

# GREEN TWO-LOT

## SUBDIVISION

19 LITTLE PITCH ROAD  
LITCHFIELD, CONNECTICUT

### DRAWING PACKAGE:

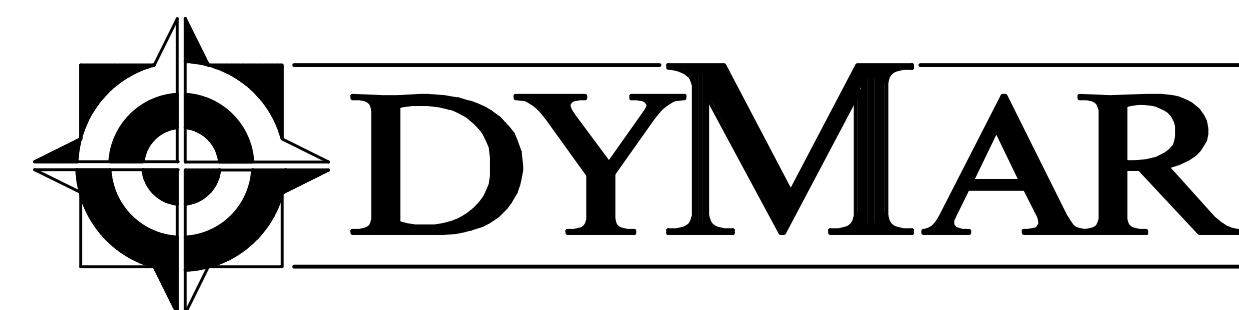
#### CIVIL ENGINEERING DRAWINGS

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C-7	CONSTRUCTION SPECIFICATIONS & STANDARDS

#### APPLICANT / DEVELOPED BY:

Gregory M. & Robin P. Green  
19 Little Pitch Road  
Litchfield, CT 06759

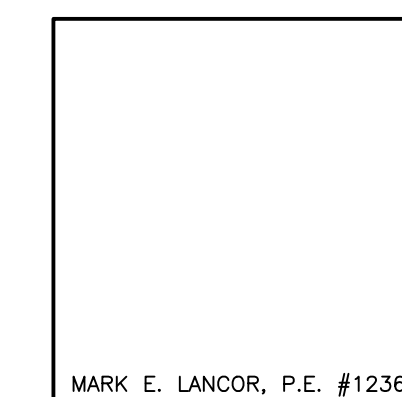
#### CIVIL ENGINEER/SURVEYOR:



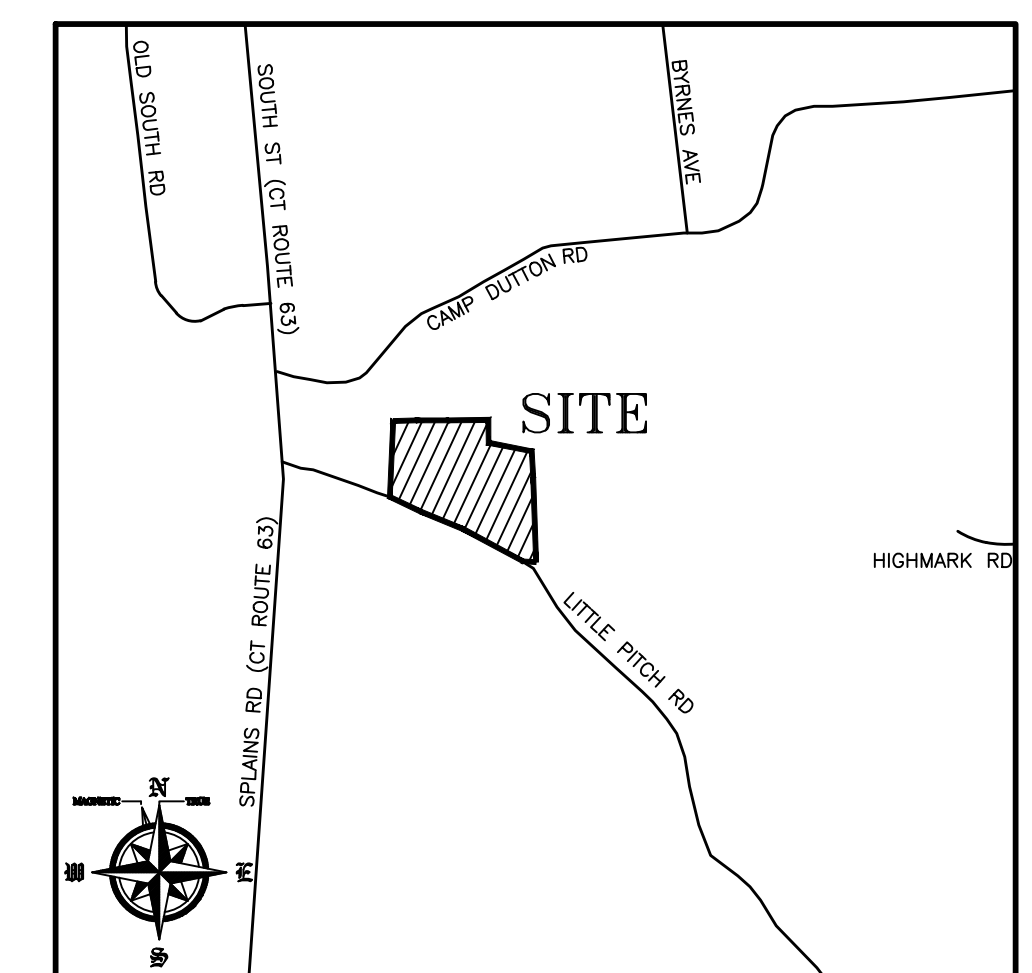
800 Main Street South · Southbury, Ct. 06488 · (203) 267-1046 · Fax (203) 267-1547  
ENGINEERING · PLANNING · SURVEYING · DEVELOPMENT SERVICES

#### SOIL SCIENTIST:

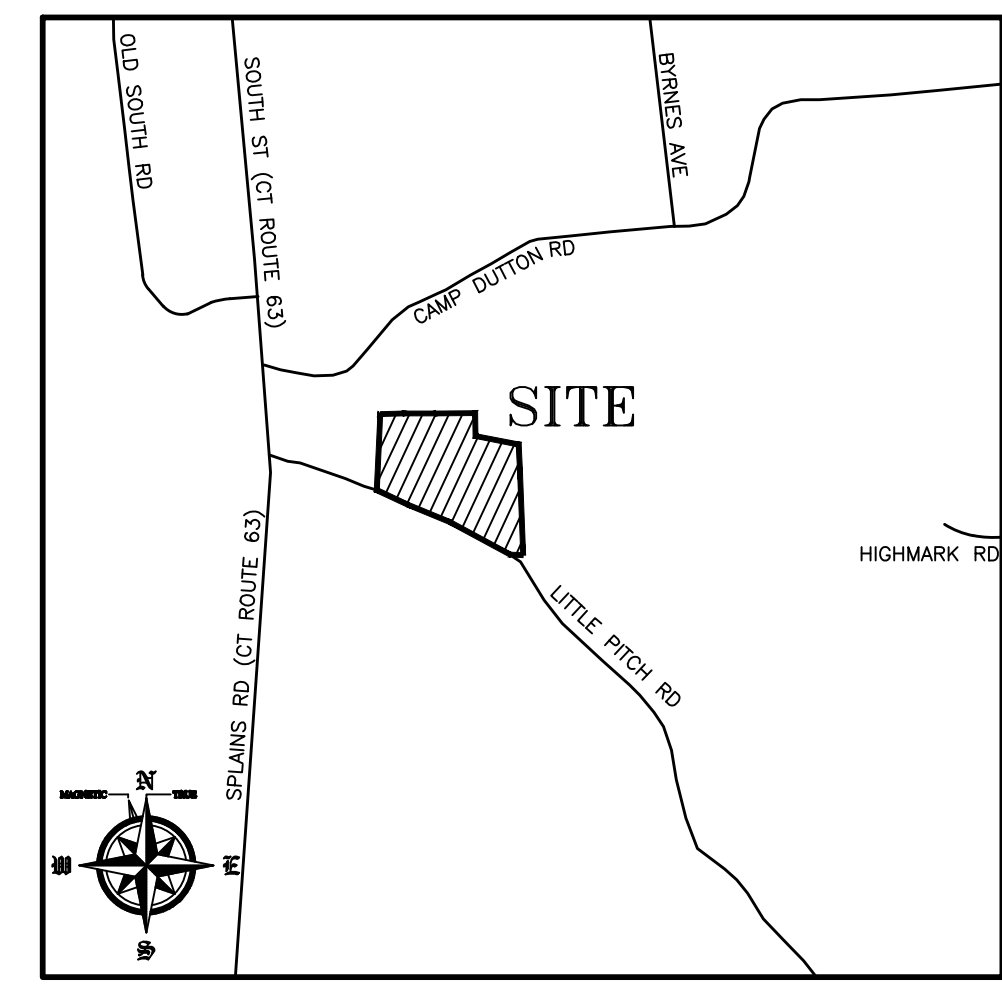
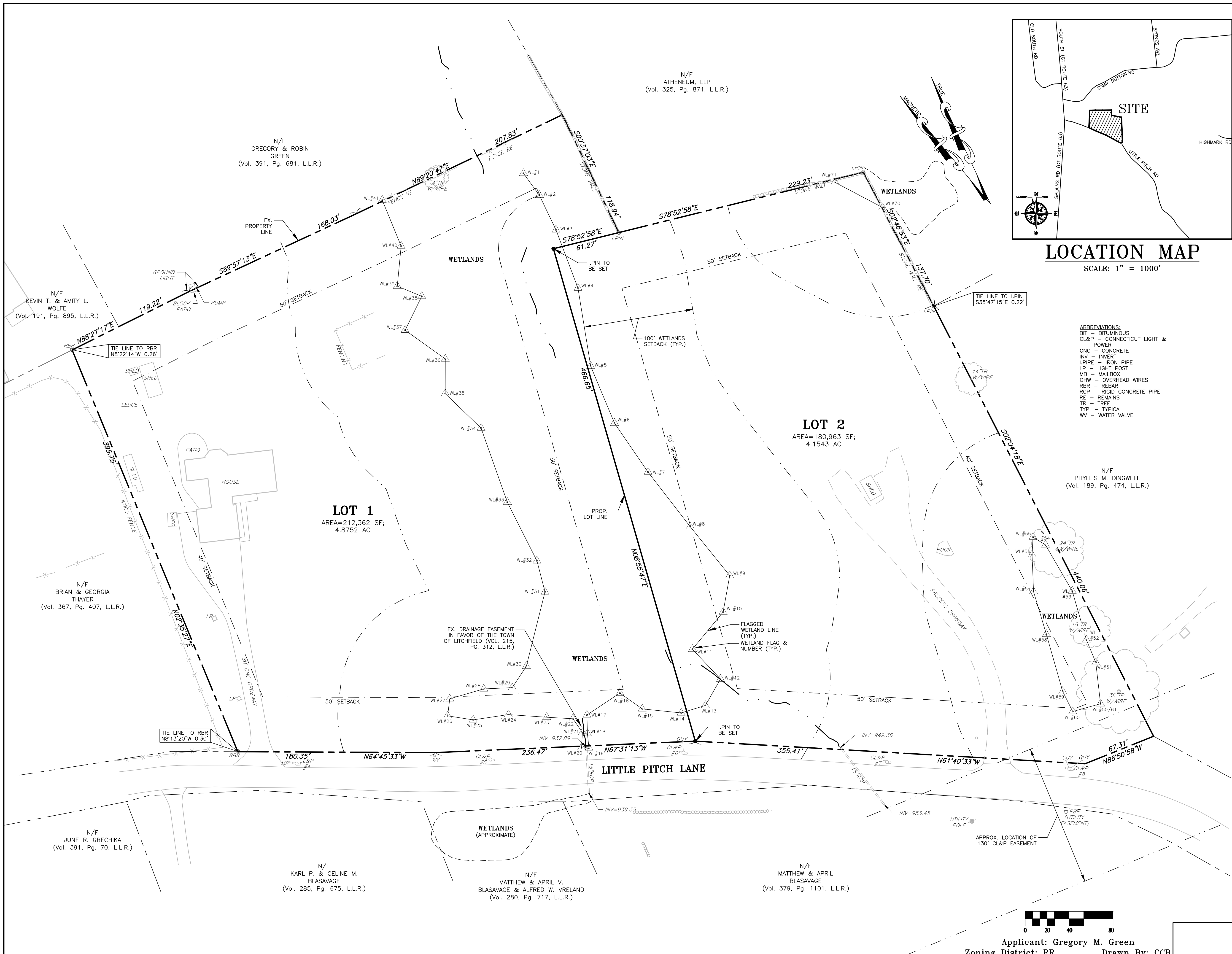
William Kenny Associates, LLC  
195 Tunxis Hill Road  
Suite 204  
Fairfield, CT 06825



Issued to:	Date	Revised
Inland Wetlands	04-08-2021	-
Planning & Zoning	04-08-2021	04-30-2021



LOCATION MAP  
SCALE: 1" = 1000'



**LOCATION MAP**  
SCALE: 1" = 1000'

- ABBREVIATIONS:**
- BIT - BITUMINOUS
  - CL&P - CONNECTICUT LIGHT & POWER
  - CNC - CONCRETE
  - INV - INVERT
  - I.P.I.P.E - IRON PIPE
  - LP - LIGHT POST
  - MB - MAILBOX
  - OHW - OVERHEAD WIRES
  - RBR - REBAR
  - RCP - RIGID CONCRETE PIPE
  - RE - REMAINS
  - TR - TREE
  - TYP. - TYPICAL
  - WV - WATER VALVE

- NOTES:**
- This map has been prepared pursuant to the Regulations of Connecticut State Agencies Sections 20-300b-1 through 20-300b-20 and the "Standards for Surveys and Maps in the State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996.
    - Type of Survey: Subdivision Plan
    - Boundary Determination Category: Outside boundary: Dependant
    - Re-Survey: Subdivision lot: Original Survey
    - Class of Accuracy: A-2
  - Area of Parcel: 393,325 sf, 9.029 acres
  - Owner: Gregory M. & Robin P. Green (Vol. 206, Pg. 1123, L.L.R.)  
19 Little Pitch Road, Litchfield, CT 06759  
Map 067, Block 041, Lot 31A
  - Zone: RR
  - Map References:
    - A. "Map Prepared For, Arthur B. Webster, Trustee, Hugh B. Webster, Trustee, and Timothy T. Webster, Trustee, Connecticut Route 63, And, Little Pitch Road, Little Pitch Road, Litchfield, Connecticut, Scale 1"=50', Dated January 7, 1991, Revised to 3-5-91, as prepared by Samuel P. Bertaccini, Jr., Litchfield, CT". (Map #31-21, Litchfield Land Records)
  - The location of any underground utilities shown on this plan are approximate. Additionally, other such underground features may exist on the site, the existence of which are unknown to DYMAR. The existence, size and location of all such underground features must be determined and verified in the field by the appropriate agency prior to any future construction. Prior to any excavation on or near this site the contractor shall contact "Call Before You Dig" at 1-800-922-4455 at least 72 hours prior to excavation.
  - The inland wetlands shown on this plan were flagged in the field by William Kenny Associates LLC, Fairfield, CT, and field located by Dymar in November, 2020.
  - The parcel is located in Zone C (area of minimal flooding), as shown on the Federal Flood Insurance Rate Map, Town Of Litchfield, Connecticut, Litchfield County, Panel 13 of 18, Community Panel Number 090047 0013 C, Map revised January 2, 1992.
  - The topographic features shown on this plan are from an aerial survey prepared by Golden Aerial Surveys, Waterbury, CT as well as field surveys conducted by this office in 2020. Vertical Datum is NAVD 1988 as determined by Global Positioning System. Bearing system is NAD 1983.
  - When any modifications or conditions including a Performance Guarantee are required as a part of the Subdivision approval by the Planning and Zoning Commission, the Chairman or Secretary shall not endorse said record subdivision map until said modifications and/or conditions are filed. If the required modifications and/or conditions are not filed within forty-five (45) days of the date of subdivision approval by the Planning and Zoning Commission, or within an extended period as may be approved by the Planning and Zoning Commission, the subdivision approval shall be deemed automatically void.
  - Approval of this subdivision by the Litchfield Planning and Zoning Commission cannot and does not guarantee the quantity and quality of water supply.
  - This subdivision does not include land areas within the Flood Plain District as defined under the Litchfield Zoning Regulations.
  - A detailed erosion and sediment control plan associated with the development of the following subdivision lots (specifying the lot numbers) shall be required as part of the application for the zoning permit and shall be certified by the Planning and Zoning Commission or its authorized agent prior to issuance of the zoning permit.
  - Engineer responsible for plan development and engineering details is Mark E. Lancor, of DYMAR, 800 Main St. South, Southbury, CT 06488.

Approved By the Litchfield Planning and Zoning Commission on: \_\_\_\_\_

Date of meeting \_\_\_\_\_

Endorsed By \_\_\_\_\_

Chairman \_\_\_\_\_ on Date \_\_\_\_\_

Secretary \_\_\_\_\_ on Date \_\_\_\_\_

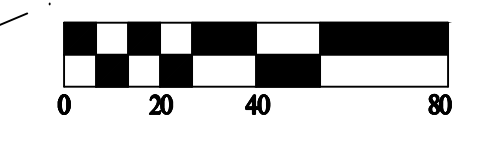
And delivered to the applicant on: \_\_\_\_\_

Date of Delivery \_\_\_\_\_

IN ACCORDANCE WITH CONNECTICUT STATE STATUTE 8 26c, ALL WORK IN CONNECTION WITH THIS SUBDIVISION SHALL BE COMPLETED BY: \_\_\_\_\_

Date (5 years from Date of Endorsement) \_\_\_\_\_

**Subdivision Map**  
FOR LAND OWNED BY  
**GREGORY M. & ROBIN P. GREEN**  
19 LITTLE PITCH ROAD  
LITCHFIELD, CONNECTICUT  
APRIL 5, 2021 SCALE: 1"=40'  
SHEET 1 OF 1



Applicant: Gregory M. Green  
Zoning District: RR  
Drawn By: CCB

DATE	REVISION

**DYMAR**

800 Main Street South · Southbury, CT · 06488-2210 · (203) 287-1046 · Fax (203) 287-1547  
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FIELD BOOK NO.	82	PROJECT NO.	1039
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To the best of my knowledge and belief, this map is substantially correct as noted hereon.

#12326  
STEVEN M. GABRIELE REG. NO.  
NOT VALID UNLESS EMBOSSED SEAL IS AFFIXED HERETO

F:\1039 - Little Pitch Subdivision-Litchfield\Survey\A-2 Subdivision.dwg, Sub, 5/20/2021 10:20:50 AM, genns, AutoCAD PDF (Web and Mobile).pc3, ARCH full sheet D (24.00 x 36.00 inches), 1:1

GENERAL LEGEND

GENERAL NOTES

ABBREVIATIONS

Table with 4 columns: Description, Existing, Proposed, Description, Existing, Proposed. It lists various symbols for plan symbols such as Property Line, Benchmark, Grid Line, Centerline, etc.

