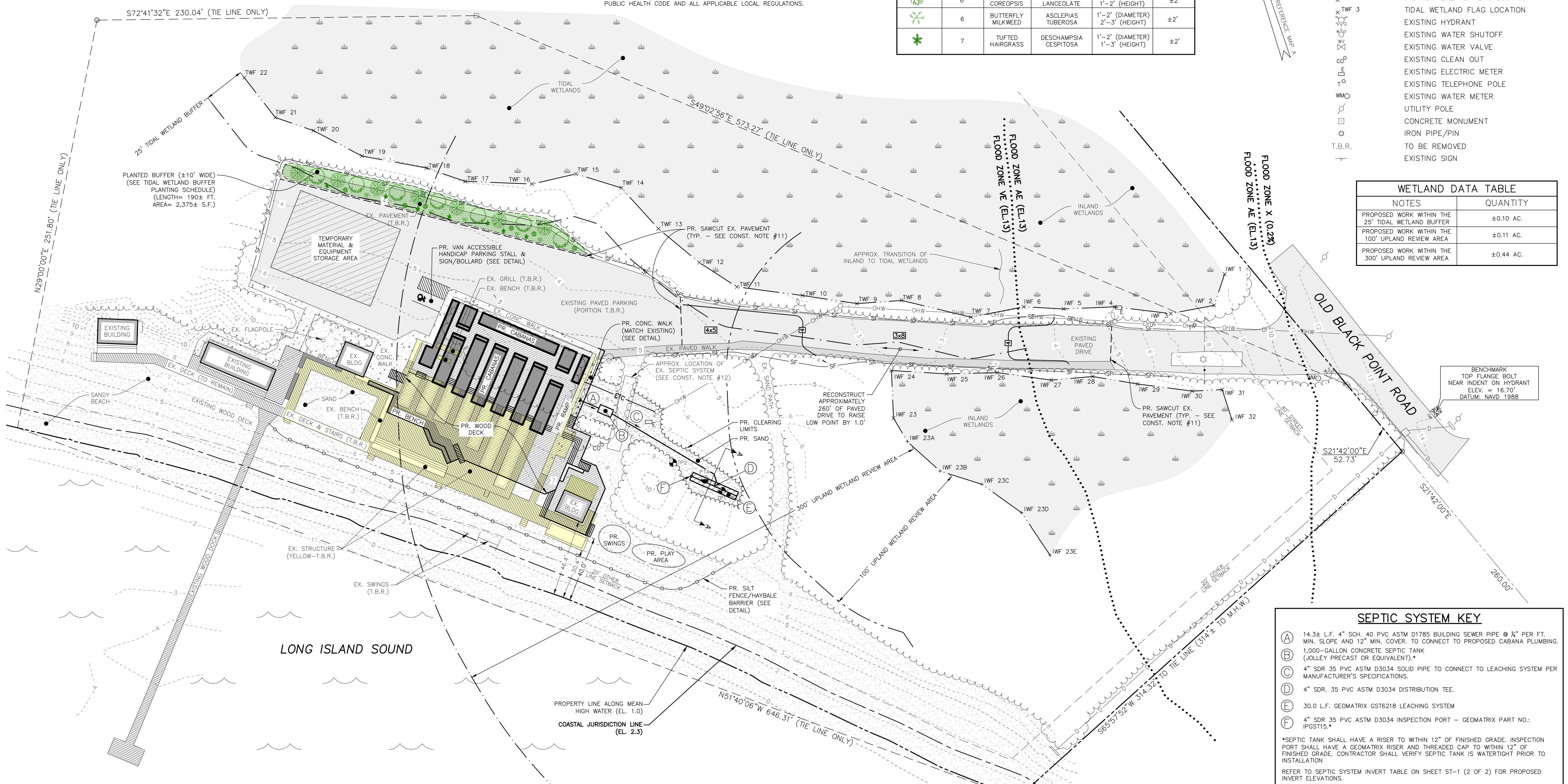
SYMBOL	QUANTITY	COMMON NAME	BOTANICAL NAME	SIZE (AT MATURITY)	SPACING
	7	HIGHBUSH BLUEBERRY	VACCINIUM CORYMBOSUM	6' (DIAMETER) 4'-6' (HEIGHT)	±10'
	7	CLETHRA	CLETHRA ALNIFOLIA	5'-6' (DIAMETER) 4' (HEIGHT)	±10'
	6	LANCE-LEAF COREOPSIS	COREOPSIS LANCEOLATE	1'-1.5' (DIAMETER) 1'-2' (HEIGHT)	±2'
	6	BUTTERFLY MILKWEED	ASCLEPIAS TUBEROSA	1'-2' (DIAMETER) 2'-3' (HEIGHT)	±2'
	7	TUFTED HAIRGRASS	DESCHAMPSIA CESPIOSA	1'-2' (DIAMETER) 1'-3' (HEIGHT)	±2'



**LEGEND**

- EXISTING PROPERTY/STREET LINE
- FLOOD ZONE
- EXISTING OVERHEAD LINE
- EXISTING DRAINAGE WIRES
- PROPOSED UNDERGROUND ELECTRIC, TELEPHONE & CABLE SERVICES IN SCH. 40 PVC CONDUITS
- EXISTING BUILDING TO REMAIN
- EXISTING BUILDING TO BE REMOVED
- EXISTING CONTOUR
- TIDAL/INLAND WETLAND BOUNDARY
- 25' TIDAL WETLAND BUFFER
- 100' UPLAND WETLAND REVIEW AREA
- 300' UPLAND WETLAND REVIEW AREA
- EXISTING STRUCTURES TO BE REMOVED
- PR. LANDSCAPED AREAS
- COASTAL JURISDICTION LINE
- PROPOSED SILT FENCE
- PROPOSED SILT FENCE/HAYBALE BARRIER
- PROPOSED CLEARING LIMITS
- INLAND WETLAND FLAG LOCATION
- TIDAL WETLAND FLAG LOCATION
- EXISTING HYDRANT
- EXISTING WATER SHUTOFF
- EXISTING CLEAN OUT
- EXISTING ELECTRIC METER
- EXISTING TELEPHONE POLE
- EXISTING WATER METER
- UTILITY POLE
- CONCRETE MONUMENT
- IRON PIPE/PIN
- TO BE REMOVED
- EXISTING SIGN

WETLAND DATA TABLE	
NOTES	QUANTITY
PROPOSED WORK WITHIN THE 25' TIDAL WETLAND BUFFER	±0.10 AC.
PROPOSED WORK WITHIN THE 100' UPLAND REVIEW AREA	±0.11 AC.
PROPOSED WORK WITHIN THE 300' UPLAND REVIEW AREA	±0.44 AC.



**SEPTIC SYSTEM KEY**

- (A) 14.3± L.F. 4" SCH. 40 PVC ASTM D1785 BUILDING SEWER PIPE @ 1/4" PER FT. MIN. SLOPE AND 12" MIN. COVER. TO CONNECT TO PROPOSED CABANA PLUMBING.
- (B) 1,000-GALLON CONCRETE SEPTIC TANK (JOLLEY PRECAST OR EQUIVALENT)\*
- (C) 4" SDR 35 PVC ASTM D3034 SOLID PIPE TO CONNECT TO LEACHING SYSTEM PER MANUFACTURER'S SPECIFICATIONS.
- (D) 4" SDR 35 PVC ASTM D3034 DISTRIBUTION TEE.
- (E) 30.0 L.F. GEOMATRIX GST6218 LEACHING SYSTEM
- (F) 4" SDR 35 PVC ASTM D3034 INSPECTION PORT - GEOMATRIX PART NO.: IPGST15.\*

\*SEPTIC TANK SHALL HAVE A RISER TO WITHIN 12" OF FINISHED GRADE. INSPECTION PORT SHALL HAVE A GEOMATRIX RISER AND THREADED CAP TO WITHIN 12" OF FINISHED GRADE. CONTRACTOR SHALL VERIFY SEPTIC TANK IS WATERTIGHT PRIOR TO INSTALLATION.  
 REFER TO SEPTIC SYSTEM INVERT TABLE ON SHEET ST-1 (2 OF 2) FOR PROPOSED INVERT ELEVATIONS.

PLAN PREPARED BY:  
 INDIGO LAND DESIGN, LLC  
 JOSEPH WREN, P.E.  
 CT REG. NO. 21090  
 201 OLD BLACK POINT ROAD, 2ND FLOOR  
 NIAN TIC, CT 06357  
 PHONE: (860) 388-9343  
 FAX: (860) 388-9343  
 WEB: INDIGOLAND.COM

THE EMBOSSED SEAL OF THE PROFESSIONAL ENGINEER IS AFFIXED HERE FOR THIS MAP TO BE VALID

#	DATE	DESCRIPTION	BY

COASTAL SITE PLAN  
 PREPARED FOR THE OLD BLACK POINT ASSOCIATION, INC.  
 201 OLD BLACK POINT ROAD, MAP 02.1 LOT 13  
 NIAN TIC, CONNECTICUT

DATE: MARCH 1, 2024  
 SCALE: 1"=30'  
 DRAWN BY: CO  
 CHECKED BY: JW  
 DWG. NO.: CSP-1  
 SHEET NO.: 1 of 3  
 JOB NO.: 2023-1025



**DEEP TEST PIT DATA**

DATE: 2/9/24  
 WITNESSED BY: JOE WREN, P.E. (INDIGO)  
 JOSEPH BLANCHARD, REHS/R/S  
 (LEDGE LIGHT HEALTH DISTRICT)  
 EXCAVATED BY: SPENCER BEERS

**TP #1**

0-2"	TOPSOIL & ORGANIC MATTER
2-23"	TAN GRAY FINE SAND WITH ROOTS
23-72"	ORANGE BROWN MEDIUM SAND
72-88"	ORANGE BROWN MEDIUM-COARSE SAND WITH SOME GRAVEL & COBBLES (SATURATED)
NO MOTTLING	
GROUNDWATER @ 68"	
NO LEDGE	

