

GENERAL NOTES

- Existing features and topography were taken from a map entitled "Topographic Survey of property at 1402 Riverbank Road, Stamford, Connecticut, Prepared for Jeffrey Casale," as prepared by D'Andrea Surveying & Engineering, P.C., and dated August 25, 2016.
- The subject parcel lies within Zone X FIRM Community-Panel Number 08001C0363F Map revised June 18, 2010, published by the Federal Emergency Management Agency (FEMA).
- Contours and elevations depicted hereon are referenced to the North American Vertical Datum of 1988 (NAVD88).
- The limit of wetlands was delineated and flagged in the field by William Kenny, Certified Soil Scientist, William Kenny Associates LLC, on May 20, 2016 and field located by D'Andrea Surveying & Engineering, P.C.
- In accordance with Connecticut Public Act 87-71 and Connecticut General Statutes (CGS) Sections 16-345 through 16-359, the contractor shall verify the depth and location of all utilities prior to commencing construction, and shall contact "Call Before You Dig, Inc." at 1.800.922.4455, 48 hours prior to commencing construction.
- The information given on this plan in respect to the location of subsurface structures and utilities indicates only that the structures and utilities exist and no responsibility is assumed by the engineer for the accuracy of the locations shown. Utility information is not guaranteed complete or accurate.
- All construction shall comply with applicable sections of the State of Connecticut, local, and International Building codes, and those criteria shall take precedent over these plans.
- The proposed dwelling addition shall be designed by others in order to conform with current applicable zoning setback criteria and regulations, and a building permit shall be obtained prior to commencing construction.
- The Engineering Bureau of the City of Stamford shall be notified three days prior to the commencement of any work within the City of Stamford Right-of-Way.
- This property is served by public water and a subsurface sewage disposal system. These utilities will remain in place and unchanged throughout construction.
- The septic system information depicted hereon was transcribed from City of Stamford Health Department records.
- Existing utilities in conflict with the proposed development as depicted on this plan shall be relocated as directed by the appropriate utility company and/or the owner. The contractor shall excavate test pits as required to verify the location and depth of utilities where conflicts may exist.
- Certification will be required by a Professional Engineer licensed in the State of Connecticut that work has been completed in compliance with the approved drawings. An Improvement Location Survey, prepared by a licensed Land Surveyor in the State of Connecticut, will be required for submission.
- Refer to sheet 3 and 4 of 4 for construction notes and details.

CONSTRUCTION STAGING

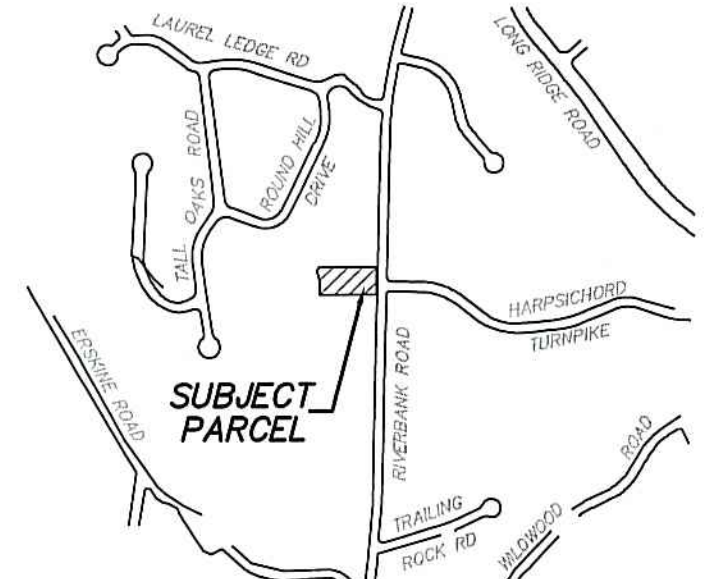
- Install sedimentation and erosion controls.
- Mark and cut trees to be removed.
- Install tree protection as required.
- Strip topsoil and stockpile it with appropriate sedimentation control measures.
- Remove existing garage structure.
- Install stream crossing and temporary access route.
- Install septic system.
- Excavate for proposed foundation.
- Construct dwelling addition foundation.
- Waterproof existing foundation and install foundation drain.
- Backfill and rough grade around building foundation, stabilize all slopes.
- Fine grade and stabilize all slopes.
- Landscape.
- Remove sedimentation and erosion controls.

NOTE C:
ALL PVC DRAIN PIPE SHALL BE SDR-35 WITH RUBBER GASKET JOINTS.

