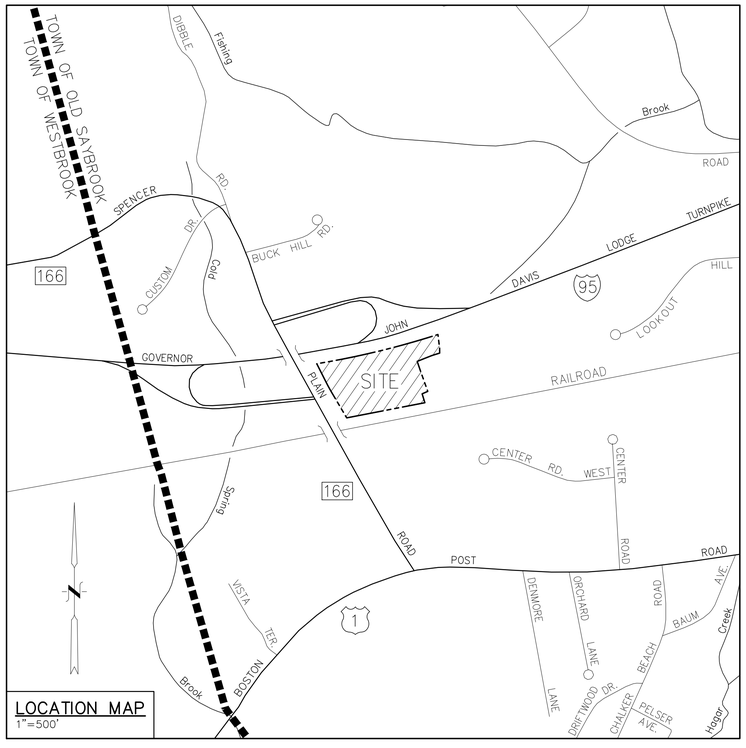
PROPOSED MEDICAL OFFICE BUILDING

PREPARED FOR ORTHO SAYBROOK, LLC
52 SPENCER PLAIN ROAD (CT ROUTE 166)
OLD SAYBROOK, CONNECTICUT

LEGEND

	EXISTING PROPERTY/STREET LINE
	BUILDING SETBACK LINE
	LANDSCAPE SETBACK LINE
	PROPOSED BUILDING
OHW	EXISTING OVERHEAD WIRES
RD	EXISTING WATER LINE
GAS	EXISTING GAS LINE
ETC	PROPOSED ELECTRIC, TELEPHONE & CABLE LINES
WD	PROPOSED DOMESTIC WATER LINE
WF	PROPOSED FIRE PROTECTION WATER LINE
G	PROPOSED GAS LINE
FD	PROPOSED FOOTING DRAIN
RD	PROPOSED ROOF DRAIN
10	EXISTING CONTOUR
10	PROPOSED CONTOUR
SF	PROPOSED SILT FENCE
WCB	PROPOSED WOOD CHIP BERM
×15.1	EXISTING SPOT GRADE
×32.5	PROPOSED SPOT GRADE
PTA	PERCOLATION TEST LOCATION
TP101	TEST PIT LOCATION
	EXISTING STREET SIGNS
E	PROPOSED ELECTRIC METER
	EXISTING UTILITY POLE
	PROPOSED LIGHT POLE
	EXISTING IRON PIPE
	EXISTING SHRUB
T.B.R.	TO BE REMOVED
E.O.P.	EXISTING EDGE OF PAVEMENT
B.C.L.C.	EXISTING BIT. CONC. LIP CURB
B.C.L.C.	PROPOSED BIT. CONC. LIP CURB



LOCATION MAP
1"=500'

DRAWING INDEX:

TITLE	DWG. NO.	SHEET NO.
SITE PLAN	SP-1	1 OF 13
LANDSCAPING & LIGHTING PLAN	LL-1	2 OF 13
GRADING, UTILITIES & SEPTIC SYSTEM PLAN	GUS-1	3 OF 13
SOIL EROSION & SEDIMENTATION CONTROL PLAN	SES-1	4 OF 13
SEPTIC DESIGN CRITERIA & SOIL TESTING DATA	SDC-1	5 OF 13
CONSTRUCTION DETAILS (SEPTIC)	CD-1	6 OF 13
CONSTRUCTION DETAILS	CD-2	7 OF 13
CONSTRUCTION DETAILS (WATER)	CD-3	8 OF 13
CONSTRUCTION DETAILS (DRAINAGE)	CD-4	9 OF 13
CONSTRUCTION DETAILS	CD-5	10 OF 13
E&S CONTROL NARRATIVE AND DETAILS	ES-1	11 OF 13
E&S CONTROL DETAILS	ES-2	12 OF 13
SOIL SAMPLE DATA	SSD-1	13 OF 13

ORIGINAL PLAN SET DATED APRIL 4, 2024

#	DATE	DESCRIPTION	BY
1	5/14/2024	REVISIONS PER TOWN ENGINEER'S COMMENTS, MISC.	RG

FOR REVIEW - NOT FOR CONSTRUCTION

Approved by the Old Saybrook Zoning Commission

Title *Signature* *Date*

LAND SURVEYOR

ANNINO SURVEY, LLC
DAVID A. ANNINO, L.S.
222 OLD BOSTON POST ROAD, SUITE 3
OLD SAYBROOK, CT 06475

BUILDING ARCHITECT

BORGHESI BUILDING & ENGINEERING CO. INC.
2155 EAST MAIN STREET
TORRINGTON, CT 06790

CIVIL ENGINEER

INDIGO LAND DESIGN, LLC
JOE WREN, P.E.
40 ELM STREET, 2ND FLOOR
OLD SAYBROOK, CT 06475

PROPERTY OWNER/APPLICANT

ORTHO SAYBROOK, LLC
430 SAYBROOK ROAD, SUITE 100
MIDDLETOWN, CT 06457

GENERAL NOTES:

1. THIS PLAN WAS COMPILED USING THE FOLLOWING REFERENCE MAP:

   A) A CLASS A-2 SURVEY MAP ENTITLED "PROPERTY/TOPOGRAPHIC SURVEY, LAND OF LAND OF ORTHO SAYBROOK, LLC, TAX MAP 25 LOT 27, 52 SPENCER PLAIN ROAD OLD SAYBROOK, CONNECTICUT" SCALE: 1"=50', DATED: AUGUST 26, 2019 PREPARED BY ANNINO SURVEY.

2. THE APPLICANT IS:

   ORTHO SAYBROOK, LLC
   430 SAYBROOK ROAD, SUITE 100
   MIDDLETOWN, CT 06457

3. THE SUBJECT PARCEL IS IDENTIFIED AS LOT 27 ON TAX ASSESSOR'S MAP 25. THE DEED REFERENCE OF THE PROPERTY IS VOLUME 643 PAGE 458. THE AREA OF THE PARCEL IS 289,459± S.F. OR 6.65 ACRES.

4. REFER TO THE FOLLOWING DRAWINGS AND REPORTS FOR ADDITIONAL INFORMATION:
   - SP-1: SITE PLAN
   - LL-1: LANDSCAPE & LIGHTING PLAN
   - GUS-1: GRADING, UTILITIES AND SEPTIC SYSTEM PLAN
   - SES-1: SOIL EROSION & SEDIMENTATION CONTROL PLAN
   - SDC-1: SEPTIC DESIGN CRITERIA & SOIL TESTING DATA
   - CD-1: CONSTRUCTION DETAILS (SEPTIC)
   - CD-2: CONSTRUCTION DETAILS
   - CD-3: CONSTRUCTION DETAILS (WATER)
   - CD-4: CONSTRUCTION DETAILS (DRAINAGE)
   - CD-5: CONSTRUCTION DETAILS
   - ES-1: E&S CONTROL NARRATIVE AND DETAILS
   - ES-2: E&S CONTROL DETAILS
   - SSD-1: SOIL SAMPLE DATA

5. REFER TO ARCHITECTURAL CONCEPT DRAWINGS ENTITLED "O&G LEASE BUILDING, OLD SAYBROOK MEDICAL, #52 SPENCER PLAIN RD., OLD SAYBROOK, CT", DATED: FEBRUARY 14, 2024, PREPARED BY: BORGHESI BUILDING & ENGINEERING CO., INC. FOR ADDITIONAL INFORMATION.

GENERAL NOTES (CONT'D):

6. REFER TO LANDSCAPE PLAN ENTITLED "O&G INDUSTRIES, 52 SPENCER PLAIN RD., OLD SAYBROOK, CT", SCALE 1"=30', DATED: APRIL 18, 2024, PREPARED BY: J.W. FLYNN ASSOC. LLC.

7. REFER TO SITE LIGHTING PLAN ENTITLED "52 SPENCER PLAINS ROAD – SITE LIGHTING – OLD SAYBROOK – REVISION 3.AGI" SCALE: 1"=40', RECEIVED: APRIL 18, 2024, PREPARED BY: LITHONIA LIGHTING.

8. THE SUBJECT PROPERTY IS LOCATED WITHIN THE GATEWAY BUSINESS 'B-4' ZONING DISTRICT.

9. THE APPLICANT IS PROPOSING TO CONSTRUCT A 23,820± S.F 1-STORY MEDICAL OFFICE BUILDING WITH ASSOCIATED PARKING AND ACCESS DRIVE, INSTALL A 100% CONNECTICUT PUBLIC HEALTH CODE-COMPLIANT SEPTIC SYSTEM, STORMWATER MANAGEMENT AREA, AND OTHER ASSOCIATED IMPROVEMENTS.

10. THE PURPOSE OF THIS PLAN IS FOR REVIEW BY THE OLD SAYBROOK INLAND WETLANDS COMMISSION.

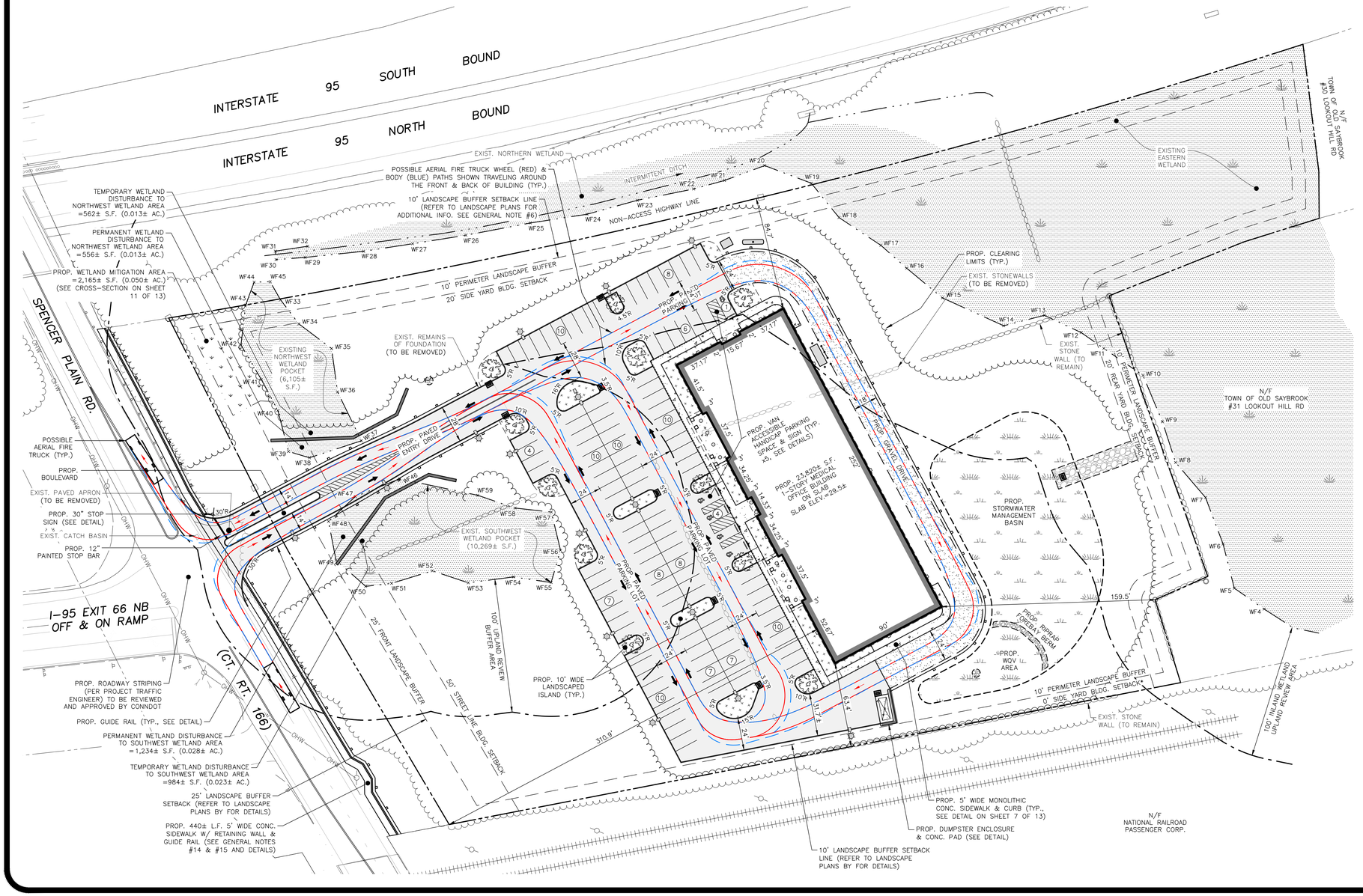
11. THIS PROPERTY WILL BE SERVED BY PUBLIC WATER AND SUBSURFACE SEWAGE DISPOSAL SYSTEMS. THERE ARE NO KNOWN WELLS OR ANY OTHER KNOWN DESIGN CONFLICTS WITHIN 75 FEET OF THE PROPOSED SEPTIC SYSTEM.

12. ALL ELEVATIONS SHOWN HEREON ARE REFERENCED TO NAVD-88 DATUM PER REF. MAP A.

13. PARKING AREAS SHALL NOT BE UTILIZED FOR OUTSIDE STORAGE. NO HAZARDOUS MATERIALS SHALL BE STORED ON SITE.

14. SIDEWALK CONSTRUCTION SHALL BE COORDINATED WITH THE OLD SAYBROOK PUBLIC WORKS DEPARTMENT. SIDEWALKS SHALL BE PORTLAND CEMENT CONCRETE, LINED WITH A BRICK SOLDIER COURSE OR COLORED, STAMPED CONCRETE IN CONFORMANCE WITH ZONING REGULATIONS SECTION 62 AND IN ACCORDANCE WITH THE CRITERIA AND STANDARDS SPECIFIED IN SECTIONS 70Q, 80M AND FIGURES 16 & 18 IN THE OLD SAYBROOK REGULATIONS FOR PUBLIC IMPROVEMENTS. SEE DETAIL ON SHEET 10 OF 13 FOR ADDITIONAL INFORMATION.

15. THE SIDEWALK DEPICTED WITHIN THE ROUTE 166 RIGHT-OF-WAY WILL ONLY BE REQUIRED TO BE CONSTRUCTED IF IT IS REQUIRED BY ZONING AND IF APPLICABLE DOT PERMITS ARE APPROVED.



40 20 0 40 80 120
30 10
SCALE IN FEET

PER REFERENCE MAP A

ZONING DATA TABLE

OLD SAYBROOK GATEWAY BUISNESS 'B-4' DISTRICT

ITEM	REQUIRED	PROPOSED
MIN. LOT AREA	20,000 S.F.	289,459± S.F. (GROSS) 228,584± S.F. (NET) (1)
MIN. FRONTAGE	50 FT.	432.68 FT. (EXIST.)
STREET LINE SETBACK	50 FT.	310.9± FT. (PROP. BUILDING)
SIDE YARD SETBACK (NORTH BOUNDARY)	20 FT.	84.7± FT. (PROP. BUILDING)
SIDE YARD SETBACK (SOUTH BOUNDARY)	20 FT. 0 FT. (2)	63.4± FT. (PROP. BUILDING)
REAR YARD SETBACK (EAST BOUNDARY)	20 FT.	159.5± FT. (PROP. BUILDING)
MAX. # OF STORIES	2 1/2 STORIES	1 STORY (PROP. BUILDING)
MAX. BUILDING HEIGHT	35 FT.	33.8± FT. (PROP. BUILDING) (3)
MAX. GROSS FLOOR AREA	60% (137,150 S.F.)	10.4% (23,819± S.F.) (4)
MAX. BUILDING/ STRUCTURE COVERAGE	40% (91,433 S.F.)	10.7% (24,441± S.F.) (5)
TOTAL LOT COVERAGE	70% (160,008 S.F.)	37.9% (86,710± S.F.) (6)

(1) MIN. LOT AREA (I.E., NET LOT AREA) EQUALS GROSS LOT AREA LESS WETLANDS. NET LOT AREA WAS USED TO COMPUTE MAX. GROSS FLOOR AREA AND MAX. BUILDING/STRUCTURE COVERAGE.
NET LOT AREA = 289,459± S.F. (GROSS) – 60,875± S.F. (WETLANDS) = 228,584± S.F.

(2) PER SECTION 68.1.2.5, NO SETBACK IS REQUIRED FROM RAILROAD RIGHT-OF-WAYS IN THE BUSINESS DISTRICT.

(3) BUILDING HEIGHT WAS MEASURED FROM THE MAX. ROOF RIDGE DOWN TO AVERAGE EXISTING GRADE AT THE PERIMETER OF THE BUILDING.
MAX. BLDG. HEIGHT = EL. 56.3± (MAX. RIDGE) – EL. 22.5± (AVG. EX. GRADE) = 33.8'±
(NOTE: BUILDING HEIGHT IS 26.3± FT. AS MEASURED FROM PROPOSED FINISHED GRADE)

(4) MAX. GROSS FLOOR AREA INCLUDES BUILDING AREA ENCLOSED BY WALLS AND OPEN COVERED ENTRIES.
MAX. G.F.A. = 22,381± S.F. (BUILDING AREA) + 1,439± S.F. (ENTRIES) = 23,820 S.F.

(5) BUILDING/STRUCTURE COVERAGE INCLUDES GROSS FLOOR AREA PLUS TRANSFORMER.
MAX. BLDG./STRUCT. COVERAGE = 23,820± S.F. (MAX. G.F.A.)
+ 477± (RETAINING WALLS)
+ 144± (ABOVE GROUND UTILITIES)
= 24,441± S.F.

(6) MAX. TOTAL LOT COVERAGE INCLUDES ALL BUILDING/STRUCTURE COVERAGE PLUS THE PAVED DRIVE, WALKS, WALLS AND OTHER IMPERVIOUS AREAS.
TOTAL LOT COVERAGE = 24,441± S.F. (BLDG./STRUCT. COVERAGE)
+ 62,269 ±S.F. (DRIVE, WALKS, ETC.) = 86,710± S.F.

PARKING REQUIREMENTS

ITEM	REQUIRED	PROPOSED
MINIMUM REQUIRED PARKING SPACES	MEDICAL OFFICE: 1 SPACE PER 200 S.F. G.F.A. 23,820± S.F. x 1 SPACE PER 200 S.F. = 120 SPACES	120 SPACES (INCLUDES 5 HANDICAP PARKING SPACES)

FOR REVIEW - NOT FOR CONSTRUCTION

Approved by the Old Saybrook Zoning Commission

Title *Signature* *Date*

PLAN PREPARED BY:
INDIGO LAND DESIGN, LLC
JOSEPH VIREN, P.E.
CT REG. NO. 21090
40 ELM STREET, 2ND FLOOR
OLD SAYBROOK, CT 06475
PHONE: (860) 388-5343
WEB: INDIGO-LAND.COM

THE EMBOSSED SEAL OF THE ENGINEER MUST BE AFFIXED TO THIS MAP TO BE VALID

#	DATE	DESCRIPTION	BY
1	5/14/2024	REVISIONS PER TOWN ENGINEER'S COMMENTS, MISC.	RG

SITTE PLAN

PREPARED FOR ORTHO SAYBROOK, LLC
52 SPENCER PLAIN ROAD (CT ROUTE 166)
(MAP 25 LOT 27)
OLD SAYBROOK, CONNECTICUT

DATE: APRIL 4, 2024
SCALE: 1"=40'
DRAWN BY: RG
CHECKED BY: JW
DWG. NO.: SP-1
SHEET NO.: 1 of 13
JOB. NO.: 2023-1030

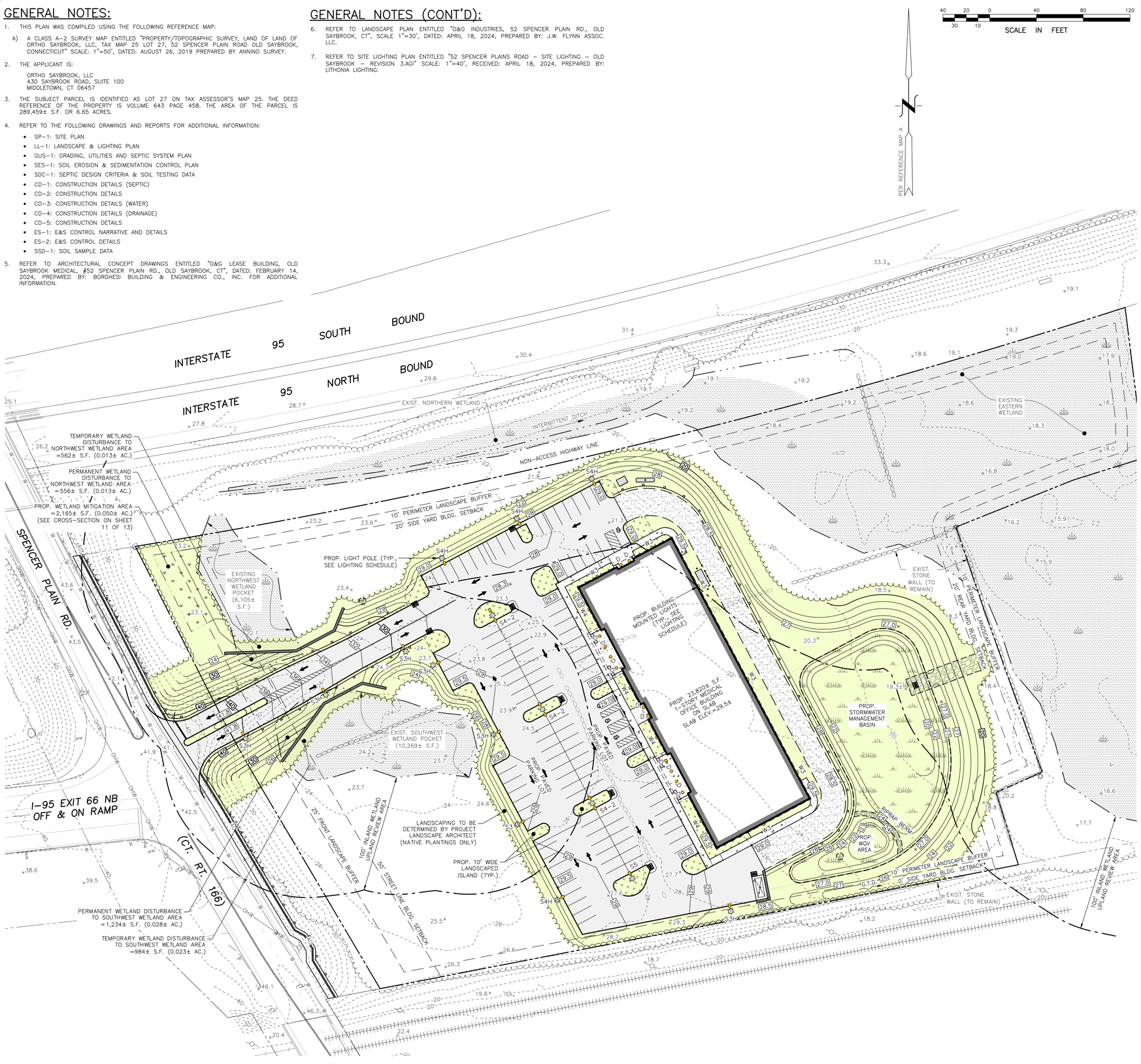
GENERAL NOTES:

1. THIS PLAN WAS COMPILED USING THE FOLLOWING REFERENCE MAP:
   A) A CLASS A-2 SURVEY MAP ENTITLED "PROPERTY/TOPOGRAPHIC SURVEY, LAND OF LAND OF ORTHO SAYBROOK, LLC, TAX MAP 25 LOT 27, 52 SPENCER PLAIN ROAD OLD SAYBROOK, CONNECTICUT" SCALE: 1"=50', DATED: AUGUST 26, 2019 PREPARED BY ANNINO SURVEY.
2. THE APPLICANT IS:

   ORTHO SAYBROOK, LLC
   430 SAYBROOK ROAD, SUITE 100
   MIDDLETOWN, CT 06457
3. THE SUBJECT PARCEL IS IDENTIFIED AS LOT 27 ON TAX ASSESSOR'S MAP 25. THE DEED REFERENCE OF THE PROPERTY IS VOLUME 643 PAGE 458. THE AREA OF THE PARCEL IS 289,459± S.F. OR 6.65 ACRES.
4. REFER TO THE FOLLOWING DRAWINGS AND REPORTS FOR ADDITIONAL INFORMATION:
   - SP-1: SITE PLAN
   - LL-1: LANDSCAPE & LIGHTING PLAN
   - GUS-1: GRADING, UTILITIES AND SEPTIC SYSTEM PLAN
   - SES-1: SOIL EROSION & SEDIMENTATION CONTROL PLAN
   - SDC-1: SEPTIC DESIGN CRITERIA & SOIL TESTING DATA
   - CD-1: CONSTRUCTION DETAILS (SEPTIC)
   - CD-2: CONSTRUCTION DETAILS
   - CD-3: CONSTRUCTION DETAILS (WATER)
   - CD-4: CONSTRUCTION DETAILS (DRAINAGE)
   - CD-5: CONSTRUCTION DETAILS
   - ES-1: E&S CONTROL NARRATIVE AND DETAILS
   - ES-2: E&S CONTROL DETAILS
   - SSD-1: SOIL SAMPLE DATA
5. REFER TO ARCHITECTURAL CONCEPT DRAWINGS ENTITLED "O&G LEASE BUILDING, OLD SAYBROOK MEDICAL, #52 SPENCER PLAIN RD., OLD SAYBROOK, CT", DATED: FEBRUARY 14, 2024, PREPARED BY: BORGHESI BUILDING & ENGINEERING CO., INC. FOR ADDITIONAL INFORMATION.