**TP #2**

0-3"	TOPSOIL & ORGANIC MATTER
3-18"	GRAY TAN VERY FINE SAND
18-30"	DARK GRAY VERY FINE SAND WITH ROOTS
30-64"	ORANGE BROWN FINE-MEDIUM SAND
64-90"	ORANGE BROWN MEDIUM-COARSE SAND WITH SOME GRAVEL & COBBLES (SATURATED)
MOTTLING @ 75"	
GROUNDWATER @ 71"	
NO LEDGE	

**PERCOLATION TEST DATA**

CONDUCTED BY: CAROLINE O'HAGAN (INDIGO)

**PERC A**

DATE: 2/16/24  
 DEPTH: 36"±

TIME (MIN.)	DEPTH (INCHES)	DROP (INCHES)	PERC RATE (MIN./INCH)
0	24	---	---
1	26 1/4	2 1/4	0.4
2	28 3/4	2 1/2	0.4
3	30	1 1/4	0.8
4	32 1/4	2 1/4	0.4
5	34	1 3/4	0.6

(DRY)

PERC RATE = FASTER THAN 1.0 MIN./INCH

**GENERAL NOTES (SEPTIC SYSTEM):**

- THE APPLICANT IS PROPOSING TO DEMOLISH THE EXISTING BEACH CABANAS & REMOVE A PORTION OF THE EXISTING PAVED PARKING AREA, CONSTRUCT NEW BEACH CABANAS AND DECKS, INSTALL A NEW 100% CONNECTICUT PUBLIC HEALTH CODE-COMPLIANT SEPTIC SYSTEM AS WELL AS OTHER ASSOCIATED IMPROVEMENTS. THE PROPOSED STRUCTURE WILL BE CONSTRUCTED ON A PILE SUPPORTED FOUNDATION AND WILL NOT HAVE FOOTING DRAINS. THE STRUCTURE IS PROPOSED TO BE IN COMPLIANCE WITH FEMA REGULATIONS AND LOCAL FLOOD ORDINANCES EFFECTIVE 2/6/2013.
- THIS PROPERTY WILL BE SERVED BY PUBLIC WATER AND A SUBSURFACE SEWAGE DISPOSAL SYSTEM. THERE ARE NO KNOWN WELLS OR ANY OTHER KNOWN DESIGN CONFLICTS WITHIN 75 FEET OF THE PROPOSED SEPTIC SYSTEM, NO KNOWN DOWNGRADE SEPTIC SYSTEM COMPONENTS WITHIN 25 FEET OF ANY UPGRADE GROUNDWATER DRAIN AND NO KNOWN UPGRADE SEPTIC SYSTEM COMPONENTS WITHIN 50 FEET OF ANY DOWNGRADE GROUNDWATER DRAIN.
- ALL UTILITIES SHALL BE INSTALLED IN CONFORMANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE TOWN OF NANTIC AND THE CUSTODIAL UTILITY COMPANIES. ALL UTILITY TRENCHES SHALL BE NO LESS THAN 5 FEET FROM THE SEPTIC SYSTEM AND NOT BACKFILLED WITH FREE DRAINING MATERIAL. THE LOCATION OF THE EXISTING WATER SERVICE LINE IS UNKNOWN. THE CONTRACTOR SHALL LOCATE THE WATER SERVICE LINE PRIOR TO CONSTRUCTION.

**GENERAL CONSTRUCTION NOTES (SEPTIC SYSTEM):**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CONNECTICUT PUBLIC HEALTH CODE, AS AMENDED.
- A LICENSED SURVEYOR SHALL FIELD STAKE THE SEPTIC SYSTEM PRIOR TO CONSTRUCTION.
- NO WORK SHALL COMMENCE IN THE SYSTEM AREA UNTIL A SEPTIC PERMIT HAS BEEN TAKEN OUT BY THE LICENSED INSTALLER.
- THE LICENSED INSTALLER SHALL PERFORM SITE PREPARATION AND SHOULD CONTACT "CALL BEFORE YOU DIG" AT 1-800-922-4455 TO VERIFY ALL UTILITY LOCATIONS PRIOR TO ANY CONSTRUCTION.
- THE LICENSED INSTALLER SHALL BE ON SITE DURING SYSTEM CONSTRUCTION. THE SYSTEM SHALL BE INSTALLED IN CONFORMANCE TO THESE PLANS. ANY REQUESTED MODIFICATIONS SHALL BE DISCUSSED WITH THE ENGINEER PRIOR TO CONSTRUCTION. ALL MODIFICATIONS MUST BE APPROVED BY THE ENGINEER AND TOWN SANITARIAN PRIOR TO CONSTRUCTION.
- A MINIMUM OF 24 HOURS NOTICE SHALL BE GIVEN BY THE LICENSED INSTALLER TO THE ENGINEER AND TOWN SANITARIAN BEFORE ANY STRIPPING IS DONE FOR THE SYSTEM. STRIP INSPECTIONS WILL BE PERFORMED BY THE ENGINEER AND SANITARIAN.
- THE LICENSED INSTALLER SHALL BE RESPONSIBLE FOR PREPARING THE LEACHING AREA IN A WORKMANLIKE MANNER. ALL NECESSARY STEPS SHALL BE TAKEN TO PROTECT THE UNDERLYING NATURALLY OCCURRING SOILS FROM OVER COMPACTION AND SILTATION ONCE EXPOSED.
- THE INSTALLER SHALL NOTIFY THE ENGINEER AND SANITARIAN AT LEAST 24 HOURS IN ADVANCE OF BEING READY FOR A FINAL INSPECTION. THE ENGINEER AND SANITARIAN SHALL CONDUCT THE FINAL INSPECTION TOGETHER WITH THE LICENSED INSTALLER. NO DEVIATION FROM THE PLAN APPROVED BY THE SANITARIAN SHALL BE ALLOWED WITHOUT PRIOR APPROVAL FROM THE SANITARIAN. THE SYSTEM SHALL NOT BE BACKFILLED WITHOUT THE APPROVAL OF THE SANITARIAN.
- A LICENSED ENGINEER OR SURVEYOR SHALL PREPARE A SEPTIC SYSTEM AS-BUILT DRAWING CERTIFYING THE SYSTEM IS CODE-COMPLIANT. THIS PLAN SHALL INCLUDE ALL ESSENTIAL ACCESS POINTS INCLUDING TANK MANHOLES AND LEACHING SYSTEM ENDS. THE AS-BUILT PLAN SHALL BE COMPLETED IN A TIMELY MANNER.
- THE LEACHING SYSTEM SHALL BE PROPERLY COVERED BY THE LICENSED SYSTEM INSTALLER WITHIN TWO (2) WORKING DAYS FOLLOWING THE LOCAL HEALTH DEPARTMENT'S FINAL INSPECTION AND APPROVAL.
- NO HEAVY EQUIPMENT SHALL BE DRIVEN OVER THE INSTALLED LEACHING SYSTEM AREA.
- THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER IF HE WISHES TO CHANGE THE LOCATION OR ELEVATION OF ANY PROPOSED SEPTIC SYSTEM COMPONENT PRIOR TO CONSTRUCTION.
- THE LICENSED INSTALLER IS RESPONSIBLE TO INSTALL THE SUBSURFACE SEWAGE DISPOSAL SYSTEM IN ACCORDANCE WITH THE APPROVED PLAN.
- SEPTIC TANK AND INSPECTION PORTS SHALL HAVE RISERS TO FINISHED GRADE. CONTRACTOR SHALL VERIFY SEPTIC TANK IS WATERTIGHT PRIOR TO INSTALLATION.
- THE PROPOSED LEACHING SYSTEM, GEOMATRIX GST6218, SHALL BE INSTALLED IN CONFORMANCE WITH ALL MANUFACTURER'S SPECIFICATIONS. A GEOMATRIX SYSTEMS REPRESENTATIVE WILL DELIVER THE GEOMATRIX GST FORMS TO THE SITE AND WILL BE ON SITE DURING INSTALLATION OF THE SYSTEM TO ENSURE PROPER INSTALLATION. THE INSTALLER SHALL OBTAIN, REVIEW AND STRICTLY ADHERE TO THE ALL INSTALLATION INSTRUCTIONS AND MATERIAL SPECIFICATIONS. MORE INFORMATION CAN BE OBTAINED FROM THE MANUFACTURER, GEOMATRIX SYSTEMS, LLC - 114 MILL ROCK ROAD EAST, OLD SAYBROOK, CT - 860-510-0730 OR AT WWW.GEOMATRIXSYSTEMS.COM.
- A TWO-PART CONCRETE SEPTIC TANK SHALL BE USED BUT MUST BE MADE 100% WATERTIGHT BY GASKETING AND MORTARING ALL JOINTS. IF A TWO-PART TANK IS USED, IT SHALL BE FILLED WITH WATER ABOVE THE JOINT AND INSPECTED BY THE ENGINEER AND/OR THE TOWN SANITARIAN WITHIN 24 HOURS. THE CONTRACTOR SHALL MONITOR THE WATER LEVEL IN THE TANK DURING THIS PERIOD AND SHALL PERMANENTLY REPAIR ANY LEAKS TO THE SATISFACTION OF THE ENGINEER AND THE TOWN SANITARIAN.
- THE LICENSED INSTALLER SHALL CONFIRM THAT NO LEDGE IS PRESENT WITHIN 48 INCHES BELOW THE BOTTOM OF THE PROPOSED LEACHING SYSTEM.
- THE CONTRACTOR SHALL GRADE THE AREA IN THE VICINITY OF THE LEACHING FIELD IN SUCH A MANNER THAT ALL SURFACE RUNOFF IS SUFFICIENTLY DIRECTED AWAY FROM THE LEACHING FIELD AREA AND NOT RESULT IN PONDING ON THE SUBJECT PROPERTY OR ANY ADJACENT PROPERTY OR ROADWAY.
- THE LICENSED INSTALLER SHALL INCLUDE ALL ADEQUATE PROVISIONS FOR FREEZE PROTECTION FOR ALL PIPING AND JUNCTIONS.
- LICENSED INSTALLER SHALL PROVIDE SIEVE ANALYSES FOR C-33 SAND PRIOR TO CONSTRUCTION.