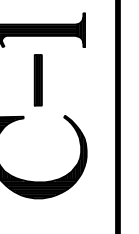
- CONSTRUCTION NOTES: 1. NOTES ARE NOT INTENDED TO REPLACE SPECIFICATIONS... 2. UNLESS OTHERWISE INDICATED, DETAILS SHOWN ON ANY DRAWINGS ARE TO BE CONSIDERED TYPICAL... 3. THE WORD 'CERTIFY' IS TO BE AN EXPRESSION OF PROFESSIONAL OPINION... 4. CHANGES MADE TO THESE PLANS AND RELATED CONTRACT DOCUMENTS... 5. THE INFORMATION SHOWN ON THE FOLLOWING SHEETS IS LIMITED TO THE INFORMATION MADE AVAILABLE AT THE TIME OF THE DESIGN SERVICES... 6. LOCATIONS OF EXISTING UTILITIES HAVE BEEN TAKEN FROM UTILITY MAPS OR BY OTHER MEANS... 7. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD... 8. THE CONTRACTOR SHALL PROCURE ALL NECESSARY PERMITS AND LICENSES... 9. THE CONTRACTOR SHALL STRICTLY COMPLY WITH THE NATIONAL FIRE CODES... 10. THE CONSTRUCTION SITE MUST BE KEPT CLEAN AND ORDERLY... 11. AISLES, PASSAGEWAYS, ALLEYS, DRIVEWAYS, ENTRANCES OR EXITS AND ACCESS TO FIRE EQUIPMENT MUST BE KEPT UNOBSTRUCTED AT ALL TIMES... 12. THE LOCAL FIRE AND POLICE DEPARTMENT SHALL BE PROMPTLY NOTIFIED... 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURATE LAYOUT OF ALL CONSTRUCTION LIMIT LINES... 14. SLOPES AND INVERTS OF ALL STORM DRAINAGE AND SANITARY SEWER PIPES ARE CRITICAL... 15. HORIZONTAL LOCATIONS OF PROPOSED STORM SEWERS MAY BE VARIED SLIGHTLY... 16. MAINTAIN TEN FOOT (10') MINIMUM HORIZONTAL SEPARATION... 17. THE CONTRACTOR SHALL NOTIFY 'CALL BEFORE YOU DIG' AT LEAST 72 HOURS... 18. ALL EXISTING UTILITIES TO BE RELOCATED, RESET AND/OR RECONNECTED... 19. WHERE EXISTING UTILITY POLES NEED TO BE RELOCATED OR REMOVED... 20. ALL UTILITY LINES DAMAGED BY CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE PERTINENT UTILITY COMPANY... 21. ALL EXISTING WATER, STORM OR SANITARY SEWER (PRIOR WPCA APPROVAL REQUIRED) LINES NOTED TO BE ABANDONED ARE TO BE EITHER REMOVED OR SAND FILLED... 22. ALL UTILITIES SHALL BE INSTALLED UNDERGROUND IN ACCORDANCE WITH THE STANDARD PRACTICES OF THE STATE... 23. ALL FILL REQUIRED UNDER UTILITY LINES FOR BELOW GRADE EXCAVATIONS, SHALL BE SELECT GRANULAR MATERIAL... 24. PROVIDE WELL-BRACED SHORING AT EXCAVATIONS NEAR EXISTING STRUCTURES... 25. BELOW GRADE PRECAST STRUCTURES ARE TO BE CONSTRUCTED TO RESIST HYDROSTATIC UPLIFT... 26. PROVIDE SIX INCH (6") MINIMUM OF CRUSHED STONE OR PIPE BEDDING IN EARTH UNDER ALL STRUCTURES...

- CONSTRUCTION - CONT'D: 27. THE CONTRACTOR SHALL PROPERLY PROTECT ADJOINING PROPERTY OUTSIDE THE PROJECT LIMITS FROM DAMAGE... 28. ALL DRIVEWAYS, ROADS, SIDEWALK AND YARD AREAS DISTURBED BY CONSTRUCTION IN OR OUTSIDE THE PROJECT AREA SHALL BE RETURNED TO THEIR ORIGINAL CONDITION OR BETTER... 29. THE CONTRACTOR SHALL BE COMPLETELY RESPONSIBLE FOR UNDERTAKING ALL MEASURES NECESSARY TO PREVENT EROSION AND SILTATION... 30. THE CONTRACTOR SHALL TAKE SPECIAL CAUTION TO PRESERVE AND PROTECT FROM INJURY ALL TREES AND VEGETATION... 31. THE CONTRACTOR IS FURTHER RESTRICTED FROM CAUSING ANY UNNECESSARY EXCAVATIONS WITHIN THE DESIGNATED WETLAND AREA... 32. ALL CONSTRUCTION MATERIALS, PRACTICES AND PROCEDURES SHALL CONFORM TO THE MUNICIPALITY'S CONSTRUCTION STANDARDS FOR STREETS, HIGHWAYS, DRIVEWAYS AND UTILITIES AS LAST AMENDED AND WHERE THE MUNICIPALITY'S REGULATION IS SILENT...

- PROJECT RELATED: 1. SITE AREA = 766,828 SF, 9,029 AC. 2. THE PROPERTY IS LOCATED IN ZONE RR. 3. THE PARCEL IS LOCATED IN ZONE C (AREA OF MINIMAL FLOODING), AS SHOWN ON THE FEDERAL FLOOD INSURANCE RATE MAP... 4. THE CONTOURS SHOWN ON THESE PLANS ARE FROM AN AERIAL SURVEY PREPARED BY GOLDEN AERIAL SURVEYS... 5. ALL PROPOSED UTILITIES ON-SITE SHALL BE INSTALLED UNDERGROUND. 6. ALL CONSTRUCTION MATERIALS, PRACTICES AND PROCEDURES SHALL CONFORM TO THE TOWN OF LITCHFIELD ZONING REGULATIONS. 7. TOWN OF LITCHFIELD MAP-067; BLOCK-041; LOT-31A. 8. THE INLAND WETLANDS SHOWN WERE FLAGGED IN THE FIELD BY WILLIAM KENNY ASSOCIATES, LLC...

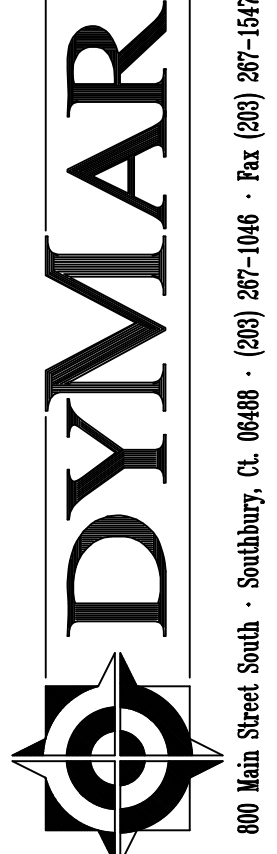
Table of abbreviations with columns for Abbreviation and Description. Includes terms like ACQ'D, APPROX, ARCH, ACCMP, B.L., B.M., BIT, B.C.L.C., B., B.B., BORY, C.I.P., C.B., CTR., C.C., CL, CH, CH.B., CONC., CONST., CTR. LN., CT., PROJ., C.M.P., C.P.P., CULV., CO., CO., D.T., DA, D.I., D.P., ESM.T., E., E.B., E.O.R., E.O.W., ELEC., EL., E.W., E.S., ENG., EVGN., EX., F.B., F.E., FLR., FT., FND., FR., GALV., G.P.D., GALL., GAR., G.G., GRAV., G.S.C., G.S.T.C., G.P.S., GRD., G.D. RL., H.B., H.W., HGT., HEM., HICK., HWY., HWY. MON., HORIZ., H.P., H.R., HYD., IN., I.P., INV., LT., L., L.V.C., LIM., LF., MAC., M.B., M.H., MPL., MAX., M.H.W., M.J., M.B.R., MIN., MISC., MON., N.B., N.O., #, O.T., OHW, P., P.E., P.C.C., P.C., P.I., P.R.C., P.V.C.C., P.V.C., P.V.I., P.V.R.C., P.V.T., P.O.C., P.O.T., P.V.C., PD, PROJ., PL, PROP., PUB. UTILITY, P.B., P.S., R., R.R., REIN.F., R.C.P., RELOC., REQ'D, RET., R.W., RT/, R.O.W., RD., R.W., R.D., SAN., S.M.H., SECT., S.T., SHLD., S.W., S.F., S., S.B., SPEC., SPK., SP. ELEV., STAKE, STB., ST. W., S.S., STY., ST., S.L.J., SYC., TAN., TEL., TEMP., T.E., T.H., T.C.G.R., TMGR., T.S., T.B., T.F., T.G., TRANS., T.P., TWIN, TW, C.G.R., U.D., UG, VERT., V.C., V.C.P., W.B.K., W.G., W.M., W.S.E., W., W.B., WL., W.W., W.R.R., W/, W/O, WD., W.I., YD., Y.D., MONUMENT, NORTH, NORTH BOUND, NUMBER, OIL TRAP, OVER HEAD WIRE(S), PERCOLATION TEST, PERMANENT EASEMENT, POINT OF COMPOUND CURVATURE, CURBING, POINT OF INTERSECTION, POINT OF TANGENCY, POINT OF REVERSE CURVATURE, POINT OF VERTICAL COMPOUND CURVATURE, POINT OF VERTICAL CURVATURE, POINT OF VERTICAL INTERSECTION, POINT OF VERTICAL REVERSE CURVATURE, POINT OF VERTICAL TANGENCY, POINT ON CURVATURE, POINT ON TANGENT, POLYVINYL CHLORIDE PIPE, POND, PROJECT, PROPERTY LINE, PROPOSED, PUBLIC UTILITY, PULL BOX, RAILROAD STATION, RADIUS, RAILROAD, REINFORCED, REINFORCED CONCRETE PIPE, RELOCATED OR RELOCATION, RETAINING, RETAINING WALL, RIGHT, RIGHT OF WAY, ROAD, ROADWAY, ROOF DRAIN, SANITARY, SANITARY MANHOLE, SECTION, SEPTIC TANK, SHOULDER, SIDEWALK, SILT FENCE, SOUTH OR SLOPE, SOUTH BOUND, SPECIFICATION, SPIKE, SPOT ELEVATION, STAKE, STANDARD, STONE WALL, STORM DRAIN OR SEWER, STORY, STREET, SUPER LOCK JOINT, SYCAMORE, TANGENT, TELEPHONE, TEMPORARY, TEMPORARY EASEMENT, TEST HOLE, THREE CABLE GUIDE RAILING, TIMBER, TOE OF SLOPE, TOP OF BANK, TOP OF FRAME, TOP OF GRATE, TRANSITION, TRAVERSE GUIDE, TWIN, TWO CABLE GUIDE RAILING, UNDER DRAIN, UNDERGROUND GAS, VERTICAL, VERTIFIED CLAY PIPE, WATER BREAK, WATER GATE, WATER MAIN, WATER SURFACE ELEVATION, WEST, WEST BOUND, WETLAND, WINGWALL, WIRE ROPE RAILING, WITH, WITHOUT, WOOD, WROUGHT IRON, YARD, YARD DRAIN

Project information block containing: CLIENT: Gregory M. & Robin P. Green, 19 Little Pitch Road, Litchfield, CT 06759. PROJECT: Two Lot Subdivision, 19 Little Pitch Road, Litchfield, CT 06759. TITLE: General Legend, Abbreviations, & Notes. Includes a signature line for Mark E. Lankor, P.E. #12369, dated 04/08/21, and a scale of 1" = 30'-0".



NOT FOR CONSTRUCTION

DRAWINGS TO BE USED FOR LAND USE SUBMISSIONS ONLY



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REVISION

Table with 3 columns: NO., DATE, DESCRIPTION. Contains revision entries.

DRAWN BY

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CHECKED BY

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DATE

Table with 3 columns: NO., DATE, DESCRIPTION. Contains date entries.

NO.

Table with 3 columns: NO., DATE, DESCRIPTION. Contains no. entries.

DATE

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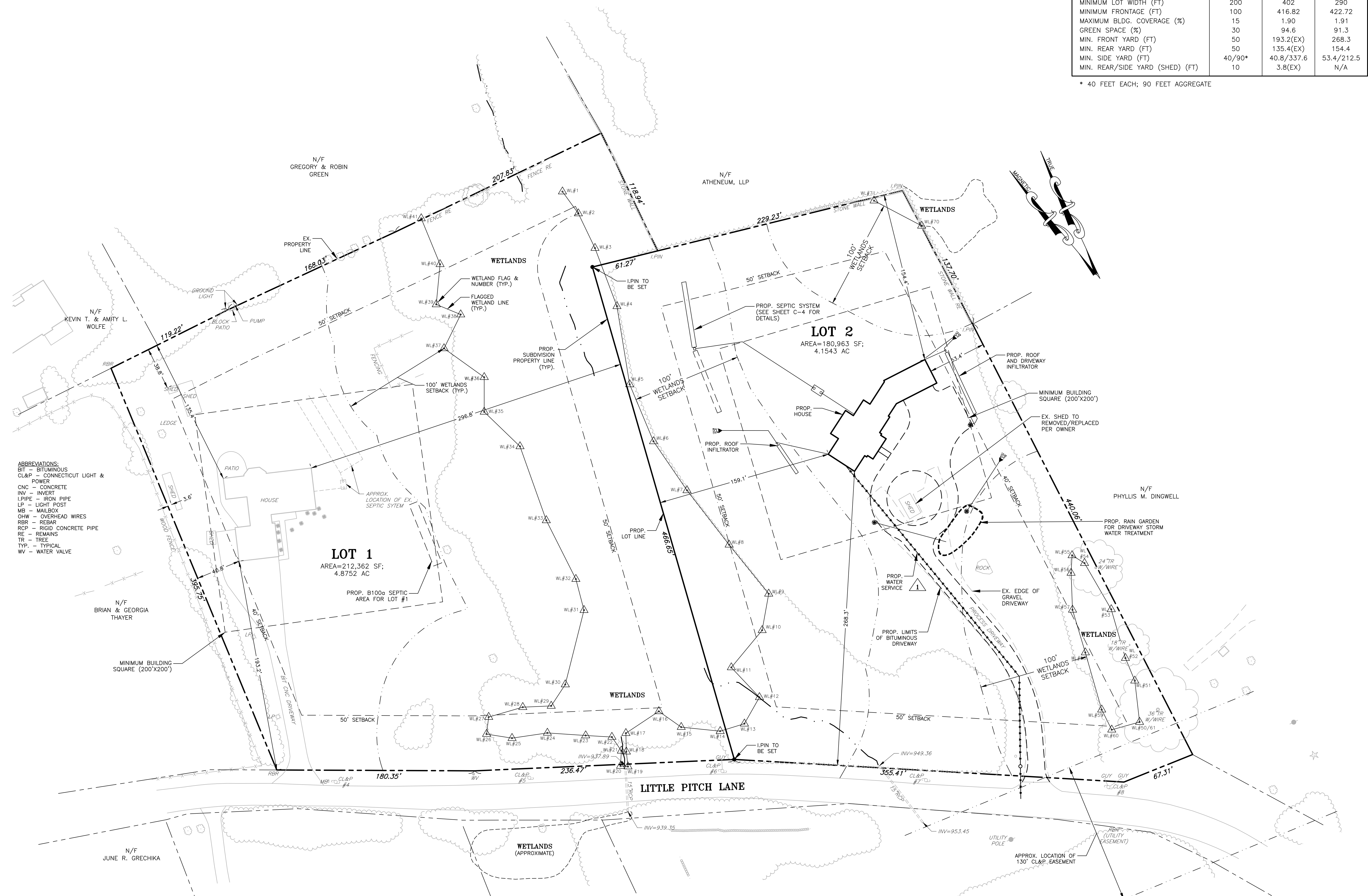
Table with 3 columns: NO., DATE, DESCRIPTION. Contains date entries.

NO.

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ZONING DATA			
ZONING DISTRICT: RR			
PARAMETER	REQUIRED	PROVIDED	PROVIDED
MINIMUM LOT SIZE (SF)	80,000	LOT #1 212,362	LOT #2 180,963
MINIMUM LOT WIDTH (FT)	200	402	290
MINIMUM FRONTAGE (FT)	100	416.82	422.72
MAXIMUM BLDG. COVERAGE (%)	15	1.90	1.91
GREEN SPACE (%)	30	94.6	91.3
MIN. FRONT YARD (FT)	50	193.2(EX)	268.3
MIN. REAR YARD (FT)	50	135.4(EX)	154.4
MIN. SIDE YARD (FT)	40/90*	40.8/337.6	53.4/212.5
MIN. REAR/SIDE YARD (SHED) (FT)	10	3.8(EX)	N/A

\* 40 FEET EACH; 90 FEET AGGREGATE



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  - INV - INVERT
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NO.	DATE	REVISION	DESCRIPTION	DRAWN BY	CHECKED BY
1	04-09-21		Revised per Agency comments	S.A.L.	M.E.L.

**DYMAR**  
 800 Main Street South · Southbury, CT 06488 · (800) 267-1066 · Fax (800) 307-1547  
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**NOT FOR CONSTRUCTION**

CLIENT: Gregory M. & Robin P. Green  
 19 Little Pitch Road  
 Litchfield, CT 06759

PROJECT: Two Lot Subdivision  
 19 Little Pitch Road  
 Litchfield, CT 06759

TITLE: Site Layout Plan

DATE: 04/09/21  
 SCALE: 1"=40'  
 DESIGNED BY: S.A.L.  
 DRAWN BY: S.A.L.  
 CHECKED BY: M.E.L.  
 JOB NO: 01039  
 DRAWING NO: C-2

NOT VALID WITHOUT SIGNATURE AND ORIGINAL SEAL

MARK E. JANCOR, P.E. #12369

**LEGEND**

- WETLANDS 1.86 AC ±
- 100' WETLANDS REVIEW AREA 4.11 AC ±
- DISTURBED UPLANDS AREA 0.21 AC ±
- STEEP SLOPES 1.09 AC ±
- ..... SOIL BOUNDARY LIMITS

CUT/FILL VOLUMES		
	CUT (CYD)	FILL (CYD)
RAW	2,082	338
SELECT	256	-
NET	2,000	-

\*SELECT MATERIALS INCLUDE DRIVEWAY MATERIALS.

**SOIL LEGEND:**

**UPLAND:**

- 60B CANTON AND CHARLTON SOILS, 3% TO 8% SLOPE
- 73C CHARLTON-CHATFIELD COMPLEX, VERY ROCKY, 3% TO 15% SLOPES
- 75C HOLLIS-CHATFIELD-ROCK OUTCROP COMPLEX, 3% TO 15% SLOPES

**WETLAND:**

- 3 RIDGEBURY, LEICESTER, WHITMAN SOILS, EXTREMELY STONY
- 15 SCARBORO MUCK

**NOTE:**

1. B-100A SEPTIC AREA IS DESIGNED FOR A 5 BEDROOM HOUSE WITH A PERCOLATION RATE OF 10.1-20 MINUTES PER INCH (REFER TO SHEET C-4 FOR SOIL LOG DATA). SEPTIC LEACHING FIELD SHALL CONSIST OF 75' OF MANTIS 536-8 UNITS WITH EIA OF 11 SFT/LF TO PROVIDE 825 SFT FOR THE REQUIRED EIA OF 787.5 SFT OR APPROVED EQUAL.

**SUMMARY OF ON-SITE REGULATED ACTIVITIES**

R.I.A.#	DESCRIPTION OF ACTIVITY	WETLAND AREA			100' WETLANDS SETBACK AREA			WATERCOURSE ALTERATION	
		CUT(CY)	FILL(CY)	AREA(SF)	CUT(CY)	FILL(CY)	AREA(SF)	LENGTH (FT)	
1	LOT #2 UPLANDS ACCESS DRIVE	0	0	0	326	0	7,793	0	
2	LOT #2 UPLANDS RAIN GARDEN	0	0	0	89	0	880	0	
3	LOT #2 UPLANDS SEWAGE DISPOSAL SYSTEM	0	0	0	27	0	400	0	
4	LOT #2 ROOF RUNOFF INFILTRATOR SYSTEM	0	0	0	9	0	291	0	
REGULATED IMPACT AREA = R.I.A.		0	0	0	451	0	9,364	0	
				0 AC			0.21 AC	0	



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NO.	DATE	REVISION	DESCRIPTION	DRAWN BY	CHECKED BY
1	04-09-21		Revised per Agency comments	S.A.L.	M.E.L.