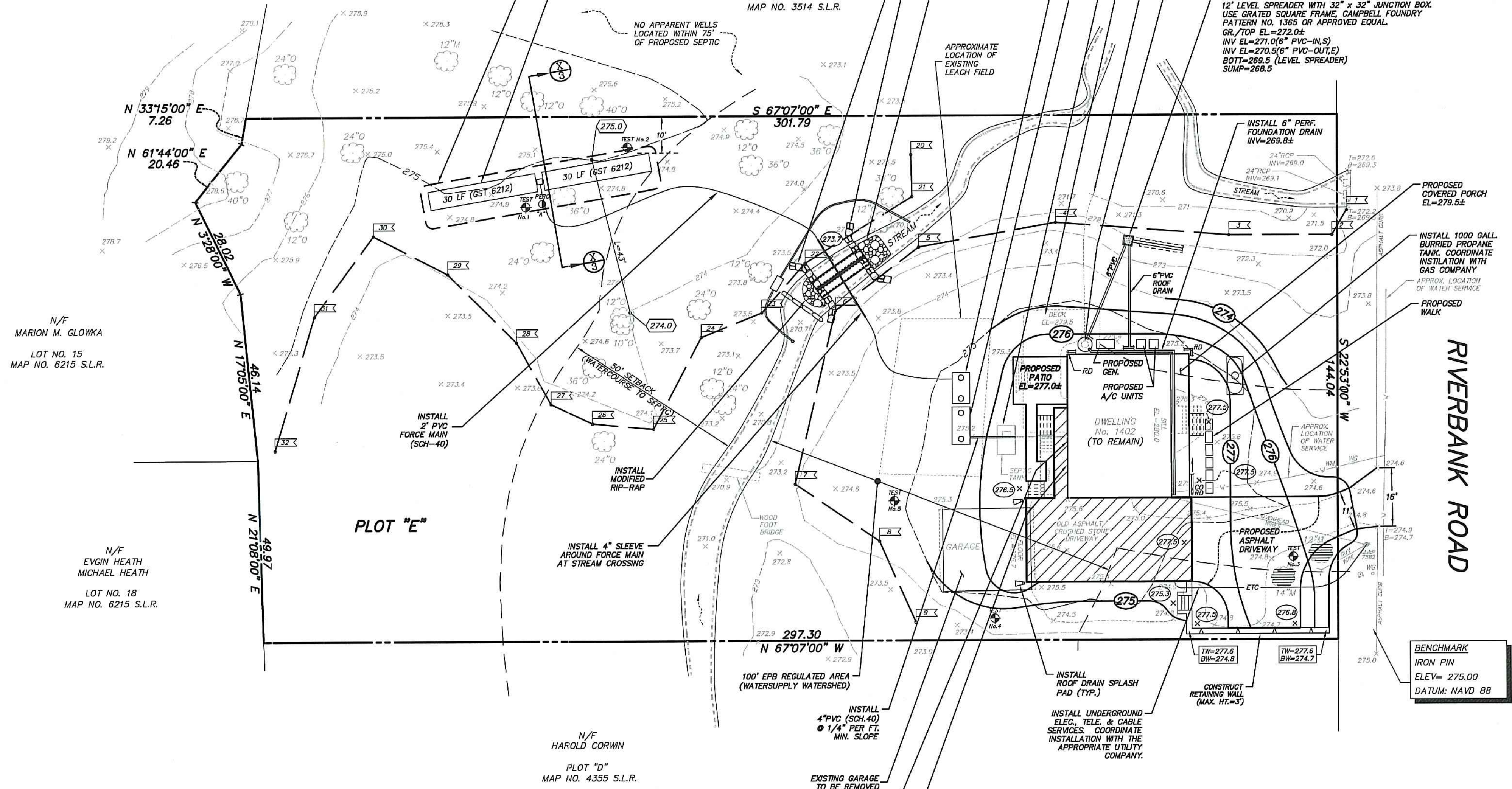
NOTE D:
UNDERGROUND SPRINKLER SYSTEMS SHALL NOT BE INSTALLED WITHIN 10' OF THE SEPTIC SYSTEM INCLUDING THE SEPTIC TANK.

NOTE E: BEDROOMS AND SEPTIC SYSTEM SIZE (TANK AND LEACHING AREA)
IT IS THE RESPONSIBILITY OF THE OWNER/DEVELOPER TO VERIFY WITH THE HEALTH DEPARTMENT THE ACTUAL BEDROOM COUNT OF THE PROPOSED DWELLING. FLOOR PLANS SHOWING ALL LEVELS OF THE PROPOSED DWELLING WITH BATHTUB SIZES SHALL BE REVIEWED AND APPROVED BY THE HEALTH DEPARTMENT. ACCORDING TO THE HEALTH CODE, BATHTUBS OF 100-199 GALLONS REQUIRE AN INCREASE OF 250 GALLONS CAPACITY TO THE SEPTIC TANK AND BATHTUBS WITH VOLUME OF 200 GALLONS OR MORE REQUIRES AN INCREASE IN SEPTIC TANK CAPACITY OF 500 GALLONS.

"RA-1" ZONE AREA=1.0005 ACRES
BLOCK No. 399



LOCATION MAP - 1" = 1000'±

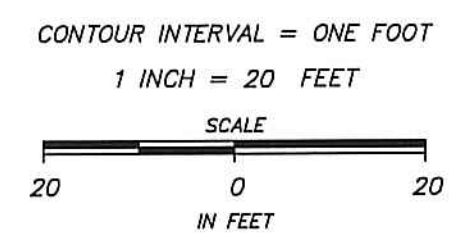


- LEGEND:**
- EXISTING CONTOUR
 - EXISTING SPOT ELEVATION
 - EXISTING TOP/BOTTOM SPOT ELEVATION
 - PROPOSED CONTOUR
 - PROPOSED SPOT ELEVATION
 - DECIDUOUS TREE
 - CONIFEROUS TREE
 - TREE TO BE REMOVED
 - INSTALL TREE PROTECTION
 - UTILITY POLE
 - TEST PIT
 - PERCOLATION TEST
 - CATCH BASIN
 - REINFORCED CONCRETE PIPE
 - VERIFY IN FIELD
 - ROOF DRAIN
 - POLYVINYL CHLORIDE
 - AS ORDERED BY ENGINEER
 - CLEAN OUT
 - TOP OF WALL
 - BOTTOM OF WALL
 - CONSTRUCTION FENCING
 - SILT FENCE
 - HAY BALE
 - OVERHEAD SERVICE WIRE
 - UTILITY POLE
 - WATER METER
 - FIRE HYDRANT
 - WATER SERVICE
 - PROPERTY LINE
 - EXISTING RETAINING WALL
 - WETLAND FLAG
 - ELEC, TELE, & CABLE SERVICES