**SANITARY SYSTEM DESIGN CRITERIA**

DESIGN PERCOLATION RATE	BUILDING TYPE	REQUIRED LEACHING AREA	LEACHING SYSTEM TYPE	EFF. LEACHING AREA	LEACHING AREA PROVIDED	REQ'D TANK CAPACITY	TANK CAPACITY PROVIDED
LESS THAN 1.0 MIN./INCH	NON-RESIDENTIAL NON-PROBLEMATIC	402 S.F. (1)	30.0 L.F. OF GEOMATRIX GST6218 LEACHING SYSTEM	14.0 S.F./L.F.	420 S.F. (14.0 S.F./L.F. x 30.0 L.F.)	1,000 GALLONS	1,000 GALLONS

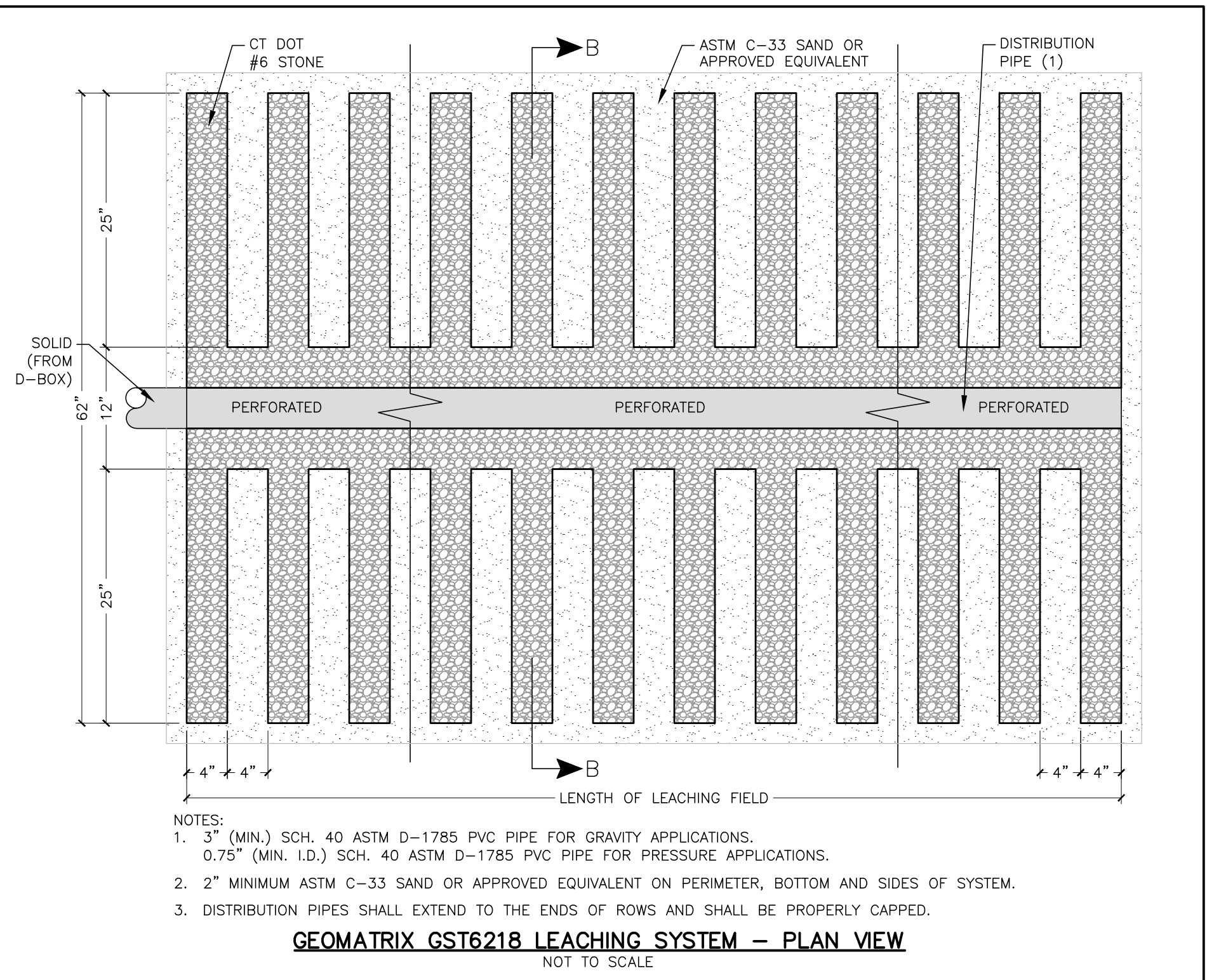
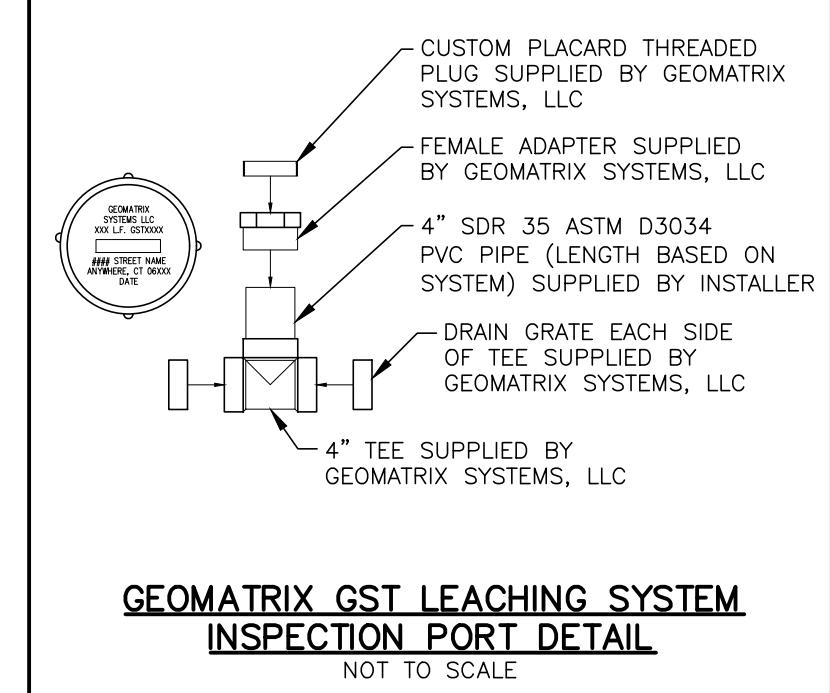
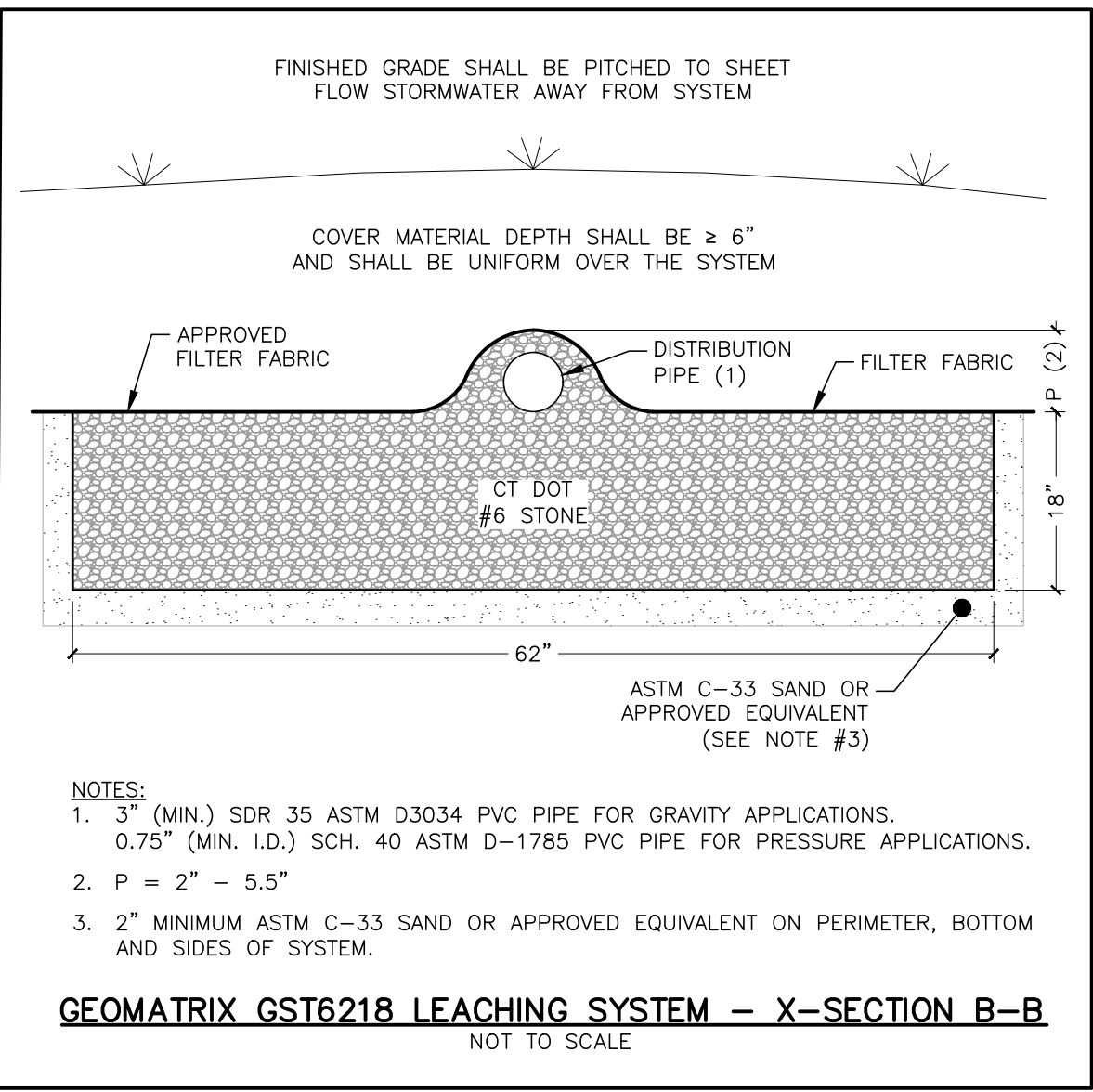
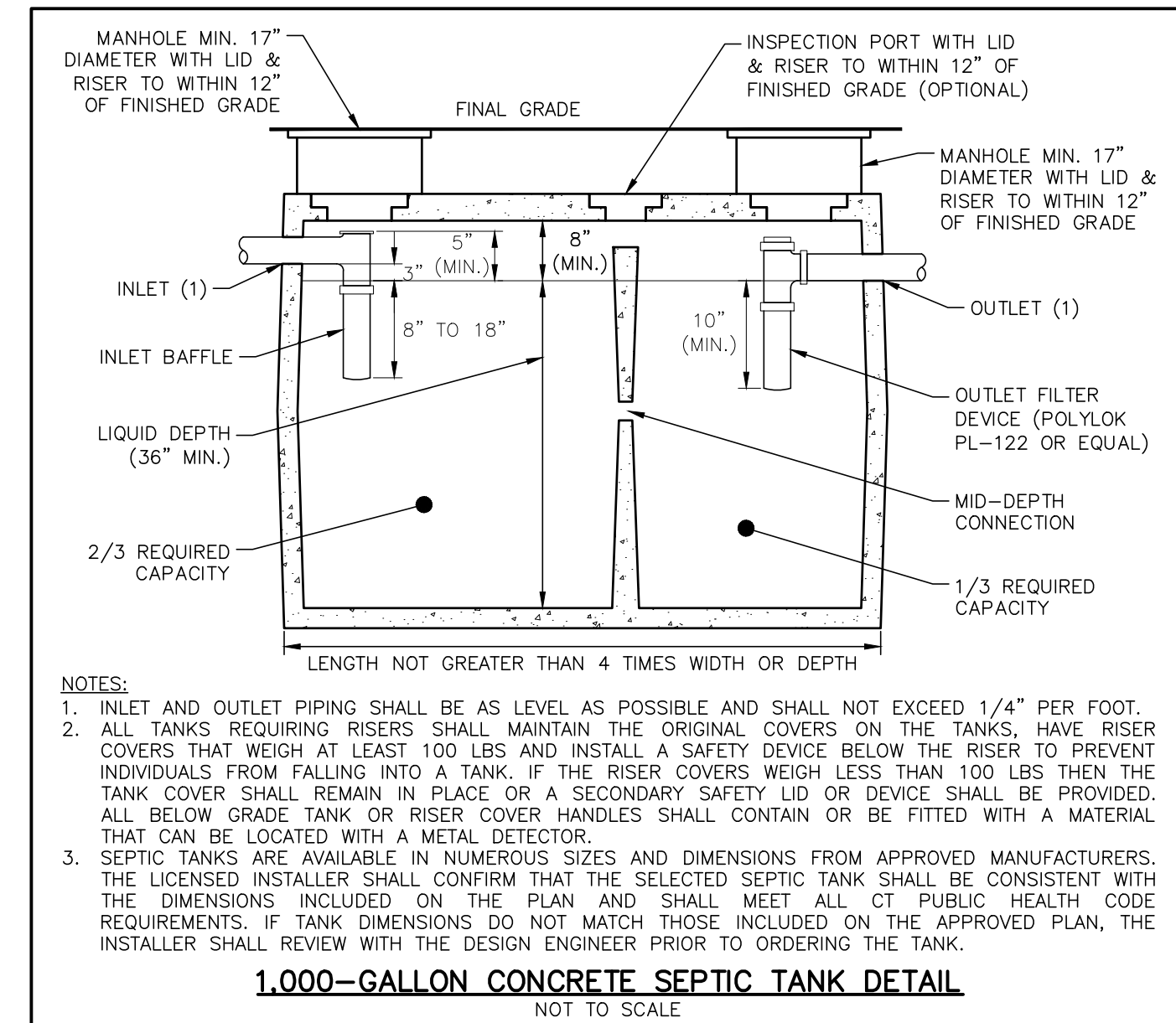
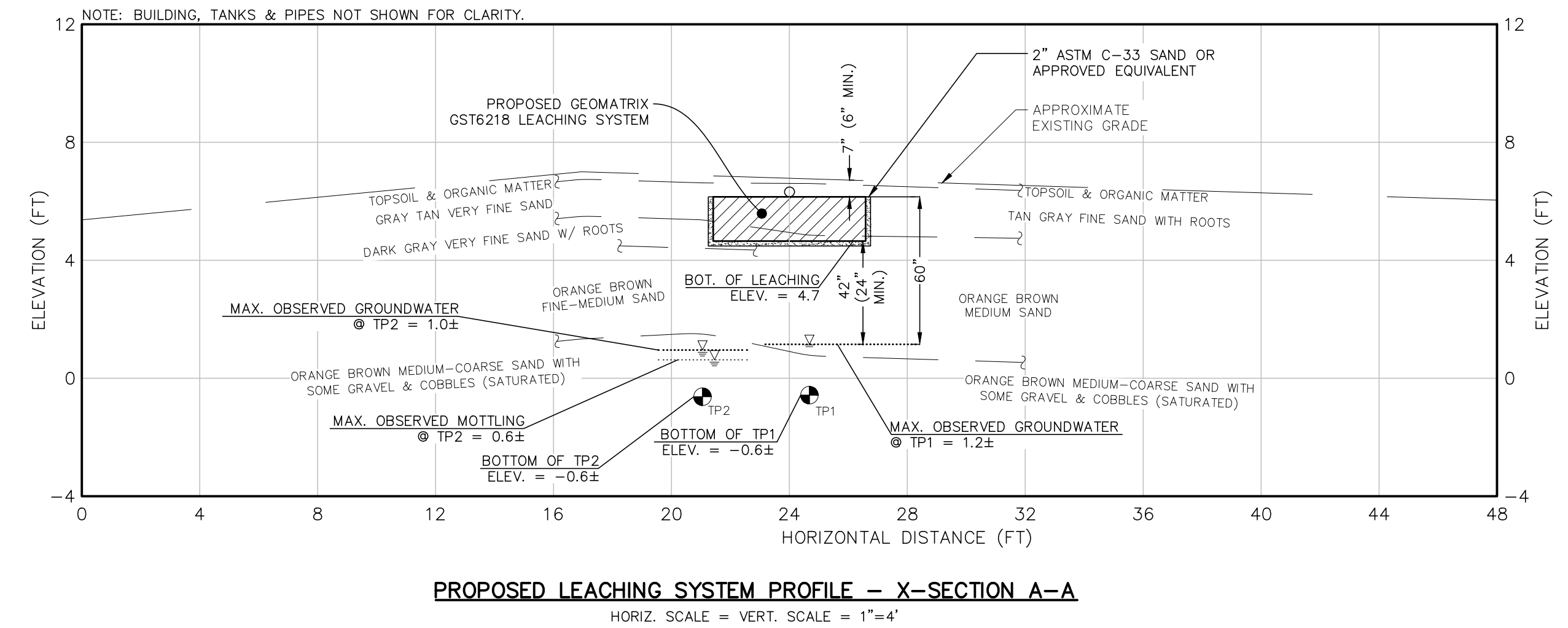
(1) DESIGN FLOW ESTIMATED BASED ON PREVIOUS WATER USAGE. BUILDING CONSIDERED NON-PROBLEMATIC. SEASONAL WATER USAGE FROM APRIL 2023 TO OCTOBER 2023 WAS 77,504 GALLONS OVER 188 DAYS. THEREFORE, THE AVERAGE DAILY USE WAS 402 GALLONS PER DAY. 402 GALLONS/DAY (WATER METER DATA) x 1.5 PEAK FACTOR = 603 GALLONS/DAY E.L.A. = 603 (DESIGN FLOW) / 1.5 (APPLICATION RATE) = 402 S.F.