**DYMAR**  
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**NOT FOR CONSTRUCTION**

CLIENT: Gregory M. & Robin P. Green  
 19 Little Pitch Road  
 Litchfield, CT 06759

PROJECT: Two Lot Subdivision  
 19 Little Pitch Road  
 Litchfield, CT 06759

TITLE: Lot #2 Site Development & Wetlands Impact Plan

DATE: 04/08/21  
 SCALE: 1"=40'  
 DESIGNED BY: S.A.L.  
 DRAWN BY: C.C.B.  
 CHECKED BY: M.E.L.  
 JOB NO: 01039  
 DRAWING NO: C-3

NOT VALID WITHOUT SIGNATURE AND ORIGINAL SEAL

MARK E. JANOR, P.E. #12389

**GENERAL SEPTIC NOTES AND SPECIFICATIONS:**

- PROPERTY LINE INFORMATION IS FROM A SURVEY PREPARED BY THIS OFFICE.
- CONTOURS FOR THE SITE PLAN ARE FROM AN AERIAL SURVEY PREPARED BY GOLDEN AERIAL SURVEYS, WATERBURY, CT. ADDITIONAL CONTOURS ARE FROM A FIELD SURVEY PERFORMED BY DYMAR DURING THE FALL OF 2020.
- ELEVATIONS ARE BASED ON 1988 NORTH AMERICAN VERTICAL DATUM.
- LOT AREA = 4.15 ACRES
- ALL CONSTRUCTION OF THE SEWAGE DISPOSAL SYSTEM IS TO BE DONE IN ACCORDANCE WITH THE STANDARDS OF THE TORRINGTON AREA HEALTH DISTRICT.
- BEFORE ANY CONSTRUCTION BEGINS ON SITE, THE DISPOSAL AREA MUST BE MARKED OFF AND ISOLATED SO AS TO EFFECTIVELY PROTECT THE AREA AGAINST DAMAGE BY EROSION, STORAGE OF EARTH AND MATERIALS, OR COMPACTION BY MACHINES OR EQUIPMENT. DAMAGE TO ANY PORTION OF THE SYSTEM, DUE TO ANY CAUSE, SHALL BE REPAIRED.
- PROPOSED BUILDING AND SEPTIC SYSTEM ARE TO BE STAKED OUT BY A REGISTERED LAND SURVEYOR. SURVEYOR TO TRANSFER STABLE BENCHMARK TO DISPOSAL AREA FOR USE BY CONTRACTOR IF REQUIRED.
- ALL PIPING FROM THE FOUNDATION WALL TO THE SEPTIC TANK SHALL BE FOUR INCH (4") DIAMETER, OR THREE INCH (3") DIAMETER. MATERIALS MAY BE CAST IRON HUBLESS ASTM A-888, CAST IRON BELL AND SPIGOT ASTM A-74, DUCTILE IRON ANSI A-21.51, PVC SCHEDULE 40 OR 80 ASTM D-1785 OR ASTM D-2665 AND PVC SCHEDULE 40 ASTM F-1760. FOR PRESSURE WATER PIPE, ALLOWABLE MATERIALS: PVC AWWA C-900-PC 100 PSI MIN PRESSURE WATER PIPE, OR APPROVED EQUAL AND LAID AT A MINIMUM GRADE OF ONE-QUARTER INCH (1/4") PER FOOT.
- FOR THE SEPTIC TANK USE A "ST-1250 SEPTIC TANK", WITH H-10 LOADING AS MANUFACTURED BY CONNECTICUT PRECAST CORP., MONROE CONN. (203-265-8688), OR APPROVED EQUAL. THE TANK SHALL BE EQUIPPED WITH MANHOLE COVERS WHICH HAVE BEEN PLACED WITH NOTIFICATION OF ITS TWO COMPARTMENT CONSTRUCTION AND THE DANGER OF ENTERING THE TANK DUE TO NOXIOUS GASES. THE TANK SHALL ALSO BE EQUIPPED WITH INLET AND OUTLET BAFFLES AND AN OUTLET NON-BY-PASS EFFLUENT FILTER.
- SEPTIC TANK SHALL BE INSTALLED SUCH THAT THE ACCESS COVERS ARE ACCESSIBLE WITHIN SIX INCHES (6")± OF THE FINISHED GRADE. IF THE DESIGN WARRANTS ACCESS MANHOLES BE CONSTRUCTED DUE TO THE DEPTH OF THE TANK, THEY SHALL BE PLACED OVER BOTH INLET AND OUTLET AND EXTEND TO WITHIN SIX INCHES (6") OF FINISHED GRADE.
- ALL PIPING BETWEEN SEPTIC TANK AND LEACHING FIELDS TO BE TIGHT JOINTED FOUR INCH (4") DIAMETER PVC ASTM D-3034 SDR-35 AND SHALL BE SPECED ON A COMPACTED SURFACE.
- ALL PIPING WITHIN TWENTY FIVE FEET (25') OF A CURTAIN OR FOOTING DRAIN SHALL BE PVC ASTM D-2241, SDR 21 EQUIPPED WITH RUBBER COMPRESSION GASKET COUPLINGS, CAST IRON (HUB LESS OR BELL AND SPIGOT) ASTM A-74, DUCTILE IRON ANSI 21.51, OR APPROVED EQUAL.
- FOR DISTRIBUTION BOXES USE A "DB-3" DISTRIBUTION BOX AS MANUFACTURED BY CONNECTICUT PRECAST CORP., MONROE CONN. (203-265-8688), OR APPROVED EQUAL. ALL OUTLETS TO BE EQUIPPED WITH SPEED LEVELERS AS BY TUF-TITE, INC. OR APPROVED EQUAL. SPEED LEVELERS SHALL BE ADJUSTED TO THE INVERTS AS INDICATED IN THE PROPOSED TABLE.
- ALL STRUCTURES SHALL BE INSTALLED ON A SIX INCH (6") MINIMUM GRAVEL FOUNDATION. ALL PIPES SHALL BE INSTALLED ON A FOUR INCH (4") MINIMUM GRAVEL FOUNDATION AND THE BEDDING SHALL EXTEND TO THE TOP OF THE PIPE.
- REFER TO DESIGN NOTES FOR TYPE AND SIZE OF LEACHING FIELD. IF ANOTHER TYPE OF LEACHING SYSTEM IS PROPOSED CONTACT THE DESIGN ENGINEER FOR POSSIBLE CHANGES TO THE SIZE OF THE LEACHING AREA. ALL CHANGES MUST BE APPROVED BY THE DESIGN ENGINEER AND LOCAL HEALTH DEPARTMENT.
- ABSORPTION AREAS MUST BE BACKFILLED, CAREFULLY LOADED, GRADED, AND SEEDED IMMEDIATELY FOLLOWING CONSTRUCTION. BACKFILL SHALL BE CLEAN EARTH ONLY AND SHALL NOT BE TAMPED, ROLLED OR PUDDLED OTHER THAN WITH THE USE OF A HAND ROLLER FOR LAWN MAKING.
- ALL OTHER AREAS DISTURBED, DUE TO CONSTRUCTION, SHALL BE LOADED SEEDED, AND HAY MULCHED AS PER STATE EROSION CONTROL GUIDELINES.
- LEACHING AREAS SHALL BE PROTECTED AT ALL TIMES FROM SURFACE WATER RUNOFF BY APPROPRIATE BERMING AND SWALES. AT NO TIME SHALL SURFACE WATER RUNOFF BE PERMITTED TO ENTER ANY LEACHING SYSTEM COMPONENTS.
- THE RESERVE AREA NEED NOT BE PREPARED AT THIS TIME, BUT WILL REQUIRE A DESIGN SYSTEM AS PREPARED BY A PROFESSIONAL ENGINEER.
- ALL STONE WALLS WITHIN 25' OF THE SEPTIC LEACHING FIELDS ARE TO BE REMOVED UNLESS ITS FOUNDATION IS WITHIN 12" OF EXISTING GROUND, AND APPROVED BY THE ENGINEER.
- THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING THE PLANS AND SCOPE THE ENGINEER FOR ANY CLARIFICATION OR INTERPRETATION OF THE SCOPE IN ADVANCE OF COMMENCING ANY PORTION OF THE WORK. THE CONTRACTOR IS FURTHER RESPONSIBLE TO VERIFY ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE PLANS PRIOR TO PROCEEDING WITH CONSTRUCTION, ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER WHO SHALL HAVE FINAL SAY AS TO ACTUAL DIMENSIONS, ELEVATIONS OR INTERPRETATION OF THE SCOPE BY WHICH TO CONSTRUCT.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH STATE OF THE ART DESIGN TECHNIQUES BUT DOES NOT GUARANTEE AGAINST FAILURE DUE TO MISUSE, LACK OF MAINTENANCE OR INCREASED FLOWS.
- THE OWNER IS RESPONSIBLE FOR SELECTING A CONTRACTOR TO INSTALL THE SYSTEM. THE OWNER SHALL BE RESPONSIBLE FOR RETAINING A PROFESSIONAL LICENSED ENGINEER TO INSPECT THE CONSTRUCTION OF THE SYSTEM. THE ENGINEER IS NOT RESPONSIBLE FOR METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES USED BY THE CONTRACTOR IN COMPLETING OR FAILURE OF THE CONTRACTOR TO PERFORM THE WORK IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR GIVING THE ENGINEER 48 HOURS NOTICE FOR ALL REQUIRED INSPECTIONS. THE OWNER IS FURTHER ADVISED TO HAVE THE CONTRACTOR NOTIFY THEM AND THE ENGINEER OF THE PROCEDURES AND SCHEDULE TO INSTALL THE SYSTEM PRIOR TO THE COMMENCEMENT OF WORK.
- THE DEEP TEST HOLE AND PERCOLATION TESTS THAT WERE PERFORMED ON THE SITE ARE SPECIFIC TO THE TESTED LOCATION ONLY. THESE RESULTS DO NOT WARRANT THAT THESE CONDITIONS WILL PREVAIL WITHIN THE ENTIRE DISPOSAL AREA. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE OWNER SHOULD CONDITIONS DIFFER FROM THE ORIGINAL TEST DATA. THE OWNER SHALL BE RESPONSIBLE FOR NOTIFYING THE DESIGN ENGINEER.
- CONTRACTOR SHALL NOTIFY "CALL BEFORE YOU DIG" AT 1-800-922-4455 NO LESS THAN 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

**INSPECTIONS:**

- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE TORRINGTON AREA HEALTH DISTRICT FOR ALL OF THEIR REQUIRED INSPECTIONS.
- THE CONTRACTOR IS ALSO RESPONSIBLE FOR COORDINATING WITH THE DESIGN ENGINEER OR HIS AUTHORIZED AGENT, INSPECTIONS OF THE SYSTEM AT THE FOLLOWING MINIMUM STAGES OF CONSTRUCTION:
  - AFTER DISPOSAL AREA HAS BEEN STRIPPED AND SCARIFIED.
  - AFTER THE SELECT FILL HAS BEEN PLACED BUT PRIOR TO ANY PORTION ON THE DISPOSAL SYSTEM TRENCHING BEING INSTALLED.
  - AFTER THE SEPTIC TANK, PIPE, AND LEACHING SYSTEMS HAVE BEEN PLACED, BUT PRIOR TO TOTAL BACKFILLING. CONTRACTOR MAY BACKFILL OVER A PORTION OF THE TRENCHES LEAVING THE SEPTIC TANK, ALL DISTRIBUTION BOXES, AND THE ENDS AND ANGLE POINTS OF ALL TRENCHES OPEN FOR INSPECTION.

**DESIGN DATA**

- SYSTEM IS DESIGNED FOR A SINGLE FAMILY RESIDENCE WITH 4 BEDROOMS.
- MINIMUM SIZE SEPTIC TANK REQUIRED BY THE TORRINGTON AREA HEALTH DISTRICT IS 1,250 GALLON.
- SIZE OF PROPOSED SEPTIC TANK IS 1,250 GALLONS.
- SYSTEM IS DESIGNED BASED ON A PERCOLATION RATE OF 1" IN 1 TO 10.1 MINUTES.
- MINIMUM SIZE OF LEACHING SYSTEM REQUIRED BY THE STATE HEALTH CODE IS 660 SQUARE FEET OF EFFECTIVE AREA.
- SIZE OF SYSTEM PROVIDED IS 60 LINEAR FEET OF 18" HIGH MANTIS 536-8 UNITS WITH AN APPLICATION RATE OF 11 SFT/LF, SFT PROVIDED = (60 LF) x (11 SFT/LF) = 660 SFT.
- MINIMUM LEACHING SPREAD NOT REQUIRED AS RESTRICTIVE LAYER MORE THAN 60" BELOW FINISHED GRADE.
- SYSTEM "WAS NOT" DESIGNED FOR GARBAGE GRINDER USE.
- SYSTEM "WAS NOT" DESIGNED FOR A BATH TUB WITH A CAPACITY GREATER THAN 100 GALLONS. IF ANYMORE ARE TO BE INSTALLED CONTACT THE DESIGN ENGINEER FOR REQUIRED INCREASE TO THE SEPTIC TANK AND/OR LEACHING AREAS. ALL CHANGES MUST BE APPROVED BY THE DESIGN ENGINEER AND LOCAL HEALTH DEPARTMENT OFFICIALS.
- LOT IS SERVED BY PUBLIC WATER.

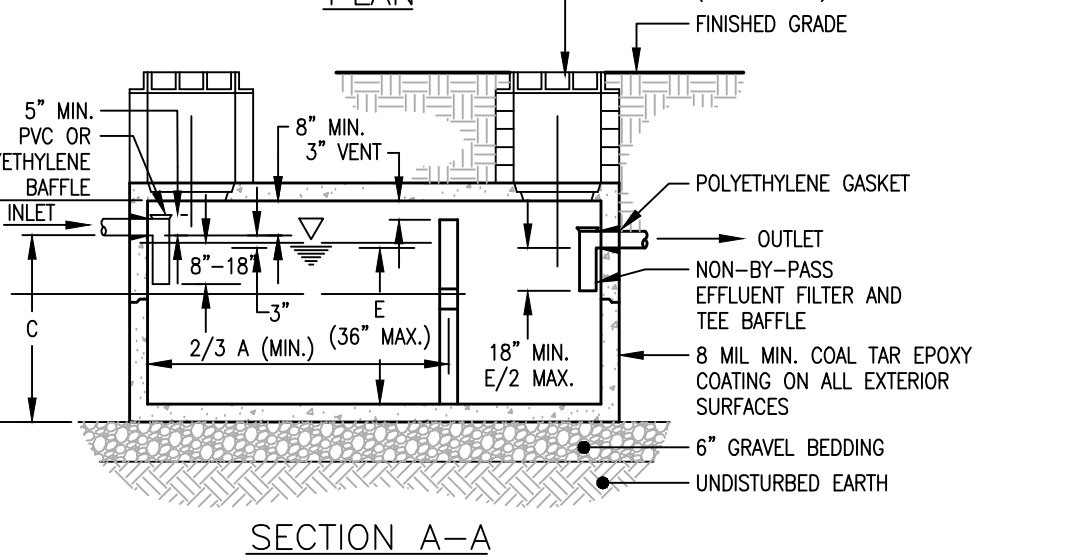
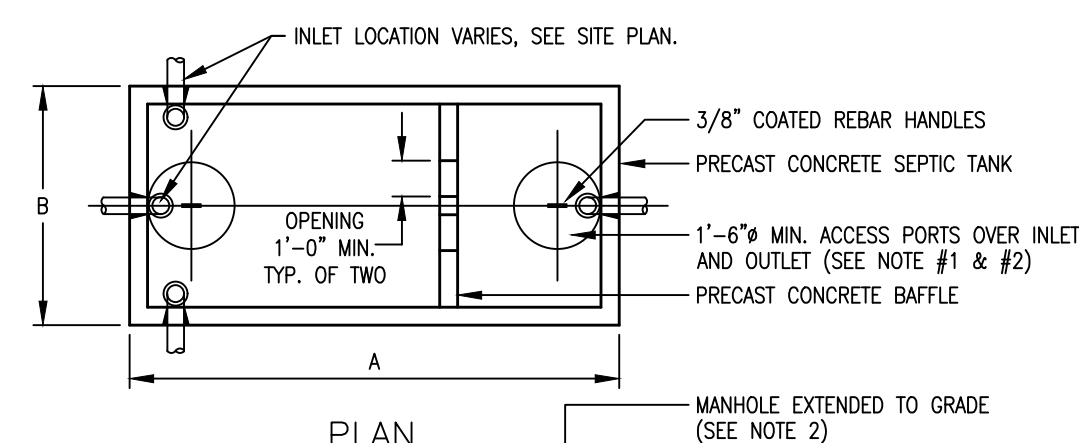
**AS-BUILT PLANS**

- A CERTIFIED AS-BUILT PLAN MUST BE PREPARED BY A REGISTERED LAND SURVEYOR. THE PLAN MUST THEN BE FURNISHED TO THE TORRINGTON AREA HEALTH DISTRICT ALONG WITH A CERTIFICATION OF COMPLIANCE FROM THE INSPECTING ENGINEER.
- JUST PRIOR TO PERMANENT LAND RESTORATION THE CONTRACTOR IS RESPONSIBLE FOR HAVING REASONABLY AVAILABLE ACCESS TO ALL SYSTEM STRUCTURES AND THE ENDS OF ALL TRENCHES FOR THE PREPARATION OF THE AS-BUILT PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE OWNER REGARDING THE SCHEDULING OF THE FIELD WORK TO PREPARE THE AS-BUILT PLANS.

LIQUID CAPACITY	A LENGTH	B WIDTH	C INVERT	D HEIGHT	E LIQUID LEVEL	UNIT(S)	PERFO
1000 GAL.	8'-0"	4'-4"	4'-3"	4'-9"	4'-0"	0	
1250 GAL.	10'-0"	5'-2"	3'-5"	3'-11"	3'-2"	1	
1500 GAL.	10'-0"	5'-2"	4'-3"	4'-9"	4'-0"	0	
2000 GAL.	11'-3"	5'-10"	4'-2"	5'-9"	3'-11"	0	
2500 GAL.	11'-3"	5'-10"	5'-2"	6'-0"	4'-11"	0	

NOTE: DIMENSIONS MAY VARY DEPENDING ON MANUFACTURER. CONTRACTOR TO VERIFY SUITABILITY OF OTHER TANK DIMENSIONS PRIOR TO INSTALLATION.

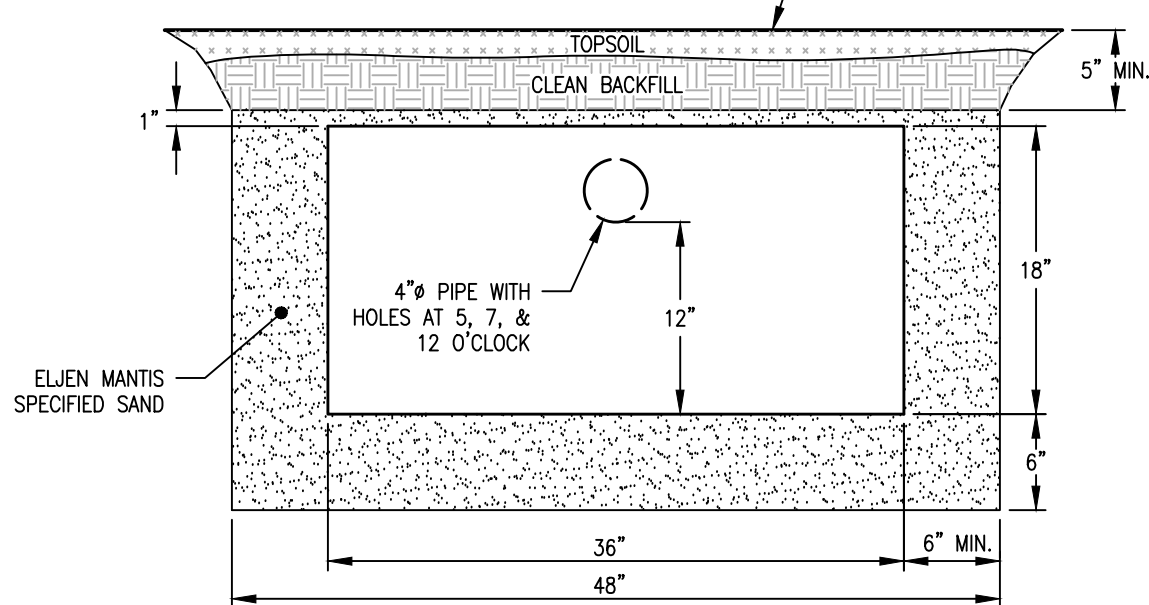
- NOTES:
- MANHOLE COVERS SHALL BE LABELED WITH NOTIFICATION OF ITS TWO COMPARTMENT CONSTRUCTION AND WARNING TO EVERYONE THAT "ENTRANCE INTO TANK COULD BE FATAL."
  - ACCESS MANHOLES ARE REQUIRED IN ALL PAVED AREAS, AND IN ALL UNPAVED AREAS WHERE HEIGHT TO TOP OF TANK EXCEEDS 1'-0". INSPECTION COVERS OVER BAFFLES SHALL BE NO GREATER THAN 12 INCHES BELOW FINISHED GRADE.
  - ALL TANK INFORMATION AND TANK LIQUID CAPACITY SHALL BE MARKED ON THE TOP OF THE TANK, BETWEEN THE OUTLET ACCESS HOLE AND OUTLET WALL, OR ON THE VERTICAL OUTLET WALL BETWEEN THE TOP OF THE TANK AND THE TOP OF THE OUTLET OPENING.
  - SPECIFICATIONS CONCRETE MINIMUM STRENGTH - 4000 PSI @ 28 DAYS WITH A 4% TO 7% AIR ENTRAINMENT. STEEL REINFORCEMENT - ASTM A615, GRADE 60, 1" MINIMUM COVER. CONSTRUCTION JOINTS TO BE SEALED WITH 1" BUTYL RUBBER OR EQUAL AND PARDED WITH A WATERPROOFING GROUT. TOTAL SYSTEM TO BE WATER-TIGHT. DESIGN LOADING - ASHTO H-20 FOR ALL TRAVELED AREAS, LIGHT DUTY SERVICE FOR ALL NON-TRAVELED AREAS. TANK TO BE ASTM C1227 COMPLIANT.