GENERAL NOTES (CONT'D):

6. REFER TO LANDSCAPE PLAN ENTITLED "O&G INDUSTRIES, 52 SPENCER PLAIN RD., OLD SAYBROOK, CT", SCALE 1"=30', DATED: APRIL 18, 2024, PREPARED BY: J.W. FLYNN ASSOC. LLC.
7. REFER TO SITE LIGHTING PLAN ENTITLED "52 SPENCER PLAINS ROAD – SITE LIGHTING – OLD SAYBROOK – REVISION 3.AGI" SCALE: 1"=40', RECEIVED: APRIL 18, 2024, PREPARED BY: LITHONIA LIGHTING.



LANDSCAPING NOTES:

1. LANDSCAPING SHOWN IS FOR REFERENCE ONLY. REFER TO LANDSCAPE PLANS FOR LANDSCAPE INFORMATION.
2. ALL PLANTING LOCATIONS ARE APPROXIMATE AND MAY BE ADJUSTED DUE TO ACTUAL FIELD CONDITIONS.
3. ALL PLANTINGS MUST BE IN HEALTHY, GROWING CONDITION WHEN INSTALLED. ALL PLANTINGS SHALL BE GUARANTEED FOR A MINIMUM OF ONE YEAR FROM THE INSTALLATION DATE.
4. ALL TREES SHALL BE PLANTED IN ACCORDANCE WITH STANDARD LANDSCAPING PRACTICES. PLANTINGS SHOULD BE INSTALLED BETWEEN MARCH 15 AND JUNE 15 OR BETWEEN SEPTEMBER 15 AND NOVEMBER 15, WEATHER PERMITTING.
5. ALL UTILITY LOCATIONS SHALL BE MARKED PRIOR TO INSTALLATION OF TREES AND SHRUBS. CONTACT CALL BEFORE YOU DIG 800-922-4455. THE LANDSCAPING CONTRACTOR SHALL NOT BEGIN WORK UNTIL THE LOCATIONS OF ALL UNDERGROUND UTILITIES ARE VERIFIED AND MARKED IN THE FIELD.
6. PROPOSED GROUNDCOVER AROUND ALL NEW TREES AND SHRUBS SHALL BE HEMLOCK OR CEDAR MULCH OR EQUIVALENT (SEE DETAILS).

LIGHTING NOTES:

1. REFER TO LIGHTING PLANS PREPARED BY LITHONIA LIGHTING FOR LIGHTING DETAILS.
2. MAXIMUM TOTAL HEIGHT OF LIGHT POLES AND FIXTURES SHALL BE 14 FEET FROM FINISHED GRADE. CONCRETE LIGHT POLE BASES SHALL BE FLUSH WITH THE GROUND SURFACE AND PAINTED A DARK COLOR. LIGHT POLES SHALL CONFORM TO ALL LIGHT POLE MANUFACTURER REQUIREMENTS.
3. ALL LIGHT POLES SHALL BE A MINIMUM OF 5 FEET FROM THE EDGE OF PAVEMENT.
4. ELECTRICAL SERVICES AND CONNECTIONS FOR SITE LIGHTING TO AND FROM THE BUILDING ELECTRICAL ROOM ARE NOT SHOWN ON THIS PLAN. OPTIMUM ROUTES SHALL BE SELECTED BY THE CONTRACTOR AND REVIEWED AND APPROVED BY THE OWNER PRIOR TO INSTALLATION.
5. OPTIMUM FIXTURE HEAD ORIENTATION TO BE SET BY SITE LIGHTING CONTRACTOR.
6. FINAL LIGHT FIXTURES, POLES AND ACCESSORIES SHALL BE FULL CUTOFF AND SELECTED AND APPROVED BY PROPERTY OWNER AND TOWN OF OLD SAYBROOK PRIOR TO INSTALLATION.
7. NO FREESTANDING OR BUILDING SIGNS ARE PROPOSED AT THIS TIME.

SIGNAGE NOTES:

1. ONE FREESTANDING SIGN IS ALLOWED PER LOT. THE FREESTANDING SIGN SHALL HAVE A MAXIMUM AREA OF 50 S.F. THE SIGN'S SUPPORT STRUCTURE SHALL NOT EXCEED 8 FEET IN HEIGHT AND THE MAXIMUM SIGN HEIGHT SHALL NOT EXCEED 10 FEET.
2. THE FREESTANDING SIGN SHALL BE 10 FEET MIN. FROM THE STREET LINE AND 5 FEET MIN. FROM THE REAR AND OTHER PROPERTY LINES.
3. ONE WALL SIGN IS ALLOWED PER TENANT. THE WALL SIGN SHALL NOT EXCEED 10% OF THE WALL AREA OR 100 S.F. EACH.
4. FREESTANDING SIGNS AND WALL SIGNS MAY BE ILLUMINATED AS ALLOWED IN THE B-4 ZONING DISTRICT.
5. REFER TO PROJECT ARCHITECTURAL PLANS FOR SIGN DETAILS.

LANDSCAPING DATA TABLE

OLD SAYBROOK GATEWAY BUSINESS B-4 DISTRICT

ITEM	REQUIRED	PROPOSED
MINIMUM LANDSCAPE AREA (SECTION 63.1)	25% (72,365 S.F.)	69.2% OF THE TOTAL LOT AREA IS GREEN AREA & WOODED AREA REFER TO LANDSCAPE PLANS (SEE GENERAL NOTE #6)
MINIMUM NUMBER OF TREES (SECTION 63.1)	12 TREES / ACRE 12 TREES x 6.65 AC. = 80 TREES	
FRONT LANDSCAPING (SECTION 63.3)	MIN. WIDTH = 25 FT. 1 TREE / 40 FT. OF FRONTAGE 432 FT. / 40 FT. = 11 TREES	
PERIMETER LANDSCAPING (SECTION 63.4)	MIN. WIDTH = 10 FT. 1 EVERGREEN TREE SPACED 10' O.C. 758± FT. / 10 FT. = 76 TREES (1)	
INTERIOR PARKING LOT LANDSCAPING (SECTION 63.5)	1 ISLAND FOR EVERY 10 PARKING SPACES (20 S.F. MIN. LANDSCAPED) MIN. 100 S.F. LANDSCAPED AREA 10' MIN DEPTH	

LIGHTING SCHEDULE

SYMBOL	LABEL	QUANTITY	ITEM	COLOR TEMP.	INTENSITY
●	D	12	BUILDING DROP SOFFIT LIGHT	3,000K	923 LUMENS
■	W3	6	BUILDING WALL MOUNTED LIGHT	3,000K	5,078 LUMENS
■	W4	4	BUILDING MOUNTED WALL PACK	3,000K	5,171 LUMENS
☼	S3	1	POLE MOUNTED LIGHT	3,000K	5,383 LUMENS
☼	S3H	6	POLE MOUNTED LIGHT	3,000K	3,915 LUMENS
☼☼	S4-2	3	POLE MOUNTED DOUBLE LIGHT	3,000K	5,463 LUMENS
☼	S4H	4	POLE MOUNTED LIGHT	3,000K	4,043 LUMENS
☼	S5	1	POLE MOUNTED LIGHT	3,000K	5,637 LUMENS

*OR EQUIVALENT – SEE DETAIL.

FOR REVIEW - NOT FOR CONSTRUCTION

Approved by the Old Saybrook Zoning Commission

Title *Signature* *Date*

PLAN PREPARED BY:
INDIGO LAND DESIGN, LLC
JOSEPH VIREN, P.E.
CT REG. NO. 21090
40 ELM STREET, 2ND FLOOR
OLD SAYBROOK, CT 06475
PHONE: (860) 388-9343
WEB: INDIGO-LAND.COM

THE EMBOSSED SEAL OF THE ENGINEER MUST BE AFFIXED TO THIS MAP TO BE VALID

#	DATE	DESCRIPTION	BY
1	5/14/2024	REVISIONS PER TOWN ENGINEER'S COMMENTS, MISC.	RG

LANDSCAPING & LIGHTING PLAN

PREPARED FOR ORTHO SAYBROOK, LLC
52 SPENCER PLAIN ROAD (CT ROUTE 166)
(MAP 25 LOT 27)
OLD SAYBROOK, CONNECTICUT

DATE: APRIL 4, 2024
SCALE: 1"=40'
DRAWN BY: RG
CHECKED BY: JW
DWG. NO.: LL-1
SHEET NO.: 2 of 13
JOB. NO.: 2023-1030

GENERAL NOTES:

1. THIS PLAN WAS COMPILED USING THE FOLLOWING REFERENCE MAP:
   A) A CLASS A–2 SURVEY MAP ENTITLED "PROPERTY/TOPOGRAPHIC SURVEY, LAND OF LAND OF ORTHO SAYBROOK, LLC, TAX MAP 25 LOT 27, 52 SPENCER PLAIN ROAD OLD SAYBROOK, CONNECTICUT" SCALE: 1"=50', DATED: AUGUST 26, 2019 PREPARED BY ANNINO SURVEY.
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   MIDDLETOWN, CT 06457
3. THE SUBJECT PARCEL IS IDENTIFIED AS LOT 27 ON TAX ASSESSOR'S MAP 25. THE DEED REFERENCE OF THE PROPERTY IS VOLUME 643 PAGE 458. THE AREA OF THE PARCEL IS 289,459± S.F. OR 6.65 ACRES.
4. REFER TO THE FOLLOWING DRAWINGS AND REPORTS FOR ADDITIONAL INFORMATION:
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   - LL–1: LANDSCAPE & LIGHTING PLAN
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5. REFER TO ARCHITECTURAL CONCEPT DRAWINGS ENTITLED "O&G LEASE BUILDING, OLD SAYBROOK MEDICAL, #52 SPENCER PLAIN RD., OLD SAYBROOK, CT", DATED: FEBRUARY 14, 2024, PREPARED BY: BORGHESI BUILDING & ENGINEERING CO., INC. FOR ADDITIONAL INFORMATION.
6. REFER TO LANDSCAPE PLAN ENTITLED "O&G INDUSTRIES, 52 SPENCER PLAIN RD., OLD SAYBROOK, CT", SCALE 1"=30', DATED: APRIL 18, 2024, PREPARED BY: J.W. FLYNN ASSOC. LLC.
7. REFER TO SITE LIGHTING PLAN ENTITLED "52 SPENCER PLAINS ROAD – SITE LIGHTING – OLD SAYBROOK – REVISION 3.AGI" SCALE: 1"=40', RECEIVED: APRIL 18, 2024, PREPARED BY: LITHONIA LIGHTING.

CONSTRUCTION NOTES:

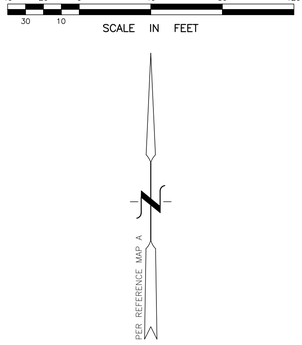
1. THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON FIELD LOCATIONS AND INFORMATION PROVIDED BY OTHERS. THEIR ACTUAL LOCATION MAY VARY FROM THOSE INDICATED AND ALL UNDERGROUND UTILITIES MAY NOT BE SHOWN. THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT 800–922–4455 TO MARK OUT ALL UNDERGROUND UTILITIES A MINIMUM OF 3 BUSINESS 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 OLD SAYBROOK STANDARDS AND REGULATIONS.
2. ALL UTILITIES SHALL BE INSTALLED IN CONFORMANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE TOWN OF OLD SAYBROOK AND THE CUSTODIAL UTILITY COMPANIES. ALL UTILITY TRENCHES SHALL BE NO LESS THAN 5 FEET FROM THE SEPTIC SYSTEMS AND NOT BACKFILLED WITH FREE DRAINING MATERIAL. ALL WATER LINES SHALL BE A MINIMUM OF 10 FEET FROM ANY PART OF THE SEPTIC SYSTEMS.
3. ALL PROPERTY LINES SHALL BE VERIFIED IN THE FIELD. NO PRIVATE PROPERTY SHALL BE DISTURBED UNLESS PROPER RIGHTS ARE OBTAINED PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND CONFORMING TO ALL PERMITS AND ALL BONDING AND INSURANCE REQUIRED BY THE TOWN OF OLD SAYBROOK AND CUSTODIAL UTILITY COMPANIES. A CONNDOT ENCROACHMENT PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE SPENCER PLAIN ROAD RIGHT–OF–WAY. IF ANY BLASTING IS REQUIRED, ALL PRE–BLAST SURVEYS AND ANY APPLICABLE PERMITS SHALL BE COORDINATED AND SECURED BY THE CONTRACTOR. THE CONTRACTOR SHALL CONFIRM AND ABIDE BY ANY APPLICABLE 'NO HAMMER' TIME PERIODS OF THE COMMUNITY.
5. THE CONTRACTOR SHALL OBTAIN, REVIEW AND ADHERE TO ALL REQUIREMENTS AND ANY CONDITIONS OF APPROVAL OF THE TOWN OF OLD SAYBROOK, CONNECTICUT DOT, AND THE CONNECTICUT RIVER AREA HEALTH DISTRICT (CRAHD).
6. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT ADJACENT PROPERTIES AND WETLAND AREAS FROM ANY EROSION AND/OR SEDIMENTATION. SILT FENCE SHALL BE INSTALLED AS SHOWN AND SHALL BE MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION.
7. THE PROPOSED BUILDING WILL BE CONSTRUCTED ON SLAB AND WILL NOT HAVE FOOTING DRAINS. THERE ARE NO KNOWN DOWNGRADIENT SEPTIC SYSTEM COMPONENTS WITHIN 25 FEET OF ANY UPGRADIENT GROUNDWATER DRAINS OR ANY UPGRADIENT SEPTIC SYSTEM COMPONENTS WITHIN 50 FEET OF ANY DOWNGRADIENT GROUNDWATER DRAINS.
8. 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.
9. ALL RETAINING WALLS SHALL BE DESIGNED BY OTHERS AND SHALL INCLUDE ADEQUATE FALL PROTECTION AS REQUIRED AND SHALL NOT EXCEED 7 FEET WITHIN ANY BUILDING SETBACK LINE.
10. ALL PROPOSED UTILITIES SHALL BE INSTALLED UNDERGROUND.

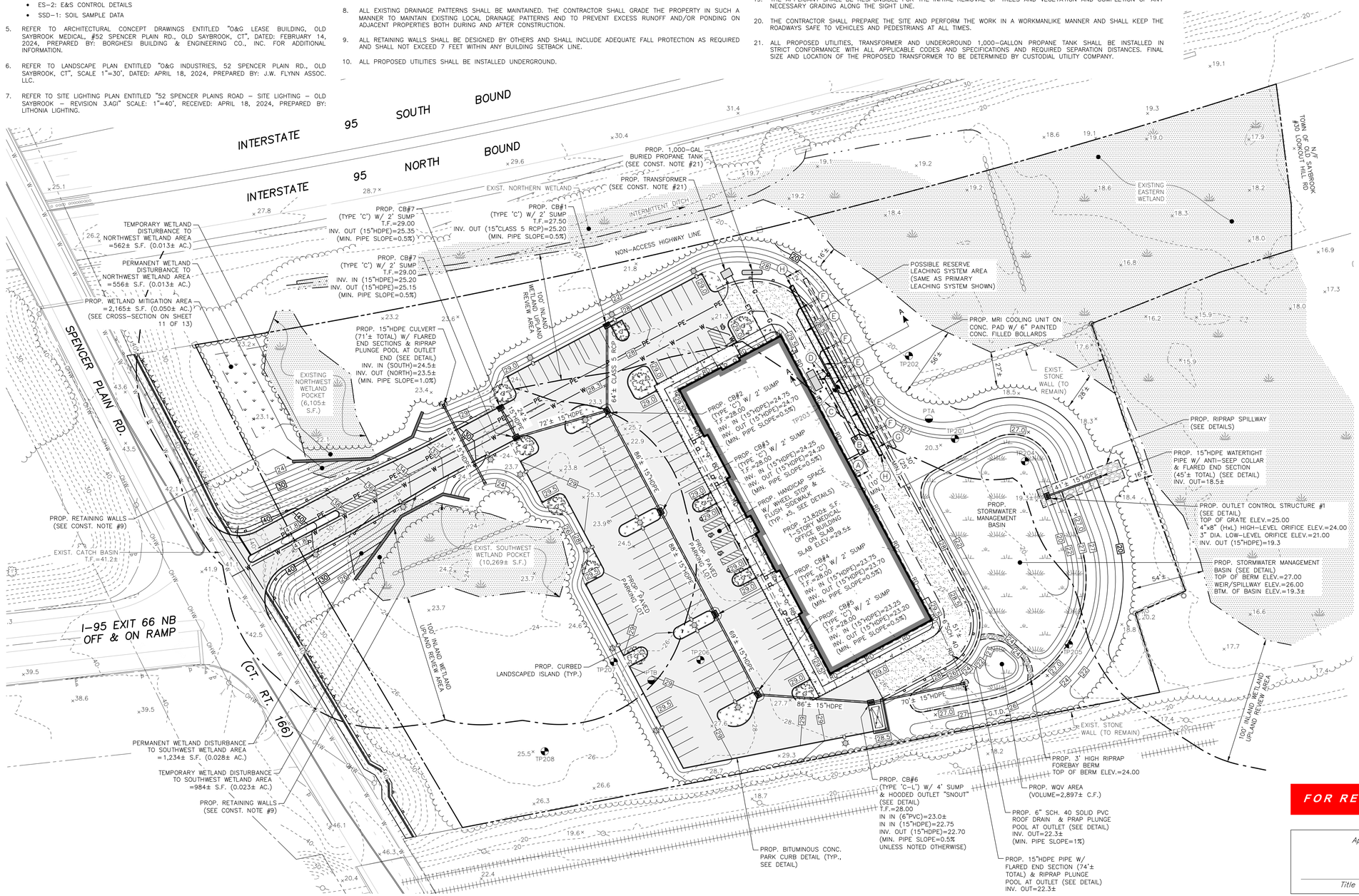
CONSTRUCTION NOTES (CONTINUED):

11. ALL MATERIALS AND CONSTRUCTION METHODS FOR SITE WORK SHALL BE IN CONFORMANCE WITH THE CONNECTICUT D.O.T. "STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION" FORM 818, 2020 OR AS AMENDED. ANY VARIATION FROM THIS SPECIFICATION SHALL BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION.
12. ALL JOINTS BETWEEN EXISTING AND NEW PAVEMENT SHALL BE PROPERLY SAWCUT, TACK COATED AND SEALED AS APPLICABLE. ALL PROPOSED JOINTS SHALL BE FLUSH AND MATCH EXISTING GRADES. SAWCUT LINES MAY BE MODIFIED AS NECESSARY TO MEET CONSTRUCTION REQUIREMENTS UPON REVIEW AND APPROVAL BY THE DESIGN ENGINEER.
13. PRIOR TO CONSTRUCTION, A LICENSED LAND SURVEYOR SHALL SET A STABLE BENCHMARK ON SITE (NAVD–88) AND ALL PROPOSED IMPROVEMENTS SHALL BE STAKED OUT.
14. PERIMETER ROOF DRAINS SHALL BE 6" (MIN.) SCHEDULE 40 PVC ASTM D1785 ~ LOCATIONS AND SIZES OF ROOF DRAINS PROVIDED BY THE PROJECT ARCHITECT OR MEP ENGINEER SHALL SUPERSEDE THESE PLANS. ALL ROOF DRAINS SHALL BE DIRECTED TO A STORMWATER MANAGEMENT BASIN.
15. ALL UTILITY DEMANDS AND SIZES AND OPTIMAL BUILDING ENTRY LOCATIONS, SITE LIGHTING WIRING, UNDERSLAB UTILITY CONNECTIONS, AND ALL OTHER UTILITY RELATED INFORMATION SHALL BE DETERMINED BY THE PROJECT MEP ENGINEER. REFER TO PROJECT MEP PLANS FOR DETAILED INFORMATION.
16. A LICENSED LAND SURVEYOR SHALL PREPARE AN AS–BUILT OF THE PROPOSED BUILDING AND UTILITIES CERTIFYING THAT THE IMPROVEMENTS ARE IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLAN. THE AS–BUILT PLAN SHALL BE COMPLETED IN A TIMELY MANNER.
17. GENERAL LOT GRADING AND THE FINISHED FLOOR ELEVATION OF THE PROPOSED BUILDING 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.
18. THE CONTRACTOR SHALL CONFORM TO ALL APPLICABLE TOWN OF OLD SAYBROOK STANDARDS AND REGULATIONS FOR ALL ROADWAY, DRAINAGE AND UTILITY WORK.
19. THE APPLICANT SHALL BE RESPONSIBLE FOR THE INITIAL REMOVAL OF TREES AND VEGETATION AND COMPLETION OF ANY NECESSARY GRADING ALONG THE SIGHT LINE.
20. THE CONTRACTOR SHALL PREPARE THE SITE AND PERFORM THE WORK IN A WORKMANLIKE MANNER AND SHALL KEEP THE ROADWAYS SAFE TO VEHICLES AND PEDESTRIANS AT ALL TIMES.
21. ALL PROPOSED UTILITIES, TRANSFORMER AND UNDERGROUND 1,000–GALLON PROPANE TANK SHALL BE INSTALLED IN STRICT CONFORMANCE WITH ALL APPLICABLE CODES AND SPECIFICATIONS AND REQUIRED SEPARATION DISTANCES. FINAL SIZE AND LOCATION OF THE PROPOSED TRANSFORMER TO BE DETERMINED BY CUSTODIAL UTILITY COMPANY.