**SANITARY SYSTEM PIPE INVERT TABLE**

STRUCTURE	BUILDING TO SEPTIC TANK	SEPTIC TANK	LEACHING ROW
INV. IN (FT.)	---	6.50	6.15
INV. OUT (FT.)	7.25	6.25	---

RECEIVING SOIL DEPTH > 60"  
 M.L.S.S. NOT REQUIRED

- FOR ALL PIPE, A MIN. OF 12" OF COVER IS RECOMMENDED.
- PIPE SLOPE = (7.25 - 6.50) / 14.3 = 5.24% > 2.08%
- BOTTOM OF LEACHING SYSTEM SHALL BE SET LEVEL AND AT ELEVATION 4.7'.



PLAN PREPARED BY:  
 INDIGO LAND DESIGN, LLC  
 JOSEPH WREN, P.E.  
 CT REG. NO. 21090  
 201 OLD BLACK POINT ROAD, 2ND FLOOR  
 NANTIC, CT 06347  
 PHONE: (860) 388-9343  
 WEB: INDIGOLAND.COM

THE EMBOSSED SEAL OF  
 THE REGISTERED PROFESSIONAL ENGINEER  
 APPLIED HERE FOR THIS  
 MAP TO BE VALID

#	DATE	DESCRIPTION	BY

**SOIL TEST DATA & SEPTIC DESIGN CRITERIA**  
 PREPARED FOR THE OLD BLACK POINT ASSOCIATION, INC.  
 201 OLD BLACK POINT ROAD, MAP 02.1 LOT 13  
 NANTIC, CONNECTICUT

DATE:	MARCH 1, 2024
SCALE:	AS NOTED
DRAWN BY:	CO
CHECKED BY:	JW
DWG. NO.:	ST-1
SHEET NO.:	2 of 3
JOB NO.:	2023-1025

**SOIL EROSION & SEDIMENTATION CONTROL PLAN NARRATIVE**

THE SITE CONTRACTOR MUST FOLLOW ALL GUIDELINES SET FORTH IN THE MANUAL ENTITLED "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" PUBLISHED BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION IN COOPERATION WITH THE CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION. THIS MANUAL IS ALSO KNOWN AS DEP BULLETIN 34.