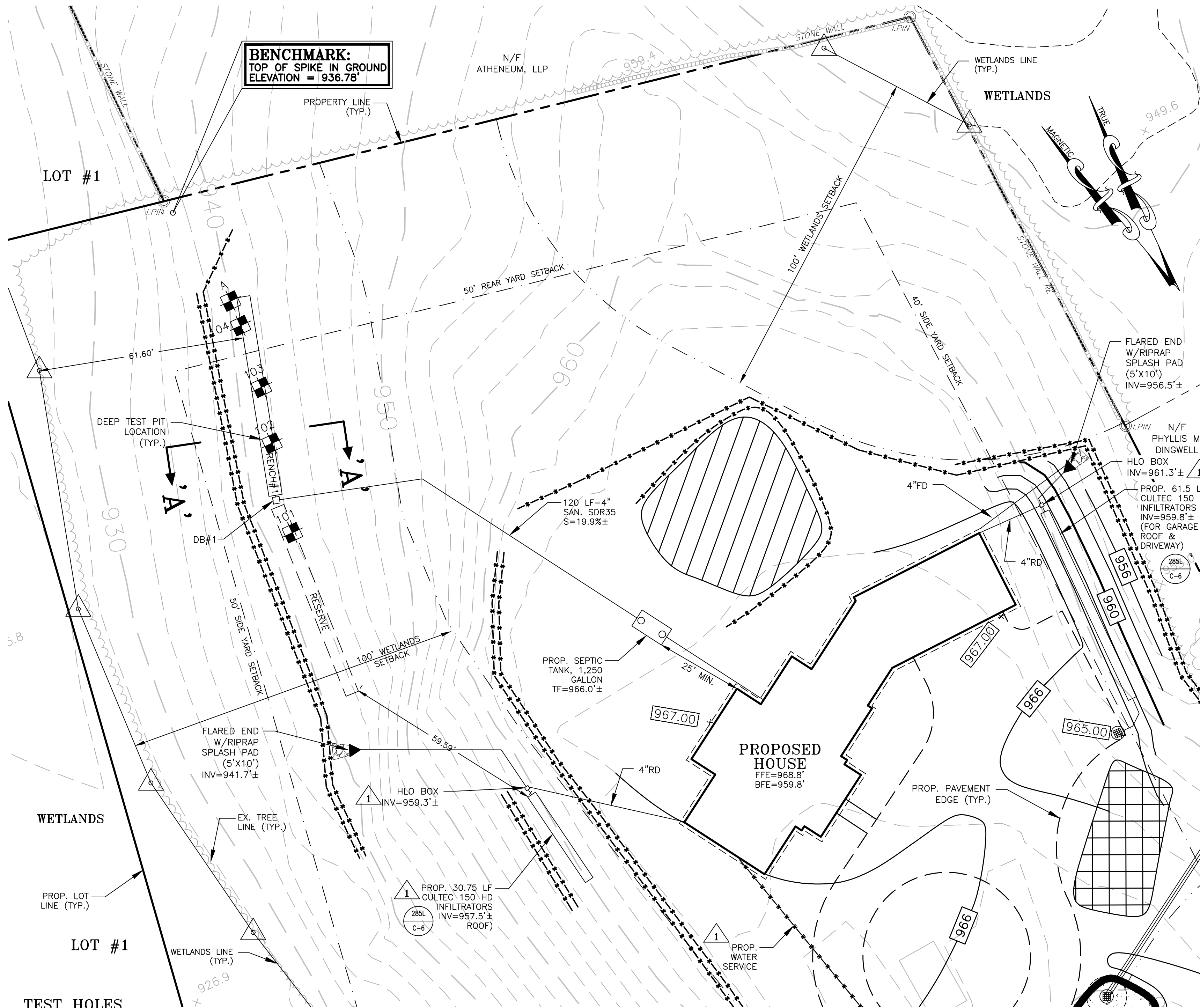
PRECAST CONCRETE SEPTIC TANK N.T.S.

- NOTE:
- VENTING REQUIRED WHEN MORE THAN 18" OF COVER AS MEASURED FROM THE TOP OF THE UNIT TO FINISHED GRADE.
  - SPECIFIED SAND REQUIREMENTS:

SIeve SIZE	PERCENT PASSING (WET SIEVE)
3/8"	95-100
#4	80-100
#8	50-85
#16	25-60
#30	5-30
#60	<10
#100	<5
#200	<5



18" MANTIS 536-8 LEACHING TRENCH N.T.S.



SITE PLAN SCALE: 1" = 20'

LOCATION	COMMENTS	INVERTS	BOT. ELV.	LENGTH
FFE			968.80'	
HOUSE INV.			964.00'	
ST-IN	ST-1250		963.45'	
ST-OUT			963.20'	
DB#1-IN	DB-3		939.27'	
DB#1-OUT			939.10'	
TR #1			939.00'	60 LF

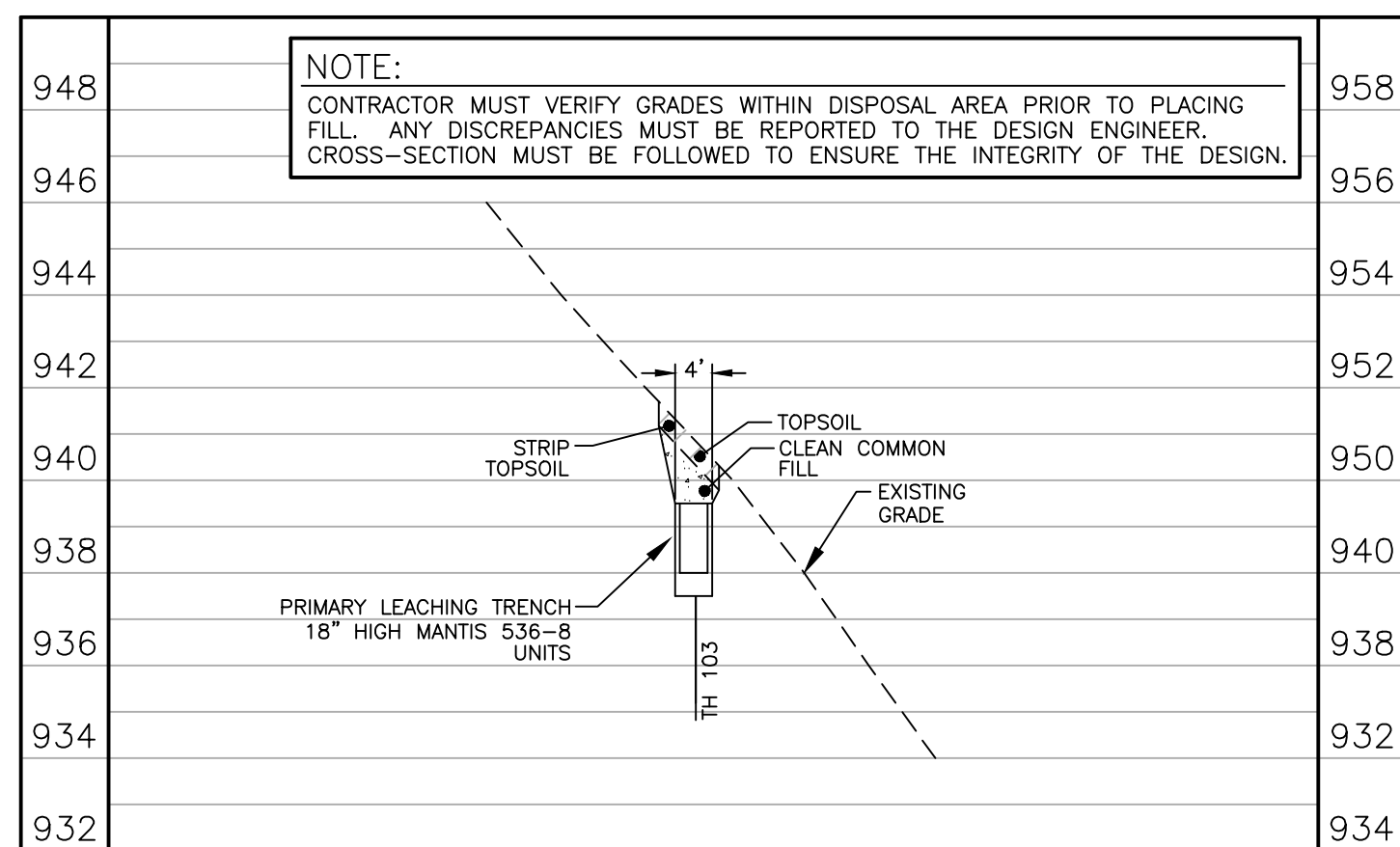
\* SUBGRADE AT SAND

**TEST HOLES**

TESTING PERFORMED BY DYMAR ON JANUARY 19, 2021 WITH THE SANITARIAN, LITTLE PITCH ROAD, JOB #01039

- TEST\_HOLE #101**  
 0'-4" DARK BROWN TOPSOIL  
 4'-26" ORANGE BROWN LOAM  
 26'-84" OLIVE BROWN MEDIUM COARSE SAND, TRACE GRAVEL, TRACE COBBLE
- ROOTS: 4"  
 GROUNDWATER: NONE  
 LEDGE: 84"  
 MOTTLING: NONE
- PERCOLATION TEST #104**  
 DEPTH: 24"  
 DATE: 3/12/21  
 STARTING TIME: 1:50  
 TIME DEPTH:  
 0 MIN 0.78'  
 5 MIN 1.02'  
 10 MIN 1.13'  
 15 MIN 1.23'  
 20 MIN 1.31'  
 25 MIN 1.37'  
 30 MIN 1.42'  
 40 MIN 1.51'  
 50 MIN 1.61'  
 60 MIN 1.71'
- PERCOLATION TEST #105**  
 DEPTH: 18"  
 DATE: 3/12/21  
 STARTING TIME: 2:15 P.M.  
 TIME DEPTH:  
 0 MIN 0.56'  
 5 MIN 0.75'  
 10 MIN 0.94'  
 15 MIN 1.14'  
 20 MIN 1.17'  
 25 MIN 1.20'  
 30 MIN 1.22'  
 40 MIN 1.27'  
 50 MIN 1.33'  
 60 MIN 1.38'
- SEEPAGE RATE: 17/8 MIN
- TEST\_HOLE #102**  
 0'-4" DARK BROWN TOPSOIL  
 4'-22" ORANGE BROWN LOAM  
 22'-63" OLIVE BROWN MEDIUM COARSE SAND, TRACE GRAVEL, TRACE COBBLE
- ROOTS: 27"  
 GROUNDWATER: NONE  
 LEDGE: 63"  
 MOTTLING: NONE
- TEST\_HOLE #103**  
 0'-6" DARK BROWN TOPSOIL  
 6'-36" ORANGE BROWN LOAM, STONY  
 36'-92" OLIVE BROWN MEDIUM COARSE SAND, TRACE GRAVEL, TRACE COBBLE, TRACE STONE
- ROOTS: 34"  
 GROUNDWATER: NONE  
 LEDGE: NONE  
 MOTTLING: NONE
- TEST\_HOLE #104**  
 0'-12" DARK BROWN TOPSOIL

- 12'-48" ORANGE BROWN LOAM, STONY  
 48'-96" OLIVE BROWN MEDIUM COARSE SAND, TRACE GRAVEL, TRACE COBBLE, TRACE STONE
- ROOTS: 12"  
 GROUNDWATER: NONE  
 LEDGE: NONE  
 MOTTLING: NONE
- PERCOLATION TEST #106**  
 DEPTH: 18"  
 DATE: 3/12/21  
 STARTING TIME: 1:50  
 TIME DEPTH:  
 0 MIN 0.56'  
 5 MIN 0.75'  
 10 MIN 0.94'  
 15 MIN 1.14'  
 20 MIN 1.17'  
 25 MIN 1.20'  
 30 MIN 1.22'  
 40 MIN 1.27'  
 50 MIN 1.33'  
 60 MIN 1.38'
- SEEPAGE RATE: 17/16 MIN
- TEST\_HOLE #106**  
 0'-12" DARK BROWN TOPSOIL  
 12'-28" ORANGE BROWN LOAM  
 28'-71" OLIVE BROWN MEDIUM COARSE SAND, TRACE GRAVEL, TRACE COBBLE, TRACE STONE
- ROOTS: 12"  
 GROUNDWATER: 61"  
 LEDGE: NONE  
 MOTTLING: NONE  
 COMMENTS: SEEP @ 24", WEST END



CROSS SECTION A-A  
 HORZ. SCALE: 1"=20'  
 VERT. SCALE: 1"=4'

NO.	DATE	REVISION	DESCRIPTION	DRAWN BY	CHECKED BY
1	04-09-21		Revised per Agency comments	S.A.L.	M.E.L.

**DYMAR**

800 Main Street South · Southbury, Ct. 06488 · (800) 307-1066 · Fax (800) 307-1077

ENGINEERING · PLANNING · SURVEYING · DEVELOPMENT SERVICES

DRAWINGS TO BE USED FOR LAND USE SUBMISSIONS ONLY  
**NOT FOR CONSTRUCTION**

CLIENT: Gregory M. & Robin P. Green  
 19 Little Pitch Road  
 Litchfield, CT 06759

PROJECT: Two Lot Subdivision  
 19 Little Pitch Road  
 Litchfield, CT 06759

TITLE: Lot #2 Septic Plan & Specifications

DATE: 04/08/21  
 SCALE: AS NOTED  
 DESIGNED BY: S.A.L.  
 DRAWN BY: S.A.L.  
 CHECKED BY: M.E.L.  
 JOB NO: 01039  
 DRAWING NO: C-4

# EROSION AND SEDIMENT CONTROL NARRATIVE

## A. PROJECT NARRATIVE:

- The project is a proposed two lot residential subdivision located at 19 Little Pitch Road in Litchfield, CT. The project has been designed in accordance with acceptable engineering standards of practice, reflective of the Zoning, Engineering, and Inland/Wetlands regulation of the Town, as well as other documents published by the CT Department of Energy & Environmental Protection (CTDEEP) and the CT Department of Transportation (CTDOT).
- The infrastructure improvements includes bituminous paved driveway, underground utilities and a private septic system and private water supply well.
- Regulated wetland activities – There are 1.86± Ac of wetlands on-site, that were mapped by William Kenny Associates, LLC, Refer to Sheet C-3.
- Total Estimated Site Disturbance is 0.91± Ac.
- Sequence of Construction Phasing Schedule – Refer to Section 'D' of this sheet for General Terms and practices for Erosion and Sediment Control measures.
- Reference is made to Sheet C-6B for the use of temporary Erosion and Sediment Control devices, their design criteria, and maintenance thereof.
- The OWNER OF RECORD is:  
Gregory M. & Robin P. Green  
19 Little Pitch Road  
Litchfield, CT 06759
- The commencement of construction is tentatively set for April, 2021. It is anticipated the Construction process will take approximately four (4) months to complete. Based on this time period the construction completion date is estimated to be August, 2021.

## B. PRINCIPLES:

The following general principles shall be maintained as an effective means of minimizing erosion and sedimentation during the development process.

- Stripping away of vegetation, regrading or other development shall be done in such a way as to minimize erosion.
- Grading and development plans shall preserve salient natural features, keep cut and fill operations to a minimum, and insure conformity with topography so as to create the least erosion potential and adequately handle the volume and velocity of surface water runoff.
- Whenever feasible, natural vegetation shall be retained, protected and supplemented wherever indicated on the site development plan and/or the landscaping plan. Trees which are shown to remain shall be protected throughout the construction period and any damages caused by the CONTRACTOR shall be repaired immediately. Whenever trees are cut beyond the contract limit lines or if a tree cannot be saved due to the CONTRACTOR'S actions, due compensation shall be granted to the OWNER OF RECORD equal to or exceeding the value of the loss. No work shall proceed after damages have occurred until the OWNER OF RECORD has agreed to a remediation plan.
- The disturbed area and the duration of exposure shall be kept to a practical minimum.
- Disturbed soils shall be stabilized as quickly as possible.
- Temporary vegetation and/or mulching shall be used to protect exposed critical areas and stockpiles during development when expected to be exposed in excess of fifteen (15) days.
- The permanent (final) vegetation and mechanical erosion control measures shall be installed as soon as practical during construction.
- Sediment in the runoff water shall be trapped until the disturbed areas are stabilized by the use of debris basins, sediment basins, silt traps or similar measures.
- All lots, tracts or developments shall be graded to provide proper drainage away from buildings, without ponding unless the area is designed as a storm water recharge system. All drainage runoff shall be routed to storm water collector systems.
- Where drainage swales are used to divert surface waters away from buildings, they shall be sodded or planted or rocklined. Type shall be planted or sodded unless indicated else wise on design plans.
- Concentration of surface runoff shall be only permitted by piping and through drainage swales reinforced with structural protective measures or natural watercourses.
- Excavation and Fills:
  - Slopes created by cuts or fills shall not be steeper than 2:1 unless existing soil conditions are inspected by the ENGINEER, stabilized and reestablished by temporary or permanent seeding measures, as required during the development process and approved by the Local Authorities having Jurisdiction.
  - Adequate provisions shall be made to prevent surface water from damaging the cut face of excavations or the sloping surfaces of fills.
  - Cut and fills shall not endanger adjoining property.
  - All fills shall be compacted to provide stability of material and to prevent undesirable settlement. The fill shall be spread in a series of layers each not exceeding loose lifts of twelve (12) inches in thickness and shall be compacted by a sheeps foot roller or other approved method after each layer is spread.
  - Fills shall not encroach on natural watercourses, constructed channels or regulated flood plain areas, unless permitted by license or permit from authority having jurisdiction.
  - Fills placed adjacent to natural watercourses, constructed channels or flood plains shall have suitable protection against erosion during periods of flooding.
  - Grading shall not be done in such a way as to divert water onto the property of another landowner without their expressed written consent.
  - During grading operations, necessary measures for dust control shall be exercised. Use of chemicals shall be prohibited.

- Sedimentation and erosion control shall be implemented in accordance with the guidelines for Soil Erosion and Sediment Control, prepared by the State of Connecticut through the counsel on Soil and Water Conservation, latest revised edition. In addition to defining specific measures and locations for sediment and erosion controls to be used, the plan shall be considered flexible to allow additional controls to be implemented as site conditions change and localized drainage patterns are altered. It is the responsibility of the CONTRACTOR to contact the OWNER OF RECORD for remedial action when site conditions warrant additional protective measures.

## C. RESPONSIBILITY FOR THE PLAN:

- The responsibility for implementing and maintaining the Sedimentation and Erosion Control Plan rests with the OWNER OF RECORD where any development of the parcel gives cause to erosion and sedimentation. It is also to be said that the OWNER OF RECORD shall be held responsible for informing all concerned regarding responsibility of the plan and seeing that the plan becomes a part of the deed in the event the title of the property is transferred. The costs of all drainage erosion and sedimentation control measures will therefore rest with the OWNER OF RECORD.
- Whenever sedimentation is caused by stripping vegetation and/or grading, it shall be the responsibility of the person, corporation or other entity having responsibility to remove sedimentation from all lower properties, drainage systems and watercourses and to repair any damage at their expense as quickly as possible.
- Maintenance of all drainage facilities and watercourses within any subdivision or land development shall be the responsibility of the OWNER OF RECORD, until they are accepted by the Municipalities. All control measures will be maintained in an effective condition throughout the construction period. Surface inlets shall be kept open and free of sediment and debris. The system shall be checked after every major storm and sediment shall be disposed of at an approved location consistent with the plan.
- Maintenance of drainage facilities or watercourses originating and completely on private property shall be the responsibility of the OWNER OF RECORD to their point of open discharge at the property line or at a communal watercourse within the property.
- No person, corporation or other entity shall block, impede the flow of, alter, construct any structure or deposit any material or thing or commit any act which affects normal or flood flow in any communal stream or watercourse without having obtained prior approval from the Naugatuck Inland Wetland and Watercourse Agency.
- An adequate right-of-way and/or easement shall be provided for all drainage facilities and watercourses which are proposed either for acceptance by the Municipalities or provided by other property owners for the convenience of the OWNER OF RECORD.

## D. SEQUENCE OF CONSTRUCTION

The tentative sequence of construction events are as follows and activities noted by a "(Capital Letter)" may occur concurrently.