WATER MAIN/SERVICE NOTES:

1. THE PROPOSED WATER MAIN & SERVICE SHALL BE INSTALLED WITH A MINIMUM OF 4'6" OF COVER AS MEASURED TO THE FINAL GRADE.
2. ANY REQUIRED THRUST BLOCKS OR VALVES SHALL BE PROVIDED IN ACCORDANCE WITH ALL CONNECTICUT WATER COMPANY REQUIREMENTS.
3. ALL WATER MAIN AND WATER SERVICE WORK SHALL BE COORDINATED WITH AND INSPECTED BY THE CONNECTICUT WATER COMPANY, AS REQUIRED. ALL MATERIALS AND CONSTRUCTION METHODOLOGIES SHALL CONFORM TO ALL SPECIFICATIONS AND REQUIREMENTS OF THE CONNECTICUT WATER COMPANY.
4. ALL DOMESTIC WATER SERVICES SHALL BY 2" TYPE K COPPER OR APPROVED EQUAL. ALL WATER SERVICES AND SHUT OFFS SHALL BE INSTALLED TO THE RIGHT–OF–WAY LINE OR AS OTHERWISE SPECIFIED BY THE CONNECTICUT WATER COMPANY.
5. A MINIMUM OF 5 FEET OF LATERAL SEPARATION SHALL BE PROVIDED BETWEEN ANY PROPOSED MAIN OR SERVICE AND ANY UNDERGROUND ELECTRICAL UTILITY WHEREVER FEASIBLY POSSIBLE.
6. ALL FINAL VALVE LOCATIONS AND METERS SHALL BE DETERMINED BY THE CONNECTICUT WATER COMPANY.





INLAND WETLAND DATA TABLE

ITEM	NORTHWEST WETLAND	SOUTHWEST WETLAND	EASTERN WETLAND	TOTAL
WETLAND AREA ON SITE	5,822± S.F. (0.134± AC.)	10,267± S.F. (0.236± AC.)	NONE	44,785± S.F. (1.028± AC.)
PERMANENT WETLAND DISTURBANCE	556± S.F. (0.013± AC.)	1,234± S.F. (0.028± AC.)	NONE	1,790± S.F. (0.041± AC.)
TEMPORARY WETLAND DISTURBANCE	562± S.F. (0.013± AC.)	984± S.F. (0.023± AC.)	NONE	1,546± S.F. (0.035± AC.)
100' UPLAND REVIEW AREA DISTURBANCE	85,021± S.F. (1.95± AC.) (ON PROPERTY) 94,024± S.F. (1.16± AC.) (TOTAL)			---

WETLAND MITIGATION AREA = 2,165± S.F.

(WETLAND MITIGATION AREA > TOTAL PERMANENT WETLAND DISTURBANCE)

SEPTIC SYSTEM KEY

- (A) 11.0± L.F. 4" SCH. 40 ASTM D1785 SOLID PVC BUILDING SEWER PIPE @ ¼" PER FT. MIN. SLOPE WITH 12" MIN. COVER.
- (B) 2,000–GALLON H–20 CONCRETE SEPTIC TANK (JOLLEY PRECAST OR EQUIVALENT) (SEE DETAIL).*
- (C) 4" SCH. 40 ASTM D1785 SOLID PVC PIPE TO CONNECT TO DISTRIBUTION BOX.
- (D) "10–HOLE" H–20 CONCRETE DISTRIBUTION BOX (JOLLEY PRECAST OR EQUIVALENT).
- (E) 4" SCH. 40 ASTM D1785 SOLID PVC PIPE TO CONNECT TO LEACHING SYSTEM PER MANUFACTURER'S SPECIFICATIONS.
- (F) 4" SCH. 40 ASTM D1785 SOLID PVC DISTRIBUTION TEE TO CONNECT AT 18.75 FT. AND 56.25 FT. FROM LEACHING SYSTEM ENDS (TYP. x4).
- (G) 150.0 L.F. OF GEOMATRIX GST3724 LEACHING SYSTEM WITH H–20 PROVISIONS (SEE DETAILS).
- (H) 4" SCH. 40 ASTM 1785 INSPECTION PORT AT END OF LEACHING SYSTEM – GEOMATRIX PART NO.: IPGST15 (TYP. x2. SEE DETAIL).*

*SEPTIC TANK AND DISTRIBUTION BOX SHALL HAVE H–20 RISERS TO FINISHED GRADE. INSPECTION PORTS SHALL HAVE H–20 VALVE COVER ASSEMBLIES TO FINISHED GRADE. CONTRACTOR SHALL VERIFY SEPTIC TANK IS WATERTIGHT PRIOR TO INSTALLATION.

REFER TO SEPTIC SYSTEM INVERT TABLE ON SHEET SDC–1 (5 OF 13) FOR PROPOSED INVERT ELEVATIONS.

FOR REVIEW - NOT FOR CONSTRUCTION

Approved by the Old Saybrook Zoning Commission

Title *Signature* *Date*

PLAN PREPARED BY:
INDIGO LAND DESIGN, LLC
JOSEPH VIREN, P.E.
CT REG. NO. 21090
40 ELM STREET, 2ND FLOOR
OLD SAYBROOK, CT 06475
PHONE: (860) 388–5343
WEB: INDIGO–LAND.COM

THE EMBOSSED SEAL OF THE ENGINEER MUST BE AFFIXED TO THIS MAP TO BE VALID

#	DATE	DESCRIPTION	BY
1	5/14/2024	REVISIONS PER TOWN ENGINEER'S COMMENTS, MISC.	RG

GRADING, UTILITIES & SEPTIC SYSTEM PLAN

PREPARED FOR ORTHO SAYBROOK, LLC
52 SPENCER PLAIN ROAD (CT ROUTE 166)
(MAP 25 LOT 27)
OLD SAYBROOK, CONNECTICUT

DATE: APRIL 4, 2024
SCALE: 1"=40'
DRAWN BY: RG
CHECKED BY: JW
DWG. NO.: GUS–1
SHEET NO.: 3 of 13
JOB. NO.: 2023–1030

GENERAL NOTES:

1. THIS PLAN WAS COMPILED USING THE FOLLOWING REFERENCE MAP:

   A) A CLASS A-2 SURVEY MAP ENTITLED "PROPERTY/TOPOGRAPHIC SURVEY, LAND OF LAND OF ORTHO SAYBROOK, LLC, TAX MAP 25 LOT 27, 52 SPENCER PLAIN ROAD OLD SAYBROOK, CONNECTICUT" SCALE: 1"=50', DATED: AUGUST 26, 2019 PREPARED BY ANNINO SURVEY.

2. THE APPLICANT IS:

   ORTHO SAYBROOK, LLC
   430 SAYBROOK ROAD, SUITE 100
   MIDDLETOWN, CT 06457

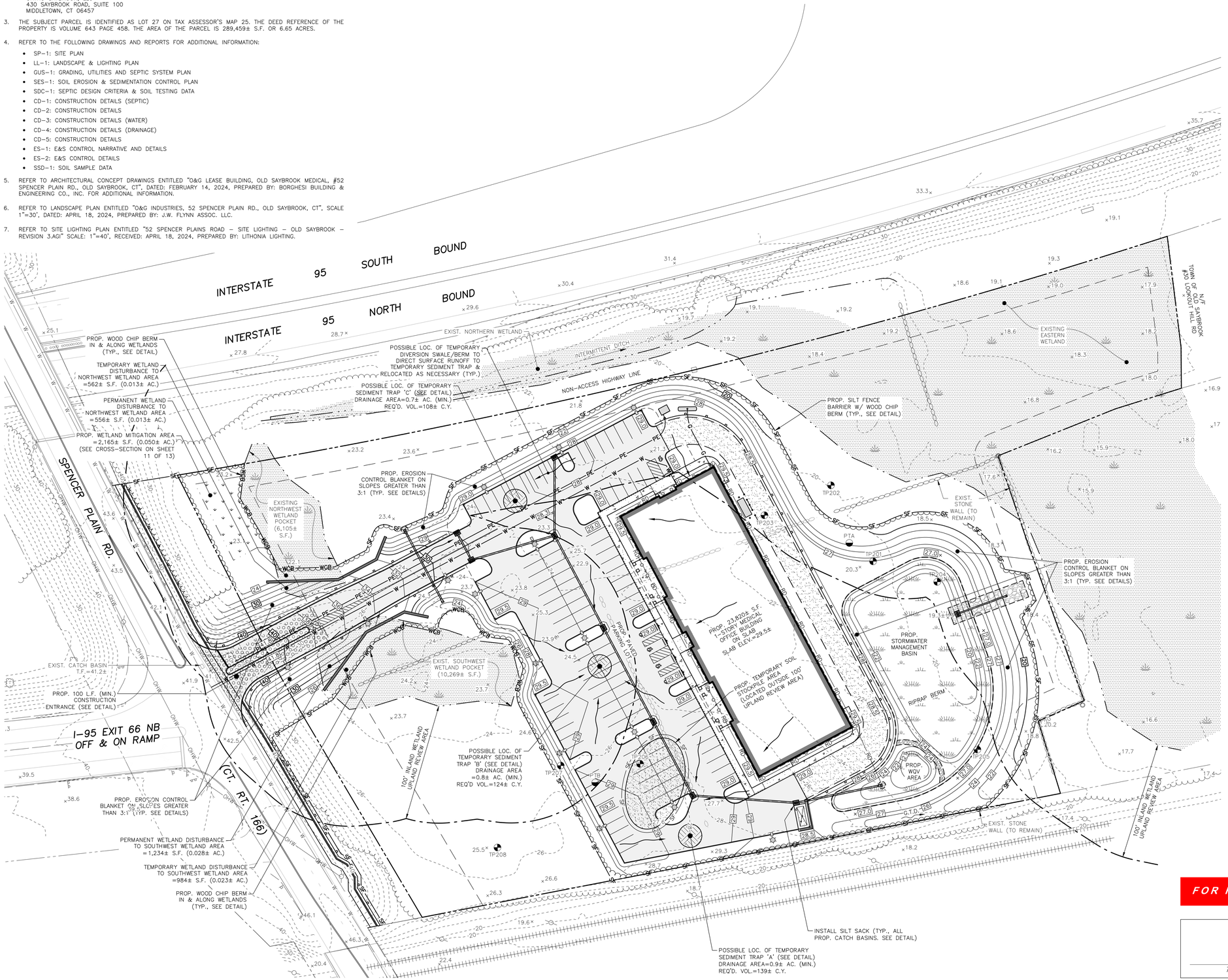
3. THE SUBJECT PARCEL IS IDENTIFIED AS LOT 27 ON TAX ASSESSOR'S MAP 25. THE DEED REFERENCE OF THE PROPERTY IS VOLUME 643 PAGE 458. THE AREA OF THE PARCEL IS 289,459± S.F. OR 6.65 ACRES.

4. REFER TO THE FOLLOWING DRAWINGS AND REPORTS FOR ADDITIONAL INFORMATION:
   - SP-1: SITE PLAN
   - LL-1: LANDSCAPE & LIGHTING PLAN
   - GUS-1: GRADING, UTILITIES AND SEPTIC SYSTEM PLAN
   - SES-1: SOIL EROSION & SEDIMENTATION CONTROL PLAN
   - SDC-1: SEPTIC DESIGN CRITERIA & SOIL TESTING DATA
   - CD-1: CONSTRUCTION DETAILS (SEPTIC)
   - CD-2: CONSTRUCTION DETAILS
   - CD-3: CONSTRUCTION DETAILS (WATER)
   - CD-4: CONSTRUCTION DETAILS (DRAINAGE)
   - CD-5: CONSTRUCTION DETAILS
   - ES-1: E&S CONTROL NARRATIVE AND DETAILS
   - ES-2: E&S CONTROL DETAILS
   - SSD-1: SOIL SAMPLE DATA

5. REFER TO ARCHITECTURAL CONCEPT DRAWINGS ENTITLED "O&G LEASE BUILDING, OLD SAYBROOK MEDICAL, #52 SPENCER PLAIN RD., OLD SAYBROOK, CT", DATED: FEBRUARY 14, 2024, PREPARED BY: BORGHESI BUILDING & ENGINEERING CO., INC. FOR ADDITIONAL INFORMATION.

6. REFER TO LANDSCAPE PLAN ENTITLED "O&G INDUSTRIES, 52 SPENCER PLAIN RD., OLD SAYBROOK, CT", SCALE 1"=30', DATED: APRIL 18, 2024, PREPARED BY: J.W. FLYNN ASSOC. LLC.

7. REFER TO SITE LIGHTING PLAN ENTITLED "52 SPENCER PLAINS ROAD – SITE LIGHTING – OLD SAYBROOK – REVISION 3.AGI" SCALE: 1"=40', RECEIVED: APRIL 18, 2024, PREPARED BY: LITHONIA LIGHTING.



40 20 0 40 80 120
30 10
SCALE IN FEET

PER REFERENCE MAP A.

FOR REVIEW - NOT FOR CONSTRUCTION

Approved by the Old Saybrook Zoning Commission

Title *Signature* *Date*

PLAN PREPARED BY:
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WEB: INDIGO-LAND.COM

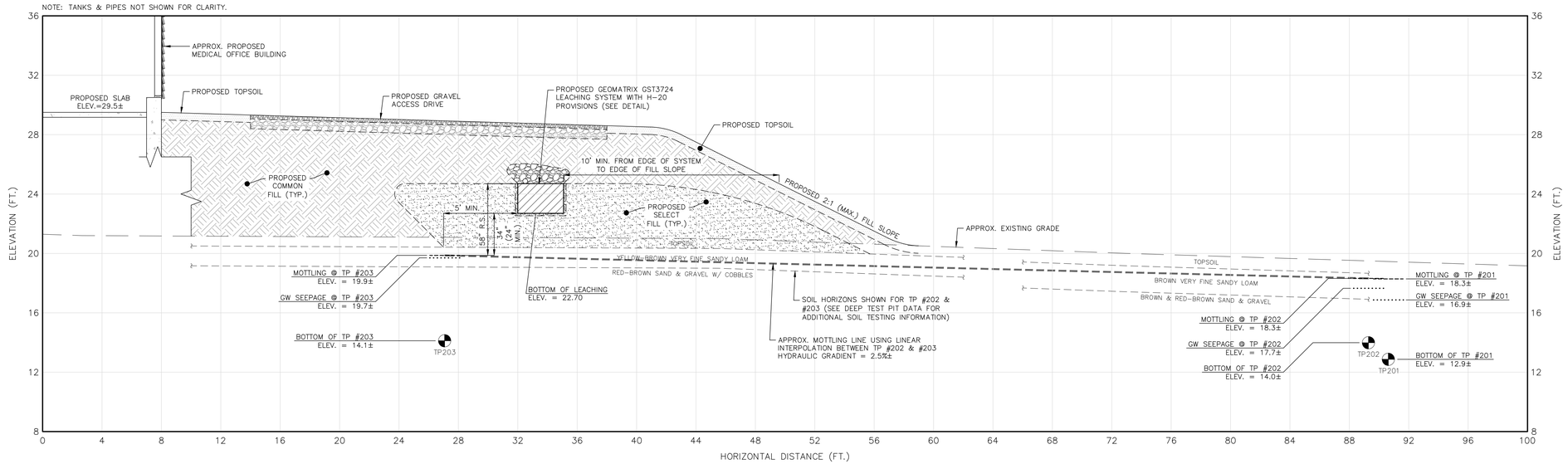
THE EMBOSSED SEAL OF THE ENGINEER MUST BE AFFIXED TO THIS MAP TO BE VALID

#	DATE	DESCRIPTION	BY
1	5/14/2024	REVISIONS PER TOWN ENGINEER'S COMMENTS, MISC.	RG

SOIL EROSION & SEDIMENTATION CONTROL PLAN

PREPARED FOR ORTHO SAYBROOK, LLC
52 SPENCER PLAIN ROAD (CT ROUTE 166)
(MAP 25 LOT 27)
OLD SAYBROOK, CONNECTICUT

DATE: APRIL 4, 2024
SCALE: 1"=40'
DRAWN BY: RG
CHECKED BY: JW
DWG. NO.: SES-1
SHEET NO.: 4 of 13
JOB. NO.: 2023-1030



PROPOSED LEACHING SYSTEM PROFILE – X-SECTION B-B

HORIZ. SCALE = VERT. SCALE = 1"=4'

DEEP TEST PIT DATA

DATE: 3/4/2024
EXCAVATED BY: DOWNIE'S SEPTIC & EXCAVATION
WITNESSED BY: JOE WREN, P.E. (INDIGO)
MELISSA HOWLEY (CRAHD)
RECORDED BY: ROBERT RUSSO, C.P.S.S.

TP #201

EXIST. GRADE ELEV. = 20.2±

0–9"
TOPSOIL, DARK BROWN FINE SANDY LOAM

9"–47"
SUBSOIL, YELLOW–BROWN FINE SANDY LOAM

47"–88"
RED–BROWN SAND & GRAVEL W/ COBBLES

MOTTLING & 23" (ELEV.=18.3±)
GROUNDWATER SEEPAGE @ 40" (ELEV.=16.9±)
NO LEDGE
ROOTS TO 29"

TP #202

EXIST. GRADE ELEV. = 19.9±

0–10"
TOPSOIL, DARK BROWN FINE SANDY LOAM

10"–31"
SUBSOIL, BROWN VERY FINE SANDY LOAM

31"–71"
BROWN & RED–BROWN SAND & GRAVEL

MOTTLING & 19" (ELEV.=18.3±)
GROUNDWATER SEEPAGE @ 27" (ELEV.=17.7±)
NO LEDGE
ROOTS TO 21"

TP #203

EXIST. GRADE ELEV. = 21.7±

0–8"
TOPSOIL, VERY DARK BROWN FINE SANDY LOAM

8"–24"
SUBSOIL, YELLOW–BROWN VERY FINE SANDY LOAM

24"–91"
RED–BROWN SAND & GRAVEL W/ COBBLES

MOTTLING & 22" (ELEV.=19.9±)
GROUNDWATER SEEPAGE @ 24" (ELEV.=19.7±)
NO LEDGE
ROOTS TO 22"

TP #204

EXIST. GRADE ELEV. = 19.2±

0–10"
TOPSOIL, DARK BROWN VERY FINE SANDY LOAM

10"–44"
SUBSOIL, BROWN FINE SANDY LOAM

44"–86"
RED–BROWN SAND & GRAVEL W/ COBBLES

MOTTLING & 23" (ELEV.=17.3±)
GROUNDWATER SEEPAGE @ 52" (ELEV.=14.9±)
NO LEDGE
ROOTS TO 23"

TP #205

EXIST. GRADE ELEV. = 20.8±

0–9"
TOPSOIL, DARK BROWN VERY FINE SANDY LOAM

9"–38"
SUBSOIL, YELLOW–BROWN FINE SANDY LOAM

38"–95"
BROWN SAND & GRAVEL W/ COBBLES, STONES & SILT

MOTTLING & 27" (ELEV.=18.6±)
GROUNDWATER SEEPAGE @ 30" (ELEV.=18.3±)
NO LEDGE
ROOTS TO 33"

TP #206

EXIST. GRADE ELEV. = 26.8±

0–12"
TOPSOIL, BROWN VERY FINE SANDY LOAM

12"–34"
SUBSOIL, YELLOW–BROWN SANDY LOAM

34"–96"
BROWN SANDY LOAM W/ LITTLE GRAVEL, COBBLES & STONES

MOTTLING & 34" (ELEV.=24.0±)
GROUNDWATER SEEPAGE @ 40" (ELEV.=23.5±)
NO LEDGE
ROOTS TO 38"

TP #207

EXIST. GRADE ELEV. = 25.7±

0–8"
TOPSOIL, VERY DARK BROWN FINE SANDY LOAM

8"–26"
SUBSOIL, YELLOW–BROWN FINE SANDY LOAM

26"–96"
DENSE BROWN SANDY LOAM W/ LITTLE GRAVEL, COBBLES & STONES

MOTTLING & 24" (ELEV.=23.7±)
GROUNDWATER SEEPAGE @ 27" (ELEV.=23.5±)
NO LEDGE
ROOTS TO 28"

TP #208

EXIST. GRADE ELEV. = 25.5±

0–10"
TOPSOIL, VERY DARK BROWN FINE SANDY LOAM

10"–18"
SUBSOIL, YELLOW–BROWN FINE SANDY LOAM

18"–95"
BROWN SANDY LOAM W/ COBBLES & STONES

MOTTLING & 18" (ELEV.=24.0±)
GROUNDWATER SEEPAGE @ 67" (ELEV.=19.9±)
NO LEDGE
ROOTS TO 29"

PERCOLATION TEST DATA

DATE: 3/4/2024
CONDUCTED BY: RAY MALINOWSKI (INDIGO)

PERC A

DEPTH: 19"

TIME (MINUTES)		DEPTH (INCHES)	DROP (INCHES)	PERC RATE (MIN./INCH)
0	@	8	---	---
6	@	11 3/4	3 3/4	1.6
12	@	14 1/2	2 3/4	2.2
18	@	16 1/2	2	3.0
24	@	18	1 1/2	4.0
(LESS THAN 3" WATER REMAINING IN HOLE)				

PERCOLATION RATE = 4.0 MIN./INCH

PERCOLATION TEST DATA

DATE: 3/4/2024
CONDUCTED BY: RAY MALINOWSKI (INDIGO)

PERC B

DEPTH: 22"

TIME (MINUTES)		DEPTH (INCHES)	DROP (INCHES)	PERC RATE (MIN./INCH)
0	@	9	---	---
6	@	10 1/2	#####	###
12	@	11 1/4	3/4	8.0
18	@	11 3/4	1/2	12.0
24	@	12 1/4	1/2	12.0
30	@	12 3/4	3 3/4	8.0
36	@	13 1/4	1/2	12.0
42	@	14	3/4	8.0
48	@	14 3/8	3/8	16.0
54	@	14 3/4	3/8	16.0
60	@	15 1/8	3/8	16.0

PERCOLATION RATE = 16.0 MIN./INCH

SANITARY SYSTEM DESIGN CRITERIA

DESIGN PERC RATE	BUILDING USE	REQUIRED LEACHING AREA	LEACHING SYSTEM TYPE	EFFECTIVE LEACHING AREA	LEACHING AREA PROVIDED	REQUIRED TANK CAPACITY	TANK CAPACITY PROVIDED
1.0–5.0 MIN./IN. (1)	22,381± S.F. OFFICE (2)	1,000 S.F. (3)(4)	150 L.F. OF GEOMATRIX GST3724 LEACHING SYSTEM W/ H–20 PROVISIONS	10.5 S.F./L.F.	1,575 S.F. (5)	1,500–GAL. (6)	2,000–GAL. (6)

(1) PERCOLATION TEST A IN THE LEACHING SYSTEM AREA WAS 4.0 MIN./IN. (SEE PERCOLATION TEST DATA ON THIS SHEET).
(2) PROPOSED 22,381± S.F. MEDICAL OFFICE BUILDING.
(3) DESIGN FLOW = 1,000 GPD (ASSUMED METERED WATER USAGE OF A SIMILAR FACILITY) x 1.5 SAFETY FACTOR = 1,500 GPD
(NOTE, 24,000± S.F. LAKEBROOK MEDICAL OFFICE BUILDING AT 5 PEQUOT PARK ROAD, WESTBROOK, CT HAS AN AVERAGE DAILY FLOW OF APPROX. 600 GPD BASED ON WATER METER DATA)
(4) REQUIRED E.L.A. = 1,500 GPD (DESIGN FLOW) / 1.5 (APPLICATION RATE) = 1,000 S.F.
(5) E.L.A. PROVIDED = 10.5 S.F./L.F. x 150 L.F. = 1,575 S.F.
(6) REQUIRED SEPTIC TANK VOLUME = 1,500 GPD x 1 DAY = 1,500 GALLONS –– USE A SEPTIC TANK WITH A VOLUME OF 2,000–GALLONS

MLSS COMPUTATIONS

DESIGN PERC RATE	# OF BEDROOMS	RECEIVING SOIL DEPTH	HYDRAULIC GRADIENT	HYDRAULIC FACTOR (HF)	FLOW FACTOR (FF)	PERCOLATION FACTOR (PF)	MLSS REQUIRED (HFxFFxPF)	MLSS PROVIDED
UP TO 10.0 MIN./IN. (1)	22,381± S.F. OFFICE (2)	36.1–42.0 INCHES (3)	2.1–3.0% (4)	30	5.0 (5)(6)	1.0	150 FT.	150 FT.