**PROJECT DESCRIPTION**

THE APPLICANT IS PROPOSING TO DEMOLISH THE EXISTING BEACH CABANAS & REMOVE A PORTION OF THE EXISTING PAVED PARKING AREA. CONSTRUCT NEW BEACH CABANAS & DECKS, INSTALL A NEW 100% CONNECTICUT PUBLIC HEALTH CODE-COMPLIANT SEPTIC SYSTEM AS WELL AS OTHER ASSOCIATED IMPROVEMENTS. THE PROPOSED STRUCTURE WILL BE CONSTRUCTED ON A PILE SUPPORTED FOUNDATION AND WILL NOT HAVE FOOTING DRAINS. THE STRUCTURE IS PROPOSED TO BE IN COMPLIANCE WITH FEMA REGULATIONS AND LOCAL FLOOD ORDINANCES EFFECTIVE 2/6/2013.

CONSTRUCTION IS ANTICIPATED TO COMMENCE IN FALL 2024. ALL EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED PRIOR TO CONSTRUCTION ACTIVITIES. E & S CONTROLS SHALL BE MAINTAINED AND REPAIRED OR REPLACED AS NEEDED THROUGHOUT THE CONSTRUCTION DURATION. ALL E & S CONTROLS SHALL BE REMOVED AND PROPERLY DISPOSED OF AS SOON AS THE SITE IS COMPLETELY STABILIZED.

**CONSTRUCTION SEQUENCE**

1. CONTACT "CALL BEFORE YOU DIG" TO MARK OUT ALL UTILITY LOCATIONS PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. ENSURE ALL LAND USE PERMITS HAVE BEEN SECURED. OBTAIN ALL NECESSARY PERMITS.
3. A LICENSED LAND SURVEYOR SHALL STAKE OUT ALL PROPOSED IMPROVEMENTS PRIOR TO ANY CONSTRUCTION.
4. INSTALL ALL EROSION AND SEDIMENT CONTROLS.
5. CLEAR TREES/BRUSH AND REMOVE STUMPS NECESSARY FOR CONSTRUCTION AND GRADING.
6. DEMOLISH EXISTING CABANAS AND DECKING.
7. BEGIN CONSTRUCTION OF PROPOSED CABANAS.
8. INSTALL SEPTIC SYSTEM AND UNDERGROUND UTILITIES.
9. CONNECT ALL UTILITIES TO THE CABANAS.
10. FINISH GRADE AND PAVE PORTION OF DRIVEWAY. SAW-CUT & REMOVE EXISTING PARKING LOT AS SHOWN.
11. FINISH GRADE, SEED, MULCH AND LANDSCAPE ALL DISTURBED AREAS AS REQUIRED. INSTALL LANDSCAPE BUFFER SHRUBS.
12. REMOVE ALL EROSION AND SEDIMENT CONTROLS ONCE SITE IS COMPLETELY STABILIZED. DISPOSE OF PROPERLY.

**LAND DISTURBANCE**

1. ALL EXISTING VEGETATION OUTSIDE OF THE CLEARING LIMITS SHALL BE PROTECTED. EXISTING VEGETATION SHALL BE REMOVED ONLY IN AREAS NECESSARY FOR SITE CONSTRUCTION ACTIVITIES. ANY ADDITIONAL CLEARING OUTSIDE OF THE PROPOSED CLEARING LIMITS SHALL BE APPROVED BY TOWN STAFF PRIOR TO CLEARING.
2. ALL AREAS SHALL REMAIN UNDISTURBED UNTIL IMMEDIATELY PRIOR TO SITE DEVELOPMENT.
3. ALL CONSTRUCTION EQUIPMENT, MATERIALS AND STOCKPILES SHALL NOT BE PLACED OUTSIDE OF THE DISTURBED AREAS.
4. ALL TREES, BRUSH, STUMPS, WOOD CHIPS OR OTHER ORGANIC MATTER SHALL BE DISPOSED OF PROPERLY OFF-SITE. WOOD CHIPS MAY BE USED AS A SILTATION BARRIER DURING CONSTRUCTION AND SPREAD AFTER SITE IS STABILIZED. NO ORGANIC MATTER INCLUDING TREES, BRUSH AND STUMPS SHALL BE BURIED ON-SITE.

**STRIPPING AND STOCKPILING**

ALL STOCKPILES THAT CONSIST OF ERODIBLE MATERIALS SHALL BE LOCATED WITHIN AREAS AS SHOWN ON THE SITE PLAN AND SURROUNDED BY A SILTATION BARRIER. ANY STOCKPILE THAT WILL REMAIN UNDISTURBED FOR A PERIOD LONGER THAN 30 DAYS SHALL BE SEEDED WITH A TEMPORARY GRASS SEED MIXTURE TO PREVENT EXCESSIVE EROSION AND SEDIMENTATION.

**TRENCH EXCAVATION AND BACKFILL**

THE CONTRACTOR SHALL PROPERLY MAINTAIN ALL BACKFILLED EXCAVATIONS. ANY DEPRESSIONS DUE TO SETTLING IN THESE AREAS SHALL BE FILLED AND RESEDED AS NECESSARY. THE WIDTH OF ALL EXCAVATED TRENCHES SHALL BE KEPT AS NARROW AS PRACTICABLE TO ACCOMMODATE THE WORK. ALL MATERIALS EXCAVATED FROM TRENCHES SHALL BE STOCKPILED AND USED AS TRENCH BACKFILL MATERIAL UNLESS IT IS DETERMINED TO BE UNSUITABLE BY THE ENGINEER. EXCESS MATERIALS SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR.

**SOIL EROSION AND SEDIMENT CONTROLS**

ALL ADJACENT PROPERTIES AND RECEIVING WATERCOURSES AND/OR WETLAND AREAS SHALL BE ADEQUATELY PROTECTED FROM SOIL EROSION AND SEDIMENTATION BOTH DURING AND AFTER CONSTRUCTION.

ADDITIONAL EROSION AND SEDIMENT CONTROLS MAY BE REQUIRED BY THE TOWN AND SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROLS BEFORE, DURING AND AFTER CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR THE PROPER REMOVAL AND DISPOSAL OF ALL EROSION AND SEDIMENT CONTROLS ONCE THE SITE IS COMPLETELY STABILIZED. ALL EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER ALL RAINFALL EVENTS. E & S CONTROLS SHALL BE REPAIRED OR REPLACED AS NECESSARY WITHIN 24 HOURS THROUGHOUT THE CONSTRUCTION DURATION.

ALL ACCUMULATED SEDIMENTS AT ALL EROSION AND SEDIMENT CONTROLS SHALL BE PERIODICALLY REMOVED AND SPREAD IN AREAS THAT ARE NOT SUBJECT TO EROSION.

THE CONTRACTOR SHALL EMPLOY BEST MANAGEMENT PRACTICES TO CONTROL STORMWATER DISCHARGES AND TO PREVENT EROSION AND SEDIMENTATION AND TO OTHERWISE PREVENT POLLUTION OF PRIVATE PROPERTY. THE CONTRACTOR SHALL IMMEDIATELY INFORM THE TOWN OF ANY PROBLEMS INVOLVING EROSION AND/OR SEDIMENTATION THAT HAVE DEVELOPED IN THE COURSE OF, OR THAT ARE CAUSED BY, THE AUTHORIZED WORK.

THE RESPONSIBLE CONTACT PERSON FOR THE INSTALLATION AND MAINTENANCE OR EROSION AND SEDIMENTATION CONTROLS ON THIS PROJECT WILL BE THE SITE CONTRACTOR AND / OR THE GENERAL CONTRACTOR. ONCE THE GENERAL CONTRACTOR IS SELECTED, CONTACT INFORMATION WILL BE PROVIDED TO THE TOWN.

**VEGETATIVE TURF ESTABLISHMENT PROCEDURE**

SCARIFY ALL AREAS TO BE TOPSOILED AND SEEDED. APPLY A MINIMUM OF 4 INCHES OF TOPSOIL ON ALL AREAS TO BE SEEDED. APPLY GRASS SEED, LIME, FERTILIZER AND MULCH ACCORDING TO THE FOLLOWING SCHEDULE:

PERMANENT SEED MIXTURE:	0.45 LBS. PER 1,000 SQ. FT.
CREeping RED FESCUE	0.45
REDTOP	0.05
TALL FESCUE	0.45
TOTAL	0.95

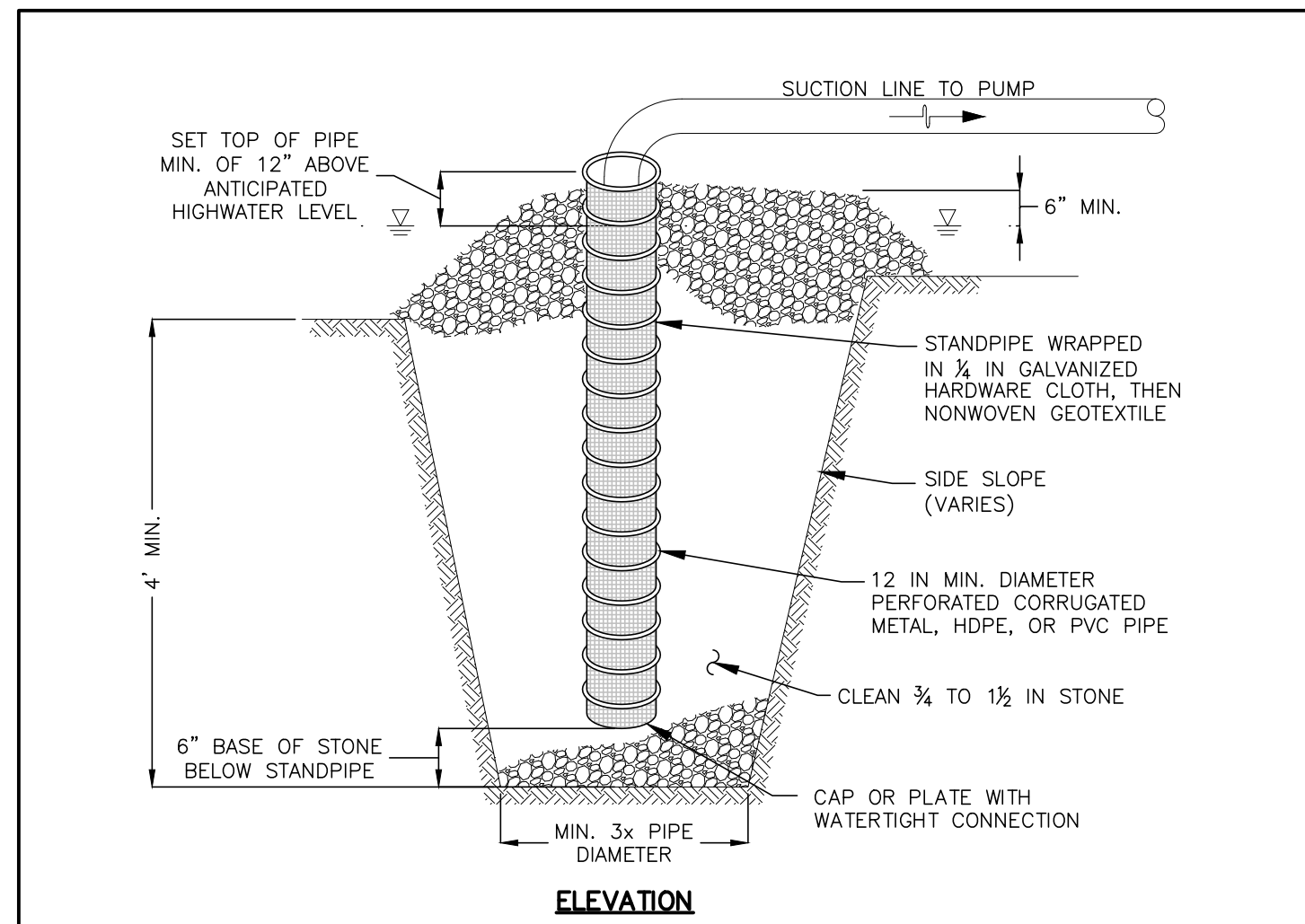
FERTILIZER:  
10-10-10 APPLY AT 7.5 LBS. PER 1,000 SQ. FT.

LIMESTONE:  
APPLY AT 150 LBS. PER 1,000 SQ. FT.

MULCHING:  
SPREAD HAY OR STRAW OVER ALL AREAS AFTER SEEDING. USE 1 1/2 TO 2 BALES PER 1,000 SQ. FT. TARGET FOR 100% COVERAGE. ANCHOR BY USING NETTING OR TRACKING AS NECESSARY.

TEMPORARY EROSION CONTROL BLANKETS:  
USE TEMPORARY EROSION CONTROL BLANKETS ON ALL SEEDED SLOPES EQUAL TO OR STEEPER THAN 3(H):1(V) IN STRICT CONFORMANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND SPECIFICATIONS.

SEEDING DATES:  
SEEDING DATES IN CONNECTICUT ARE NORMALLY APRIL 1 THROUGH JUNE 15 AND AUGUST 15 THROUGH OCTOBER 1. SEED GERMINATION NORMALLY CANNOT BE EXPECTED FROM NOVEMBER THROUGH FEBRUARY. IF ADEQUATE SEED GERMINATION IS NOT POSSIBLE DUE TO TIME OF YEAR CONSTRAINTS, MULCHING SHALL BE ADEQUATELY PROVIDED TO PROTECT THE SEED FROM WIND AND SURFACE EROSION UNTIL THE WEATHER IMPROVES AND THE SEEDING BECOMES WELL ESTABLISHED.

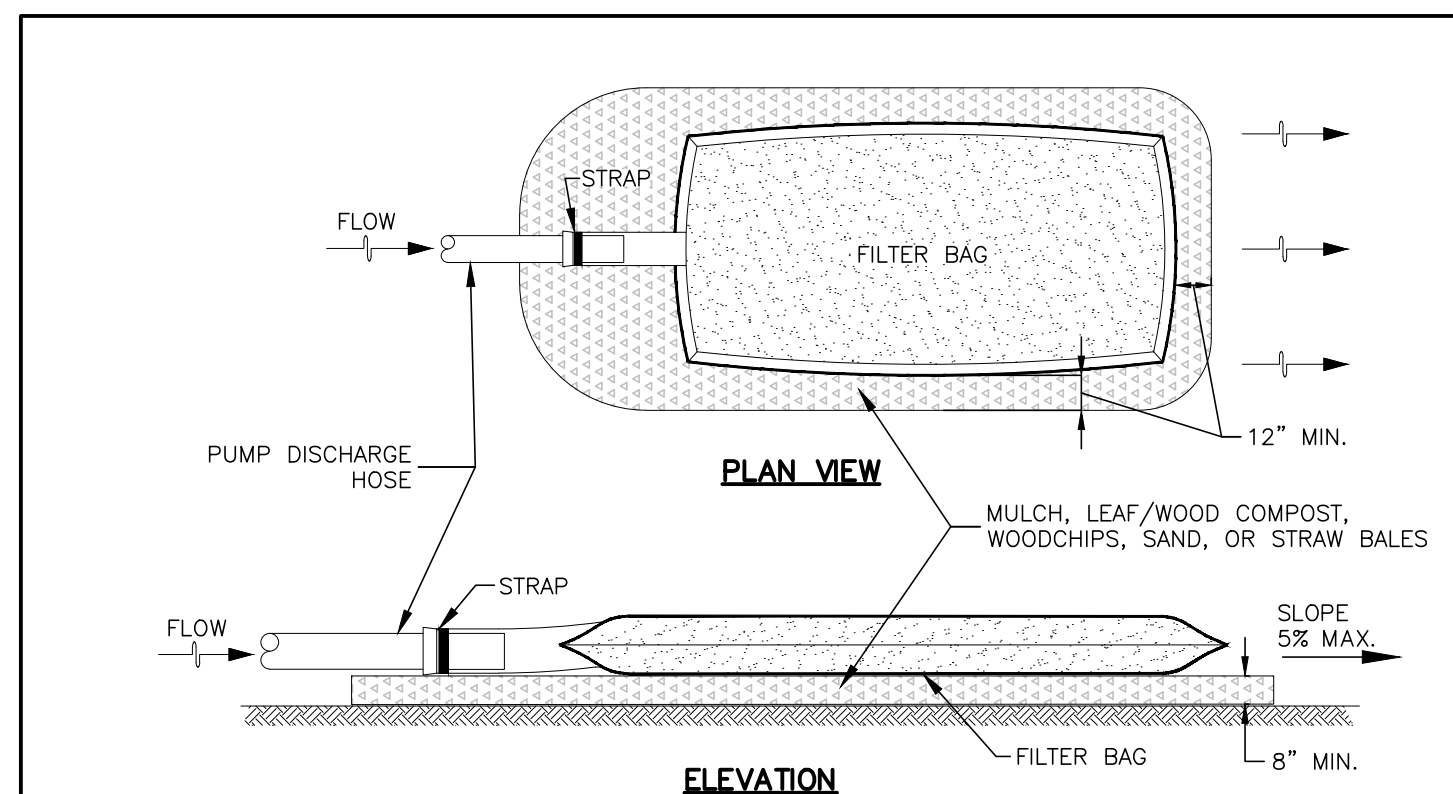


**ELEVATION**

**CONSTRUCTION SPECIFICATIONS**

1. USE 12 INCH OR LARGER DIAMETER CORRUGATED METAL, HDPE, OR PVC PIPE WITH 1 INCH DIAMETER PERFORATIONS, 6 INCHES ON CENTER. BOTTOM OF PIPE MUST BE CAPPED WITH WATERTIGHT SEAL.
  2. WRAP PIPE WITH 1/2 INCH GALVANIZED HARDWARE CLOTH AND WRAP NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE HARDWARE CLOTH.
  3. EXCAVATE PIT TO THREE TIMES THE PIPE DIAMETER AND FOUR FEET IN DEPTH. PLACE 3/4 TO 1 1/2 INCH STONE OR EQUIVALENT RECYCLED CONCRETE, 6 INCHES IN DEPTH PRIOR TO PIPE PLACEMENT.
  4. SET TOP OF PIPE MINIMUM 12 INCHES ABOVE WATER SURFACE ELEVATION.
  5. BACKFILL PIT AROUND THE PIPE WITH 3/4 TO 1 1/2 INCH CLEAN STONE OR EQUIVALENT RECYCLED CONCRETE AND EXTEND STONE A MINIMUM OF 6 INCHES ABOVE ANTICIPATED WATER SURFACE ELEVATION.
  6. DISCHARGE TO A STABLE AREA AT A NONEROSIVE RATE.
  7. A SUMP PIT REQUIRES FREQUENT MAINTENANCE. IF SYSTEM CLOGS, REMOVE PERFORATED PIPE AND REPLACE GEOTEXTILE AND STONE. KEEP POINT OF DISCHARGE FREE OF EROSION.
- THIS DETAIL ONLY REQUIRED FOR DEWATERING DURING CONSTRUCTION IF SHALLOW GROUNDWATER IS ENCOUNTERED.