BUILDING COVERAGE
LOT AREA = 1.0005 ACRES
DWELLING = 1,133 S.F.
GARAGE = 550 S.F.
DECK = 506 S.F.
DECK ALLOWANCE (SEC. 3A.15) = -200 S.F.
TOTAL = 1,989 S.F.
PERCENT COVERAGE = 4.6%

TEST PIT DATA
1402 RIVERBANK ROAD, STAMFORD CONNECTICUT
TEST PITS 1 - 6 CONDUCTED BY D'ANDREA SURVEYING & ENGINEERING, P.C.
ON AUGUST 4, 2016

Test Pit #1 (HAND DUG)	Test Pit #2 (HAND DUG)	Test Pit #3
0"----- 8"----- Orange Brown Silty Loam 25"----- Light Brown Sandy Loam 36"----- No Mottles No Water No ledge	0"----- 8"----- Orange Brown Silty Loam 26"----- Light Brown Sandy Loam 36"----- No Mottles No Water No ledge	0"----- 22"----- Original Topsoil 30"----- Brown Silty Sand (Mottled) 66"----- Mottles @ 34" GW @ 52" No ledge
Test Pit #4	Test Pit #5	
0"----- 14"----- Brown Silty Loam 18"----- Grey Clay 28"----- Brown Sandy Loam 48"----- Mottles @ 18" No Water No ledge	0"----- 27"----- Original Topsoil 34"----- Brown Silty Sand (Mottled) 60"----- Mottles @ 34" No Water No ledge	



REV.	DATE	DESCRIPTION
3	11-12-24	ADDED SAE SHEET SHOWING CONST. ACCESS
2	8-24-17	EPB COMMENTS & DECK MODIFICATIONS
1	5-25-17	ENGINEERING & SHD COMMENTS
0	4-26-17	SUBMIT TO EPB & SHD
REV.	DATE	DESCRIPTION
LEONARD C. D'ANDREA, CT.	PE No. 14889	
11-12-24	DATE	
ONLY COPIES OF THIS PLAN BEARING AN ORIGINAL IMPRINT OF THE ENGINEER'S EMBOSSED SEAL ARE TRUE, VALID COPIES.		

D'ANDREA SURVEYING & ENGINEERING, P.C.
• LAND PLANNERS
• ENGINEERS
• SURVEYORS
P.O. BOX 549
RIVERSIDE, CT 06878
6 NEIL LANE
TEL. 637-1779

PROJECT	RESIDENTIAL IMPROVEMENTS
PREPARED FOR	JEFFREY CASALE
LOCATION	1402 RIVERBANK ROAD STAMFORD, CONNECTICUT
1 OF 4	DEVELOPMENT PLAN

SEDIMENTATION AND EROSION CONTROL NOTES:

1. Temporary soil and erosion control measures, inclusive of filter barriers, water breaks, check dams, and anti-tracking areas, shall remain in place for as long as necessary to permanently stabilize developed areas.
2. Erosion and sediment control devices shall be installed in their proper sequence. No clearing or grading may be done in any area until the erosion control devices for that area, as shown on the plan, are in place and functional.
3. Natural vegetation shall be maintained and protected where practical.
4. No changes of this soil erosion and sediment control plan may be made without prior approval of the supervising engineer.
5. Land disturbance is to be kept to a minimum. Re-establishment and/or stabilization of disturbed areas shall be scheduled as soon as practical.
6. Erosion controls shall be monitored periodically to verify that they are maintained in effective working order. If, during construction, additional control measures are necessary, they shall be installed by that contractor.
7. Sediment or debris shall be removed from the drainage pipes and structures as it accumulates during construction. It shall be disposed of in a manner which is consistent with the intent of this plan.
8. The contractor may provide alternate means of sediment control, but he may not eliminate placement of protection in the areas indicated hereon.
9. Sediment fencing shall be installed where required prior to commencing construction. Fencing shall be Propex Silt Stop (TM) as manufactured by Amoco, or engineer approved equivalent.
10. The contractor shall re-grade, topsoil, and seed all disturbed areas immediately after construction has been completed.
11. All designated trees shall be protected during the construction period, except those designated to be removed. Tree protection shall be in accordance with generally accepted standards. (Refer to the Connecticut Guidelines for Soil Erosion and Sediment Control (2002) for details and specifications).
12. Roof leader down spouts and drains that discharge to the ground surface, if any, shall discharge over splash pads.
13. Four (4) inches of crushed stone shall be placed under any exterior decks and/or open stairways.
14. Additional protection measures shall be implemented should site conditions warrant them.
15. Refer to Connecticut Guidelines for Soil Erosion and Sediment Control (2002) for additional details and specifications.
16. Silt fence shall be Mirafi envirofence, Amoco siltstop or equivalent approved by Site Engineer. Filter fabric used shall be Mirafi 100x or equivalent. Install silt fence according to manufacturer's instruction, particularly, bury lower edge of fabric into ground.
17. Land disturbance shall be kept to a minimum. All disturbed areas shall be planted in where permanent plantings are called for as soon as practicable. Seed and mulch disturbed areas with grass seed where permanent plantings are not called for, as soon as practicable. Prepare seedbed (4" thick minimum) with topsoil. Seed, rake, roll, water and mulch areas according to mixes below. Water as often as necessary (up to 3 times per day) to establish cover. Mulch seeded areas at 1 to 2 tons/acre with salt hay. Maintain mulch and watering until grass is 3" high with 85% cover. Reseed or overseed if necessary.