(1) PERCOLATION TEST A IN THE LEACHING SYSTEM AREA WAS 4.0 MIN./IN. (SEE PERCOLATION TEST DATA ON THIS SHEET).
(2) PROPOSED 22,381± S.F. MEDICAL OFFICE BUILDING.
(3) RECEIVING SOIL DEPTH (IN SYSTEM AREA)= 10" (MIN. UNSATURATED NATURAL SOIL) 24" (MIN. SELECT FILL) + 24" (HEIGHT OF GEOMATRIX GST3724 LEACHING SYSTEM) = 58"
RECEIVING SOIL DEPTH (DOWNGRADIENT) = 22" (MOTTLING DEPTH @ TP #203) + 19± (MOTTLING DEPTH @ TP #202)] / 2 = 20.5"±
RECEIVING SOIL DEPTH (AVERAGE) = 39.3"± –– USE A RECEIVING SOIL DEPTH OF 36.1–42.0"
(4) HYDRAULIC GRADIENT = [ELEV. 19.9± (MOTTLING @ TP #203) – ELEV. 18.3± (MOTTLING @ TP #202)] / 62± L.F. = 2.6%± –– USE HYDRAULIC GRADIENT OF 2.1–3.0%
(5) DESIGN FLOW = 1,000 GPD (ASSUMED METERED WATER USAGE OF A SIMILAR FACILITY) x 1.5 SAFETY FACTOR = 1,500 GPD
(NOTE, 24,000± S.F. LAKEBROOK MEDICAL OFFICE BUILDING AT 5 PEQUOT PARK ROAD, WESTBROOK, CT HAS AN AVERAGE DAILY FLOW OF APPROX. 600 GPD BASED ON WATER METER DATA)
(6) FLOW FACTOR = 1,500 GPD (DESIGN FLOW) / 300 (APPLICATION RATE) = 5.0

SANITARY SYSTEM PIPE INVERT TABLE

STRUCTURE	PIPE @ BUILDING (A)	SEPTIC TANK (B)	DISTRIBUTION BOX (C)	LEACHING SYSTEM (G)
INV. IN (FT.)	---	25.75 (1)	25.30	24.70
INV. OUT (FT.)	26.00 (1)	25.50	25.20 (2)	---

(1) PROPOSED 11.0± L.F. OF 4" SCH. 40 PVC ASTM D1785 BUILDING SEWER PIPE.
PERCENT SLOPE = (26.00' – 25.75') x 100% / 11.0'± = 2.27%± > 2.08% (MIN.).
(2) INITIAL 10 FT. (MIN.) OF ALL DISTRIBUTION PIPES EXITING THE DISTRIBUTION BOX SHALL BE SET LEVEL FOR EVEN DISTRIBUTION.
(3) BOTTOM OF LEACHING SYSTEM SHALL BE SET LEVEL AND AT ELEVATION 22.70'.
(4) FOR ALL PIPE, A MIN. OF 12" OF COVER SHALL BE PROVIDED.
(5) SEPTIC SYSTEM LABELS SHOWN FOR CLARITY (REFER TO SEPTIC SYSTEM KEY ON SHEET 3 OF 13).

FOR REVIEW - NOT FOR CONSTRUCTION

Approved by the Old Saybrook Zoning Commission

Title *Signature* *Date*

PLAN PREPARED BY:
INDIGO LAND DESIGN, LLC
JOSEPH WREN, P.E.
CT REG. NO. 21090
40 ELM STREET, 2ND FLOOR
OLD SAYBROOK, CT 06475
PHONE: (860) 388-3343
WEB: INDIGO-LAND.COM

THE EMBOSSED SEAL OF THE ENGINEER MUST BE AFFIXED TO THIS MAP TO BE VALID

#	DATE	DESCRIPTION	BY
1	5/14/2024	REVISIONS PER TOWN ENGINEER'S COMMENTS, MISC.	RG

SEPTIC DESIGN CRITERIA & SOIL TESTING DATA

PREPARED FOR ORTHO SAYBROOK, LLC
52 SPENCER PLAIN ROAD (CT ROUTE 166)
(MAP 25 LOT 27)
OLD SAYBROOK, CONNECTICUT

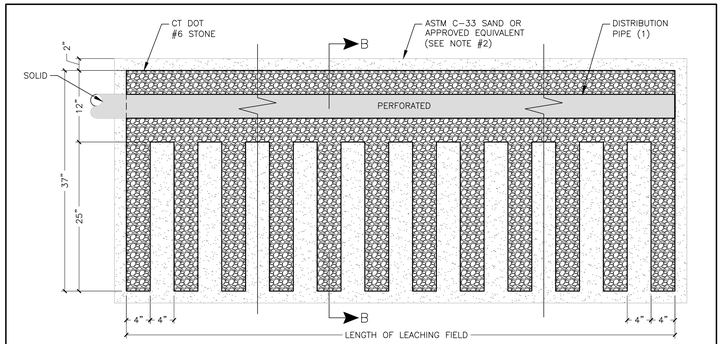
DATE: APRIL 4, 2024
SCALE: AS NOTED
DRAWN BY: RG
CHECKED BY: JW
DWG. NO.: SDC-1
SHEET NO.: 5 of 13
JOB. NO.: 2023-1030

GENERAL NOTES (SEPTIC SYSTEM):

1. THE APPLICANT IS PROPOSING TO CONSTRUCT A 23,820± S.F 1-STORY MEDICAL OFFICE BUILDING WITH ASSOCIATED PARKING AND ACCESS DRIVE, INSTALL A 100% CONNECTICUT PUBLIC HEALTH CODE-COMPLIANT SEPTIC SYSTEM, STORMWATER MANAGEMENT AREA, AND OTHER ASSOCIATED IMPROVEMENTS.
2. THIS PROPERTY IS 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.
3. THE USE OF A GARBAGE DISPOSAL IS NOT RECOMMENDED. IF A GARBAGE DISPOSAL OR A TUB OVER 100 GALLONS IS INSTALLED, THE PROPOSED SEPTIC TANK SIZE SHALL BE INCREASED IN CONFORMANCE WITH THE PUBLIC HEALTH CODE. ANY WATER SOFTENER SHALL NOT DISCHARGE TO THE SEPTIC SYSTEM.
4. THE PROPOSED BUILDING WILL BE CONSTRUCTED ON SLAB AND WILL NOT HAVE FOOTING DRAINS. THERE ARE NO KNOWN DOWNGRADIENT SEPTIC SYSTEM COMPONENTS WITHIN 25 FEET OF ANY UPGRADIENT GROUNDWATER DRAINS OR ANY UPGRADIENT SEPTIC SYSTEM COMPONENTS WITHIN 50 FEET OF ANY DOWNGRADIENT GROUNDWATER DRAINS.
5. ALL UTILITIES SHALL BE INSTALLED IN CONFORMANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE TOWN OF OLD SAYBROOK AND THE CUSTODIAL UTILITY COMPANIES. ALL UTILITY TRENCHES SHALL BE NO LESS THAN 5 FEET FROM THE SEPTIC SYSTEMS AND NOT BACKFILLED WITH FREE DRAINING MATERIAL. ALL WATER LINES SHALL BE A MINIMUM OF 10 FEET FROM ANY PART OF THE SEPTIC SYSTEMS.

GENERAL CONSTRUCTION NOTES (SEPTIC SYSTEM):

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CONNECTICUT PUBLIC HEALTH CODE, AS AMENDED.
2. A LICENSED SURVEYOR SHALL FIELD STAKE THE LOCATION OF THE PROPOSED SEPTIC SYSTEM PRIOR TO CONSTRUCTION AND SET A STABLE SITE BENCHMARK ON NAVD-88 DATUM (SAME AS SURVEY MAP).
3. NO WORK SHALL COMMENCE IN THE SYSTEM AREA UNTIL A SEPTIC PERMIT HAS BEEN TAKEN OUT BY THE LICENSED INSTALLER.
4. 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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, DISTRIBUTION BOX AND LEACHING SYSTEM ENDS. THE AS-BUILT PLAN SHALL BE COMPLETED IN A TIMELY MANNER.
10. 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.
11. NO HEAVY EQUIPMENT SHALL BE DRIVEN OVER THE INSTALLED LEACHING SYSTEM AREA.
12. 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.
13. THE LICENSED INSTALLER IS RESPONSIBLE TO INSTALL THE SUBSURFACE SEWAGE DISPOSAL SYSTEM IN ACCORDANCE WITH THE APPROVED PLAN.
14. THE SEPTIC TANK AND DISTRIBUTION BOX SHALL HAVE H-20 RISERS TO FINISHED GRADE. THE INSPECTION PORTS SHALL HAVE H-20 VALVE COVER ASSEMBLIES TO FINISHED GRADE. THE CONTRACTOR SHALL VERIFY SEPTIC TANK IS WATERTIGHT PRIOR TO INSTALLATION.
15. THE PROPOSED LEACHING SYSTEM, GEOMATRIX GST63724 (WITH H-20 PROVISIONS), 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.
16. 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.
17. THE LICENSED INSTALLER SHALL CONFIRM THAT NO LEDGE IS PRESENT WITHIN 48 INCHES BELOW THE BOTTOM OF THE PROPOSED LEACHING SYSTEM.
18. 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.
19. THE LICENSED INSTALLER SHALL INCLUDE ALL ADEQUATE PROVISIONS FOR FREEZE PROTECTION FOR ALL PIPING AND JUNCTIONS.
20. LICENSED INSTALLER SHALL PROVIDE SIEVE ANALYSES FOR C-33 SAND AND SELECT FILL PRIOR TO CONSTRUCTION.
21. THE CONTRACTOR SHALL FULLY COORDINATE WITH GEOMATRIX SYSTEMS, LLC (GEOMATRIX) AND SHALL ABIDE BY ALL SPECIFICATIONS AND INSTRUCTIONS FOR INSTALLATION OF THE GEOMATRIX GST6212 LEACHING SYSTEM. IT IS STRONGLY RECOMMENDED, ALTHOUGH NOT REQUIRED BY THE PUBLIC HEALTH CODE, TO INSTALL A SOILAIR SYSTEM ON THE PROPOSED LEACHING SYSTEM. AT A MINIMUM, SOIL AIR PIPING SHALL BE INSTALLED TO FACILITATE POTENTIAL FUTURE SOIL AIR BLOWER CONNECTIONS. IF SOIL AIR SYSTEM IS NOT INSTALLED, GEOMATRIX WILL REQUIRE OWNER TO SIGN A DISCLAIMER AGREEMENT.



NOTES:
1. 3" (MIN.) SCH. 40 ASTM D-1785 PVC PIPE FOR GRAVITY APPLICATIONS.
   0.75" (MIN. I.D.) SCH. 40 ASTM D-1785 PVC PIPE FOR PRESSURE APPLICATIONS.
2. 2" MINIMUM ASTM C-33 SAND OR APPROVED EQUIVALENT ON PERIMETER, BOTTOM AND SIDES OF SYSTEM.
3. DISTRIBUTION PIPES SHALL EXTEND TO THE ENDS OF ROWS AND SHALL BE PROPERLY CAPPED.

GEOMATRIX GST3724 LEACHING SYSTEM (WITH H-20 PROVISIONS) - PLAN VIEW
NOT TO SCALE

FILL AND GRADING NOTES (SEPTIC SYSTEM):

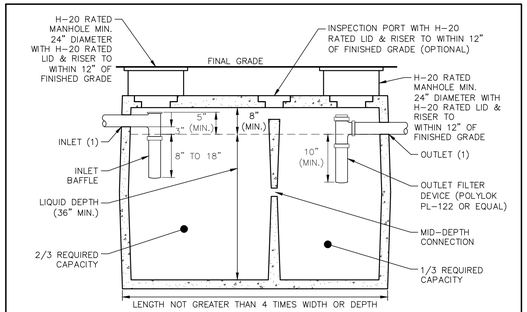
1. REMOVE ALL TOPSOIL AND/OR FILL WITHIN THE SYSTEM AREA AND SCARIFY THE SURFACE IN THE PROPOSED LEACHING SYSTEM AREA PRIOR TO PLACING ANY SELECT FILL MATERIAL AVOID COMPACTING THE SCARIFIED AREA. FILL SHALL NOT BE PLACED OVER SNOW OR FROZEN GROUND. DISCONTINUE FILL PLACEMENT DURING HEAVY RAINFALL AND A MINIMUM OF 24 HOURS THEREAFTER. THE SELECT FILL MATERIAL SHALL BE PLACED IN 12" LIFTS AND COMPACTED TO 90% DENSITY.
2. SELECT FILL MATERIAL SHALL CONSIST OF CLEAN SAND AND GRAVEL, FREE FROM ORGANIC MATTER AND FOREIGN SUBSTANCES. THE SELECT FILL MATERIAL SHALL MEET THE REQUIREMENTS OF THE PUBLIC HEALTH CODE PROVIDED IN THE TABLE ON THIS SHEET.
3. THE LICENSED INSTALLER SHALL BE RESPONSIBLE FOR PREPARING THE LEACHING AREA UTILIZING THE SELECT FILL MATERIAL.
4. ALL NECESSARY STEPS SHALL BE TAKEN TO PROTECT THE UNDERLYING NATURALLY OCCURRING SOILS FROM OVER COMPACTION AND SILTATION ONCE EXPOSED.
5. THE CONTRACTOR SHALL PROVIDE GRADATION SPECIFICATIONS OF THE SELECT FILL MATERIAL TO BE USED FOR THE PROPOSED SEPTIC SYSTEM TO THE DESIGN ENGINEER AND TOWN SANITARIAN PRIOR TO ORDERING AND INSTALLATION.

SELECT FILL GRADATION TABLE

SIEVE SIZE	PERCENT PASSING	
	WET SIEVE	DRY SIEVE
#4	100	100
#10	70-100	70-100
#40	10-50*	10-75
#100	0-20	0-5
#200	0-5	0-2.5

* PERCENT PASSING THE #40 SIEVE CAN BE INCREASED TO NO GREATER THAN 75% IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED 10% AND THE #200 SIEVE DOES NOT EXCEED 5%.

** A SIEVE ANALYSIS FOR THE SELECT FILL MATERIAL SHALL BE PROVIDED TO THE DESIGN ENGINEER. ONLY THE DESIGN ENGINEER MAY APPROVE SELECT FILL MATERIAL NOT IN COMPLIANCE WITH THE GRADATION TABLE IF THE MATERIAL PASSING THE #200 SIEVE DOES NOT EXCEED 6% BASED ON WET SIEVE.

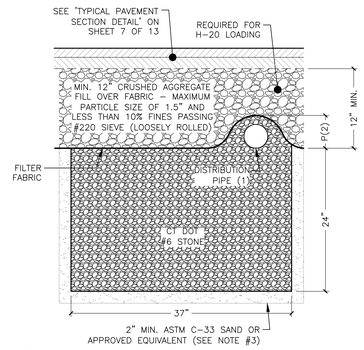


NOTES:
1. INLET AND OUTLET PIPING SHALL BE AS LEVEL AS POSSIBLE AND SHALL NOT EXCEED 1/4" PER FOOT.
2. ALL TANKS REQUIRING RISERS SHALL MAINTAIN THE ORIGINAL COVERS ON THE TANKS, HAVE RISER COVERS THAT WEIGH AT LEAST 100 LBS AND INSTALL A SAFETY DEVICE BELOW THE RISER TO PREVENT INDIVIDUALS FROM FALLING INTO A TANK. IF THE RISER COVERS WEIGH LESS THAN 100 LBS THEN THE TANK COVER SHALL REMAIN IN PLACE OR A SECONDARY SAFETY LID OR DEVICE SHALL BE PROVIDED. ALL BELOW GRADE TANK OR RISER COVER HANDLES SHALL CONTAIN OR BE FITTED WITH A MATERIAL THAT CAN BE LOCATED WITH A METAL DETECTOR.
3. SEPTIC TANKS ARE AVAILABLE IN NUMEROUS SIZES AND DIMENSIONS FROM APPROVED MANUFACTURERS. THE LICENSED INSTALLER SHALL CONFIRM THAT THE SELECTED SEPTIC TANK SHALL BE CONSISTENT WITH THE DIMENSIONS INCLUDED ON THE PLAN AND SHALL MEET ALL CT PUBLIC HEALTH CODE REQUIREMENTS. IF TANK DIMENSIONS DO NOT MATCH THOSE INCLUDED ON THE APPROVED PLAN, THE INSTALLER SHALL REVIEW WITH THE DESIGN ENGINEER PRIOR TO ORDERING THE TANK.

2,000-GALLON H-20 CONCRETE SEPTIC TANK DETAIL
NOT TO SCALE

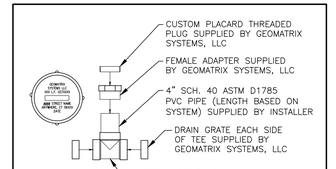
CRUSHED AGGREGATE FILL GRADATION

SIZE	PERCENT PASSING
1 1/2 IN.	100
3/4 IN.	50-100
#4	25-50
#40	10-20
#100	5-15
#200	LESS THAN 10



NOTES:
1. 3" (MIN.) SCH. 40 ASTM D-1785 PVC PIPE FOR GRAVITY APPLICATIONS.
   0.75" (MIN. I.D.) SCH. 40 ASTM D-1785 PVC PIPE FOR PRESSURE APPLICATIONS.
2. P = 2" TO 5.5"
3. 2" MINIMUM ASTM C-33 SAND OR APPROVED EQUIVALENT ON PERIMETER, BOTTOM AND SIDES OF SYSTEM.
4. PAVEMENT BASE AND SUBBASE (12" MIN. THICKNESS + PAVEMENT) MAY BE ADEQUATE FOR H-20 LOADING. CONFIRM WITH GEOMATRIX SYSTEMS, LLC.

GEOMATRIX GST3724 LEACHING SYSTEM (WITH H-20 PROVISIONS) - X-SECTION B-B
NOT TO SCALE



NOTE:
INSPECTION PORT ASSEMBLY SHALL BE H-20 LOAD RATED

GEOMATRIX GST LEACHING SYSTEM INSPECTION PORT DETAIL
NOT TO SCALE

FOR REVIEW - NOT FOR CONSTRUCTION

Approved by the Old Saybrook Zoning Commission

Title _____ *Signature* _____ *Date* _____

PLAN PREPARED BY:
INDIGO LAND DESIGN, LLC
JOSEPH VREN, P.E.
CT REG. NO. 21090
40 ELM STREET, 2ND FLOOR
OLD SAYBROOK, CT 06475
PHONE: (860) 388-5343
WEB: INDIGO-LAND.COM

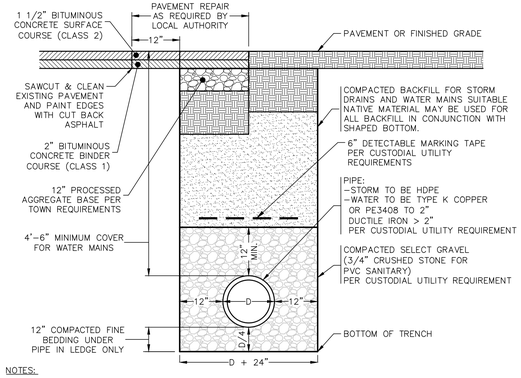
THE EMBOSSED SEAL OF THE ENGINEER MUST BE AFFIXED TO THIS MAP TO BE VALID

#	DATE	DESCRIPTION	BY
1	5/14/2024	REVISIONS PER TOWN ENGINEER'S COMMENTS, MISC.	RG

CONSTRUCTION DETAILS (SEPTIC)

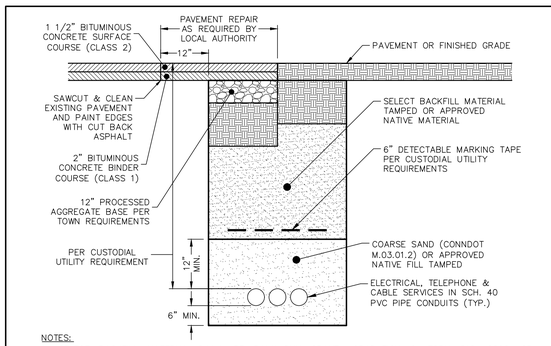
PREPARED FOR ORTHO SAYBROOK, LLC
52 SPENCER PLAIN ROAD (CT ROUTE 166)
(MAP 25 LOT 27)
OLD SAYBROOK, CONNECTICUT

DATE: APRIL 4, 2024
SCALE: NOT TO SCALE
DRAWN BY: RG
CHECKED BY: JW
DWG. NO.: CD-1
SHEET NO.: 6 of 13
JOB. NO.: 2023-1030



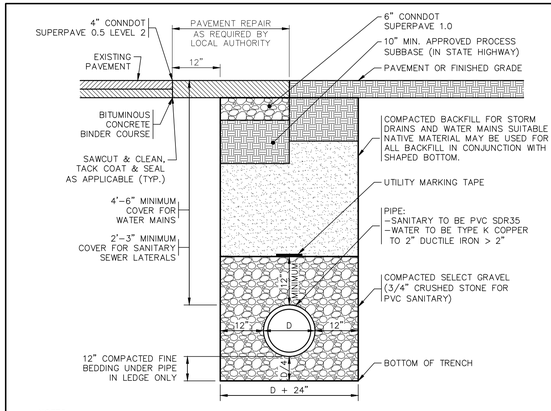
NOTES:
1. SELECT BACKFILL MATERIAL SHALL BE BANK–RUN GRAVEL GRADATION C, FORM 818, 2020, OR PROCESSED AGGREGATE CAN BE USED IN LIEU OF BANK–RUN GRAVEL OR APPROVED NATIVE MATERIAL.
2. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO CONNECTICUT DOT STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION FORM 818, 2020 OR AS AMENDED.
3. ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH ALL TOWN OF OLD SAYBROOK AND CUSTODIAL UTILITY COMPANY SPECIFICATIONS.
4. ALL PROPOSED MATERIALS SHALL BE INSTALLED AS SHOWN OR AS APPROVED BY THE TOWN OF OLD SAYBROOK AND/OR CUSTODIAL UTILITY COMPANY.