**SUMP PIT DETAIL**  
NOT TO SCALE

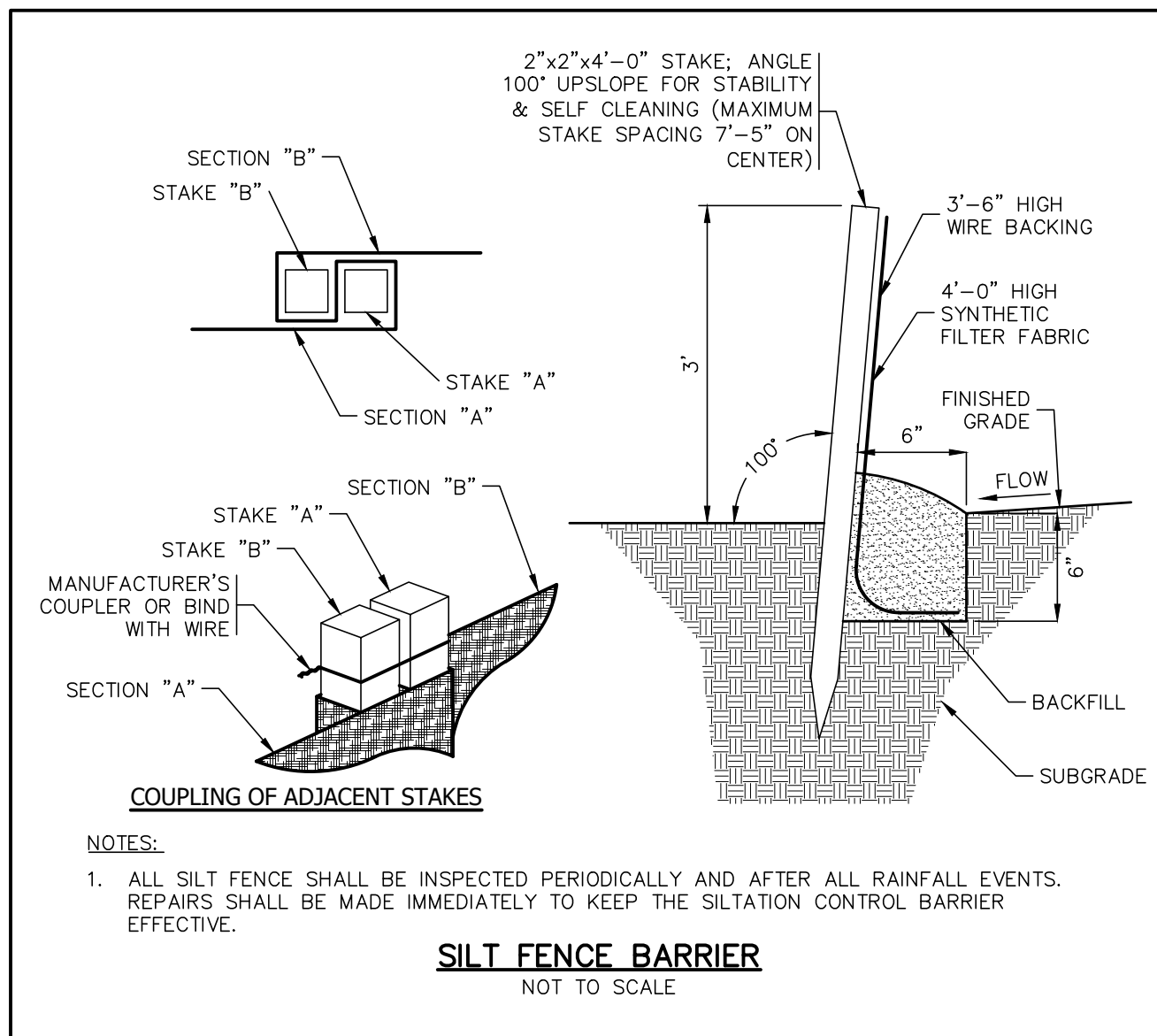


**ELEVATION**

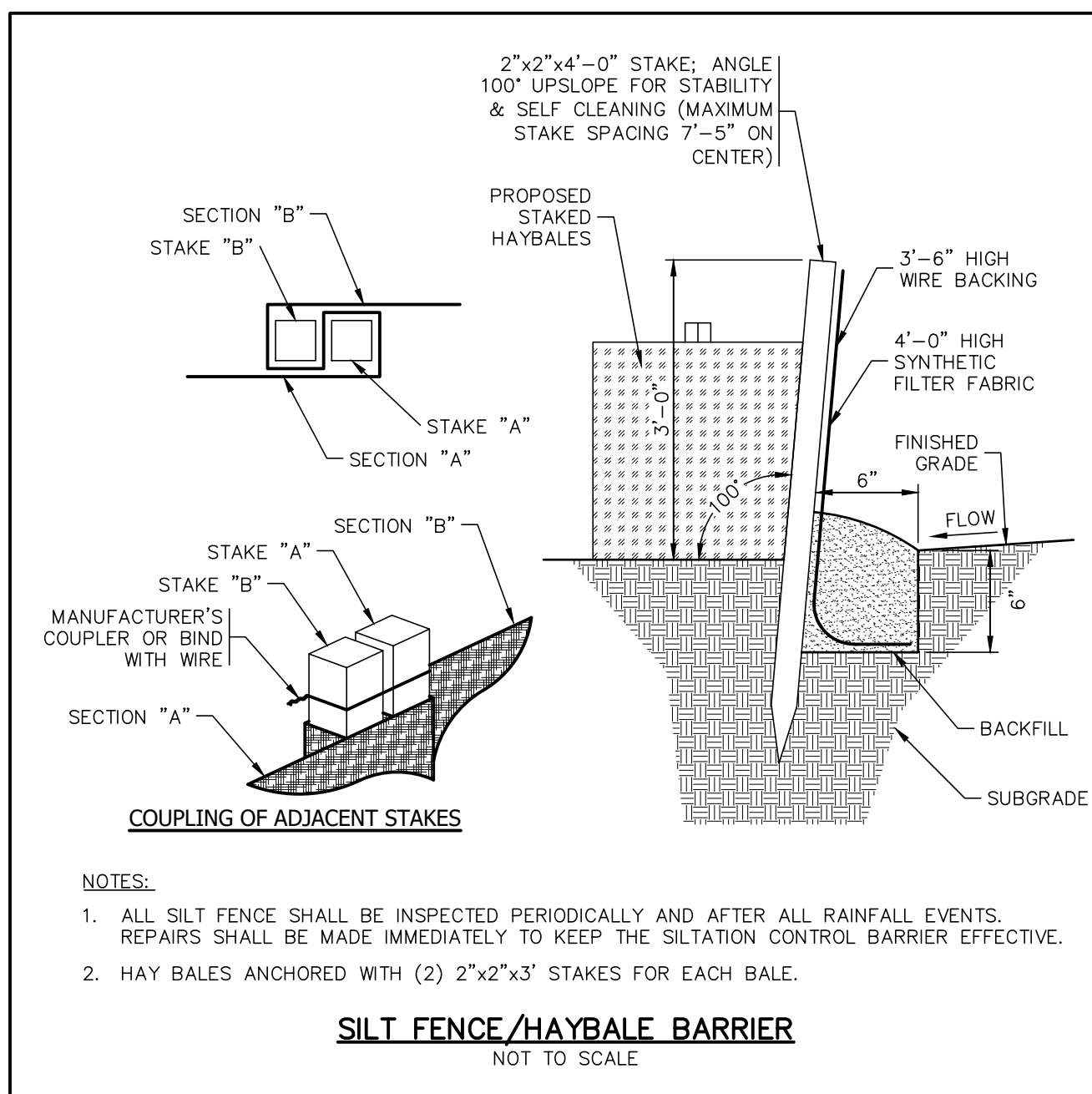
**CONSTRUCTION SPECIFICATIONS**

1. TIGHTLY SEAL SLEEVE AROUND THE PUMP DISCHARGE HOSE WITH A STRAP OR SIMILAR DEVICE.
  2. PLACE FILTER BAG ON SUITABLE BASE (E.G., MULCH, LEAF/WOOD COMPOST, WOODCHIPS, SAND, OR STRAW BALES) LOCATED ON A LEVEL OR 5% MAXIMUM SLOPING SURFACE. DISCHARGE TO A STABILIZED AREA. EXTEND BASE A MINIMUM OF 12 INCHES FROM EDGES OF BAG.
  3. CONTROL PUMPING RATE TO PREVENT EXCESSIVE PRESSURE WITHIN THE FILTER BAG IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS. AS THE BAG FILLS WITH SEDIMENT, REDUCE PUMPING RATE.
  4. REMOVE AND PROPERLY DISPOSE OF FILTER BAG UPON COMPLETION OF PUMPING OPERATIONS OR AFTER BAG HAS REACHED CAPACITY, WHICHEVER OCCURS FIRST. SPREAD THE DEWATERED SEDIMENT FROM THE BAG IN AN APPROVED UPLAND AREA AND STABILIZE WITH SEED AND MULCH BY THE END OF THE WORK DAY. RESTORE THE SURFACE AREA BENEATH THE BAG TO ORIGINAL CONDITION UPON REMOVAL OF THE DEVICE.
  5. USE NONWOVEN GEOTEXTILE WITH DOUBLE STITCHED SEAMS USING HIGH STRENGTH THREAD. SIZE SLEEVE TO ACCOMMODATE A MAXIMUM 4 INCH DIAMETER PUMP DISCHARGE HOSE. THE BAG MUST BE MANUFACTURED FROM A NONWOVEN GEOTEXTILE THAT MEETS OR EXCEEDS MINIMUM AVERAGE ROLL VALUES (MARV) FOR THE FOLLOWING:
- |                                   |                            |             |
|-----------------------------------|----------------------------|-------------|
| GRAB TENSILE                      | 250 LB                     | ASTM D-4632 |
| PUNCTURE                          | 150 LB                     | ASTM D-4633 |
| FLOW RATE                         | 70 GAL/MIN/FT <sup>2</sup> | ASTM D-4491 |
| PERMITTIVITY (SEC <sup>-1</sup> ) | 1.2 SEC <sup>-1</sup>      | ASTM D-4491 |
| UV RESISTANCE                     | 70% STRENGTH @ 500 HOURS   | ASTM D-4355 |
| APPARENT OPENING SIZE (AOS)       | 0.15-0.18 MM               | ASTM D-4751 |
| SEAM STRENGTH                     | 90%                        | ASTM D-4632 |
6. REPLACE FILTER BAG IF BAG CLOGS OR HAS RIPS, TEARS, OR PUNCTURES. DURING OPERATION KEEP CONNECTION BETWEEN PUMP HOSE AND FILTER BAG WATER TIGHT. REPLACE BEDDING IF IT BECOMES DISPLACED.
- FILTER BAG SHALL BE PLACED NO CLOSER THAN 25' TO ANY WETLAND AREA OR DOWNGRADIENT PROPERTY LINE.
- THIS DETAIL ONLY REQUIRED FOR DEWATERING DURING CONSTRUCTION IF SHALLOW GROUNDWATER IS ENCOUNTERED.