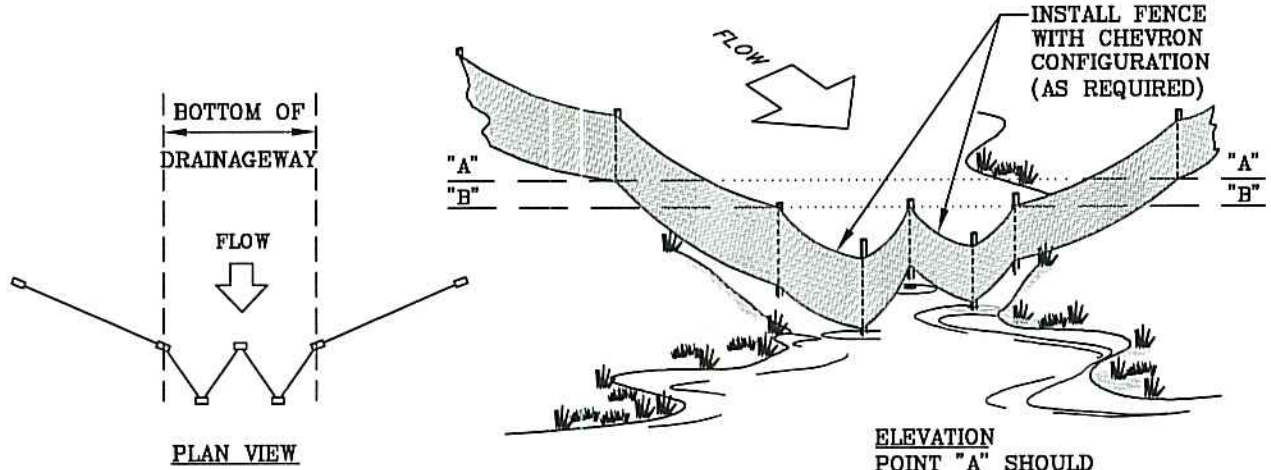
Temporary Seed Mix:
Perennial ryegrass 40 lbs/ac.

Permanent Lawns:
Kentucky Bluegrass 20 lbs/ac.
Creeping red fescue 20 lbs/ac.
Perennial ryegrass 5 lbs/ac.
(1 lb/1000 sq. ft.)

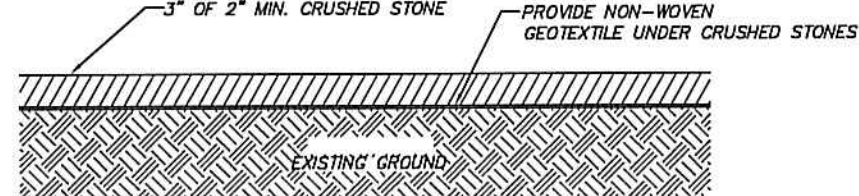
Optimum Seeding Dates:
April 15 through June 15
August 15 through October 1 45 lbs/ac.
(1 lb/1000 sq. ft.)
18. If disturbed areas cannot be seeded immediately due to the time of year, mulch area until seeding can occur, remove mulch and seed and reseed when season permits.
19. Construction within the watercourse and wetlands shall occur during low-flow periods. When weather for casts a 1/2 inch rain storm or more, sandbags, sump pump, and all dewatering equipment shall be removed from the watercourse area.
20. Refer landscape planting plan for proposed plantings and related notes and details.

CONSTRUCTION STAGING

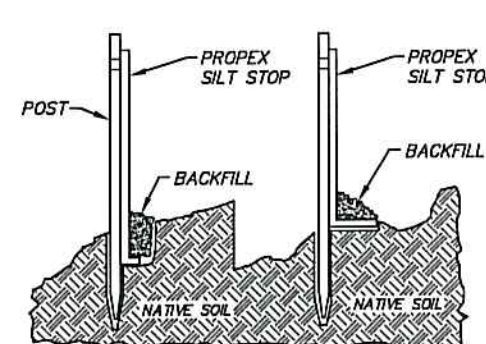
1. Install sedimentation and erosion controls.
2. Mark and cut trees to be removed.
3. Install tree protection as required.
4. Strip topsoil and stockpile it with appropriate sedimentation control measures.
5. Remove existing garage structure.
6. Install stream crossing and temporary access route.
7. Install septic system.
8. Excavate for proposed foundation.
9. Construct dwelling addition foundation.
10. Waterproof existing foundation and install foundation drain.
11. Backfill and rough grade around building foundation, stabilize all slopes.
12. Fine grade and stabilize all slopes.
13. Landscape.
14. Remove sedimentation and erosion controls.