TYPICAL TRENCH DETAIL
NOT TO SCALE



NOTES:
1. SELECT BACKFILL MATERIAL SHALL BE BANK–RUN GRAVEL GRADATION C, FORM 818, 2020, OR PROCESSED AGGREGATE CAN BE USED IN LIEU OF BANK–RUN GRAVEL OR APPROVED NATIVE MATERIAL.
2. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO CONNECTICUT DOT STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION FORM 818, 2020 OR AS AMENDED.
3. ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH ALL TOWN OF OLD SAYBROOK AND CUSTODIAL UTILITY COMPANY SPECIFICATIONS.
4. ALL PROPOSED MATERIALS SHALL BE INSTALLED AS SHOWN OR AS APPROVED BY THE TOWN OF OLD SAYBROOK AND/OR CUSTODIAL UTILITY COMPANY.

TYPICAL UNDERGROUND UTILITY TRENCH CROSS SECTION
NOT TO SCALE



NOTES:
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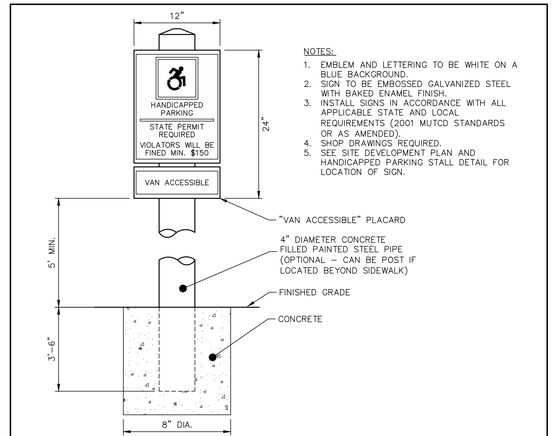
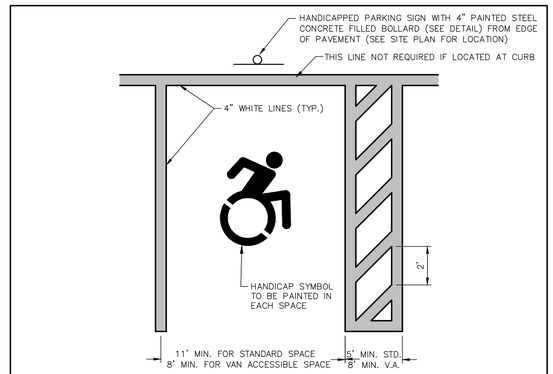
2. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO CONNECTICUT DOT STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION FORM 818, 2020 OR AS AMENDED.
3. ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH ALL TOWN OF OLD SAYBROOK AND CUSTODIAL UTILITY COMPANY SPECIFICATIONS.
4. ALL WORK WITHIN THE STREET RIGHT–OF–WAY SHALL CONFORM TO ALL APPLICABLE TOWN OF OLD SAYBROOK AND/OR STATE REQUIREMENTS AND SPECIFICATIONS.
5. ALL PROPOSED MATERIALS SHALL BE INSTALLED AS SHOWN OR MATCH EXISTING CONDITIONS AS APPROVED BY THE TOWN AND/OR D.O.T. INSPECTOR.
6. IF REINFORCED CONCRETE PAVEMENT IS ENCOUNTERED, THE CONTRACTOR SHALL COORDINATE WITH CONNECTICUT D.O.T. DISTRICT 2 FOR ANY SPECIAL REQUIREMENTS.

TYPICAL STATE ROADWAY TRENCH DETAIL
NOT TO SCALE

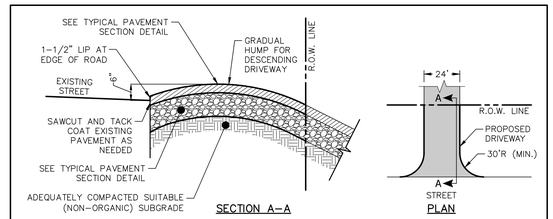


NOTES:
1. EMBLEM AND LETTERING TO BE WHITE ON A BLUE BACKGROUND.
2. SIGN TO BE EMBOSSED GALVANIZED STEEL WITH BAKED ENAMEL FINISH.
3. INSTALL SIGNS IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REQUIREMENTS (2001 MUTCD STANDARDS OR AS AMENDED).
4. SHOP DRAWINGS REQUIRED.
5. SEE SITE DEVELOPMENT PLAN AND HANDICAPPED PARKING STALL DETAIL FOR LOCATION OF SIGN.

VAN ACCESSIBLE HANDICAPPED PARKING SIGN WITH BOLLARD DETAIL
NOT TO SCALE



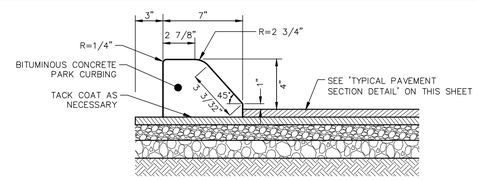
SINGLE OR DOUBLE HANDICAP SPACE
HANDICAPPED PARKING STALL DETAIL
NOT TO SCALE



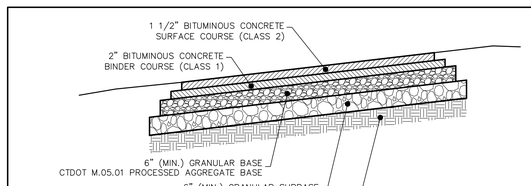
SECTION A–A
PLAN

NOTES:
1. SUBBASE MUST BE SHAPED AND PROPERLY COMPACTED PRIOR TO THE PLACEMENT OF BASE.
2. ALL BRUSH, TREES AND ANY OTHER OBSTRUCTIONS SHALL BE CLEARED AND REMOVED FOR A DISTANCE OF 3 FEET BEYOND THE EDGE OF PAVEMENT ALONG BOTH SIDES FOR THE ENTIRE LENGTH OF THE DRIVEWAY, AND TO A HEIGHT OF 12 FEET ABOVE THE DRIVEWAY SURFACE.
3. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO CONNECTICUT D.O.T. STANDARD SPECIFICATIONS.
4. A 1–1/2" LIP AND A GRADUAL HUMP SHALL BE PROVIDED AS SHOWN TO PREVENT RUNOFF FROM ENTERING THE DRIVEWAY. THE DRIVEWAY HUMP SHALL BE 6" HIGH MINIMUM.
5. GRADUAL HUMP SHALL BE CONSTRUCTED IN A MANNER SO THAT STANDARD PASSENGER CARS CAN EASILY TRAVERSE IT UPON ENTERING AND EXITING THE DRIVEWAY.
6. TACK COAT AND SEALER SHALL BE APPLIED BETWEEN ROADWAY AND DRIVEWAY APRON.

DESCENDING DRIVEWAY ENTRANCE DETAIL
NOT TO SCALE

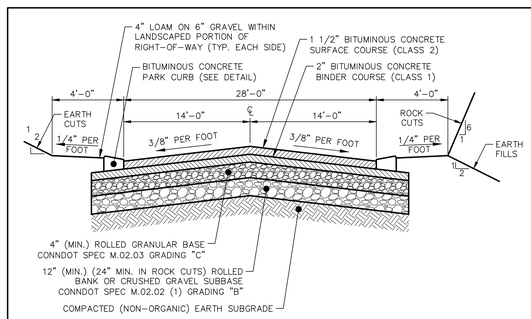


BITUMINOUS CONCRETE PARK CURB DETAIL
NOT TO SCALE



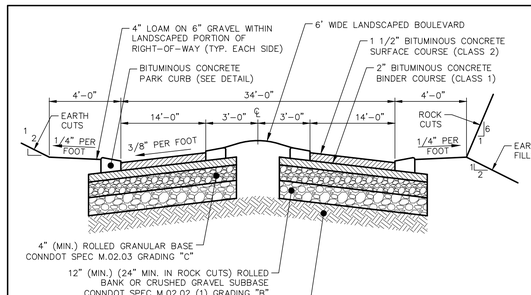
NOTES:
1. SUBBASE MUST BE SHAPED AND PROPERLY COMPACTED PRIOR TO THE PLACEMENT OF BASE.
2. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO CONNECTICUT D.O.T. STANDARD SPECIFICATIONS.
3. COMPACTION OF ALL BASE AND SUBBASE MATERIALS SHALL MEET OR EXCEED 95% PROCTOR.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS AND COMPACTION TESTING AND SHALL SUBMIT DOCUMENTATION FOR REVIEW.
5. EXISTING EXCAVATED MATERIALS MAY BE REUSED FOR SUBBASE IF MATERIAL IS TESTED AND CONFIRMED TO BE IN SUBSTANTIAL CONFORMANCE WITH THE PROVIDED CONNDOT SPECIFICATIONS.
6. IF SHALLOW LEDGE IS ENCOUNTERED, CONTRACTOR SHALL CONSULT WITH DESIGN ENGINEER TO MAKE APPROPRIATE ADJUSTMENTS.

TYPICAL PAVEMENT SECTION DETAIL
NOT TO SCALE



NOTES:
1. SUBBASE MUST BE SHAPED AND COMPACTED PRIOR TO THE PLACEMENT OF BASE.
2. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO CONNECTICUT DOT STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION FORM 818, 2020, OR AS AMENDED.
3. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ADEQUATE SUBGRADE CONDITIONS PRIOR TO PLACEMENT OF SUBBASE.
4. IF SHALLOW LEDGE IS ENCOUNTERED, CONTRACTOR SHALL CONSULT WITH DESIGN ENGINEER TO MAKE APPROPRIATE ADJUSTMENTS.
5. CONTRACTOR SHALL PROVIDE SIEVE ANALYSES AND COMPACTION TESTING RESULTS FOR ALL BASE AND SUBBASE MATERIALS TO ENGINEER FOR REVIEW PRIOR TO PAVING.
6. UNDERDRAIN SHALL BE INSTALLED BETWEEN CATCH BASINS AS DIRECTED BY THE DESIGN ENGINEER.
7. IN NO CASE SHALL ANY UNDERDRAIN BE INSTALLED WITHIN 50 FEET OF ANY SEPTIC SYSTEM.

TYPICAL DRIVEWAY ENTRANCE SECTION DETAIL
NOT TO SCALE



NOTES:
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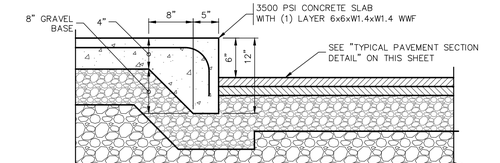
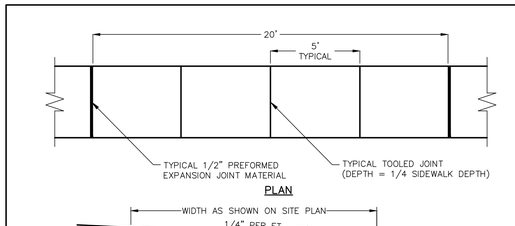
5. CONTRACTOR SHALL PROVIDE SIEVE ANALYSES AND COMPACTION TESTING RESULTS FOR ALL BASE AND SUBBASE MATERIALS TO ENGINEER FOR REVIEW PRIOR TO PAVING.
6. UNDERDRAIN SHALL BE INSTALLED BETWEEN CATCH BASINS AS DIRECTED BY THE DESIGN ENGINEER.
7. IN NO CASE SHALL ANY UNDERDRAIN BE INSTALLED WITHIN 50 FEET OF ANY SEPTIC SYSTEM.

TYPICAL BOULEVARD STYLE DRIVEWAY ENTRANCE SECTION DETAIL
NOT TO SCALE

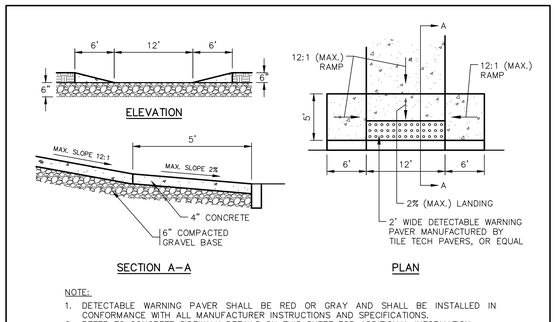


NOTE: ALSO SEE "CONCRETE SIDEWALK" DETAIL

MONOLITHIC CONCRETE CURB DETAIL
NOT TO SCALE



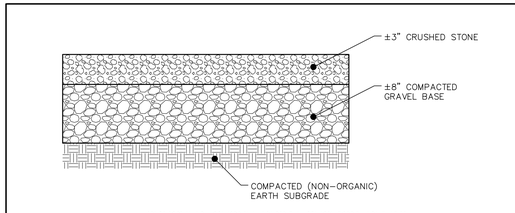
PLAN
SECTION
SITE CONCRETE SIDEWALK DETAIL
NOT TO SCALE



ELEVATION
SECTION A–A
PLAN

NOTE:
1. DETECTABLE WARNING PAVER SHALL BE RED OR GRAY AND SHALL BE INSTALLED IN CONFORMANCE WITH ALL MANUFACTURER INSTRUCTIONS AND SPECIFICATIONS.
2. REFER TO CONCRETE SIDEWALK DETAILS ON THIS SHEET FOR ADDITIONAL INFORMATION.

CONCRETE SIDEWALK RAMP DETAIL
NOT TO SCALE



CRUSHED STONE DRIVE SECTION DETAIL
NOT TO SCALE

FOR REVIEW - NOT FOR CONSTRUCTION

Approved by the Old Saybrook Zoning Commission

Title *Signature* *Date*

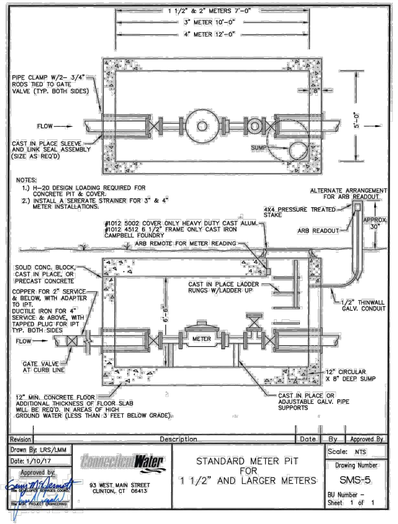
PLAN PREPARED BY:
INDIGO LAND DESIGN, LLC
JOSEPH VIREN, P.E.
CT REG. NO. 21090
40 ELM STREET, 2ND FLOOR
OLD SAYBROOK, CT 06475
PHONE: (860) 388-5943
WEB: INDIGO-LAND.COM

THE EMBOSSED SEAL OF THE ENGINEER MUST BE AFFIXED TO THIS MAP TO BE VALID

#	DATE	DESCRIPTION	BY
1	5/14/2024	REVISIONS PER TOWN ENGINEER'S COMMENTS, MISC.	RG

CONSTRUCTION DETAILS
PREPARED FOR ORTHO SAYBROOK, LLC
52 SPENCER PLAIN ROAD (CT ROUTE 166)
(MAP 25 LOT 27)
OLD SAYBROOK, CONNECTICUT

DATE: APRIL 4, 2024
SCALE: NOT TO SCALE
DRAWN BY: RG
CHECKED BY: JW
DWG. NO.: CD-2
SHEET NO.: 7 of 13
JOB. NO.: 2023-1030

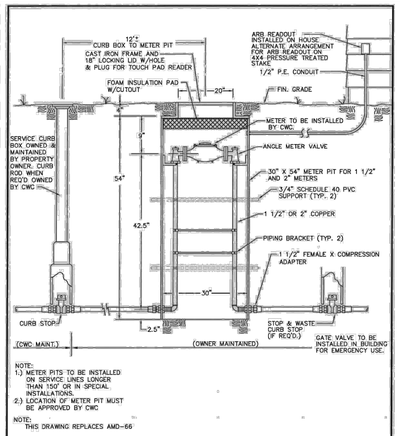


Revision	Description	Date	By	Approved By

Drawn By: LRS/LMM
Date: 1/10/17
Approved by:
93 WEST MAIN STREET CLINTON, CT 06413

STANDARD METER PIT FOR 1 1/2" AND LARGER METERS

Scale: NTS
Drawing Number: SMS-5
BU Number –
Sheet 1 of 1



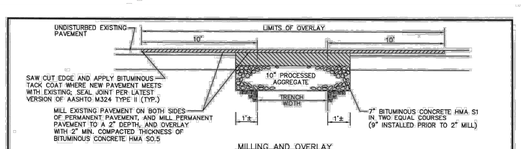
NOTE:
1.) METER PITS TO BE INSTALLED ON SERVICE LINES LONGER THAN 150' OR IN SPECIAL INSTALLATIONS.
2.) LOCATION OF METER PIT MUST BE APPROVED BY CWC

NOTE:
THIS DRAWING REPLACES AMD-66

Drawn By: LRS/LMM
Date: 2/28/17
Approved by:
93 WEST MAIN STREET CLINTON, CT 06413

STANDARD METER PIT INSTALLATION FOR 1 1/2" AND 2" METERS

Scale: NTS
Drawing Number: SMS-3B
BU Number –
Sheet of

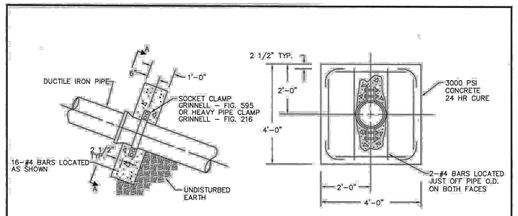


NOTES:
1) 3000 PSI CONCRETE TO BE USED FOR THRUST BLOCKS.
2) D=DIAMETER OF WATER MAIN.
3) MEGA-LUG RESTRAINING GLANDS SHALL BE USED ON ALL MJ FITTINGS.
4) SOLID CONCRETE BLOCKS WITH WEDGES WILL BE PERMITTED ON MAINS UP TO 10" ALL 12" OR LARGER SHALL BE POURED THRUST BLOCKS.
5) LOCKING GASKETS SHALL BE INSTALLED A MIN. 2 FULL PIPE LENGTHS ON EITHER SIDE OF A BEND.

Drawn By: LRS
Date: 1/30/12
Approved by:

THRUST BLOCK DETAILS

Scale: NTS
Drawing Number: SD-2
BU Number –X
Sheet 1 of 1

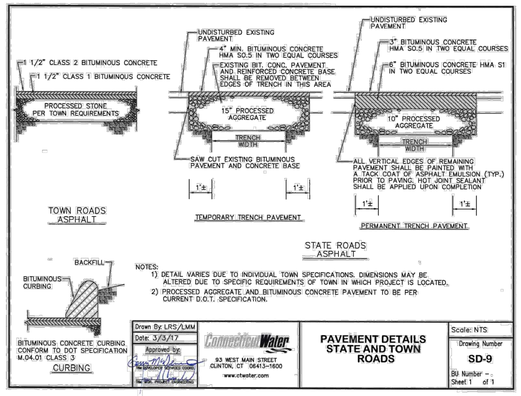


NOTE: ALL DIMENSIONS ARE MINIMUM, AND WILL BE DETERMINED BY CWC CONSIDERING PIPE SIZE, OPERATING PRESSURE AND SOIL CONDITIONS.

Drawn By: LRS/LMM
Date: 1/10/17
Approved by:
93 WEST MAIN STREET CLINTON, CT 06413-1600 www.ctwater.com

STOP COLLAR DETAIL

Scale: NTS
Drawing Number: SD-3
BU Number –X
Sheet 1 of 1

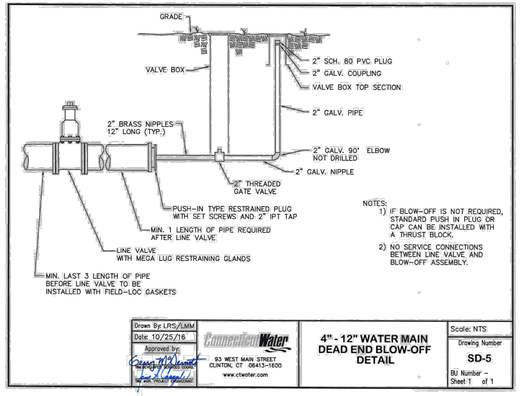


NOTES:
1) DETAIL VARIES DUE TO INDIVIDUAL TOWN SPECIFICATIONS. DIMENSIONS MAY BE ALTERED DUE TO SPECIFIC REQUIREMENTS OF TOWN IN WHICH PROJECT IS LOCATED.
2) PROCESSED AGGREGATE AND BITUMINOUS CONCRETE PAVEMENT TO BE PER CURRENT D.O.T. SPECIFICATION.

Drawn By: LRS/LMM
Date: 3/3/17
Approved by:
93 WEST MAIN STREET CLINTON, CT 06413-1600 www.ctwater.com

PAVEMENT DETAILS STATE AND TOWN ROADS

Scale: NTS
Drawing Number: SD-9
BU Number –
Sheet 1 of 1

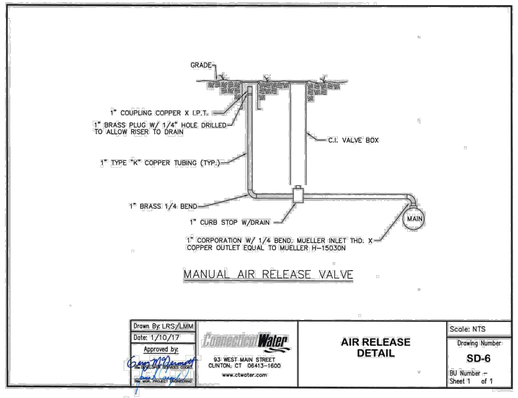


NOTES:
1) IF BLOW-OFF IS NOT REQUIRED, STANDARD PUSH IN PLUG OR CAP CAN BE INSTALLED WITH A THRUST BLOCK.
2) NO SERVICE CONNECTIONS BETWEEN LINE VALVE AND BLOW-OFF ASSEMBLY.

Drawn By: LRS/LMM
Date: 10/25/16
Approved by:
93 WEST MAIN STREET CLINTON, CT 06413-1600 www.ctwater.com

4" - 12" WATER MAIN DEAD END BLOW-OFF DETAIL

Scale: NTS
Drawing Number: SD-5
BU Number –
Sheet 1 of 1

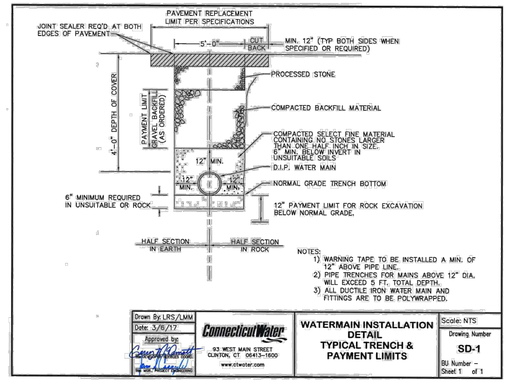


MANUAL AIR RELEASE VALVE

Drawn By: LRS/LMM
Date: 1/10/17
Approved by:
93 WEST MAIN STREET CLINTON, CT 06413-1600 www.ctwater.com

AIR RELEASE DETAIL

Scale: NTS
Drawing Number: SD-6
BU Number –
Sheet 1 of 1

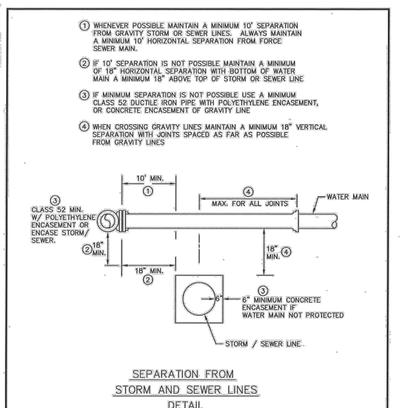


NOTES:
1) WARNING TAPE TO BE INSTALLED A MIN. OF 12" ABOVE PIPE LINE.
2) PIPE TRENCHES FOR MAINS ABOVE 12" DIA. WILL EXCEED 5 FT. TOTAL DEPTH.
3) ALL DUCTILE IRON WATER MAIN AND FITTINGS ARE TO BE POLYWRAPPED.