- Conduct a preconstruction meeting with the OWNER OF RECORD, Contractor, and Local and State agencies having jurisdiction over the project.
- Field stakeout the limits of all activities and install, at a minimum, a snow fence along construction limit lines along environmentally sensitive and tree protection areas. Silt fencing may be substituted where it coincides with this line, but only as approved by the OWNER OF RECORD. (A)
- Install silt fence along all sides contiguous to wetlands, watercourses and property owned by others affected by the work. Refer to Sedimentation and Erosion Control Plans for locations. (A)
- After each rain storm monitor the sedimentation and erosion control structures, which may include riprap channels, sediment basins, plunge pools, etc.. Routinely remove sediment during construction to an approved site location when controls exceed one half (1/2) their capacity. (A)
- Clear vegetation within project limits, except trees designated to remain or in question, as shown on the plans. The decision of how questionable trees are to be treated shall rest with the OWNER OF RECORD and coordinated through the local agency having jurisdiction as construction progresses. All trees and shrubs less than 6" in diameter, and not to remain, shall be clipped and stored on site for mulch. (A)
- Install temporary drainage dewatering devices and dirt bags as necessary to capture and minimize sediment migration during trench operations. (A)
- Remove stumps and dispose of at a bulky waste site approved by the ENGINEER and local official having jurisdiction. Disposal of stumps within burial pits on-site shall be prohibited. (B)
- Install traffic controls and barriers per CTDOT At the end of each working day or as required, accumulated soil is to be swept from existing streets. (B)
- Install septic disposal system, backfill trenches, and provide other temporary structural controls as necessary to capture and minimize sediment migration. (C)
- If blasting is required for any cuts, all proposed work is to be coordinated with all local officials having jurisdiction. The contractor is required to secure all permits for blasting operations in accordance with local and state regulations and conduct a pre-blast survey of surrounding properties. Rock spoil is to be disposed of in an appropriate manner as the site plan may show or as locally permitted. (C)
- Install a six inch (6") deep crushed stone anti-tracking pad as detailed and dimensioned on the drawings. At the end of each working day or as required, accumulated soil is to be swept from existing streets. (B)
- Strip topsoil and subsoil materials as required and stockpile them on site in an area that will not affect the building construction and not adversely impact any down gradient wetlands. Stockpiles may be relocated to meet job conditions but shall not adversely impact any down gradient wetlands. Locations are subject to the ENGINEER'S approval. Provide temporary erosion controls on the downside slopes of all stockpiles. (B)
- Install silt sack sediment barriers, retention basins, sediment traps, riprap swales, and other structural controls as necessary to capture and minimize sediment migration. (C)
- Excavate unsuitable materials within limits of proposed utilities. Proof roll to 95% compaction. Refill with select material per details and install temporary pavement. (C)
- Conduct all rough cuts and fills for driveways, utilities, and landscaped areas, making sure that all fill material is free of brush, rubbish, large boulders, logs, stumps and other objectionable materials. (C)
- Provide temporary seeding measures on all exposed soil which were damaged due to construction activities, are outside of construction traffic zones, and are not to be permanently restored or for a period in excess of thirty (30) days. Seeding and seedbed preparation are as specified herein or as indicated on the landscape plan. (C)
- Excavate and complete remaining drainage if required. Install silt sack sediment barriers at any catch basins installed. (D)
- Upon completion of cuts and fills to subgrade, buildings, electric, telephone, cable, gas and water systems can be installed. (D).
- Bring proposed driveway to pavement subgrade with processed aggregate base. Refer to details. (D).
- Complete final subgrading for all grassed and landscaped areas. Prepare subgrades for placing a minimum of six inches of topsoil. Place topsoil only when permanent seeding and landscaping can follow within a reasonable time frame (E).
- Exercise final landscaping plan and permanent seeding to provide long-term stabilization (E).
- Complete final paving of driveway with top course and paint surfaces with pavement markings suitable for traffic control (E).
- Clean and remove all silt from within any drainage structures installed and dispose of materials at an approved site (F).
- Remove temporary measures once permanent measures have matured as approved by the Municipality's enforcement officer (F).
- Conduct final inspection with MUNICIPALITY and applicable state agencies to identify deficiencies and establish punch list; complete same to the satisfaction of the MUNICIPALITY.

## E. SEEDING AND PLANTING REQUIREMENTS:

- Seedbed Preparation: Fine grade and rake surface to remove stones larger than 2" in diameter. Install needed erosion control devices such as surface water diversions. Grade stabilization structures, sediment basins or drainage channels to maintain grassed areas. Apply limestone at a rate of 90 lbs / 1000 sft unless otherwise required according to soil test results. Apply 10-10-10 fertilizer at a rate of 7.5 lbs / 1000 sft. Work lime and fertilizer into soil uniformly before seeding.
- Seed Application: Apply grass mixtures at rates specified by hand, cyclone seeder or hydroseeder. Increase seed mixture by 10% if hydroseeder is used. Lightly drag or roll the seeded surface to cover seed. Seeding for selected fine grasses should be done between April 1 and June 1 or between August 15 and October 15. If seeding cannot be done during these times, repeat mulching procedure below until seeding can take place or seed with a quick germinating seed mixture to stabilize slopes. A quick germinating seed mixture (Domestic Rye) can be applied between June 15 and August 15 as approved by the LANDSCAPE ARCHITECT or ENGINEER.
- Mulching: Immediately following seeding, mulch the seeded surface with straw, hay or wood fiber at a rate of 1.5 to 2 tons / Ac. except as otherwise specified elsewhere. Mulches should be free of weeds and coarse matter. Temporary mulches shall be anchored down on slopes in excess of 3% and within channels of concentrated flows.
- Gross Seed Mixtures:
 

<u>Temporary Covers</u>	<u>Permanent Covers</u>
Perennial Rye Grass . . 20 lbs / Ac.	Creeping Red Fescue .20 lbs / Ac.
Annual Rye Grass . . 20 lbs / Ac.	Canada Bluegrass . . .20 lbs / Ac.

Substitutions equal to or better than that specified may be permitted based on the local availability of seed mixtures and seasonal conditions when approved by the LANDSCAPE ARCHITECT or ENGINEER.
- Planting Notes:
  - All materials shall be inspected, approved and site located by the LANDSCAPE ARCHITECT or ENVIRONMENTAL SUPERVISOR. All plant materials are to be inspected for defects or damage before planting. Substandard materials shall be returned to and replaced by the CONTRACTOR. Acceptable plants are to be planted per the specifications of the landscaping plan. It is the responsibility of the GENERAL CONTRACTOR to provide for the safekeeping and maintenance of plants and vegetation cover for the duration of site construction activity. Once planted, all machinery shall avoid planted areas which should be demarcated clearly by flagged field stakes. Provisions for regular watering and inspections shall be made by the NURSERY CONTRACTOR for the duration of the plant's first year in the ground and all plants which do not survive shall be replaced at the CONTRACTOR'S expense.
  - All plant material placement is subject to field adjustment in response to site conditions. These adjustments shall be at the discretion of the ARCHITECT, LANDSCAPE ARCHITECT, SITE SUPERVISOR or ENVIRONMENTALIST.
  - All plant materials are subject to replacement by suitable alternatives per agreement between OWNER OF RECORD, LANDSCAPE ARCHITECT or ENGINEER, NURSERY CONTRACTOR and appropriate agencies.

## F. REGULATORY COMPLIANCE

- The OWNER OF RECORD or its agent shall be responsible for registering the project with the CTDEEP for "Discharge of Stormwater and Dewatering Wastewaters" per Section 22a-430b of the Connecticut General Statutes whenever five acres or more of accumulated disturbance will occur with the parcel's boundaries.
- The OWNER OF RECORD shall be responsible for retaining a licensed Professional Engineer or Certified Soil Erosion & Sediment Control Specialist to inspect the site periodically in accordance with CTDEEP guidelines. Monitoring reports shall be prepared and filed with the OWNER OF RECORD, contractor, the City Planning Office, and Inland-Wetland office of the Municipalities.
- The Applicant shall be responsible for obtaining all local permits and approvals required from the Planning Commission, including Wetlands and Watercourses' Commission and any necessary agencies and departments to satisfy the regulations of the Municipalities.

## G. LONG TERM MAINTENANCE SCHEDULE

A Best Management Practices (BMP's) program, for post-development condition on the Project has been developed to manage both the on-site stormwater quality and quantity. The recommendations are proposed to protect the watersheds downstream as well as the associated on-site wetland system.

The success of BMP controls requires professional and regulatory input, and monitoring through the implementation of a long-term maintenance program. The proposed program schedule recommended for the side includes the following as they apply to the project:

- Catch Basins & Yard Drains – all basin sumps to be cleaned out and hooded outlets to be inspected for structural and integrity. These procedures should be conducted yearly anytime after May 1 and before September 15.
- Detention/Water Quality Basins – this system should be inspected bi-yearly in the spring and fall for the first three years of operation, to insure the functionality of the planted vegetation, the sediment forebay and the microtopography, and removal of invasive plant material. Subsequent inspections shall be performed on a yearly basis observing the above mentioned components as well as the removal of trash, debris and invasive plant species.
- Energy Dissipaters – these devices should be inspected annually to verify undermining of the system and downstream erosion is not occurring. If such occurs, the device should be repaired immediately.

This program shall be implemented and monitored under the direct supervision of a licensed engineer in conjunction with a wetlands scientist. Inspection reports shall be prepared and copied to the Town I/W office. The Town is encouraged to monitor site controls by providing a representative to participate in these inspections.

NO.	DATE	REVISION DESCRIPTION	DRAWN BY	CHECKED BY

**DYMAR**

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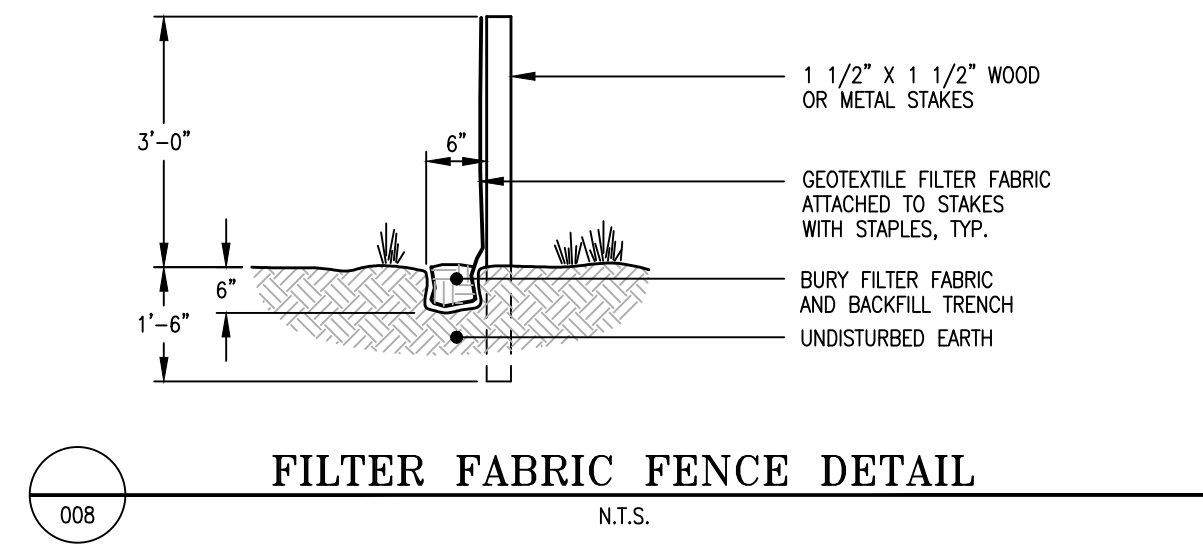
**NOT FOR CONSTRUCTION**

DATE: 04/08/21	CLIENT: Gregory M. & Robin P. Green 19 Little Pitch Road Litchfield, CT 06759	NOT VALID WITHOUT SIGNATURE AND ORIGINAL SEAL	DRAWING NO: C-5A
SCALE: AS NOTED	PROJECT: Two Lot Subdivision 19 Little Pitch Road Litchfield, CT 06759	MARK E. LANCOR, P.E. #12369	1 2
DESIGNED BY: S.A.L.	TITLE: Erosion & Sediment Control Narrative	DRAWINGS TO BE USED FOR LAND USE SUBMISSIONS ONLY	
DRAWN BY: C.C.B.			
CHECKED BY: M.E.L.			
JOB NO: 01039			

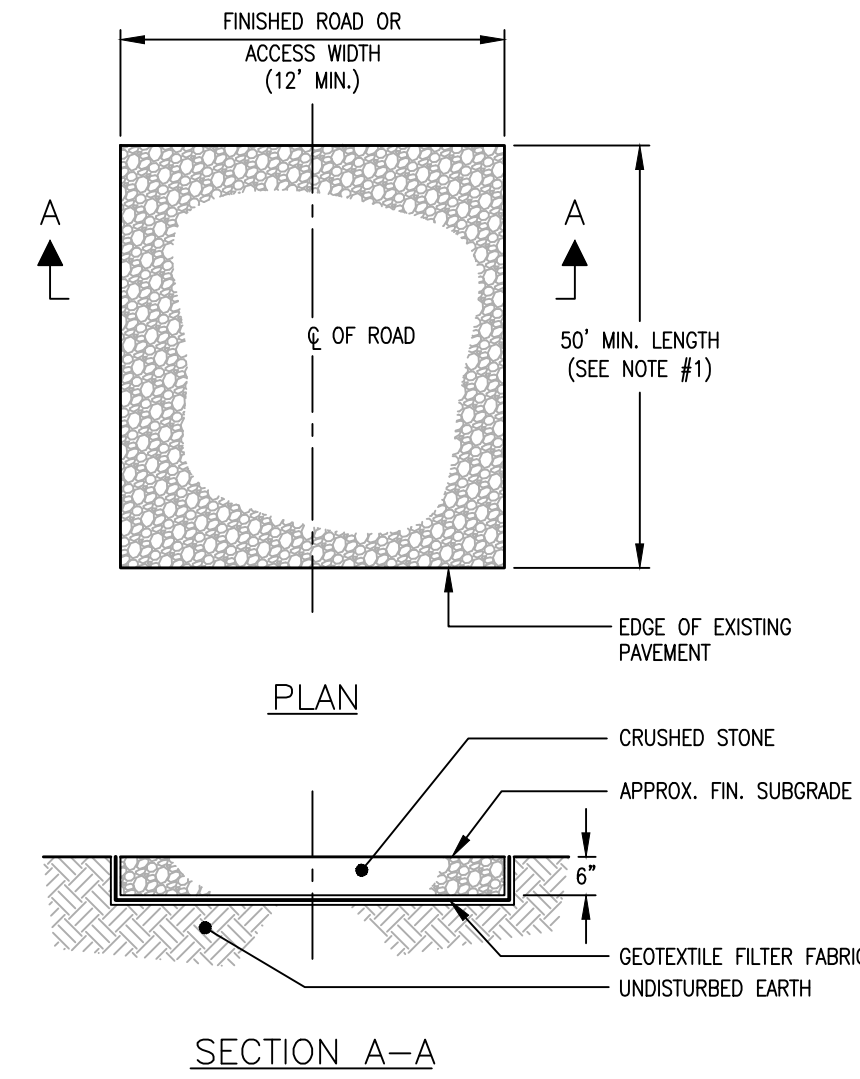




- NOTES:
1. SPACING MAY VARY AS PER MANUFACTURERS RECOMMENDATIONS. MAXIMUM SPACING IS 8'-0".
  2. JOIN SILT FENCE SECTIONS BY OVERLAPPING END STAKES TO PREVENT SILT FROM BYPASSING ADJOINING UNITS.
  3. INSPECT PERIODICALLY AND REMOVE SILT WHEN MORE THAN 1/2 THE HEIGHT IS FILLED.

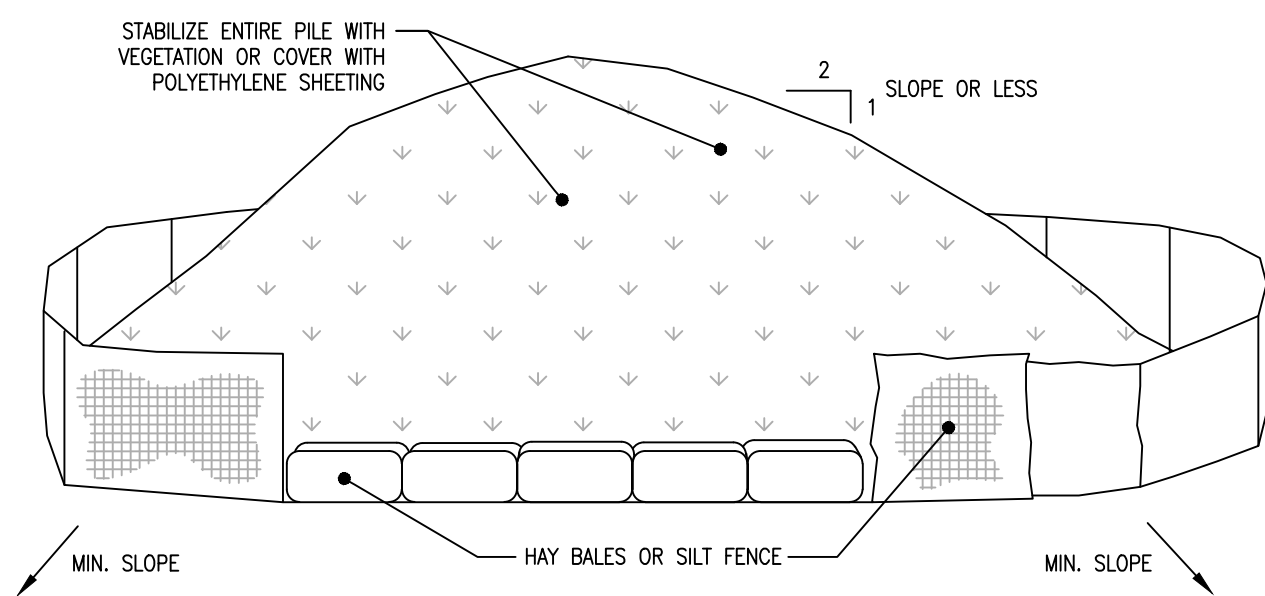


- NOTES:
1. LENGTH EQUAL TO 50' MINIMUM WHERE SOILS ARE SAND AND GRAVEL; PROVIDE 100' WHERE SOILS ARE PREDOMINANTLY CLAYS OR SILTS.
  2. SPECIFICATIONS: CRUSHED STONE - ASTM C-33, GRADE NO. 2; GEOTEXTILE FILTER FABRIC - MIRAFI 500X OR APPROVED EQUAL.



SEC 001 ANTI-TRACKING PAVEMENT DETAIL N.T.S.

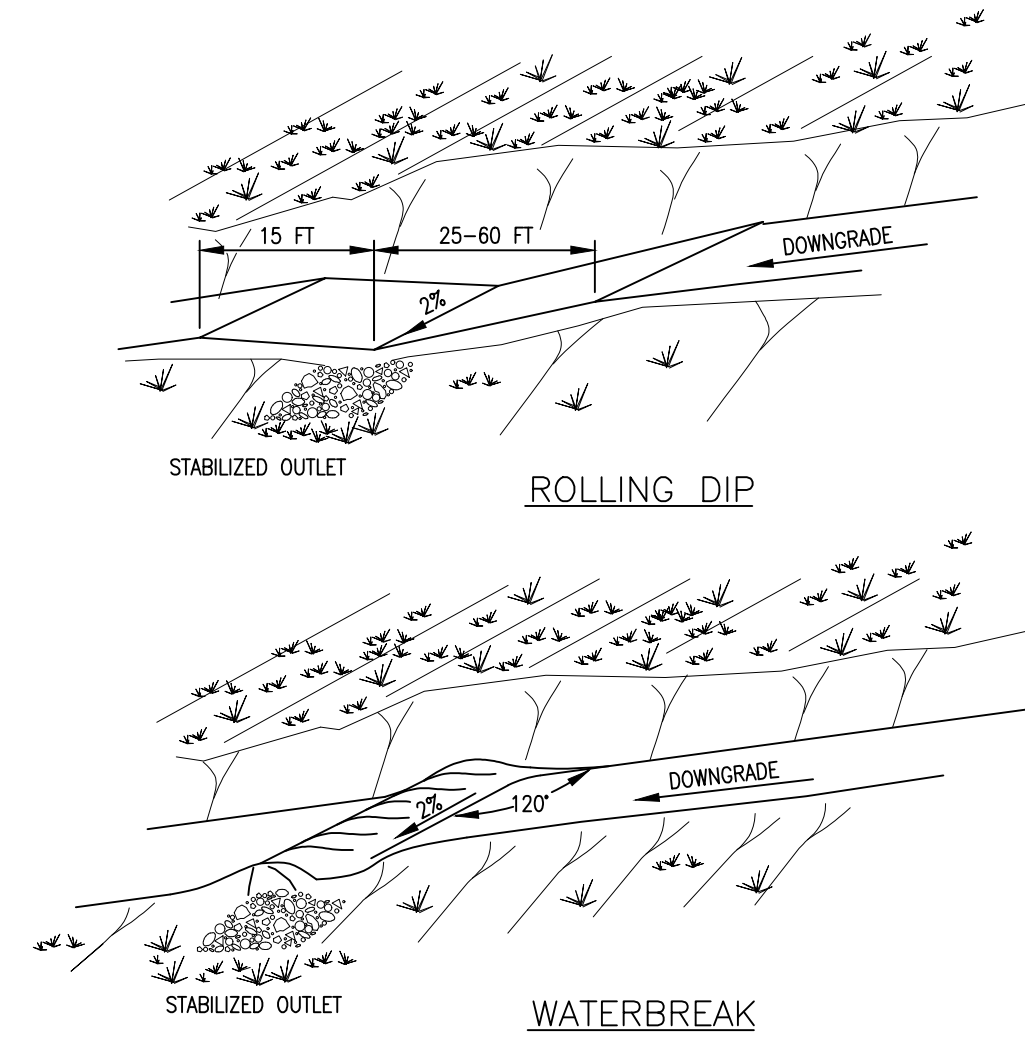
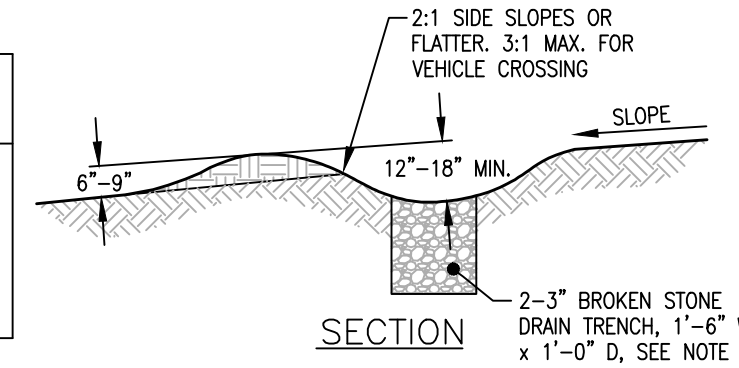
- NOTES:
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
  2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
  3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAWBALES, THEN STABILIZED WITH VEGETATION OR COVERED WITH POLYETHYLENE SHEETING.
  4. TO BE USED WHERE TOPSOIL IS NECESSARY FOR REGRADING AND VEGETATING DISTURBED AREAS. TOPSOIL IS APPLIED TO SUBSOILS THAT ARE DRAUGHTY (HAVING LOW AVAILABLE MOISTURE FOR PLANTS), STONEY, SALTY, HAVE LOW PERMEABILITY, OR ARE EXTREMELY ACID. IT IS ALSO USED TO BACKFILL AROUND SHRUB AND TREE TRANSPLANTS. PRESERVATION OF EXISTING TOPSOIL IS BENEFICIAL FOR ALL TYPES OF LAWN OR ORNAMENTAL PLANTINGS.
  5. TEMPORARY STOCKPILE STABILIZATION MEASURES INCLUDE VEGETATIVE COVER, MULCH, NONVEGETATIVE COVER, AND PERIPHERAL SEDIMENT TRAPPING BARRIERS. THE STABILIZATION MEASURE(S) SELECTED SHOULD BE APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS, AND REQUIRED PERIOD OF USE.
  6. SEE EROSION AND SEDIMENT CONTROL PLAN FOR LOCATIONS.