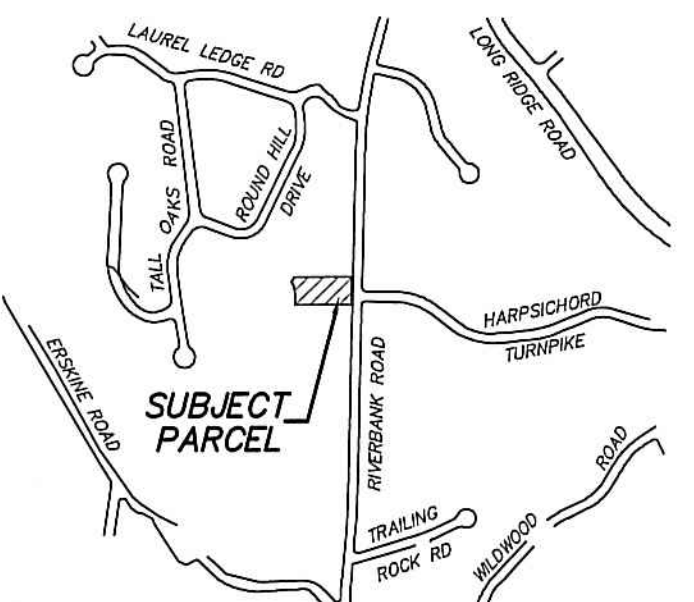
CHEVRON CONFIGURATION SILT FENCE



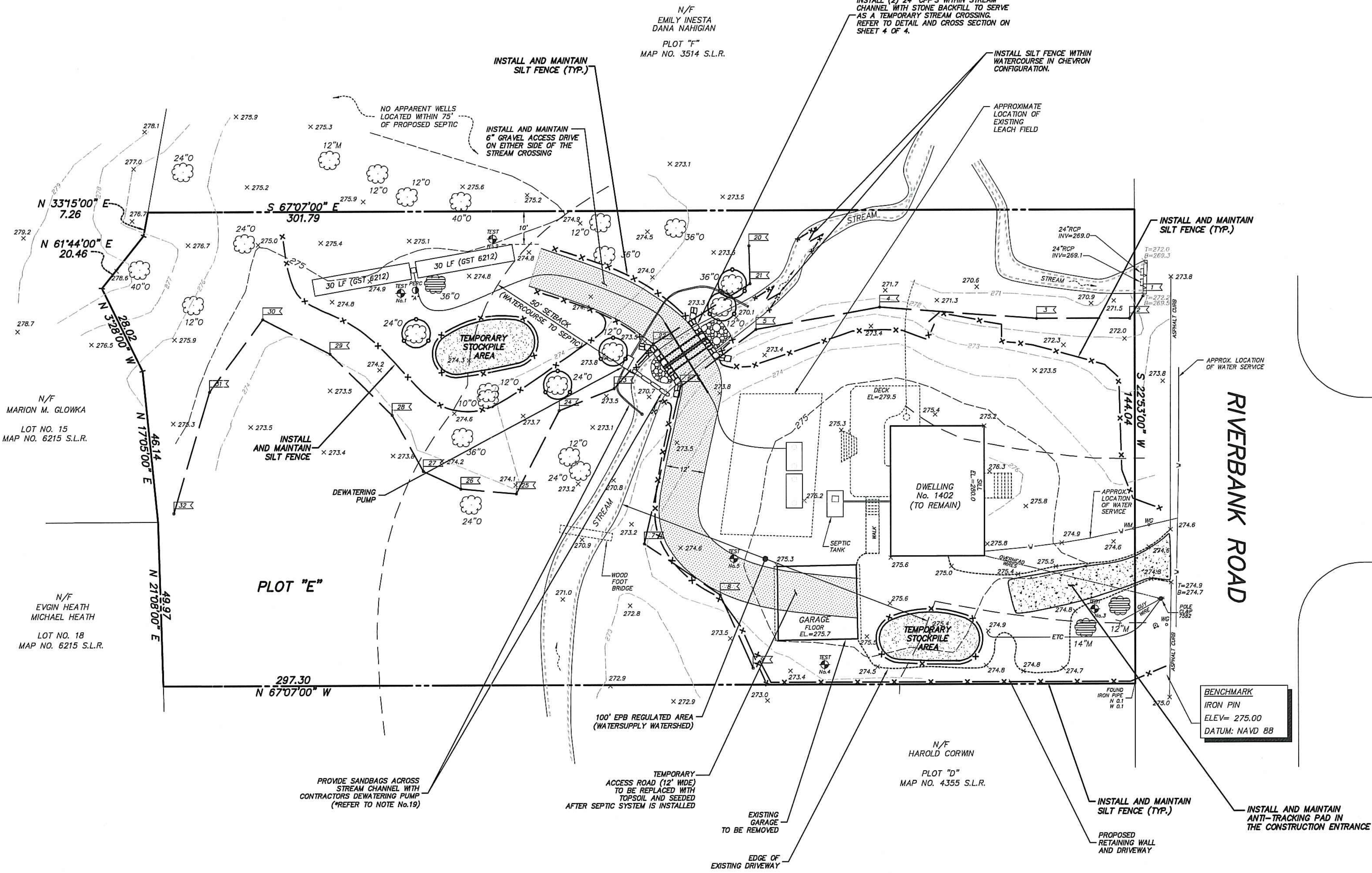
TEMPORARY ACCESS ROAD DETAIL



INSTALLATION DETAIL SEDIMENT CONTROL FABRIC

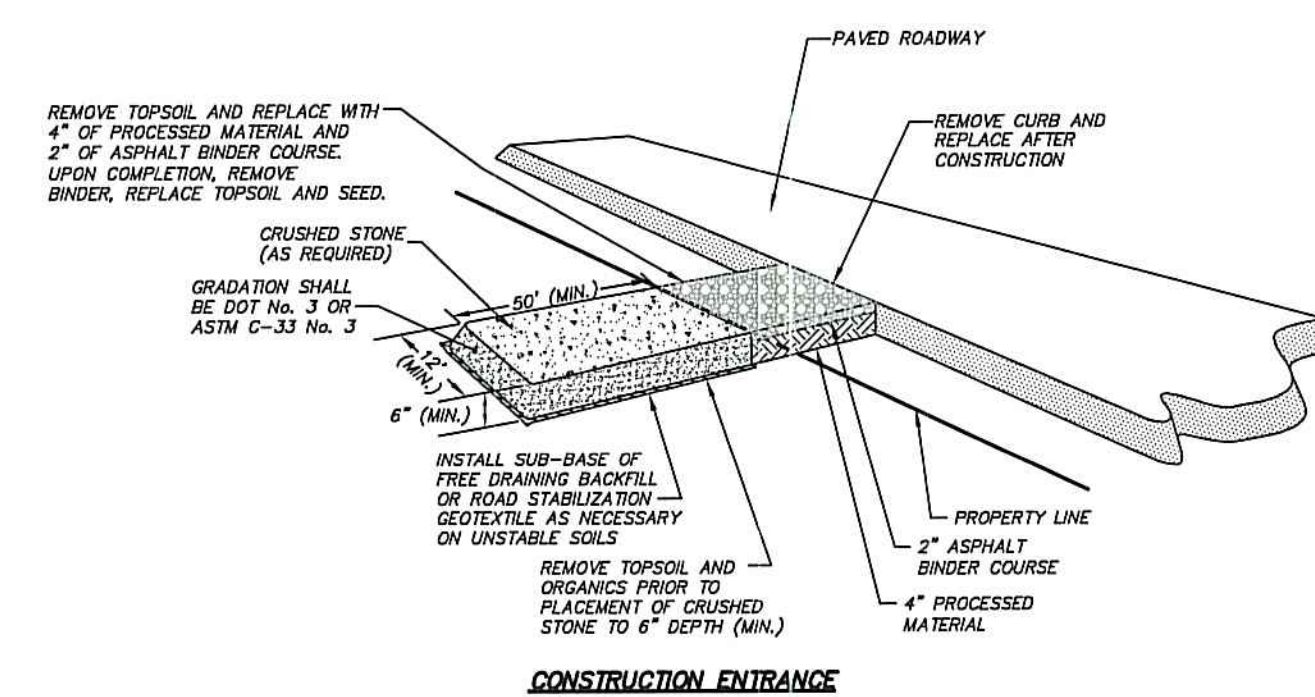


LOCATION MAP - 1" = 1000'±

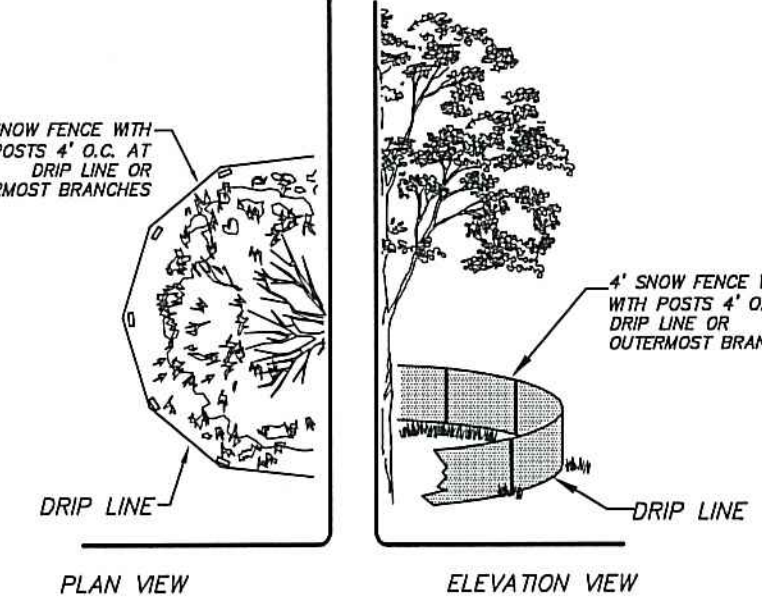


SYMBOL LEGEND

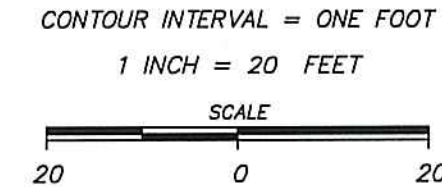
---	EXISTING CONTOUR
x 25.3	EXISTING SPOT ELEVATION
x 25.3	EXISTING WALL/CURB SPOT GRADE
(circle with cross)	DECIDUOUS TREE
(circle with star)	CONIFEROUS TREE
(circle with X)	TREE TO BE REMOVED
GG	GAS GATE
+	UTILITY POLE W/GUY
+	UTILITY POLE
+	TEST PIT
+	PERCOLATION TEST
(circle with X)	TREE PROTECTION
AD	AREA DRAIN
JB	JUNCTION BOX
CB	CATCH BASIN
C.O	CLEANOUT
PVC	POLYVINYL CHLORIDE
T.O.W	TOP OF WALL
SDMH	STORM DRAIN MANHOLE
A.O.B.E	AS ORDERED BY ENGINEER
(square with X)	HAY BALE