Drawn By: LRS/LMM
Date: 3/6/17
Approved by:
93 WEST MAIN STREET CLINTON, CT 06413-1600 www.ctwater.com

WATERMAIN INSTALLATION DETAIL TYPICAL TRENCH & PAYMENT LIMITS

Scale: NTS
Drawing Number: SD-1
BU Number –
Sheet 1 of 1



SEPARATION FROM STORM AND SEWER LINES DETAIL
NTS

Drawn By: LRS
Date: 4/27/07
Approved by:
93 WEST MAIN STREET CLINTON, CT 06413-1600 www.ctwater.com

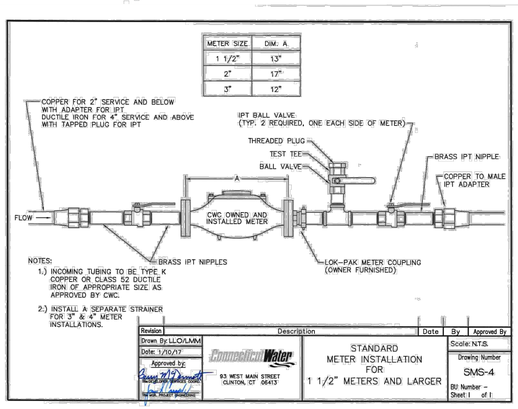
SEPARATION FROM STORM AND SEWER LINES DETAIL

Scale: NTS
Drawing Number: SD-22
BU Number –
Sheet 1 of 1

Drawn By: LRS/LMM
Date: 3/3/17
Approved by:
93 WEST MAIN STREET CLINTON, CT 06413-1600 www.ctwater.com

PAVEMENT DETAILS STATE AND TOWN ROADS

Scale: NTS
Drawing Number: SD-9A
BU Number –
Sheet 1 of 1



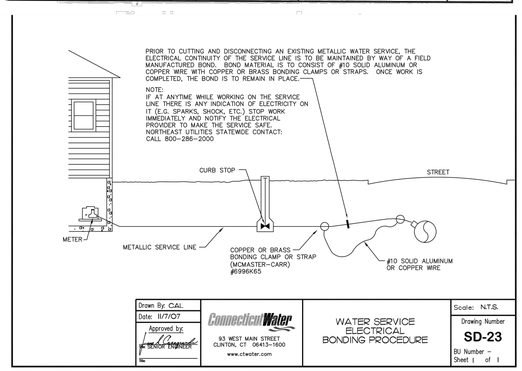
NOTES:
1.) INCOMING TUBING TO BE TYPE K COPPER OR CLASS 52 DUCTILE IRON, OF APPROPRIATE SIZE AS APPROVED BY CWC.
2.) INSTALL A SEPARATE STRAINER FOR 3" & 4" METER INSTALLATIONS.

Revision	Description	Date	By	Approved By

Drawn By: LLO/LMM
Date: 1/10/17
Approved by:
93 WEST MAIN STREET CLINTON, CT 06413

STANDARD METER INSTALLATION FOR 1 1/2" METERS AND LARGER

Scale: N.T.S.
Drawing Number: SMS-4
BU Number –
Sheet 1 of 1



Drawn By: CAL
Date: 11/7/07
Approved by:
93 WEST MAIN STREET CLINTON, CT 06413-1600 www.ctwater.com

WATER SERVICE ELECTRICAL BONDING PROCEDURE

Scale: N.T.S.
Drawing Number: SD-23
BU Number –
Sheet 1 of 1

PLAN PREPARED BY:
INDIGO LAND DESIGN, LLC
JOSEPH VIREN, P.E.
CT REG. NO. 21090
40 ELM STREET, 2ND FLOOR
OLD SAYBROOK, CT 06475
PHONE: (860) 388-5343
WEB: INDIGO-LAND.COM

THE EMBOSSED SEAL OF THE ENGINEER MUST BE AFFIXED TO THIS MAP TO BE VALID

	DATE	DESCRIPTION	BY
1	5/14/2024	REVISIONS PER TOWN ENGINEER'S COMMENTS, MISC.	RG

CONSTRUCTION DETAILS (WATER)

PREPARED FOR ORTHO SAYBROOK, LLC
52 SPENCER PLAIN ROAD (CT ROUTE 166)
(MAP 25 LOT 27)
OLD SAYBROOK, CONNECTICUT

DATE:
APRIL 4, 2024

SCALE:
NOT TO SCALE

DRAWN BY:
RG

CHECKED BY:
JW

DWG. NO.:
CD-3

SHEET NO.:
8 of 13

JOB. NO.:
2023-1030

FOR REVIEW - NOT FOR CONSTRUCTION

Approved by the Old Saybrook Zoning Commission

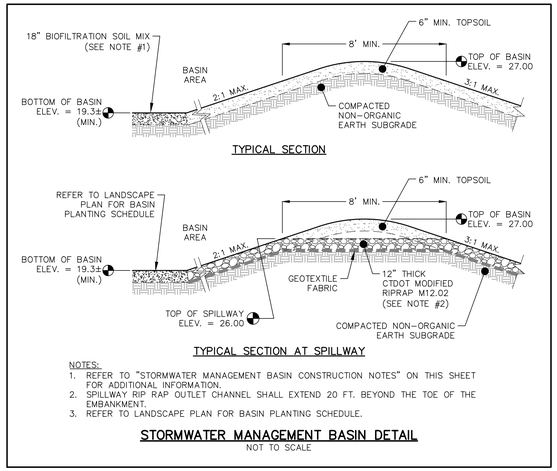
Title *Signature* *Date*

SEED MIXTURE SCHEDULE

REFER TO LANDSCAPE PLAN ENTITLED "O&G INDUSTRIES, 52 SPENCER PLAIN RD., OLD SAYBROOK, CT", SCALE 1"=30', DATED: APRIL 18, 2024, PREPARED BY: J.W. FLYNN ASSOC. LLC.

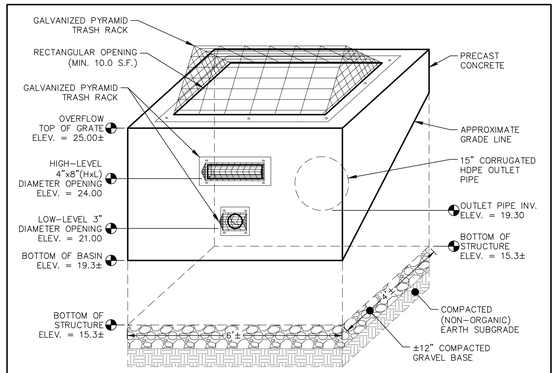
STORMWATER MANAGEMENT BASIN CONSTRUCTION NOTES

1. AFTER ROUGH GRADING AND SHAPING, THE AREA OF THE BASIN SHALL BE MARKED OFF BY APPROPRIATE FENCING TO PREVENT THE MOVEMENT OF CONSTRUCTION VEHICLES OVER AND THE POSSIBLE OVER COMPACTION OF THE UNDERLYING NATURAL SOILS.
2. BASIN SHALL NEVER BE USED FOR SEDIMENT CONTROL DURING AN ACTIVE CONSTRUCTION PERIOD.
3. DURING CONSTRUCTION, SEDIMENT SHALL BE PREVENTED FROM ENTERING THE AREA OF THE BASIN. THE CONTRACTOR SHALL ENSURE THAT THE AREAS DRAINING TO THE BASIN ARE STABILIZED IN A TIMELY MANNER AND MAINTAINED OVER THE ENTIRE AREA DRAINING TO THE BASIN.
4. THE DESIGN ENGINEER SHALL MONITOR THE CONSTRUCTION OF THE STORMWATER MANAGEMENT BASIN, WILL PERFORM ALL FOLLOW UP INSPECTIONS, ASSESSMENTS AND REPORTS AND REMEDIATION WORK (IF NECESSARY) AND SHALL PROVIDE CERTIFICATION THAT THE SYSTEM WAS INSTALLED IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLANS. A LICENSED LAND SURVEYOR SHALL PREPARE AN AS-BUILT OF THE CONSTRUCTED STORMWATER MANAGEMENT BASIN AREAS. THIS PLAN SHALL INCLUDE THE LOCATION AND INVERTS OF ANY ROOF DRAIN, DRAINAGE PIPE, CATCH BASIN AND OUTLET CONTROL STRUCTURE.
5. ALL DISTURBED AREAS SHALL BE FINE GRADED WITH 6" TOPSOIL, RAKED, SEEDED AND MULCHED IN A TIMELY MANNER. THE BOTTOM OF THE BASINS SHALL BE SEEDED PER THE PROJECT LANDSCAPE ARCHITECT.
6. FOREBAYS SHALL BE SIZED TO CONTAIN 100% OF THE WATER QUALITY VOLUME AND SHALL BE FORMED BY A BARRIER SUCH AS AN EARTHEN OR MODIFIED RIPRAP BERM. EACH FOREBAY SHALL ALSO HAVE A FIXED VERTICAL SEDIMENT DEPTH MARKER INSTALLED TO MEASURE SEDIMENT DEPOSITION.
7. REFER TO LANDSCAPE PLAN ENTITLED "O&G INDUSTRIES, 52 SPENCER PLAIN RD., OLD SAYBROOK, CT", SCALE 1"=30', DATED: APRIL 18, 2024, PREPARED BY: J.W. FLYNN ASSOC. LLC.
8. A BIOFILTRATION SOIL MIX SHALL BE INSTALLED ALONG THE ENTIRE BOTTOM OF STORMWATER MANAGEMENT BASIN #1. THE BIOFILTRATION MIX SHALL CONSIST OF 50-60% SAND, 20-30% TOPSOIL, AND 20-30% WEED-FREE LEAF COMPOST OR EQUIVALENT.



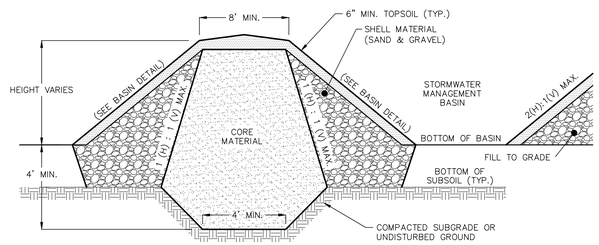
NOTES:
1. REFER TO "STORMWATER MANAGEMENT BASIN CONSTRUCTION NOTES" ON THIS SHEET FOR ADDITIONAL INFORMATION.
2. SPILLWAY RIP RAP OUTLET CHANNEL SHALL EXTEND 20 FT. BEYOND THE TOE OF THE EMBANKMENT.
3. REFER TO LANDSCAPE PLAN FOR BASIN PLANTING SCHEDULE.

STORMWATER MANAGEMENT BASIN DETAIL
NOT TO SCALE



NOTES:
1. ANY JOINTS IN RISERS SHALL BE MORTARED AND WATERTIGHT TO THE SATISFACTION OF THE ENGINEER.
2. SHOP DRAWINGS SHALL BE SUBMITTED TO DESIGN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
3. WIDTH AND DEPTH DIMENSIONS MAY VARY SLIGHTLY.

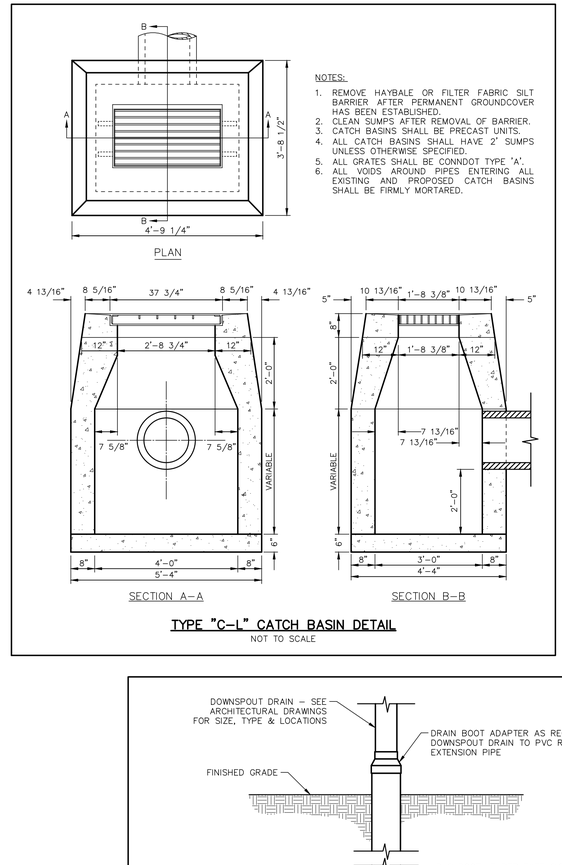
OUTLET CONTROL STRUCTURE DETAIL FOR STORMWATER MANAGEMENT BASIN
NOT TO SCALE



GRADATION TABLES			
SHELL MATERIAL		CORE MATERIAL	
SIEVE SIZE	% PASS	SIEVE SIZE	% PASS
5"	10	No. 10	100
3/4"	50-100	No. 40	75-100
No. 4	25-75	No. 200	40-100
No. 200	15-50		

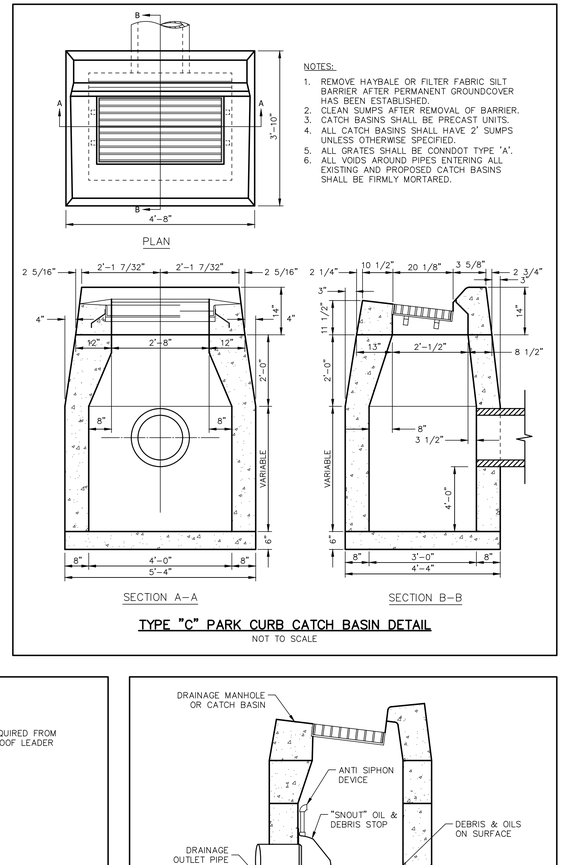
NOTES:
1. ALL MATERIALS SHALL BE COMPACTED TO AT LEAST 95% MODIFIED OPTIMUM DENSITY.
2. ENTIRE BERM AND SURROUNDING DISTURBED AREAS SHALL BE COMPLETELY STABILIZED AND SEEDED WITH EROSION CONTROL/RESTORATION MIX.
3. IT IS RECOMMENDED THAT THE BERM BE CONSTRUCTED IN THE SUMMER MONTHS IF POSSIBLE SINCE THE CORE MATERIALS WILL BE DIFFICULT TO PLACE AND COMPACT IF THEY BECOME WET.
4. CONSTRUCTION OF THE DETENTION BASIN BERM SHALL BE SUPERVISED AND INSPECTED BY THE DESIGN ENGINEER. CORE COMPACTION TESTS AND SIEVE ANALYSIS TESTS SHALL BE PERFORMED TO DEMONSTRATE CONFORMANCE TO BERM SPECIFICATIONS. ALL TEST RESULTS SHALL BE PROVIDED TO THE DESIGN ENGINEER.
5. ANTI-SEEP COLLAR SHALL BE INSTALLED AROUND OUTLET PIPE AS NECESSARY.

STORMWATER QUALITY BASIN BERM DETAIL
NOT TO SCALE



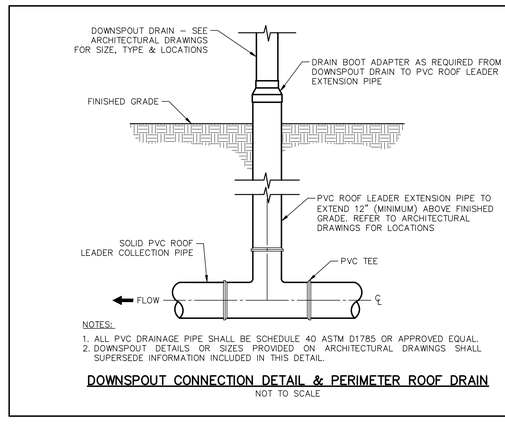
NOTES:
1. REMOVE HAYBALE OR FILTER FABRIC SILT BARRIER AFTER PERMANENT GROUNDCOVER HAS BEEN ESTABLISHED.
2. CLEAN SUMPS AFTER REMOVAL OF BARRIER.
3. CATCH BASINS SHALL BE PRECAST UNITS.
4. ALL CATCH BASINS SHALL HAVE 2' SUMPS UNLESS OTHERWISE SPECIFIED.
5. ALL GRATES SHALL BE CONNDOT TYPE 'A'.
6. ALL VOIDS AROUND PIPES ENTERING ALL EXISTING AND PROPOSED CATCH BASINS SHALL BE FIRMLY MORTARED.

TYPE "C-L" CATCH BASIN DETAIL
NOT TO SCALE



NOTES:
1. REMOVE HAYBALE OR FILTER FABRIC SILT BARRIER AFTER PERMANENT GROUNDCOVER HAS BEEN ESTABLISHED.
2. CLEAN SUMPS AFTER REMOVAL OF BARRIER.
3. CATCH BASINS SHALL BE PRECAST UNITS.
4. ALL CATCH BASINS SHALL HAVE 2' SUMPS UNLESS OTHERWISE SPECIFIED.
5. ALL GRATES SHALL BE CONNDOT TYPE 'A'.
6. ALL VOIDS AROUND PIPES ENTERING ALL EXISTING AND PROPOSED CATCH BASINS SHALL BE FIRMLY MORTARED.

TYPE "C" PARK CURB CATCH BASIN DETAIL
NOT TO SCALE



NOTES:
1. ALL PVC DRAINAGE PIPE SHALL BE SCHEDULE 40 ASTM D1785 OR APPROVED EQUAL.
2. DOWNSPOUT DETAILS OR SIZES PROVIDED ON ARCHITECTURAL DRAWINGS SHALL SUPERSEDE INFORMATION INCLUDED IN THIS DETAIL.

DOWNSPOUT CONNECTION DETAIL & PERIMETER ROOF DRAIN
NOT TO SCALE

NOTE:
1. "SNOUT" OIL AND DEBRIS STOP MANUFACTURED BY: BMP, INC. LYME CONNECTICUT, OR EQUAL.
2. THE LAST CATCH BASIN IN THE RUN PRIOR TO DISCHARGE SHALL BE FITTED WITH A "SNOUT" AND 4-FOOT SUMP AS DESIGNATED ON THE PLANS.

CATCH BASIN HOOD DETAIL
NOT TO SCALE

FOR REVIEW - NOT FOR CONSTRUCTION

Approved by the Old Saybrook Zoning Commission

Title *Signature* *Date*

PLAN PREPARED BY:
INDIGO LAND DESIGN, LLC
JOSEPH VIREN, P.E.
CT REG. NO. 21090
40 ELM STREET, 2ND FLOOR
OLD SAYBROOK, CT 06475
PHONE: (860) 388-5343
WEB: INDIGO-LAND.COM

THE EMBOSSED SEAL OF THE ENGINEER MUST BE AFFIXED TO THIS MAP TO BE VALID

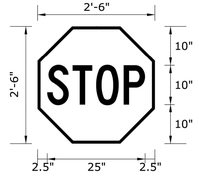
#	DATE	DESCRIPTION	BY
1	5/14/2024	REVISIONS PER TOWN ENGINEER'S COMMENTS, MISC.	RG

CONSTRUCTION DETAILS (DRAINAGE)

PREPARED FOR ORTHO SAYBROOK, LLC
52 SPENCER PLAIN ROAD (CT ROUTE 166)
(MAP 25 LOT 27)
OLD SAYBROOK, CONNECTICUT

DATE: APRIL 4, 2024
SCALE: NOT TO SCALE
DRAWN BY: RG
CHECKED BY: JW
DWG. NO.: CD-4
SHEET NO.: 9 of 13
JOB. NO.: 2023-1030

SIGN DETAIL
1:20



SIGN NUMBER	31-0552
PANEL SIZE	2'-6" x 2'-6"
TOTAL (Sq.Ft.)	5.17 Sq.Ft.
DATE	Jun 24, 2017
BDR INSET/WIDTH	0" / .75"
CORNER RADIUS	0"
BACKGROUND	TYPE: *
	COLOR: Red
LEGEND/BORDER	TYPE: *
	COLOR: White/White

* REFER TO CATALOG OF SIGNS FOR SHEETING TYPE. WHEN COLOR IS BLACK TYPE IS "PLAIN".

SYMBOL	ROT	X	Y	WID	HT

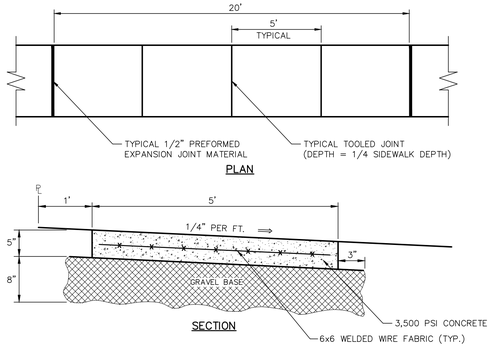
Dimension are in Inches
Material : .080 Thick Sheet Aluminum
Sign Support No. N/A
Location : N/A
Engineer : B.Schilling Designed By: J. Fascione Checked By:_____
Ground Mounted

REV'D /

FILE :TR_MSH_SIN_31_0552.dgn

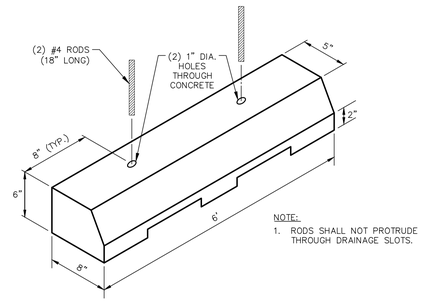
LETTER POSITIONS (X)

S	T	O	P	LENGTH	SERIES/SIZE
2.5	9	15	22	25	C 10



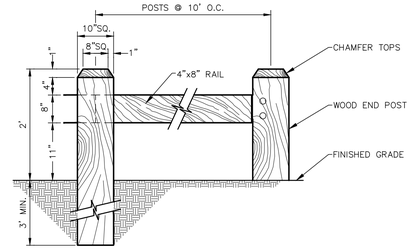
NOTES:
1. CONCRETE SIDEWALK THICKNESS AT DRIVEWAY CROSSINGS SHALL BE INCREASED TO 8 INCHES AND ADDITIONAL REINFORCEMENT PROVIDED AS REQUIRED BY TOWN.
2. ALL SIDEWALKS ALONG BOSTON POST ROAD (ROUTE 1) CORRIDOR WITHIN THE PEDESTRIAN NODE SHALL BE PORTLAND CEMENT CONCRETE, LINED WITH A BRICK SOLDIER COURSE OR COLORED, STAMPED CONCRETE IN CONFORMANCE WITH ZONING REGULATIONS SECTION 62 AND IN ACCORDANCE WITH THE CRITERIA AND STANDARDS SPECIFIED IN SECTIONS 70Q, 80M AND FIGURES 16 & 18 IN THE OLD SAYBROOK REGULATIONS FOR PUBLIC IMPROVEMENTS.
3. THE CONTRACTOR SHALL COORDINATE ALL SIDEWALK CONSTRUCTION WITH THE DIRECTOR OF PUBLIC WORKS.
4. CONCRETE SHALL BE TYPE "F", AIR ENTRAINED. STEEL DOWELS SHALL BE PROVIDED AT ALL EXPANSION JOINTS.
5. SIDEWALKS SHALL BE STENCILED, NOT IMPRINTED. ALL SIDEWALK CONSTRUCTION MATERIALS AND METHODS INCLUDING STENCILING PATTERN AND COLORING SHALL CONFORM TO THE SPECIFICATIONS FOR THE "OLD SAYBROOK SIDEWALKS".