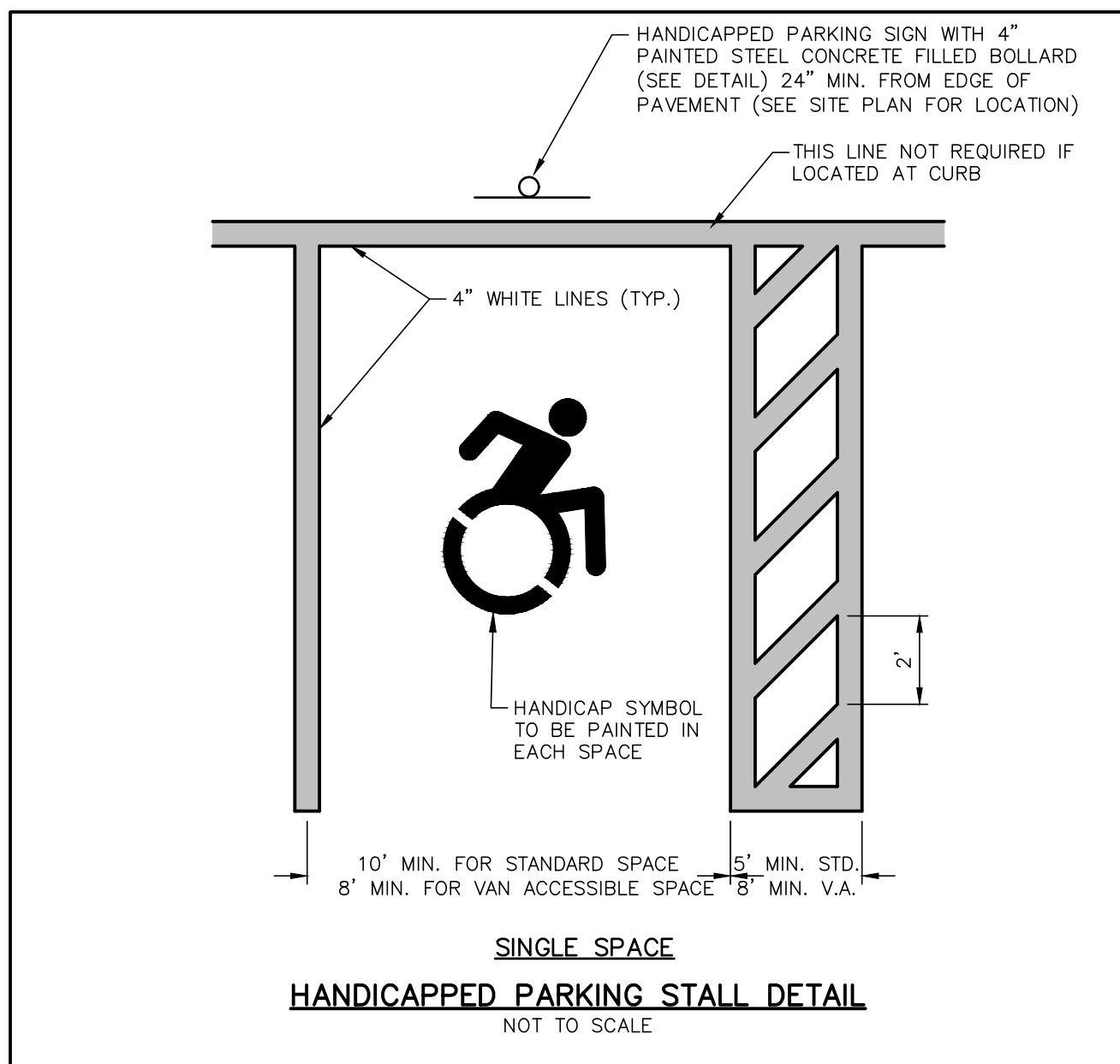
**FILTER BAG DETAIL**  
NOT TO SCALE



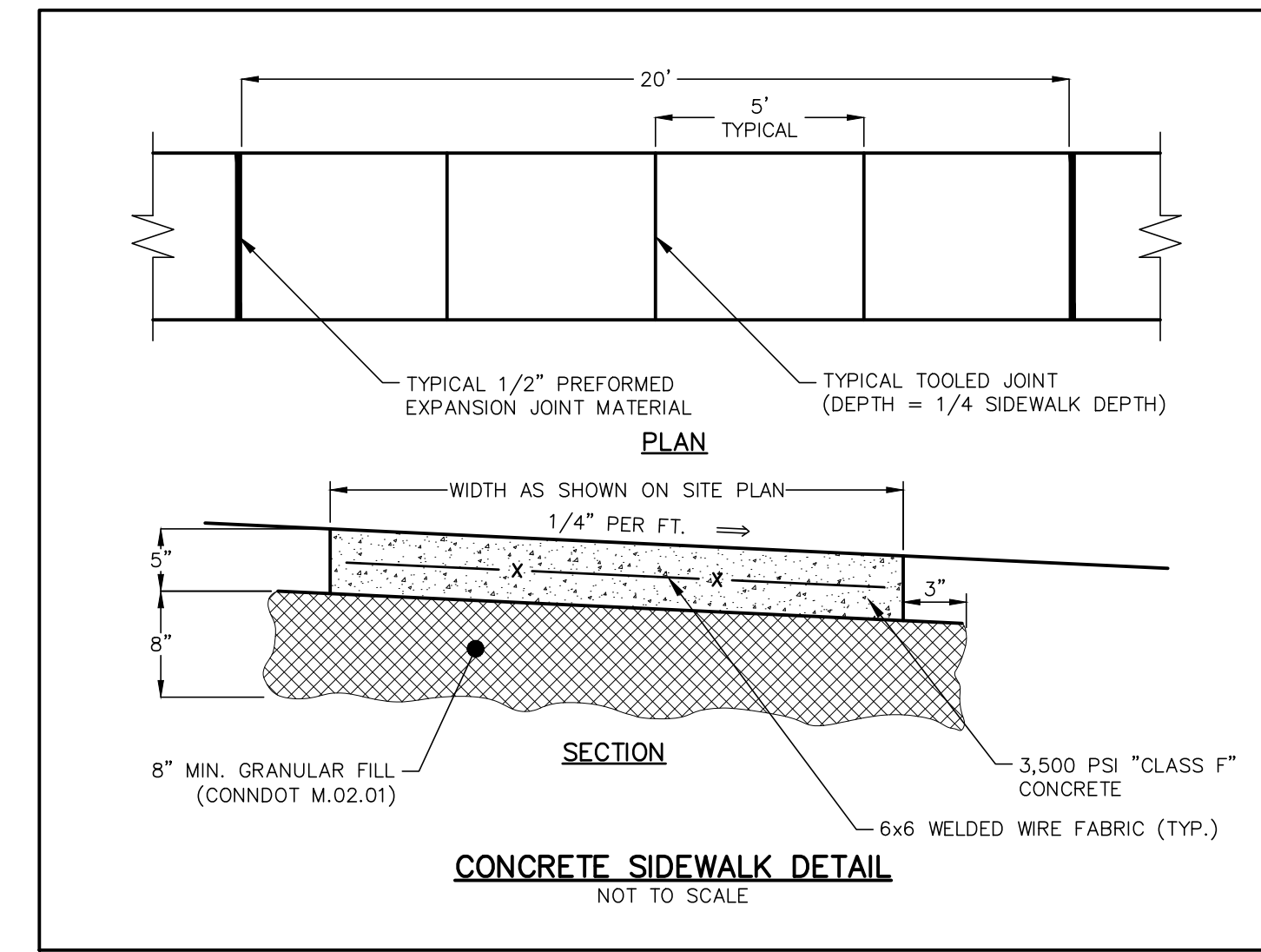
**SILT FENCE BARRIER**  
NOT TO SCALE



**SILT FENCE/HAYBALE BARRIER**  
NOT TO SCALE



**SINGLE SPACE**  
**HANDICAPPED PARKING STALL DETAIL**  
NOT TO SCALE



**CONCRETE SIDEWALK DETAIL**  
NOT TO SCALE

PLAN PREPARED BY:  
INDIGO LAND DESIGN, LLC  
JOSEPH WREN, P.E.  
CT REG. NO. 21090  
200 BLACK POINT ROAD, 2ND FLOOR  
MANTIC, CONNECTICUT 06475  
PHONE: (860) 388-9343  
WEB: INDIGO-LAND.COM

INDIGO LAND DESIGN

#	DATE	DESCRIPTION	BY

**E&S NARRATIVE & CONSTRUCTION DETAILS**  
PREPARED FOR THE OLD BLACK POINT ASSOCIATION, INC.  
201 OLD BLACK POINT ROAD, MAP 02.1 LOT 13  
MANTIC, CONNECTICUT

DATE:	MARCH 1, 2024
SCALE:	NOT TO SCALE
DRAWN BY:	CO
CHECKED BY:	JW
DWG. NO.:	ESCD-1
SHEET NO.:	3 of 3
JOB NO.:	2023-1025