(square with X)	CONSTRUCTION FENCE
(square with X)	SILT FENCE
(hatched area)	FLAGGED WETLANDS



ANTI-TRACKING PAD DETAIL



TREE PROTECTION



NOTE A:
THE STREET AND PROJECT FRONTAGE AREA SHALL BE SWEEPED CLEAN AT THE END OF EACH DAY AS REQUIRED. IN PARTICULAR, THE CONSTRUCTION ENTRANCE SHALL BE KEPT FREE OF DUST AND SEDIMENT.

D'ANDREA SURVEYING & ENGINEERING, P.C.	
• LAND PLANNERS • ENGINEERS • SURVEYORS	
P.O. BOX 549 RIVERSIDE, CT 06878	6 NEIL LANE TEL. 637-1779
PROJECT	RESIDENTIAL IMPROVEMENTS
PREPARED FOR	JEFFREY CASALE
LOCATION	1402 RIVERBANK ROAD STAMFORD, CONNECTICUT
2 OF 4	SEDIMENTATION AND EROSION CONTROL PLAN

REV.	DATE	DESCRIPTION
0	11-12-24	ADDED CONSTRUCTION ACCESS
1	11-12-24	LEONARD C. D'ANDREA, CT. PE No. 14869
2	11-12-24	ENGINEER DATE

ONLY COPIES OF THIS PLAN BEARING AN ORIGINAL IMPRINT OF THE ENGINEER'S EMBOSSED SEAL ARE TRUE, VALID COPIES.