ROADWAY CONCRETE SIDEWALK DETAIL
NOT TO SCALE



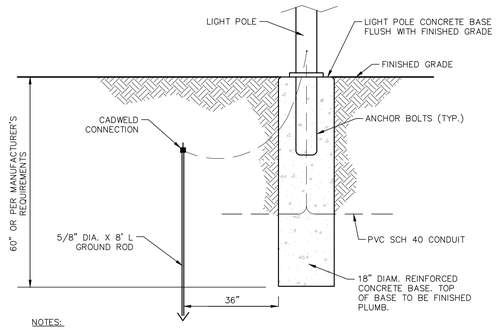
NOTE:
1. RODS SHALL NOT PROTRUDE THROUGH DRAINAGE SLOTS.

COMPOSITE WHEEL STOP DETAIL
NOT TO SCALE



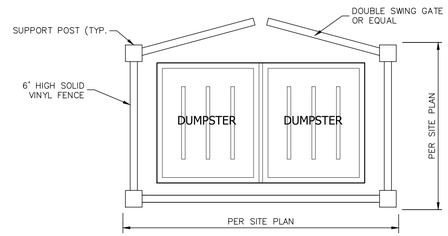
NOTE:
1. A MIN. 2-FOOT WIDE STONE APRON SHALL BE PROVIDED BENEATH GUIDE RAIL. GUIDE RAIL SHALL BE INSTALLED WITHIN THE SHELF A MINIMUM OF 24 INCHES BEYOND THE EDGE OF PAVEMENT.

TIMBER GUIDE RAIL
NOT TO SCALE



NOTES:
1. REFER TO ALL LIGHT POLE AND FIXTURE MANUFACTURER SPECIFICATIONS FOR ADDITIONAL INFORMATION. ALL MANUFACTURER REQUIREMENTS SUPERSEDE INFORMATION SHOWN IN THIS DETAIL.
2. CONCRETE BASES SHALL BE FLUSH WITH THE GROUND SURFACE AND PAINTED A DARK COLOR. ALL LIGHT POLES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM THE EDGE OF ANY PAVEMENT.

LIGHT POLE CONCRETE BASE DETAIL
NOT TO SCALE



NOTES:
1. MATERIAL AND COLOR FOR DOUBLE SWING GATES AS SELECTED BY PROJECT ARCHITECT.
2. FENCING SHALL NOT EXCEED 6 FEET IN HEIGHT MEASURED FROM GRADE.
3. ALL DIMENSIONS ARE APPROXIMATE AND ARE INTENDED TO ACCOMMODATE THE PROPOSED DUMPSTERS.

DUMPSTER ENCLOSURE DETAIL
NOT TO SCALE

FOR REVIEW - NOT FOR CONSTRUCTION

Approved by the Old Saybrook Zoning Commission

Title *Signature* *Date*

PLAN PREPARED BY:
INDIGO LAND DESIGN, LLC
JOSEPH VIREN, P.E.
CT REG. NO. 21090
40 ELM STREET, 2ND FLOOR
OLD SAYBROOK, CT 06475
PHONE: (860) 388-3343
WEB: INDIGO-LAND.COM

#	DATE	DESCRIPTION	BY
1	5/14/2024	REVISIONS PER TOWN ENGINEER'S COMMENTS, MISC.	RG

CONSTRUCTION DETAILS

PREPARED FOR ORTHO SAYBROOK, LLC
52 SPENCER PLAIN ROAD (CT ROUTE 166)
(MAP 25 LOT 27)
OLD SAYBROOK, CONNECTICUT

DATE: APRIL 4, 2024
SCALE: AS NOTED
DRAWN BY: RG
CHECKED BY: JW
DWG. NO.: CD-4
SHEET NO.: 10 of 13
JOB. NO.: 2023-1030

PAGE 1

INSPECTION CHECKLIST

DATE/ TIME: _____

INSPECTOR: _____

TYPE OF BMP: _____

WEATHER DURING INSPECTION: _____

_____

LOCATION: _____

TYPE OF INSPECTION (check if applicable):

Storm Event ☐ Complaint Response ☐ Routine ☐

AS IS BUILT PLANS AVAILABLE: Yes ☐ No ☐

PRECIPITATION AMOUNT IN 24 HR PRIOR TO INSPECTION: _____

INLET APPLICABLE: Yes ☐ No ☐

Circle or note applicable element(s):
level spreader, inlet curb cut opening, inlet structure, piped flow entrance, flow diversion structure

Guidance on what to look for:
-Accumulated debris/ sediment at the inlet and within the structure (if applicable)
-Structural damage or erosion

CONDITION: Satisfactory ☐ Unsatisfactory ☐

RECOMMENDED MAINTANANCE	NOTES

DATE FOR FOLLOW UP

Appendix B - Structural Stormwater BMP Maintenance Inspection Checklist

PAGE 2

PRETREATMENT APPLICABLE: Yes ☐ No ☐

Circle or note applicable element(s):
sediment forebay, pretreatment vegetated filter strip, deep sump pump catch basin, oil grit separator, proprietary treatment device

Guidance on what to look for:
-Accumulated debris/ sediment
-Structural damage or erosion

CONDITION: Satisfactory ☐ Unsatisfactory ☐

RECOMMENDED MAINTANANCE	NOTES

DATE FOR FOLLOW UP

BASIN CELL APPLICABLE: Yes ☐ No ☐

Circle or note applicable element(s):
infiltration trench, infiltration basin, bioretention, sand filter, subsurface gravel wetland

Guidance on what to look for:
-Accumulated debris
-Damage (e.g. erosion/ animal burrowing)
-Overgrown/ dead vegetation
-Standing water
-Condition of wetland vegetation

CONDITION: Satisfactory ☐ Unsatisfactory ☐

RECOMMENDED MAINTANANCE	NOTES

DATE FOR FOLLOW UP

Appendix B - Structural Stormwater BMP Maintenance Inspection Checklist

PAGE 3

FILTER BED APPLICABLE: Yes ☐ No ☐

Circle or note applicable element(s):
bioretention, sand filter, tree filter, dry water quality swale, permeable pavement

Guidance on what to look for:
- Accumulated debris/ sediment
-Overgrown/ dead vegetation and weeds
-Standing water above filter bed
-Erosion/ rutting in upgradient areas
-Cracks or damage to permeable pavement

CONDITION: Satisfactory ☐ Unsatisfactory ☐

RECOMMENDED MAINTANANCE	NOTES

DATE FOR FOLLOW UP

SUBSURFACE RESERVOIR/ OBSERVATION WELL APPLICABLE: Yes ☐ No ☐

Circle or note applicable element(s):
infiltration trench, underground infiltration system, dry well, bioretention, tree filter, dry water quality swale, subsurface gravel wetland*

Guidance on what to look for:
-Standing water in the

*if underdrain present

CONDITION: Satisfactory ☐ Unsatisfactory ☐

RECOMMENDED MAINTANANCE	NOTES

DATE FOR FOLLOW UP

Appendix B - Structural Stormwater BMP Maintenance Inspection Checklist

PAGE 4

Berm/ Weir APPLICABLE: Yes ☐ No ☐

Circle or note applicable element(s):
stormwater ponds, stormwater wetlands including subsurface gravel wetland, water quality swales

Guidance on what to look for:
-Debris sediment buildup
-Damage (e.g. erosion, cracks, spalling, seepage/ weeps, failure, animal burrows)

CONDITION: Satisfactory ☐ Unsatisfactory ☐

RECOMMENDED MAINTANANCE	NOTES

DATE FOR FOLLOW UP

Outlet APPLICABLE: Yes ☐ No ☐

Circle or note applicable element(s):
outlet curb cut openings, raised overflow structures or risers, outflow weirs, outlet pipes/ culverts, stone riprap apron, stone riprap stilling basin or plunge pool

Guidance on what to look for:
-Accumulated debris/ sediment at the outlet and within the structure (if applicable)
-Structural damage or erosion

CONDITION: Satisfactory ☐ Unsatisfactory ☐

RECOMMENDED MAINTANANCE	NOTES

DATE FOR FOLLOW UP

Appendix B - Structural Stormwater BMP Maintenance Inspection Checklist

PAGE 5

Maintenance Access APPLICABLE: Yes ☐ No ☐

All BMPs are appliable
Guidance on what to look for:
-Access to pretreatment and all parts of BMP that require routine maintenance or sediment removal
-Structural damage or erosion access road
-Overgrown/ dead vegetation preventing or impeding access by maintenance personnel or equipment

CONDITION: Satisfactory ☐ Unsatisfactory ☐

RECOMMENDED MAINTANANCE	NOTES

DATE FOR FOLLOW UP

Other: _____

Note applicable element(s):

CONDITION: Satisfactory ☐ Unsatisfactory ☐

RECOMMENDED MAINTANANCE	NOTES

DATE FOR FOLLOW UP

Appendix B - Structural Stormwater BMP Maintenance Inspection Checklist

STORMWATER MANAGEMENT BASIN MAINTENANCE CHECKLIST

SOIL EROSION & SEDIMENTATION CONTROL PLAN NARRATIVE

THE SITE CONTRACTOR MUST FOLLOW ALL GUIDELINES SET FORTH IN THE MANUAL ENTITLED "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL", PUBLISHED SEPTEMBER 30, 2023, REVISED MARCH 26, 2024 OR AS AMENDED, BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION IN COOPERATION WITH THE CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION.

PROJECT DESCRIPTION

THE APPLICANT IS PROPOSING TO CONSTRUCT A 23,820± S.F 1–STORY MEDICAL OFFICE BUILDING WITH ASSOCIATED PARKING AND ACCESS DRIVE, INSTALL A 100% CONNECTICUT PUBLIC HEALTH CODE–COMPLIANT SEPTIC SYSTEM, STORMWATER MANAGEMENT AREA, AND OTHER ASSOCIATED IMPROVEMENTS.

CONSTRUCTION IS ANTICIPATED TO COMMENCE IN SPRING 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. LAND SURVEYOR TO STAKE OUT CLEARING LIMITS & PROPOSED IMPROVEMENTS.
4. INSTALL ALL EROSION AND SEDIMENT CONTROLS AND CONSTRUCTION ENTRANCE.
5. REMOVE ALL TREES, BRUSH AND STUMPS WITHIN CLEARING LIMITS.
6. STRIP AND STOCKPILE TOPSOIL AND OTHER EXCAVATED SOILS IN AREA(S) SHOWN ON PLAN. APPLY TEMPORARY SEED MIXTURE TO PILES IF THEY WILL NOT BE DISTURBED FOR MORE THAN 30 DAYS.
7. IMPORT AND SPREAD FILL TO ROUGH GRADE AND PREPARE SEPTIC AND STORMWATER MANAGEMENT AREAS AS REQUIRED.
8. ROUGH GRADE DRIVEWAY AND PARKING AREA.
9. CONSTRUCT STORMWATER MANAGEMENT BASIN.
10. CONSTRUCT THE FOUNDATION FOR THE PROPOSED BUILDING.
11. FRAME AND CONSTRUCT THE PROPOSED BUILDING.
12. INSTALL ALL UTILITIES AND SEPTIC SYSTEM.
13. FINISH GRADE DRIVEWAY AND PARKING AREA AND PAVE PER PLAN (BINDER COURSE ONLY).
14. FINISH GRADE, SEED AND MULCH ALL DISTURBED AREAS AS REQUIRED.
15. INSTALL ALL LANDSCAPING AND LIGHTING POLES/FIXTURES.
16. INSTALL SURFACE COURSE PAVEMENT AND STRIPE PARKING LOT.
17. 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 RESEEDED 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.

IF NECESSARY, A TEMPORARY FILTER FABRIC SILT BARRIER SHALL BE PLACED BENEATH THE GRATE OF THE PROPOSED CATCH BASIN TO PREVENT ANY SILTATION OF THE DRAINAGE SYSTEM. THE FILTER FABRIC SHALL BE REMOVED IMMEDIATELY AFTER THE SURROUNDING AREAS ARE ADEQUATELY STABILIZED.

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 WETLANDS OR WATERCOURSES OR 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:

CREEPING RED FESCUE	0.90 LBS. PER 1,000 SQ. FT.
REDTOP	0.10
TALL FESCUE	0.90
TOTAL	1.90

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 STEEPER THAN 3 (H) TO 1 (V) AND/OR AS DIRECTED BY THE DESIGN ENGINEER.

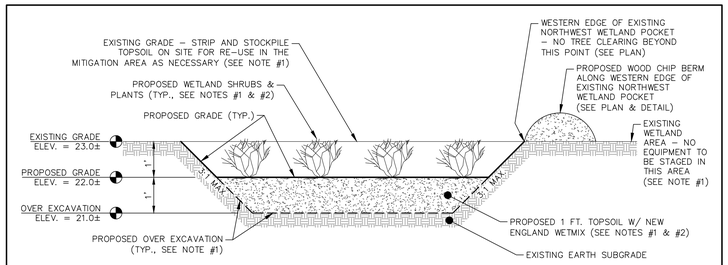
SEEDING DATES:
SEEDING DATES IN CONNECTICUT ARE NORMALLY APRIL 1 THROUGH JUNE 15 AND AUGUST 15 THROUGH OCTOBER 1. SEED GERMINATION NORMALLY CANNOT BE EXPECTED FROM NOVEMBER THROUGH FEBRUARY. IF ADEQUATE SEED GERMINATION IS NOT POSSIBLE DUE TO TIME OF YEAR CONSTRAINTS, MULCHING SHALL BE ADEQUATELY PROVIDED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

DRAINAGE SYSTEM MAINTENANCE

IT SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN THE DRAINAGE SYSTEM AND STORMWATER MANAGEMENT BASINS TO ENSURE PROPER FUNCTION AND EFFICIENT OPERATION. PARKING LOTS, AND ACCESS DRIVES SHALL BE SWEPT AND ALL TRASH CLEANED UP ON AN AS NEEDED BASIS. ALL CATCH BASINS SHALL BE CLEANED OF SEDIMENT AND TRASH ON A SEMI–ANNUAL BASIS – IN THE FALL AFTER THE LEAVES HAVE FALLEN FROM TREES AND IN THE SPRING. REFER TO "STORMWATER PONDS AND WETLANDS" CHECKLIST ON THIS SHEET FOR DETAILED MAINTENANCE REQUIREMENTS FOR STORMWATER MANAGEMENT BASINS.

Mitigation and Restoration Sequence and Plan Notes

1. All sedimentation and erosion controls will be established before grading begins.
2. Temporary devices and structures to control erosion and sedimentation in and around mitigation sites shall be properly maintained at all times. The devices and structures shall be disassembled and disposed of no later than November 1, three full growing seasons after planting. Sediments collected by these devices will be removed and placed upland in a manner that prevents its transport into a wetland or waterway.
3. Construction of mitigation will take place before the driveway retaining walls have been constructed. Access will be through the upland on the north side of the existing entrance.
4. Topsoil will be stripped from the impact area and stockpiled on site for later re-use in the mitigation area if necessary.
5. The mitigation area will be over excavated 1.0 feet below the final elevations if deemed necessary by the on-site wetland scientist as shown on the plan and refilled to the specified grades with topsoil. The on-site wetland scientist will establish microtopographic grading.
6. All wetland mitigation areas will be seeded with New England Wetmix (New England Plants, Inc, Amherst. MA, ph 413-256-1752) or equivalent at 1 lb per 2500 s.f.
7. Planting and seeding will take place in the spring or fall planting periods to maximize plant survival and seed germination. The mitigation area will be planted prior to the construction of the driveway retaining walls. The restoration of temporary disturbance to wetland and upland around the retaining walls will be completed after the retaining walls are completed.
8. A supply of dead and dying woody debris shall cover at least 2% of the ground throughout the mitigation site after completion of construction of the mitigation site. These materials should not include species shown on the attached list of invasive species.
9. No equipment will be staged in the existing wetlands. All bulky waste and garbage will be removed by hand labor. Equipment will be used in the mitigation area only as necessary for removal of fill and grading. If necessary construction mats will be used to stage equipment.
10. To reduce the immediate threat and minimize the long-term potential of degradation, the species included on the Connecticut invasive plant species list are not included as planting stock in the overall project. Only plant materials native and indigenous to the region shall be used. Species not specified in the mitigation plan shall not be used without written approval from the on-site scientist
11. A certified soil scientist or qualified wetland scientist will over-see the mitigation work .A certified soil scientist or qualified wetland scientist will locate the sites for planting the vegetation
12. The site will be monitored for 3 years following the completion of work and controlled for invasive species. Annual reports will be filed with the Local Inland Wetlands Commission. The standards for survival of the plantings shall be as follows: The minimum survival standard will be 80% of woody plantings. At the end of each growing season a count of the shrubs and trees will be conducted. If less than 80% survival occurs, the dead vegetation will be replaced during the next planting season with new live plantings to bring the live plantings to above 80%.
13. The Local Inland Wetlands Commission will be notified before work begins and also be notified upon completion of the mitigation site and plantings so that they may inspect.



NOTES:
1. REFER TO THE "MITIGATION AND RESTORATION SEQUENCE AND PLAN NOTES" ON THIS SHEET FOR MORE INFORMATION.
2. REFER TO "MITIGATION AREA PLANTING SCHEDULE" ON THIS SHEET FOR MORE INFORMATION.

WETLAND MITIGATION AREA DETAIL

NOT TO SCALE

Mitigation Area Planting Schedule

Name	NWI Wetland Indicator Status	Quantity	Size
Shrubs			
Winterberry holly (*Ilex verticillata)*)	Facultative Wetland	10	1 gallon
Arrowood vibunum (Viburnum recognitum)	Facultative Wetland (-)	10	1 gallon
Highbush blueberry(*Vaccinum corymbosum*)	Facultative Wetland	10	1 gallon
Plants			
Fowl Manna Grass (*Glyceria canadensis*)	Obligate	50	plugs
Tussock sedge (*Carex stricta*)	Obligate	50	plugs
Canada rush (*Juncus canadensis*)	Obligate	50	plugs
Seedmixe			
New England Wetmix	Variable		

Eastern Wetland Buffer

Name	NWI Wetland Indicator Status	Quantity	Size
Shrubs			
Red chokeberry (*Aronia arbutilfolia)*	Facultative Wetland	45	1 gallon
Arrowood vibunum (Viburnum dentatum)	Facultative Wetland (-)	45	1 gallon
Witch hazel (*Hamamelis virginia*)	Facultative Wetland	45	1 gallon
Spicebush (*Lindera benzoin)*	Facultative Wetland (-)	45	1 Gallon
Seedmixe			
New England Conservation Wildlife Mix	Variable		

FOR REVIEW - NOT FOR CONSTRUCTION

Approved by the Old Saybrook Zoning Commission

Title *Signature* *Date*

PLAN PREPARED BY:
INDIGO LAND DESIGN, LLC
JOSEPH VIREN, P.E.
CT REG. NO. 21090
40 ELM STREET, 2ND FLOOR
OLD SAYBROOK, CT 06475
PHONE: (860) 388-5343
WEB: INDIGO-LAND.COM

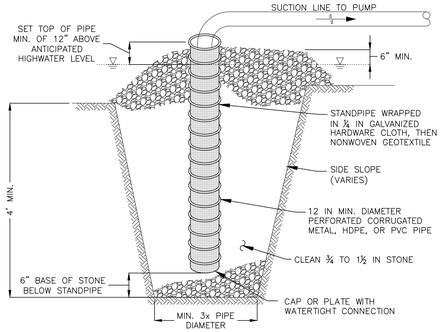
THE EMBOSSED SEAL OF THE ENGINEER MUST BE AFFIXED TO THIS MAP TO BE VALID

#	DATE	DESCRIPTION	BY
1	5/14/2024	REVISIONS PER TOWN ENGINEER'S COMMENTS, MISC.	RG

E&S CONTROL NARRATIVE AND DETAILS

PREPARED FOR ORTHO SAYBROOK, LLC
52 SPENCER PLAIN ROAD (CT ROUTE 166)
(MAP 25 LOT 27)
OLD SAYBROOK, CONNECTICUT

DATE: APRIL 4, 2024
SCALE: NOT TO SCALE
DRAWN BY: RG
CHECKED BY: JW
DWG. NO.: ES-1
SHEET NO.: 11 of 13
JOB. NO.: 2023-1030



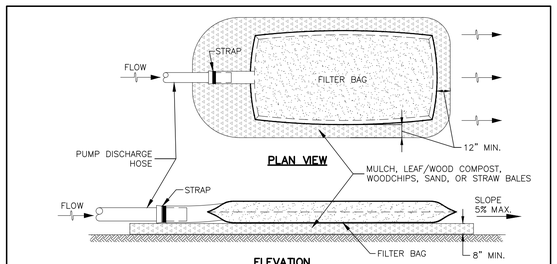
ELEVATION

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 ¼ 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 ¾ TO 1½ 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 ¾ TO 1½ 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

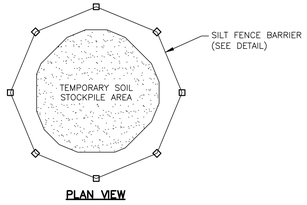
1. TIGHTLY SEAL SLEEVE AROUND THE PUMP DISCHARGE HOSE WITH A STRAP OR SIMILAR DEVICE.
2. PLACE FILTER BAG ON SUITABLE BASE (E.G., MULCH, LEAF/WOOD COMPOST, WOODCHIPS, SAND, OR STRAW BALES) LOCATED ON A LEVEL OR 5% MAXIMUM SLOPING SURFACE. DISCHARGE TO A STABILIZED AREA. EXTEND BASE A MINIMUM OF 12 INCHES 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-4833
FLOW RATE	70 GAL/MIN/FT²	ASTM D-4491
PERMITTIVITY (SEC⁻¹)	1.2 SEC⁻¹	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.

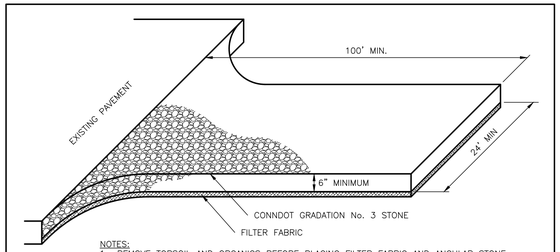
FILTER BAG DETAIL
NOT TO SCALE



PLAN VIEW

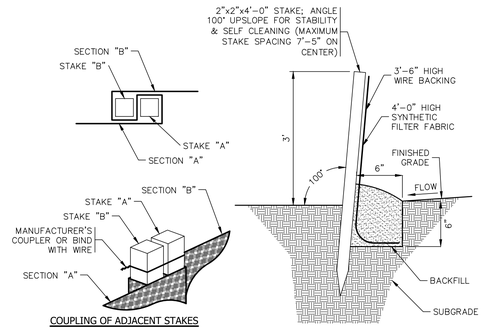
NOTES:
1. APPLY TEMPORARY SEED MIXTURE TO PILES IF THEY WILL NOT BE DISTURBED FOR MORE THAN 30 DAYS.
2. ALL SILT FENCE SHALL BE INSPECTED PERIODICALLY AND AFTER ALL RAINFALL EVENTS. REPAIRS SHALL BE MADE IMMEDIATELY TO KEEP THE SILTATION CONTROL BARRIER EFFECTIVE.