SEC 196 SOIL STOCKPILE DETAIL N.T.S.

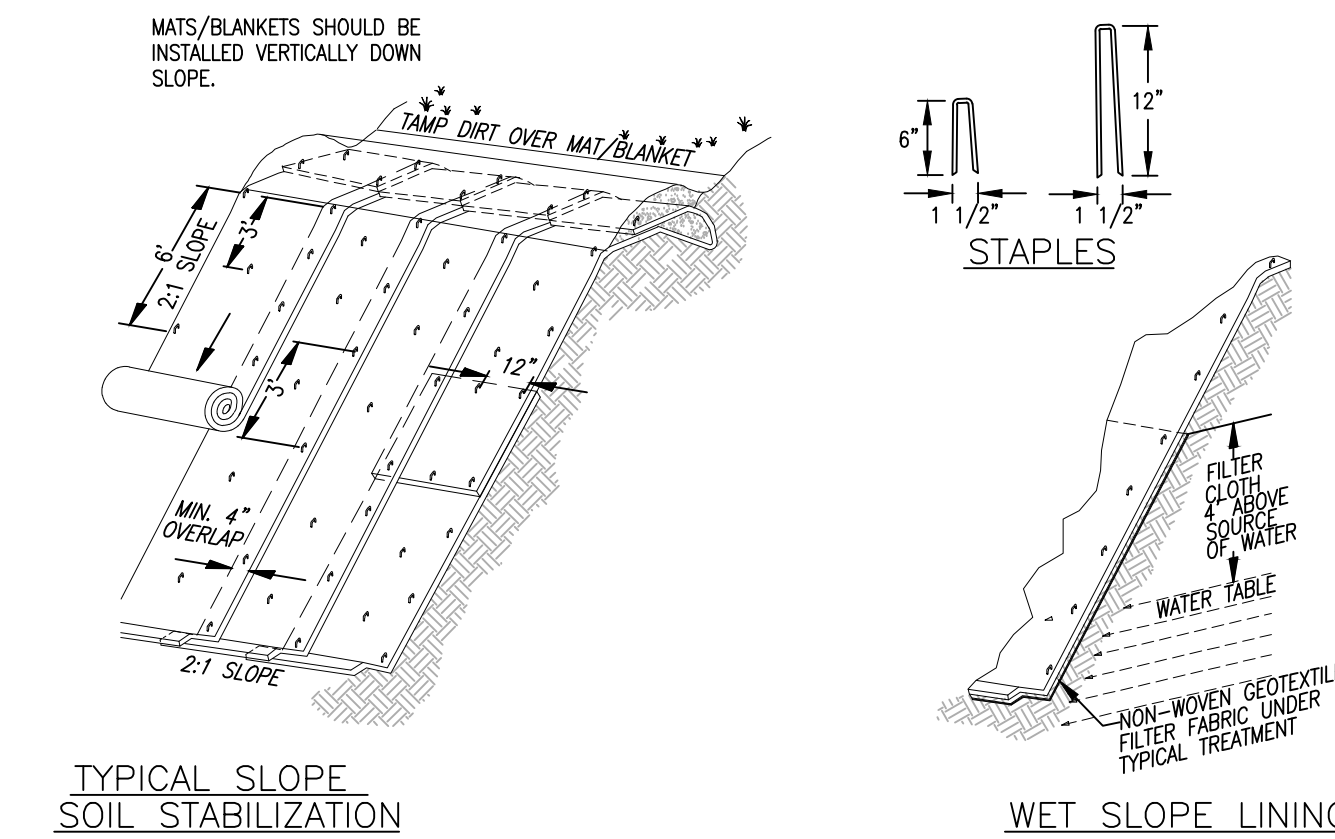
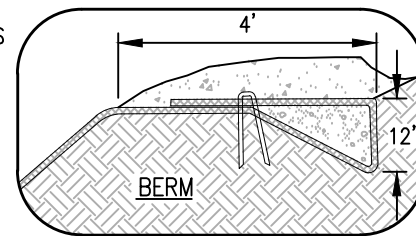
- NOTES:
1. INSTALL WATER BREAKS / ROLLING DIPS (DIVERSIONS) AS SOON AS THE RIGHT-OF-WAY HAS BEEN CLEARED AND GRADED.
  2. ROLLING DIPS ARE TO BE INSTALLED IF THE ROAD IS INTENDED FOR WINTER USE OR USE BY VEHICLES WITH LOW CLEARANCE. THE HEIGHT FROM CHANNEL BOTTOM TO THE TOP OF THE SETTLED RIDGE SHALL BE 12"-18" AND THE SIDE SLOPES OF THE RIDGE SHALL BE 2:1 OR FLATER.
  3. THE OVERFLOW END OF THE DIVERSIONS SHALL HAVE A NATURAL OR CONSTRUCTED STABLE OUTLET TO CLEAN THE SEDIMENT OUT OF THE WATER AND PREVENT EROSION. NEVER END OUTLET DIVERSIONS ONTO UNPROTECTED HILL SLOPES.
  4. SPACING BETWEEN DIVERSIONS MAY NEED TO BE ADJUSTED TO FIELD CONDITIONS SO AS TO USE THE MOST SUITABLE AREAS FOR WATER DISPOSAL. THESE CHANGES SHALL BE APPROVED PRIOR TO THEIR INSTALLATION BY THE DESIGN ENGINEER.
  5. USE GRAVEL TO STABILIZE THE DIVERSIONS WHERE SIGNIFICANT VEHICULAR TRAFFIC IS ANTICIPATED.
  6. DIVERSIONS SHALL BE INSPECTED PERIODICALLY AND AFTER EVERY HEAVY RAIN STORM FOR EROSION DAMAGE. REMOVE SEDIMENT IMMEDIATELY FROM THE FLOW AREA AND MAKE TIMELY REPAIRS AS NEEDED.
  7. DRAIN TRENCH TO BE INSTALLED FOR PERMANENT GRAVEL SURFACES.

ROAD GRADE	SPACING BETWEEN WATER BREAKS (AVERAGE SOIL)	SPACING BETWEEN WATER BREAKS (HIGH CRODIBLE)
0-1 %	400'	200'
1-2 %	245'	125'
2-5 %	125'	100'
5-10 %	100'	75'
10-20 %	75'	50'
20-35 %	50'	25'
>35 %	25'	25'



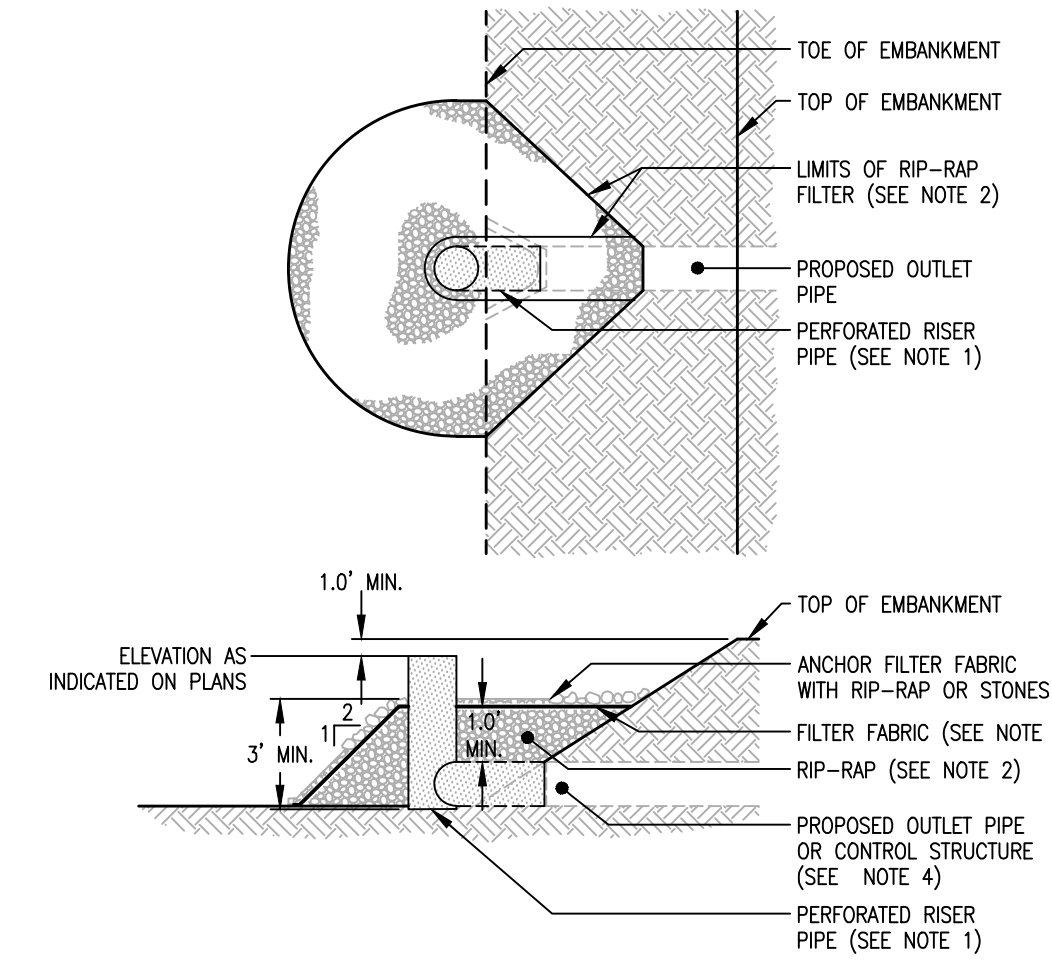
SEC 039B WATER BREAK/ROLLING DIP DETAIL N.T.S.

- NOTES:
1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/BANKETS SHALL HAVE GOOD SOIL CONTACT.
  2. LAY BANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.



SEC 102 EROSION BLANKET & REINFORCEMENT MAT SLOPE INSTALLATION N.T.S.

- NOTES:
1. THE RISER PIPE DIAMETER TO BE THE SAME AS THE OUTLET PIPE DIAMETER.
  2. USE MODIFIED RIP-RAP UNLESS AS SPECIFIED ELSEWHERE ON PLANS.
  3. USE MARFI 100X WOVEN FILTER FABRIC LINER AS MANUFACTURED BY MARFI INC. (800-438-1855), OR APPROVED EQUAL SILT TO BE REMOVED PERIODICALLY FROM LINER TO PREVENT CLOGGING AS DIRECTED BY ENGINEER.
  4. WHEN OUTLET FILTER IS INSTALLED ADJACENT TO AN OUTLET CONTROL STRUCTURE, PIPE SHALL BE BUTTED UP AGAINST THE CONTROL STRUCTURE INLET ORIFICE.



SEC 273 TEMPORARY SEDIMENT TRAP OUTLET FILTER DETAIL N.T.S.

NO.	DATE	REVISION DESCRIPTION	DRAWN BY	CHECKED BY

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DRAGINGS TO BE USED FOR LAND USE SUBMISSIONS ONLY  
**NOT FOR CONSTRUCTION**

CLIENT: **Gregory M. & Robin P. Green**  
 19 Little Pitch Road  
 Litchfield, CT 06759

PROJECT: **Two Lot Subdivision**  
 19 Little Pitch Road  
 Litchfield, CT 06759

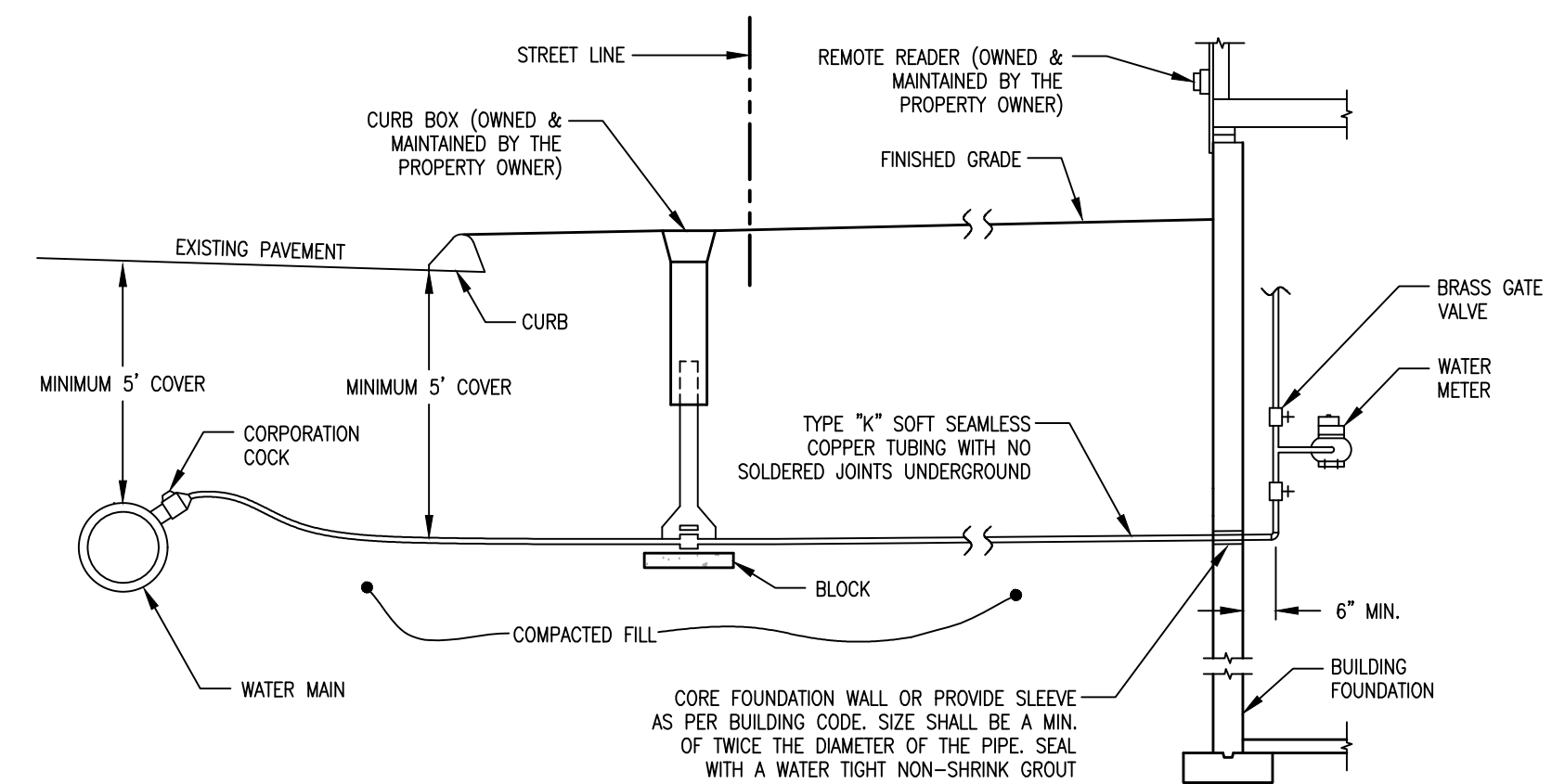
TITLE: **Erosion & Sediment Control Details**

DATE: 04/08/21  
 SCALE: AS NOTED  
 DESIGNED BY: S.A.L.  
 DRAWN BY: C.C.B.  
 CHECKED BY: M.E.L.  
 JOB NO: 01039  
 DRAWING NO: C-5C

NOT VALID WITHOUT SIGNATURE AND ORIGINAL SEAL

MARK E. JANCOR P.E. #12369

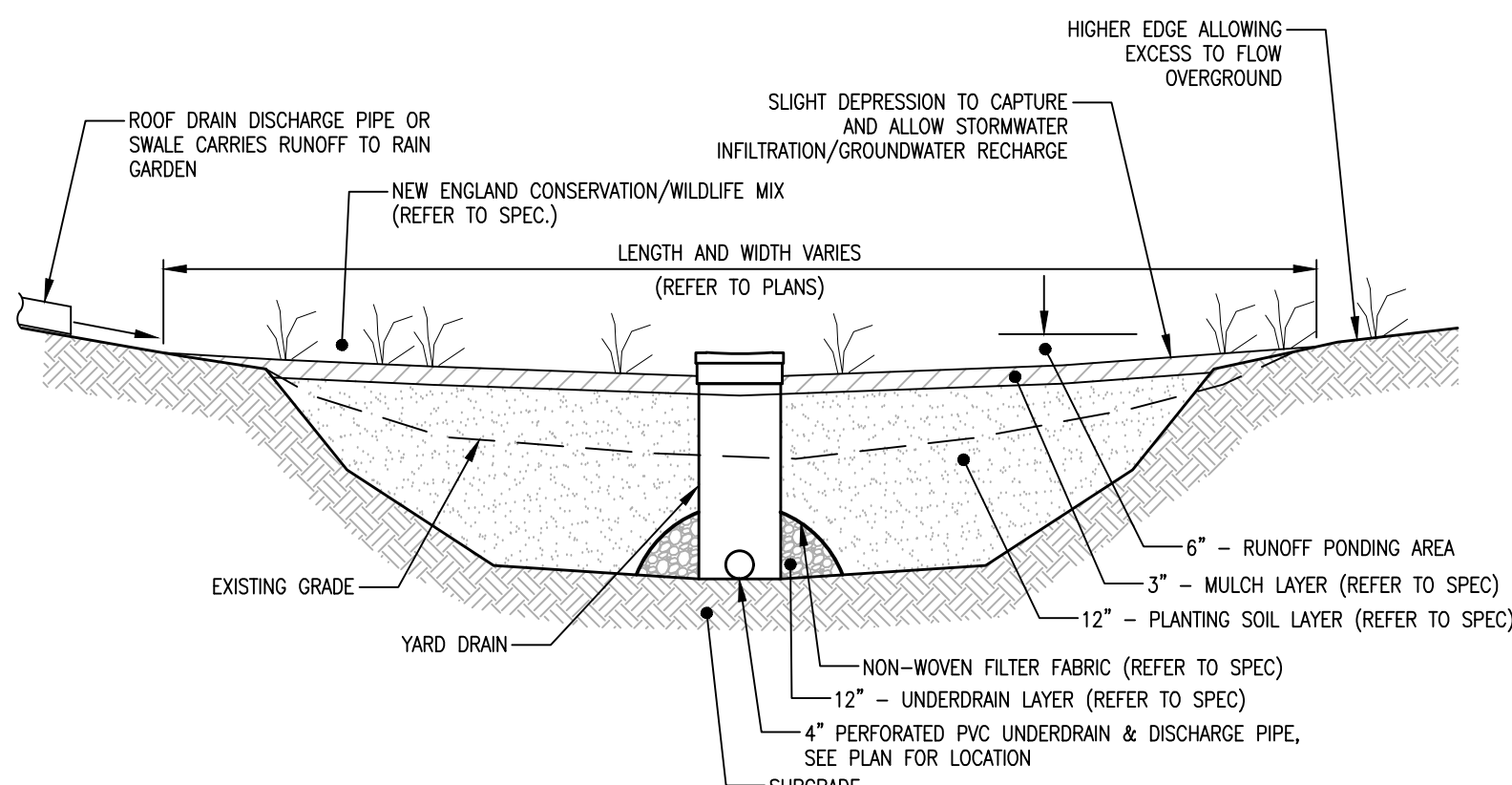
- NOTES:  
 1. ALL WORK AND MATERIAL SHALL BE COMPLETED IN ACCORDANCE WITH AND MEET THE SPECIFICATIONS OF THE "HERITAGE VILLAGE WATER COMPANY STANDARD SPECIFICATIONS FOR INSTALLATION OF WATER MAINS AND FIRE HYDRANTS".  
 2. REFERENCE IS MADE TO HERITAGE VILLAGE WATER COMPANY DETAIL HW-1 FOR METER INSTALLATION REQUIREMENTS.