REPLACEMENT AND CONSTRUCTION NOTES:

- Contours and elevations shown hereon are based on the NGVD88 datum. The surveyor shall transfer a control benchmark into the working area after site preparation is complete.
- In accordance with Connecticut Public Act 87-71 and Connecticut General Statutes (CGS) Sections 16-345 through 16-359, the contractor shall verify the depth and location of all utilities prior to commencing construction, and shall contact "Call Before You Dig, Inc." at 1.800.922.4455, 48 hours prior to commencing construction.
- Earth material used to cover the sewage disposal system shall be free of large stones, masonry, stumps or construction debris.
- Machinery that may disturb the alignment of the disposal system shall not be allowed on the disposal area.
- No permanent structure shall be constructed over the code complying area. There shall be no filling or earth removal in the code complying area. The code complying area shall remain in its natural condition unless noted otherwise.
- All construction shall comply with applicable sections of the State of Connecticut and Town of Greenwich Health codes.
- D'Andrea Surveying & Engineering, P.C. will not be responsible for the performance of the system unless constructed according to design as it may be amended.
- Areas disturbed during construction shall be regraded, seeded and mulched, or planted, for permanent stabilization as soon as practical after construction.
- "Select Septic Fill Material" shall be placed in 8" to 12" lifts and compacted. It shall be comprised of clean sand, or sand and gravel (bank run gravel), free from organic matter and foreign substances. The select fill shall meet the following requirements unless otherwise approved by a professional engineer for use within the leaching area:
The select septic fill shall meet the requirement specified in Section VII A of the State of Connecticut Public Health Code Technical Standards.

Prior to the placement of select fill, the contractor shall, at his expense, provide to the certifying Engineer for approval and to the local Health Department a certified lab analysis of the gradation of select fill and the characteristics of compaction. The percolation rate of the select fill shall be in accordance with the Health Code and approved by the design engineer (1" in 10 min.). A percolation test shall be required if there is more than 12" depth of select fill.

- The select fill shall not contain any material larger than the three (3) inch sieve.
- Up to 45% of the dry weight of the representative sample may be retained on the #4 sieve (This is the gravel portion of the sample).
- The material that passes the #4 sieve is then reweighed and the sieve analysis started.
- The remaining sample shall meet the following gradation criteria:

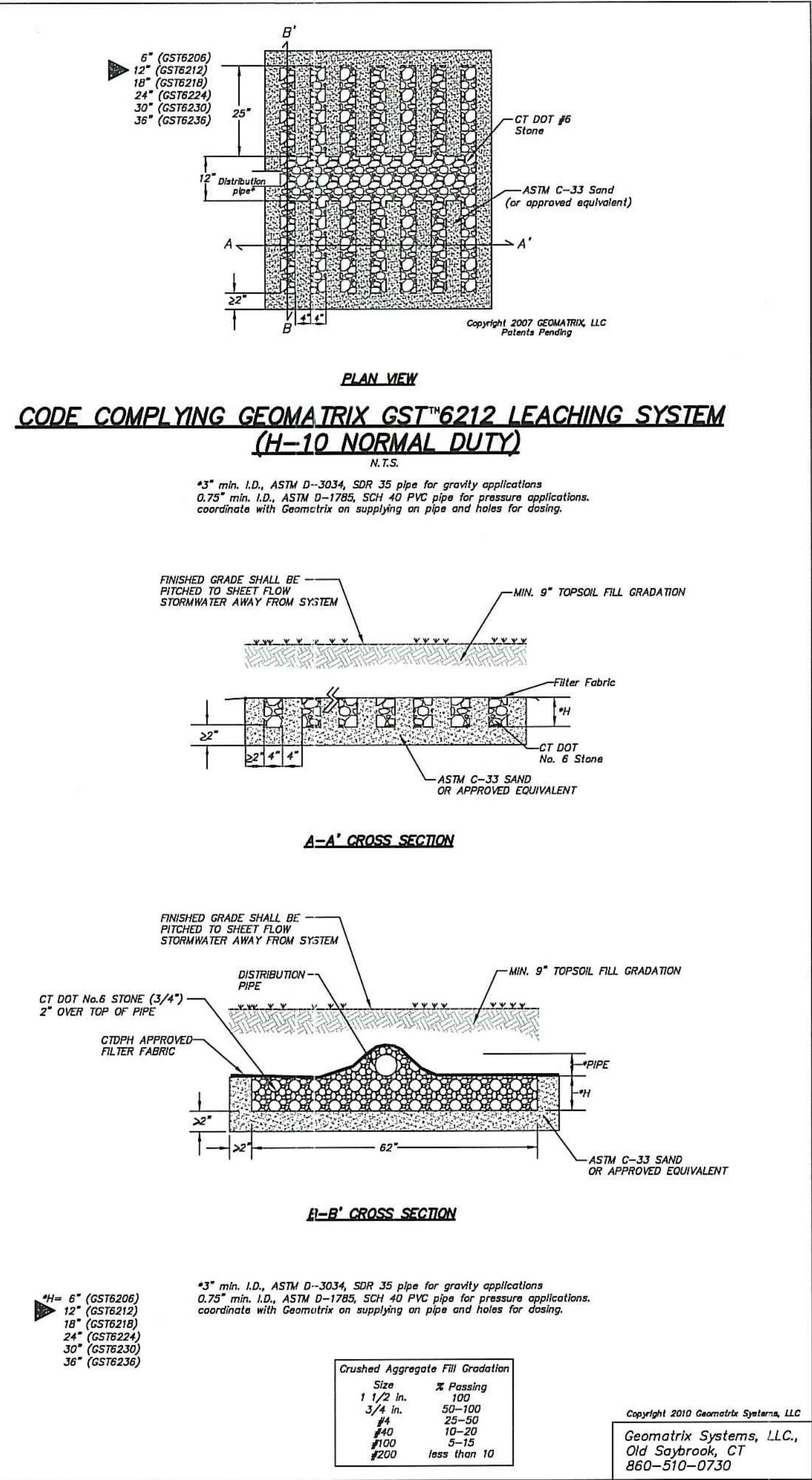
Percent Passing		
Sieve Size	Wet Sieve	Dry Sieve
#4	100	100
#10	70-100	70-100
#40	10-50 **	10-75
#100	0-20	0-5
#200	0-5	0-2.5