STOCKPILE SILTATION CONTROL DETAIL
NOT TO SCALE



NOTES:
1. REMOVE TOPSOIL AND ORGANICS BEFORE PLACING FILTER FABRIC AND ANGULAR STONE.
2. REDRESS STONE THROUGHOUT CONSTRUCTION AS NEEDED.

CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE



COUPLING OF ADJACENT STAKES

NOTES:
1. ALL SILT FENCE SHALL BE INSPECTED PERIODICALLY AND AFTER ALL RAINFALL EVENTS. REPAIRS SHALL BE MADE IMMEDIATELY TO KEEP THE SILTATION CONTROL BARRIER EFFECTIVE.

SILT FENCE BARRIER
NOT TO SCALE

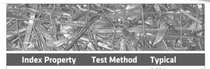
ROLLMAX™
ROLLED EROSION CONTROL

Specification Sheet
BioNet® S75BN™ Erosion Control Blanket

DESCRIPTION

The short-term single net erosion control blanket shall be a machine-produced mat of 100% agricultural straw with a functional longevity of up to 12 months. (NOTE: functional longevity may vary depending upon climatic conditions, soil, geographical location, and elevation). The blanket shall be of consistent thickness with the straw evenly distributed over the entire area of the mat. The blanket shall be covered on the top side with a 100% 100% biodegradable woven natural organic fiber net. The netting shall consist of machine directional strands formed from two intertwined yarns with across directional strands interwoven through the twisted machine strands (commonly referred to as a Leno weave) to form approximate 0.50 x 1.0 in. (1.27 x 2.54 cm) mesh. The blanket shall be sewn together on 1.50 inch (3.81 cm) centers with degradable thread. The blanket shall be manufactured with a colored thread stitched along both outer edges (approximately 2-5 inches [5-12.5 cm] from the edge) as an overlap guide for adjacent mats.

The S75BN shall meet Type 2.C specification requirements established by the Erosion Control Technology Council (ECTC) and Federal Highway Administration's (FHWA) FP-03 Section 713.17



Index Property	Test Method	Typical
Thickness	ASTM D6525	0.28 in. (7 mm)
Resiliency	ECTC Guidelines	81.4%
Water Absorbency	ASTM D7017	440%
Mass/Unit Area	ASTM D6475	9.12 oz/sy (310 g/sm)
Swell	ECTC Guidelines	15.7%
Smolder Resistance	ECTC Guidelines	Yes
Stiffness	ASTM D1388	6.92 oz-in
Light Penetration	ASTM D6567	9.1%
Tensile Strength - MD	ASTM D6818	146.4 lbs/ft (2.17 kN/m)
Elongation - MD	ASTM D6818	10.9%
Tensile Strength - TD	ASTM D6818	109.2 lbs/ft (1.62 kN/m)
Elongation - TD	ASTM D6818	14.3%
Biomass Improvement	ASTM D7322	398%

Material Content		
Matrix	100% straw fiber	0.5 lbs/sq yd (0.27 kg/sm)
Netting	Top side only. Leno woven 100% biodegradable natural organic fiber	9.3 lbs/1000 sq ft (4.5 kg/100 sm)
Thread	Biodegradable	

Standard Roll Size		
Width	6.67 ft (2.0 m)	8.0 ft (2.4 m)
Length	108 ft (32.92 m)	112 ft (34.14 m)
Weight ± 10%	46.4 lbs (21.05 kg)	50 lbs (22.68 kg)
Area	80 sq yd (66.9 sm)	100 sq yd (83.61 sm)

Design Permissible Shear Stress	
Unvegetated Shear Stress	1.60 psf (76 Pa)
Unvegetated Velocity	5.00 fps (1.52 m/s)

Slope Design Data: C Factors			
	Slope Gradients (S)		
Slope Length (L)	≤ 3:1	3:1 – 2:1	≥ 2:1
≤ 20 ft (6 m)	0.029	N/A	N/A
20-50 ft	0.11	N/A	N/A
≥ 50 ft (15.2 m)	0.19	N/A	N/A

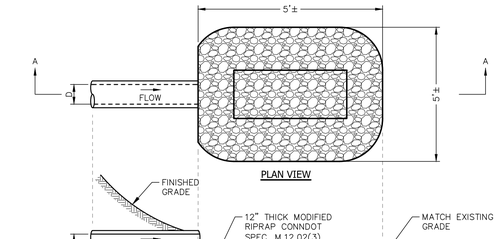
Roughness Coefficients – Unveg.	
Flow Depth	Manning's n
≤ 0.50 ft (0.15 m)	0.055
0.50 – 2.0 ft	0.055-0.021
≥ 2.0 ft (0.60 m)	0.021

NORTH AMERICAN GREEN
Western Green
4409 E. Boonville-New Harmony Rd.
Evansville, IN 47725
nagreen.com
800-772-2040

EC_RMX_MPDS_S75BN_7.20

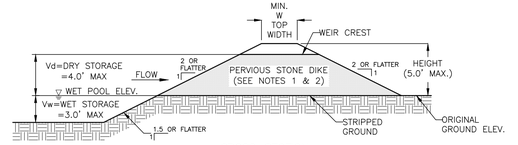
NOTES:
1. EROSION CONTROL BLANKETS SHALL CONSIST OF BIODEGRADABLE MATERIALS.
2. TEMPORARY EROSION CONTROL BLANKETS SHALL BE PROVIDED ON ALL 3:1 SLOPES OR STEEPER.
3. CONTRACTOR SHALL PREPARE SURFACE, REMOVE PROTRUDING OBJECTS AND INSTALL TEMPORARY EROSION CONTROL BLANKETS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
4. CONTRACTOR SHALL ENSURE THE ORIENTATION AND ANCHORING OF THE BLANKET IS APPROPRIATE FOR THE SITE.
5. CONTRACTOR SHALL INSPECT THE TEMPORARY EROSION CONTROL BLANKET AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH RAINFALL OF 0.5 INCHES OR MORE. IF WASHOUT OR BREAKOUT OCCURS, CONTRACTOR SHALL RE-INSTALL THE BLANKET AFTER REGRADING AND RE-SEEDING THE AREA.

EROSION CONTROL BLANKET DETAIL
NOT TO SCALE



NOTE:
1. PRE-FORMED SCOUR HOLE TO BE INSTALLED LEVEL. THE OUTLET INVERT SHALL MATCH THE EXISTING GRADE ELEVATION AT THE DOWNSTREAM END.

PRE-FORMED SCOUR HOLE DETAIL
NOT TO SCALE



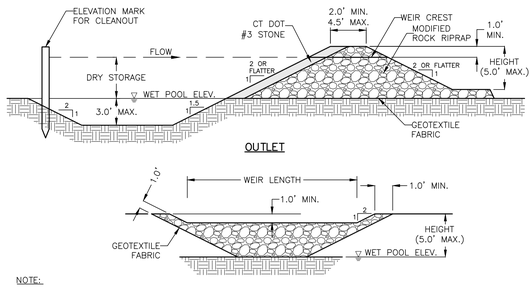
CROSS-SECTION

NOTES:
1. PERVIOUS STONE DIKE SHALL BE CONSTRUCTED OF CT DOT MODIFIED RIPRAP WITH #3 STONE ON FACE.
2. NON-OVERFLOW PORTIONS AND ABUTMENTS OF TEMPORARY SEDIMENT TRAP MAY BE CONSTRUCTED OF COMPACTED EARTH FILL.

TOP WIDTH VS. HEIGHT

H = HEIGHT OF EMBANKMENT
W = TOP WIDTH OF EMBANKMENT

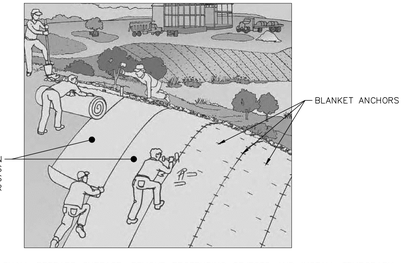
H (ft)	W (ft)
1.5	2.0
2.0	2.0
2.5	2.5
3.0	2.5
3.5	3.0
4.0	3.0
4.5	4.0
5.0	4.5



OUTLET

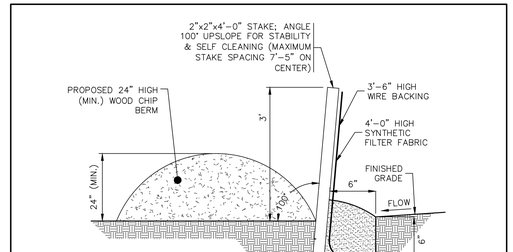
NOTE:
TYPICALLY, SEDIMENT TRAPS ARE REQUIRED FOR ANY DISCHARGE POINT THAT SERVES AN AREA BETWEEN 2 AND 5 DISTURBED ACRES OF LAND. ALL TEMPORARY SEDIMENT TRAPS SHALL BE DESIGNED IN CONFORMANCE WITH THE "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL". GENERALLY, TEMPORARY SEDIMENT TRAPS SHALL BE SIZED TO PROVIDE A MINIMUM OF 134 CUBIC YARDS OF WATER STORAGE PER ACRE DRAINED. ALL TEMPORARY SEDIMENT TRAPS SHALL BE MAINTAINED TO ASSURE EFFICIENT OPERATION UNTIL THE CONTRIBUTING AREA IS COMPLETELY STABILIZED. TEMPORARY SEDIMENT TRAPS MAY BE RELOCATED DURING CONSTRUCTION TO ACCOMMODATE PHASING. CONTRACTOR SHALL REVIEW LOCATIONS OF TEMPORARY SEDIMENT TRAPS WITH DESIGN ENGINEER PRIOR TO INSTALLATION. NO TEMPORARY SEDIMENT TRAP SHALL HAVE MORE THAN 5 ACRES OF DISTURBED LAND CONTRIBUTING TO IT.

TEMPORARY SEDIMENT TRAP
NOT TO SCALE



NOTES:
1. CONTRACTOR SHALL PREPARE SURFACE, REMOVE PROTRUDING OBJECTS AND INSTALL TEMPORARY EROSION CONTROL BLANKETS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
2. CONTRACTOR SHALL ENSURE THE ORIENTATION AND ANCHORING OF THE BLANKET IS APPROPRIATE FOR THE SITE.
3. CONTRACTOR SHALL INSPECT THE TEMPORARY EROSION CONTROL BLANKET AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH RAINFALL OF 0.5 INCHES OR MORE. IF WASHOUT OR BREAKOUT OCCURS, CONTRACTOR SHALL RE-INSTALL THE BLANKET AFTER REGRADING AND RE-SEEDING THE AREA.
4. ALL EROSION CONTROL BLANKETS SHALL CONSIST OF BIODEGRADABLE MATERIALS.

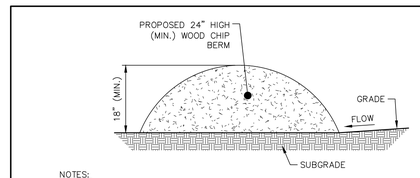
EROSION CONTROL BLANKET DETAIL
NOT TO SCALE



COUPLING OF ADJACENT STAKES

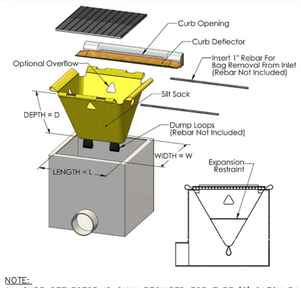
NOTES:
1. ALL SILT FENCE SHALL BE INSPECTED PERIODICALLY AND AFTER ALL RAINFALL EVENTS. REPAIRS SHALL BE MADE IMMEDIATELY TO KEEP THE SILTATION CONTROL BARRIER EFFECTIVE.

SILT FENCE BARRIER WITH WOOD CHIP BERM DETAIL
NOT TO SCALE



NOTES:
1. ALL SILT FENCE SHALL BE INSPECTED PERIODICALLY AND AFTER ALL RAINFALL EVENTS. REPAIRS SHALL BE MADE IMMEDIATELY TO KEEP THE SILTATION CONTROL BARRIER EFFECTIVE.
2. WOOD CHIP BERM SHALL BE LEFT IN PLACE AFTER CONSTRUCTION.

WOOD CHIP BERM DETAIL
NOT TO SCALE



NOTE:
1. CURB DEFLECTOR IS ONLY REQUIRED FOR TYPE 'C' CATCH BASINS.

CATCH BASIN INLET PROTECTION – SILT SACK DETAIL
NOT TO SCALE

PLAN PREPARED BY:
INDIGO LAND DESIGN, LLC
JOSEPH VIREN, P.E.
CT REG. NO. 21090
40 ELM STREET, 2ND FLOOR
OLD SAYBROOK, CT 06475
PHONE: (860) 388-3343
WEB: INDIGO-LAND.COM

THE EMBOSSED SEAL OF THE ENGINEER MUST BE AFFIXED TO THIS MAP TO BE VALID

NO.	DATE	DESCRIPTION	BY
1	5/14/2024	REVISIONS PER TOWN ENGINEER'S COMMENTS, MISC.	RG

E&S CONTROL DETAILS

PREPARED FOR ORTHO SAYBROOK, LLC
52 SPENCER PLAIN ROAD (CT ROUTE 166)
(MAP 25 LOT 27)
OLD SAYBROOK, CONNECTICUT

DATE: APRIL 4, 2024
SCALE: NOT TO SCALE
DRAWN BY: RG
CHECKED BY: JW
DWG. NO.: ES-2
SHEET NO.: 12 of 13
JOB. NO.: 2023-1030

FOR REVIEW - NOT FOR CONSTRUCTION

Approved by the Old Saybrook Zoning Commission

Title *Signature* *Date*

CLA Engineers, Inc.
Civil • Structural • Survey
317 MAIN STREET • NORWICH, CT 06360 • (860) 886-1966 • (860) 886-9165 FAX

Permeability of Soils using Compaction Permeameter

Date: 9/23/2022
Project: Indigo Land Design
CLA Project #: 7154
Source: Spencer Plains Road, Old Saybrook, Ct.
Material: On-site material (Test Pits)
Specification: 100 lbs/cu ft Compaction on samples

Sample #1: Test Pit # Sample A

Permeability: 2.22 x 10-4 cm/sec or .62 ft/day

Sample #1: Test Pit # Sample B

Permeability: 1.85 x 10-4 cm/sec or .52 ft/day

Sample #1: Sample B2

Permeability: 2.78 x 10-4 cm/sec or .78 ft/day

Thomas Cummings 9/23/22
PE No. 9606

STATE OF CONNECTICUT · THOMAS L. CUMMINGS · 23018 · LICENSED PROFESSIONAL ENGINEER

CLA Engineers, Inc.
Civil • Structural • Survey
317 MAIN STREET • NORWICH, CT 06360 • (860) 886-1966 • (860) 886-9165 FAX

SIEVE ANALYSIS

Date: 9/1/2022
Project: Spencer Plains Road, Old Saybrook, Ct.
CLA Project #: 7154
Source: Old Saybrook, Ct.
Material: On-site material (Test Pits)
Specification: N/A
Sample Designation: Test Pit # Sample A

Sieve Size	% Passing
3/4 in	100
¾ in	99.9
#4	99.1
#10	94.1
#20	83.2
#40	76.3
#60	46.1
#100	34.5
#200	23.3

Thomas Cummings 9/30/22
PE No. 9606

STATE OF CONNECTICUT · THOMAS L. CUMMINGS · 23018 · LICENSED PROFESSIONAL ENGINEER

CLA Engineers, Inc.
Civil • Structural • Survey
317 MAIN STREET • NORWICH, CT 06360 • (860) 886-1966 • (860) 886-9165 FAX

SIEVE ANALYSIS

Date: 9/19/2022
Project: Spencer Plains Road, Old Saybrook, Ct.
CLA Project #: 7154
Source: Old Saybrook, Ct.
Material: On-site material (Test Pits)
Specification: N/A
Sample Designation: Test Pit # Sample B

Sieve Size	% Passing
3/4 in	98.1
¾ in	93.3
#4	92.2
#10	88.1
#20	80.1
#40	64.0
#60	47.7
#100	36.7
#200	25.2

Thomas Cummings 9/30/22
PE No. 9606

STATE OF CONNECTICUT · THOMAS L. CUMMINGS · 23018 · LICENSED PROFESSIONAL ENGINEER

CLA Engineers, Inc.
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317 MAIN STREET • NORWICH, CT 06360 • (860) 886-1966 • (860) 886-9165 FAX.

SIEVE ANALYSIS

Date: 9/19/2022
Project: Spencer Plains Road, Old Saybrook, Ct.
CLA Project #: 7154
Source: Old Saybrook, Ct.
Material: On-site material (Test Pits)
Specification: N/A
Sample Designation: Test Pit # Sample B2

Sieve Size	% Passing
3/4 in	94.5
¾ in	90.8
#4	83.2
#10	65.9
#20	58.7
#40	45.9
#60	31.3
#100	20.5
#200	10.5

Thomas Cummings 9/30/22
PE No. 9606

STATE OF CONNECTICUT · THOMAS L. CUMMINGS · 23018 · LICENSED PROFESSIONAL ENGINEER

MOISTURE DENSITY
(4" Mold)

CLIENT:	Indigo Land Design					DATE:	9/1 & 9/2/2022		
PROJECT:	52 Spencer Plains Road, Old Saybrook, Ct.					BY:	JB		
SAMPLE:	TP #A, #B & #B2					SOURCE:	Test Pits		
SAMPLING METHOD:	Sampled on site					SPEC:			
	Sample + Pan - Pan Weight + Sample								
SAMPLE #1									
	wet /			=	0.200				
	dry /			=	0.179	M/C	11.73		
	wet /		dry	=	0.021	/dry	11.7	=M/C	
					Net Weight	6.950			
5.802	-4.126 =	1.676	/ 0.033 =	50.79	* 2.2 =	111.73	/1 M/C=	100.0	
Full Mold Weight - Mold = Net Weight									
	Sample + Pan - Pan Weight + Sample								
SAMPLE #2									
	wet /			=	0.200				
	dry /			=	0.180	M/C	11.11		
	wet /		dry	=	0.020	/dry	11.1	=M/C	
					Net Weight	6.950			
5.792	-4.126 =	1.666	/ 0.033 =	50.48	* 2.2 =	111.07	/1 M/C=	100.0	
Full Mold Weight - Mold = Net Weight									
	Sample + Pan - Pan Weight + Sample								
SAMPLE #3									
	wet /			=	0.200				
	dry /			=	0.186	M/C	7.53		
	wet /		dry	=	0.014	/dry	7.5	=M/C	
					Net Weight	6.950			
5.739	-4.126 =	1.613	/ 0.033 =	48.88	* 2.2 =	107.53	/1 M/C=	100.0	
Full Mold Weight - Mold = Net Weight									
	Sample + Pan - Pan Weight + Sample								
SAMPLE #4									
	wet /			=	0.200				
	dry /			=		M/C	#DIV/0!		
	wet /		dry	=	0.200	/dry	#DIV/0!	=M/C	
					Net Weight	6.950			
	-4.126 =	-4.126	/ 0.033 =	-125.03	* 2.2 =	-275.07	/1 M/C=	#DIV/0!	
Full Mold Weight - Mold = Net Weight									
	Sample + Pan - Pan Weight + Sample								
SAMPLE #5									
	wet /			=	0.200				
	dry /			=		M/C	#DIV/0!		
	wet /		dry	=	0.200	/dry	#DIV/0!	=M/C	
					Net Weight	6.950			
	-4.126 =	-4.126	/ 0.033 =	-125.03	* 2.2 =	-275.07	/1 M/C=	#DIV/0!	
Full Mold Weight - Mold = Net Weight									

M:\7000\7100\7154 52 Spencer Plains Rd\Material Testing\7154 - Spencer Plains Road - MoistureDensity-Mold 9 - 1 - 2022.xls

SIEVE ANALYSIS

CLIENT:	Indigo Land Design			DATE:	9/1/2022			
PROJECT:	52 Spencer Plains Road, Old Saybrook, Ct.			BY:	JB			
SOURCE:	Test Pits			SAMPLE:	TP#A			
SAMPLING METHOD:	Sampled On-site			SPEC:	N/A			
Sieve	Gross Weight	Sieve Weight	Net Weight	% Retained	% Pass	Spec		
3/4 in	0			0.0	100.0			
1/4 in	0.4			0.1	99.9			
#4	5.2			0.9	99.1			
#10	34.2			5.9	94.1			
#20	96.6			16.8	83.2			
#40	136.6			23.7	76.3			
#60	310.8			53.9	46.1			
#100	377.4			65.5	34.5			
#200	442			76.7	23.3			
	576.4							

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SIEVE ANALYSIS

CLIENT:	Indigo Land Design			DATE:	9/19/2022			
PROJECT:	52 Spencer Plains Road, Old Saybrook, Ct.			BY:	JB			
SOURCE:	Test Pits			SAMPLE:	TP#B			
SAMPLING METHOD:	Sampled On-site			SPEC:	N/A			
Sieve	Gross Weight	Sieve Weight	Net Weight	% Retained	% Pass	Spec		
3/4 in	10.2			1.9	98.1			
1/4 in	35.2			6.7	93.3			
#4	41.2			7.8	92.2			
#10	63			11.9	88.1			
#20	104.8			19.9	80.1			
#40	189.6			36.0	64.0			
#60	275.6			52.3	47.7			
#100	333.8			63.3	36.7			
#200	394.4			74.8	25.2			
	527.2							

M:\7000\7100\7154 52 Spencer Plains Rd\Material Testing\7154 - Spencer Plains Road - TP #B 9 - 19 - 2022.xls

SIEVE ANALYSIS

CLIENT:	Indigo Land Design			DATE:	9/19/2022			
PROJECT:	52 Spencer Plains Road, Old Saybrook, Ct.			BY:	JB			
SOURCE:	Test Pits			SAMPLE:	TP#B2			
SAMPLING METHOD:	Sampled On-site			SPEC:	N/A			
Sieve	Gross Weight	Sieve Weight	Net Weight	% Retained	% Pass	Spec		
3/4 in	28			5.5	94.5			
1/4 in	46.6			9.2	90.8			
#4	85.6			16.8	83.2			
#10	173.4			34.1	65.9			
#20	210.2			41.3	58.7			
#40	275			54.1	45.9			
#60	349.2			68.7	31.3			
#100	404.2			79.5	20.5			
#200	453.6			89.2	10.8			
	508.6							

M:\7000\7100\7154 52 Spencer Plains Rd\Material Testing\7154 - Spencer Plains Road - TP #B2 9 - 19 - 2022.xls

PLAN PREPARED BY:
INDIGO LAND DESIGN, LLC
JOSEPH WREN, P.E.
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THE EMBOSSED SEAL OF THE ENGINEER MUST BE AFFIXED TO THIS MAP TO BE VALID

BY	DESCRIPTION	DATE
RG	1 REVISIONS PER TOWN ENGINEER'S COMMENTS, MISC.	5/14/2024

SOIL SAMPLE DATA
PREPARED FOR ORTHO SAYBROOK, LLC
52 SPENCER PLAIN ROAD (CT ROUTE 166)
(MAP 25 LOT 27)
OLD SAYBROOK, CONNECTICUT

FOR REVIEW - NOT FOR CONSTRUCTION

Approved by the Old Saybrook Zoning Commission

Title *Signature* *Date*

DATE: APRIL 4, 2024
SCALE: NOT TO SCALE
DRAWN BY: RG
CHECKED BY: JW
DWG. NO.: SSD-1
SHEET NO.: 13 of 13
JOB. NO.: 2023-1030