TYPICAL HOUSE WATER SERVICE DETAIL

UTIL 365 N.T.S. (HW)

- NOTES:  
 1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO THE START OF CONSTRUCTION/INSTALLATION OF RAIN GARDEN MATERIALS.  
 2. GRADE SURFACE OF INSTALLATION AREA SO THAT EARTH IS CLEAN OF ALL ROOTS AND OBSTRUCTIONS. SCARIFY SUBSOIL PRIOR TO INSTALLATION OF RAIN GARDEN MATERIALS.  
 3. ALL RAIN GARDEN MATERIALS SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION AND SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:  
 MULCH LAYER - SHALL BE A SHREDDED HARDWOOD ONLY.  
 PLANTING SOIL LAYER - SHALL BE A SCREENED TOPSOIL MIXED WITH CLEAN SAND, SAND SHALL MEET ASTM C-33 WITH GRAD SIZE OF 0.02-0.04".  
 NON-WOVEN FILTER FABRIC - SHALL BE 160Z WITH A MINIMUM PUNCTURE STRENGTH OF 95 LBS. AS MANUFACTURED BY MIRAFI INC. OR APPROVED EQUAL.  
 UNDERDRAIN LAYER - SHALL BE 1-1/2" - 1-1/2" WASHED STONE.  
 4. SURFACE PLANTING SEED MIXTURE SHALL BE NEW ENGLAND CONSERVATION/WILDLIFE MIX, BY NEW ENGLAND WETLAND PLANTS, INC. OR APPROVED EQUAL. APPLICATION RATE: 1 LB/1,750 SF.



TYPE 'A' RAIN GARDEN DETAIL IN A SUMP CONDITION

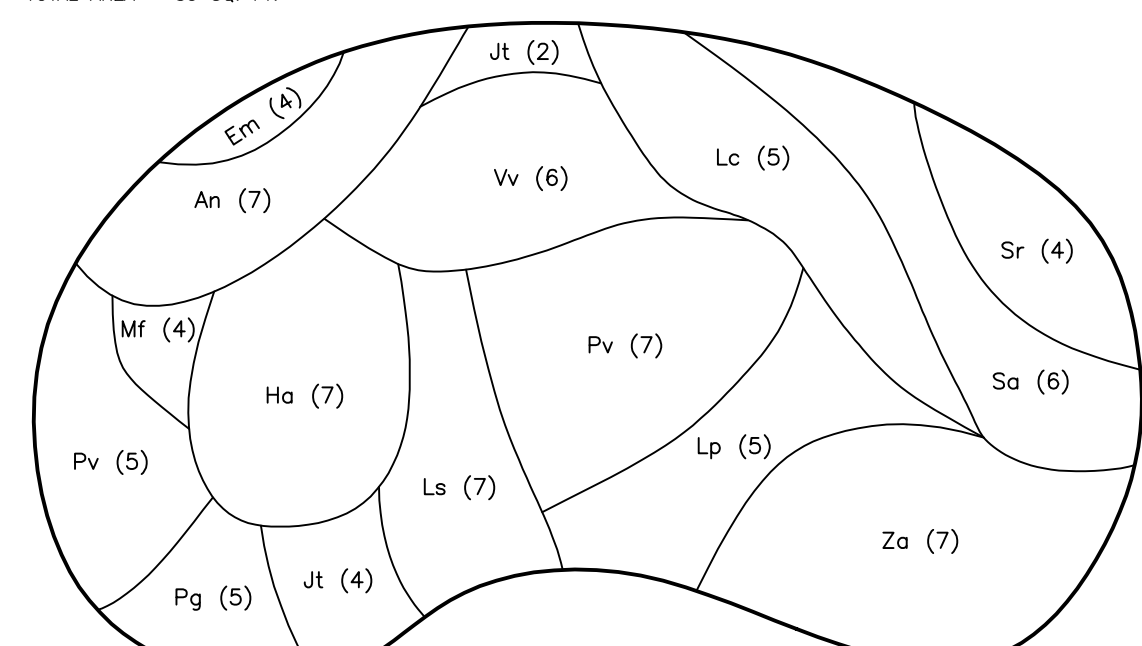
STRM 329B N.T.S.

- NOTES:  
 1. PATTERN AND SHAPE CAN VARY TO SUIT SITE CONDITIONS AND PLANT AVAILABILITY.

PLANTING LIST FOR RAIN GARDEN IN WELL DRAINATED TO SANDY SOILS

SYMBOL	COMMON NAME	SPECIES NAME	NUMBER OF PLANTS
An	New England Aster	Aster novae-angliae	7
Em	Spotted Joe-Pye weed	Eupatorium maculatum	4
Ha	Sneezeweed	Helenium autumnale	7
Jt	Torrey's rush	Juncus torreyi	6
Lp	Prairie blazing star	Liatris pycnostachya	5
Lc	Cardinal flower	Labellia cardinalis	5
Ls	Great blue lobelia	Labellia siphilitica	7
Mf	Wild bergamot	Monarda fistulosa	4
Pg	Marsh phlox	Phlox glaberrima	12
Pv	Mountain Mint	Pycnanthemum virginianum	5
Sa	Green bullrush	Scirpus atrovirens	6
Sr	Stiff goldenrod	Solidago rigida	4
Vv	Culver's root	Veronicastrum virginicum	6
Za	Golden Alexander	Zizia aurea	7
Total Plants Needed			85

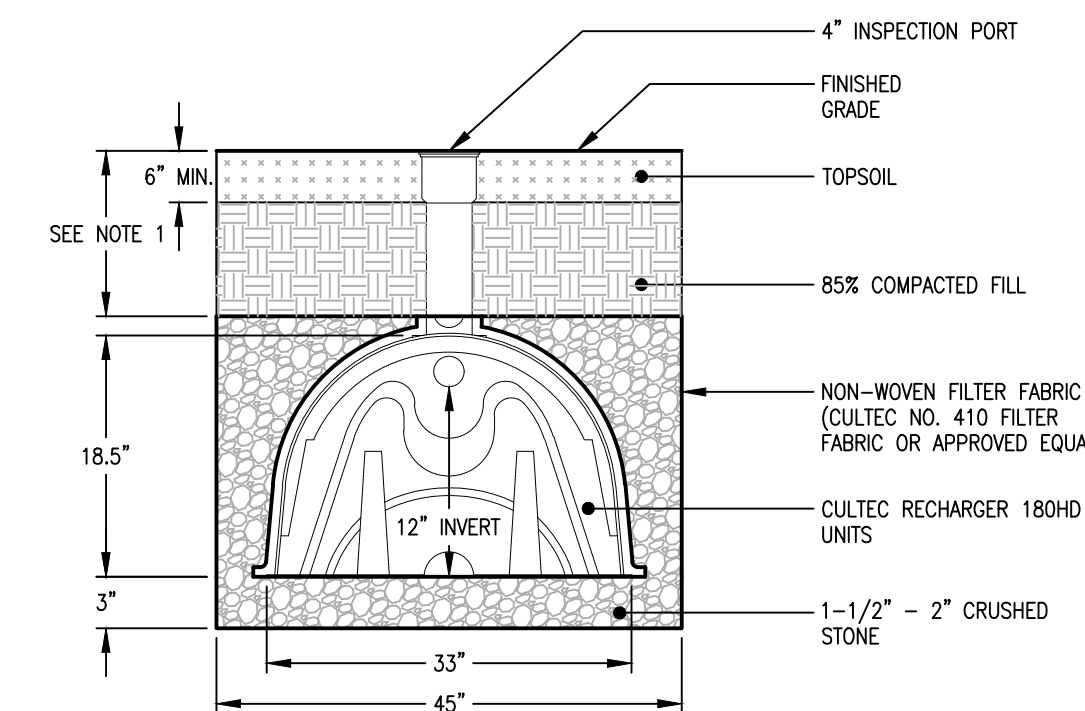
TOTAL AREA = 85 SQ. FT.



TYPICAL RAIN GARDEN PLANTING DETAIL

STRM 317A N.T.S.

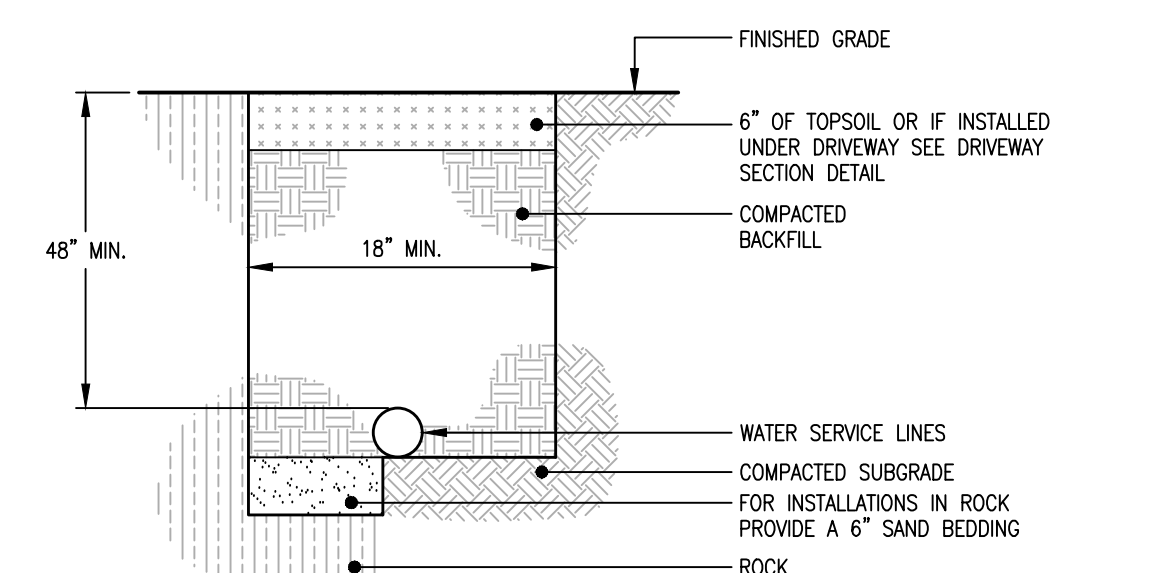
- NOTES:  
 1. MINIMUM 9" OF COVER TO MEET H-10 LOADING, AND 18" OF COVER TO MEET H-20 LOADING.  
 2. PROVIDE A MINIMUM ONE CLEANOUT MANHOLE PER TRENCH IN ALL PAVED AREAS (SEE DETAIL); A MANHOLE EXTENSION IS REQUIRED IN GRASSED AREAS WHEN FINISHED GRADE IS GREATER THAN 2'-0" FROM TOP OF GALLEY.



RECHARGER 150 CULTEC ROOF DRAIN RECHARGE SYSTEM DETAIL

STRM 285L N.T.S.

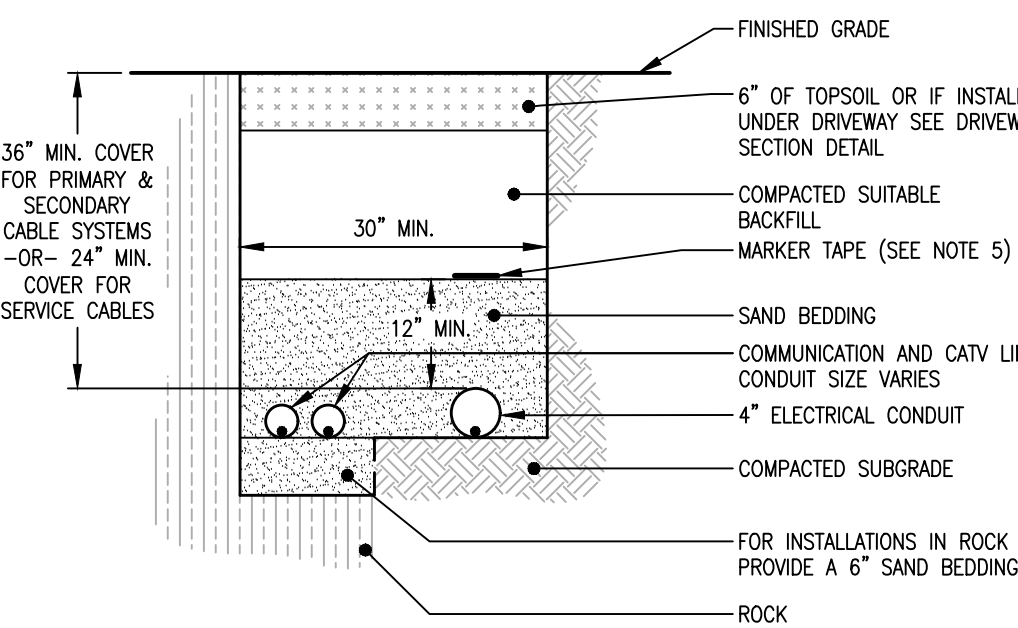
- NOTES:  
 1. CALL "BEFORE YOU DIG" (1-800-922-4455).  
 2. CONTRACTOR TO COORDINATE WITH EACH INDIVIDUAL UTILITY COMPANY AND THE DESIGN ENGINEER, ALL REQUIRED INSPECTIONS AND TAPPING PROCEDURES.  
 3. MACHINE DIGGING SHALL STOP NOT LESS THAN 18" FROM VAULTS, FOUNDATIONS, EQUIPMENT, CABLES AND POLES. TRENCHING SHALL BE COMPLETED BY HAND THEREAFTER.  
 4. A MINIMUM SEPARATION OF 30" SHALL BE MAINTAINED BETWEEN WATER SERVICE LINES AND ELECTRICAL CONDUIT.  
 5. A MINIMUM SEPARATION OF 30" SHALL BE MAINTAINED BETWEEN WATER SERVICE LINES AND GAS SERVICE LINES. JOINT TRENCHING IS NOT PERMITTED FOR MAIN GAS LINES.



WATER SERVICE TRENCHING DETAIL

UTIL 015 N.T.S.

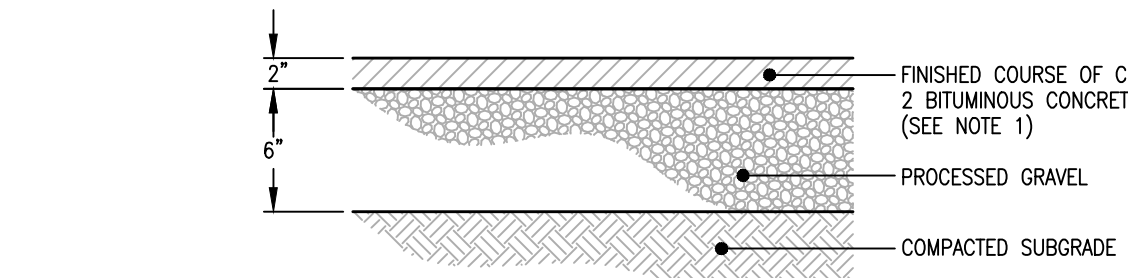
- NOTES:  
 1. CALL "BEFORE YOU DIG" (1-800-922-4455).  
 2. PROVIDE P.V.C. CONDUIT WITH NYLON PULL CORD AS REQUIRED FOR EACH INDIVIDUAL UTILITY LINE. CONTRACTOR TO COORDINATE WITH INDIVIDUAL UTILITY COMPANIES THE DIAMETER OF CONDUIT REQUIRED.  
 3. CONTRACTOR TO COORDINATE WITH EACH INDIVIDUAL UTILITY COMPANY AND THE DESIGN ENGINEER, ALL REQUIRED INSPECTIONS.  
 4. MACHINE DIGGING SHALL STOP NOT LESS THAN 18" FROM VAULTS, FOUNDATIONS, EQUIPMENT, CABLES AND POLES. TRENCHING SHALL BE COMPLETED BY HAND THEREAFTER.  
 5. ALL ELEC. BURIED CONDUITS SHALL BE IDENTIFIED BY A RED PLASTIC FILM MARKER TAPE, AS SPEC. BY THE UTIL. CO. THE MARKER TAPE SHALL RUN DIRECTLY ABOVE THE ENTIRE LENGTH OF EACH CONDUIT SECTION AND SHALL HAVE MINIMUM VERTICAL SEPARATION OF 12".  
 6. A MINIMUM SEPARATION OF 30" SHALL BE MAINTAINED BETWEEN ELECTRICAL CONDUIT AND WATER SERVICE LINES. SEPARATION BETWEEN ELECTRICAL CONDUIT AND WATER MAIN SHALL BE 36".  
 7. A MINIMUM SEPARATION OF 30" SHALL BE MAINTAINED BETWEEN ELECTRICAL CONDUIT AND GAS SERVICE LINES. JOINT TRENCHING IS NOT PERMITTED FOR MAIN GAS LINES.



UTILITY LINE TRENCHING DETAIL

UTIL 014 N.T.S.

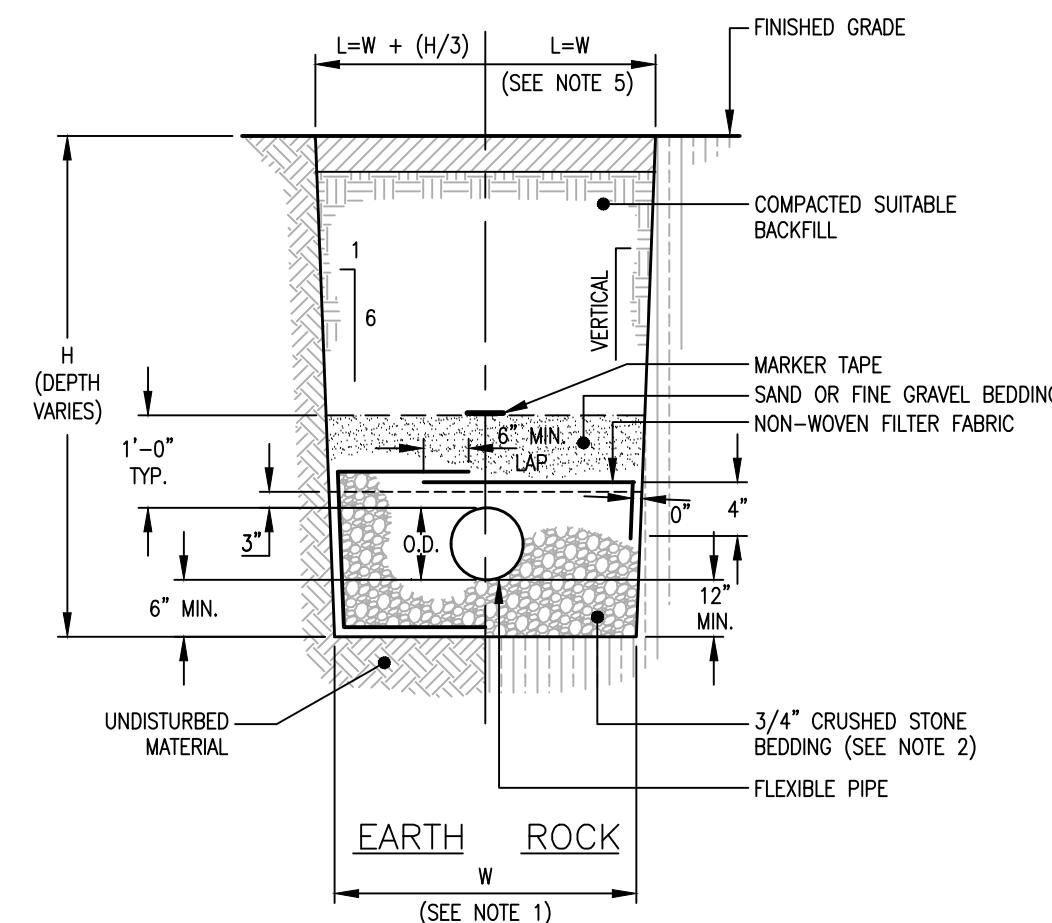
- NOTES:  
 1. BITUMINOUS PAVEMENT AT OWNERS OPTION UNLESS OTHERWISE SPECIFIED ON THE PLANS.



TYPICAL DRIVEWAY PAVEMENT DETAIL

PV/VEH 013A N.T.S.

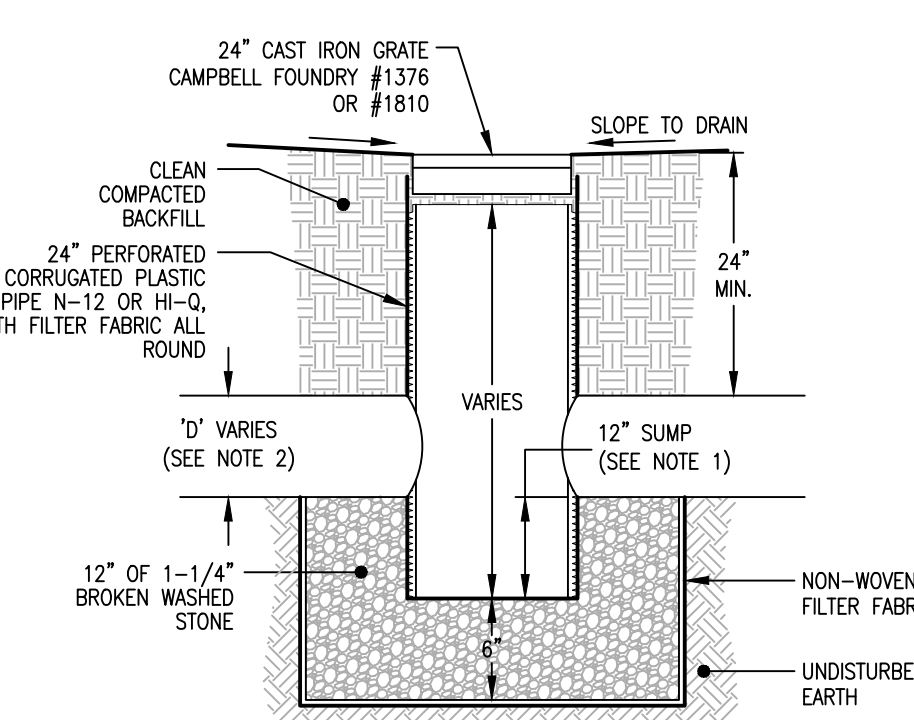
- NOTES:  
 1. FOR UNSHEETED TRENCH WHERE PIPE O.D. IS 6" OR LESS THAN, WIDTH (W) 2'-6"; WHERE PIPE O.D. IS GREATER THAN 6" BUT LESS THAN OR EQUAL TO 36" THEN, W = O.D. + 2'-0"; WHERE PIPE O.D. IS GREATER THAN 36" THEN, W = O.D. + 3'-0". PAVEMENT FOR THE TRENCHING, BEDDING, FILTER FABRIC AND BACKFILL TO BE INCLUDED IN THE COST PER LINEAR FOOT OF THE PIPE.  
 2. IF SUITABLE GRANULAR PIPE BEDDING MATERIAL IS AVAILABLE FROM ON SITE EXCAVATIONS, IT CAN BE UTILIZED PROVIDED IT CONFORMS WITH THE "STANDARD SPECIFICATIONS", AND IS APPROVED BY THE TOWN ENGINEER.  
 3. TYPICAL FOR ALL FLEXIBLE PIPE MATERIALS I.E. C.P.P., P.V.C., POLYETHYLENE, F.R.P., AND A.B.S. TRUSS.  
 4. SHEETING OR SHORING OF TRENCH WALLS, WHERE UNSUITABLE CONDITIONS EXIST, IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.  
 5. FOR ROCK REMOVAL DEPTHS GREATER THAN 10', INCREASE WIDTH (W) BY 6".



CLASS 'B' TRENCH DETAIL

STRM 017 N.T.S.

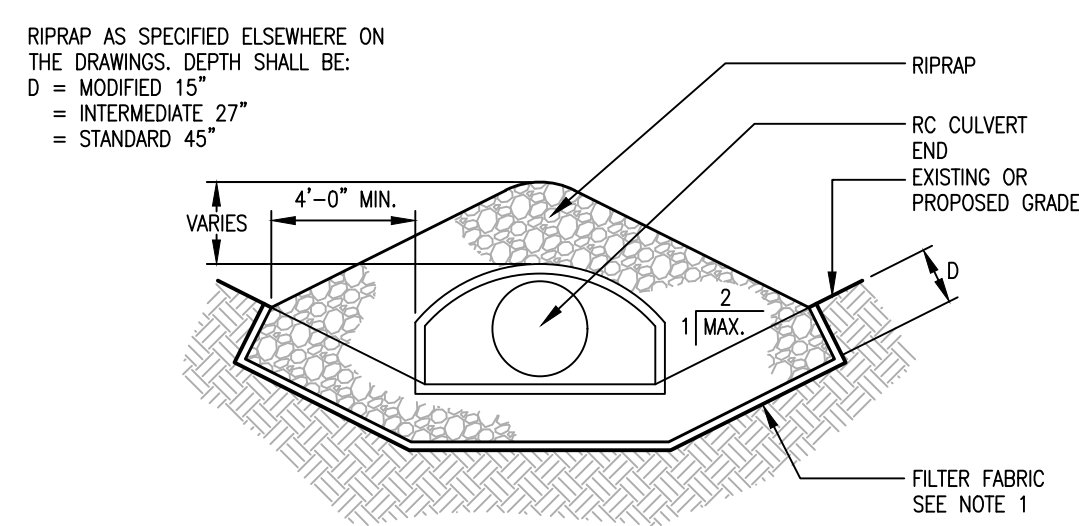
- NOTES:  
 1. WHERE CALLED FOR ON THE PLANS "NO SUMP", PROVIDE 4"-6" CONCRETE APRON TO PIPE INVERT.  
 2. FOR 'D' LESS THAN OR EQUAL TO 8", PROVIDE A CLEAN CUT HOLE.



TYPICAL DRY WELL YARD DRAIN DETAIL

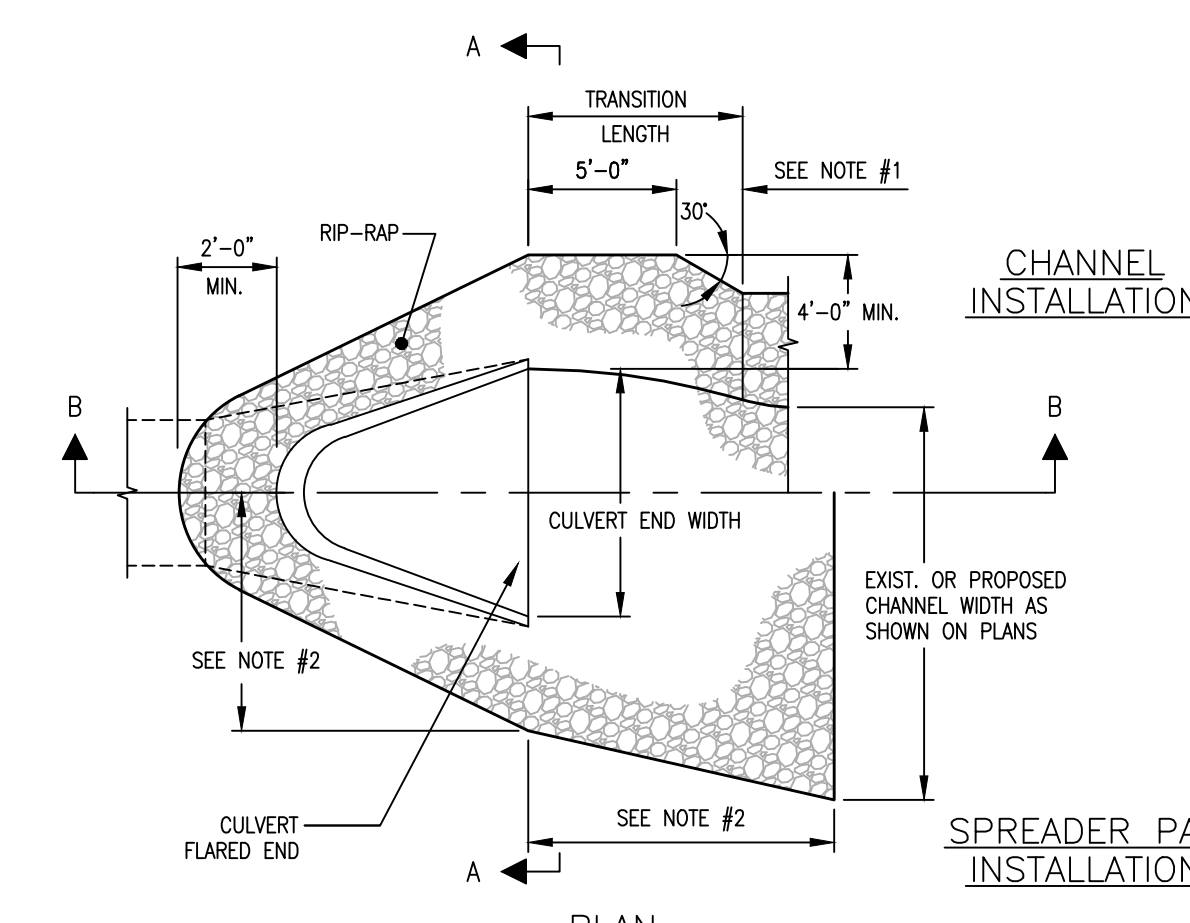
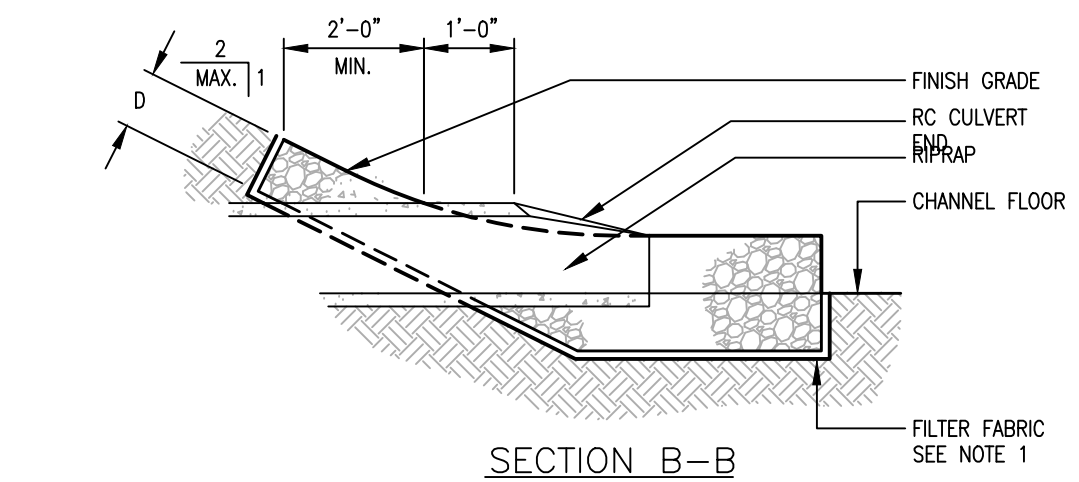
STRM 235E N.T.S.

- NOTES:  
 1. TAPER TRANSITION FOR CHANNEL INSTALLATIONS AS REQUIRED TO MATCH CHANNEL WIDTH, OR AS INDICATED ON THE PLANS.  
 2. ALL TOTAL WIDTHS AND LENGTHS FOR SPREADER PAD INSTALLATIONS ARE AS INDICATED ON PLANS.  
 3. FILTER FABRIC SHALL BE A WOVEN MONOFILAMENT FABRIC AS MANUFACTURED BY MIRAFI FABRIC 600X OR AMOCO FABRICS CO PROPEX 1325.



RIPRAP SPLASHPAD DETAIL

STRM 004 N.T.S.



RIPRAP SPLASHPAD DETAIL

STRM 004 N.T.S.

NO.	DATE	DESCRIPTION	REVISION	CHECKED BY	DRAWN BY
1	06-30-21	Revised per Agency comments		M.E.L.	S.A.L.

**DYMAR**  
 800 Main Street South · Southbury, Ct. 06488 · (800) 367-1066 · Fax (800) 367-1677  
 ENGINEERING · PLANNING · SURVEYING · DEVELOPMENT SERVICES

CLIENT: **Gregory M. & Robin P. Green**  
 19 Little Pitch Road  
 Litchfield, CT 06759  
 PROJECT: **Two Lot Subdivision**  
 19 Little Pitch Road  
 Litchfield, CT 06759  
 TITLE: **Site Details**

DATE:	04/08/21	NOT VALID WITHOUT SIGNATURE AND ORIGINAL SEAL
SCALE:	1"=40'	
DESIGNED BY:	S.A.L.	
DRAWN BY:	C.C.B.	
CHECKED BY:	M.E.L.	
JOB NO.:	01039	
DRAWING NO.:		

**C-6**

MARK E. LANCOR, P.E. #12369

CONTRACTOR SHALL VERIFY THE EXISTING UTILITY LOCATIONS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTING UTILITY LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING DYMAR IF A DISCREPANCY EXISTS. THESE UTILITY LOCATIONS SHALL BE THE PROPERTY OF THE TOWN OF LITCHFIELD, CONNECTICUT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTING UTILITY LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING DYMAR IF A DISCREPANCY EXISTS. THESE UTILITY LOCATIONS SHALL BE THE PROPERTY OF THE TOWN OF LITCHFIELD, CONNECTICUT.

DRAWINGS TO BE USED FOR LAND USE SUBMISSIONS ONLY  
**NOT FOR CONSTRUCTION**

# CONSTRUCTION SPECIFICATIONS & STANDARDS

## A. MANHOLES, CATCH BASINS AND STRUCTURES:

- Catch basins and manholes shall be constructed of class "A" concrete, prefabricated of precast sections in accordance with ASTM C-148, latest revised edition. The minimum compressive strength shall be 4,000 psi. Structures can be constructed in the field at the contractor's option if built in accordance with the standard specifications and drawings. Leveling courses may be constructed to insure that the frame meets the proposed grade at the design gradient, to a maximum of twelve inches (12"). A maximum two inch (2") thick layer of mortar may also be used to adjust the top slab. The cost of the welded wire fabric and bar reinforcement shall be included in the price bid for manhole(s) and catch basins.
- All catch basins shall be CONNECTICUT STATE HIGHWAY DEPARTMENT STANDARD TYPE "C" concrete curbed unless otherwise specified.
- All proposed catch basins shall have a minimum of two foot (2') sumps below the invert of the outlet pipe to trap silt and sand from roads or parking areas, except as otherwise specified on the drawings.
- Manholes shall have concrete aprons and inverts constructed to one-half the diameter of the outlet pipe with aprons sloped to drain.
- Manhole steps will be required in all manholes deeper than four feet (4'). Spacing will be twelve inches (12") center to center with the top rung within a minimum of two feet (2') to the top of frame and cover and lower rung within eighteen inches (18") of the apron. The steps shall be ALCOA #6005-T5, drop front design, or a copolymer polypropylene conforming to ASTM 2146, type II, grade 43758 with a grade 60, half inch (1/2") steel rod or an approved equal.
- Provide a minimum of six inches (6") of gravel bedding under all catch basins, manholes and outlet structures in earth and twelve inches (12") for rock excavations.
- Knockout panels, stubs and/or manhole drops and accommodating invert channels shall be constructed to meet line and grade of future construction, as required. Main line and lateral future connections shall be suitably capped or plugged for water tightness. Contractor to provide a 1/2 inch metal rod with a two inch square plate top placed four inches below grade at the end of all capped utilities.
- The contractor may elect to interchange rectangular manholes for circular manholes with the engineer's approval. The size substituted thereof shall be determined by the engineer. The cost of the new structure shall be the same cost bid per vertical lineal foot as the original structure. Shop drawings shall be submitted to the engineer for review.
- Frames and grates for yard drains shall be Campbell Foundry pattern #4127. Sanitary manhole frame and grates shall be per local WPCA standards.
- All head walls shall be Wing Type Endwalls as detailed by The Connecticut D.O.T. Standard Specifications and drawings, and as manufactured by Connecticut Precast Corp. Monroe CT or approved equal.

## B. STORM SEWER PIPES:

- All R.C.P. Storm Sewer Drainage Pipe specified shall be Reinforced Concrete Pipe ASTM C76. Joints shall be rubber compression gasketed ASTM C443. Classifications shall be, CLASS IV in streets and CLASS III in unimproved areas, except fifteen inch (15") catch basin laterals shall be CLASS V, or approved equal.
- All C.P.P. specified (3"-60") shall be 'N-12' smooth wall interior Corrugated High Density Polyethylene Pipe as manufactured by Advanced Drainage Systems (ADS), Inc., or approved equal. Reference is made to Product Note 3.115 as prepared by ADS for manufacturers installation recommendations. The pipe shall meet or exceed the requirements as follows:
  - AASHTO M 252 = Standard specifications for corrugated polyethylene drainage tubing 3"-10" dia.
  - AASHTO M 294 = Standard specifications for corrugated polyethylene pipe 12"-48" dia.
  - AASHTO MP 7-97 = Standard specifications for corrugated polyethylene pipe 54" and 60" dia.
  - AASHTO Section 30 = Construction standards, Thermoplastic pipe.
  - AASHTO D 2321 = Standard practice for underground installation of Thermoplastic pipe for sewers and other gravity flow applications.
  - ASTM D 3212 = Standard specification for joints for drain and sewer plastic pipe using flexible elastomeric joints.
  - ASTM F 1417 = Standard test method for installation acceptance of plastic gravity sewer lines using low-pressure air.
  - ASTM F 477 = Elastomeric seals (gaskets) for joining plastic pipe.
  - ASTM F 677 = Standard specification for large diameter corrugated polyethylene pipe and fittings.
- All 'Tight Pipe' specified shall be 'N-12 WT 1B' smooth wall interior Corrugated High Density Polyethylene Pipe with a ceramic composite joint as manufactured by ADS, or approved equal. The joints shall have a bell and spigot or bell-bell design and incorporate an ASTM F 477 elastomeric rubber gasket. The joints shall meet or exceed the requirements of ASTM 3212 lab pressure test of 10.8 psi, and ASTM 1417 watertight field test. After the pipe is installed it shall be air tested in conformance with ASTM F 1417.
- All curtain and footing drain outlet pipes shall be 6" PVC ASTM 3034, SDR 35 pipe, or approved equal. Joints shall be rubber compression gaskets, or solvent welded couplings using proper two step PVC solvent solution procedure. Joints must meet ASTM D 3212 specifications.
- All curtain drain pipe shall be six inch (6") perforated corrugated polyethylene tubing conforming to AASHTO M36 Class 'I' heavy duty type, minimum slots 1/4" clear opening, except as otherwise shown on the plans, and shall exit to a gravel lined drainage swale or drainage structure. All aggregate for underdrain shall be washed, size as specified.
- Pipe lengths for the storm drainage system are measured from centerline of structure to centerline of structure with the exception of flared ends which are measured from the outer most edge.
- Pipe inverts for storm drainage structures are measured at their centerline, while inverts for flared ends measured at their outer most edge.
- All piping shall be founded on a stone bedding in CLASS "B" and "C" trench installations for either earth or rock excavations, unless otherwise directed by the engineer. Refer to details.
- All pipe backfill shall be placed in compacted twelve inch (12") max. lifts to an AASHTO T-99 density of 95% to proposed subgrade.

- Pipes shall be cut flush to the inside walls of all structures. Openings at knockouts shall be mortared tight with a non-shrink grout. Concrete inverts and aprons shall be constructed to one-half the diameter of the existing pipe within manholes. Aprons shall slope to drain. Smaller pipe sizes entering structures shall, at a minimum, match the crown of the outgoing pipe, except as otherwise specified for critical elevations for upstream structures or in the case of significant grade changes.
- All footing drain discharge piping located in excess of twenty five (25) feet from any sewage disposal system shall be constructed of solid pipe. Any footing drain discharge piping located within twenty five (25) of any sewage disposal system shall be tight pipe and conform to the standards of Table 2-C of the State of CT Health code.
- All roof drains shall discharge to collector pipe, to be conveyed to recharger basins. Size as shown on C5

NO.	DATE	REVISION DESCRIPTION	DRAWN BY	CHECKED BY



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CLIENT: **Gregory M. & Robin P. Green**  
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Litchfield, CT 06759

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