** 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%.

The licensed installer is responsible for preparing the leaching area with necessary select fill. The topsoil in the leaching system area must be removed and the subsoil scarified prior to select fill placement unless otherwise directed by the design engineer. The installer shall take the necessary steps to protect the underlying naturally occurring soil from over compaction or damage. Select fill shall extend a minimum of five (5) feet laterally in all directions beyond the outer perimeter of the leaching system.

- This system is not designed to accept the wastes from garbage disposal units, backwash from water treatment devices, or discharge from whirlpool type baths greater than 99 gallons.
- Any change in the location or design of the system without prior approval of the design engineer is not permitted.
- The installer shall be licensed by the State of Connecticut and shall notify D'Andrea Surveying & Engineering, P.C. and the City of Stamford Health Department (203-977-5569) 48 hours prior to starting, and prior to each phase of construction. The licensed installer shall obtain and pay for a permit to construct from the Stamford health department, prior to starting construction. If the installer does not notify the Health Department the system will not be certified.
- The new septic tank shall, shall be a 1250 gallon tank with baffle and filter. The pump chamber shall be a 1000 gallon tank. Both tanks shall be designed for H-10 loading as manufactured by Eastern Precast Co., Inc., or approved equal.
- Final location of the septic tank shall be approved by D'Andrea Surveying & Engineering, P.C. prior to commencing construction.
- Manholes on the septic tank, if located under a driveway or traveled way, shall have bolted manhole covers with rubber gaskets. Service access manholes on the septic tank shall be set to grade.
- Leaching structures shall be as specified.
- Installation of the septic system shall be inspected in progress by a Connecticut registered licensed professional engineer and an as-built plan certified by a professional engineer, shall be submitted to the City of Stamford Health Department before a "Permit to Use and/or Operate" is issued.
- The licensed septic system installer shall install the septic system in accordance with the approved plan and the "Permit to Construct" from the local Health Department. Any changes must be approved by the Engineer and the local Health Department.
- All PVC pipe shall conform to ASTM D-3034 "standard specification for type PSM-Poly Vinyl Chloride (PVC) sewer pipe and fittings" or approved equal (SDR-35) except where noted otherwise.
- Pipe from the house to the septic tank shall be 4" diameter SCH 40 PVC with solvent weld joints. Pipe shall conform to ASTM D 1785.

- Soil tests were conducted by D'Andrea Surveying & Engineering, P.C. and others as noted.
- There shall be no part of a septic system located within 75 feet of a well when the well is located upgradient from the septic system.
There shall be 100 feet separating any part of a septic system and a well when the septic system is located downgradient from the well.
- The separating distance between a septic system and a building shall be: 15 feet without footing drains on the building, 25 feet with footing drains on the building if it is located upgradient from the septic system and 50 feet with footing drains on the building if the building is located downgradient from the septic system.
- All distribution boxes shall be designed and constructed for H-10 loading as manufactured by Eastern Precast Co. Inc., or approved equal.
- All distribution boxes shall be leveled and installed on a minimum of twelve (12) inches of crushed stone.
- Prior to commencing construction, all portions of the septic system shall be clearly marked and enclosed using snow fencing so that they are not subject to H-20 loading from construction equipment or vehicles or other heavy loads from construction activities.
- Any underground drain such as footing or roof drains which discharge onto the subject parcel or within 25 feet upgradient and 50 feet downgradient of the proposed septic system shall be relocated using SDR-35 pipe or eliminated with approval of the supervising engineer.
- No part of the septic system shall be installed within 10 feet of any water distribution line.
- This property is served by public water.
- Select septic fill shall be spread on the septic area with a small crawler tractor or other machinery approved by the design engineer.
- Final elevation of the proposed septic tank shall be determined in the field with the approval of the design engineer.
- All drains within 5' to 25' of any part of the septic system shall be "tight pipe" in compliance with the requirements of the Health Code. All drains must maintain a 3' min. separation to any part of a septic system. All drains existing or proposed must meet the requirements noted, or they shall be relocated or replaced A.O.B.E.
- Conduits and drains within 5'-25' of septic system shall not be backfilled with sand, gravel or other free draining material.



HYDRAULIC LOADING:
EXISTING 3 BEDROOM DWELLING
PROPOSED 4 BEDROOM SEPTIC SYSTEM

SEPTIC TANK:
1,250 GALLON SEPTIC TANK
1000 GALLON PUMP CHAMBER

PERCOLATION RATE:
Use 1" in 10 minutes.

MINIMUM EFFECTIVE LEACHING AREA
4 BEDROOM SYSTEM REQUIRES 577.5 SQUARE FEET OF LEACHING AREA
THIS SYSTEM PROVIDES 600 SQUARE FEET OF EFFECTIVE LEACHING AREA

LEACHING AREA:
Use Geomatrix - GST 6212 (10 sf/lf).
Lineal feet of galleries required: $\frac{577.5 \text{ sf}}{10 \text{ sf/lf}} = 57.8 \text{ lf}$

Use: 30 + 30 = 60'
60' x 10 sf/lf = 600 sf of leaching area provided.

MINIMUM LEACHING SYSTEM SPREAD(MLSS):
Average Slope: $\frac{275.0 - 274.0}{43.0} = 2.3\%$

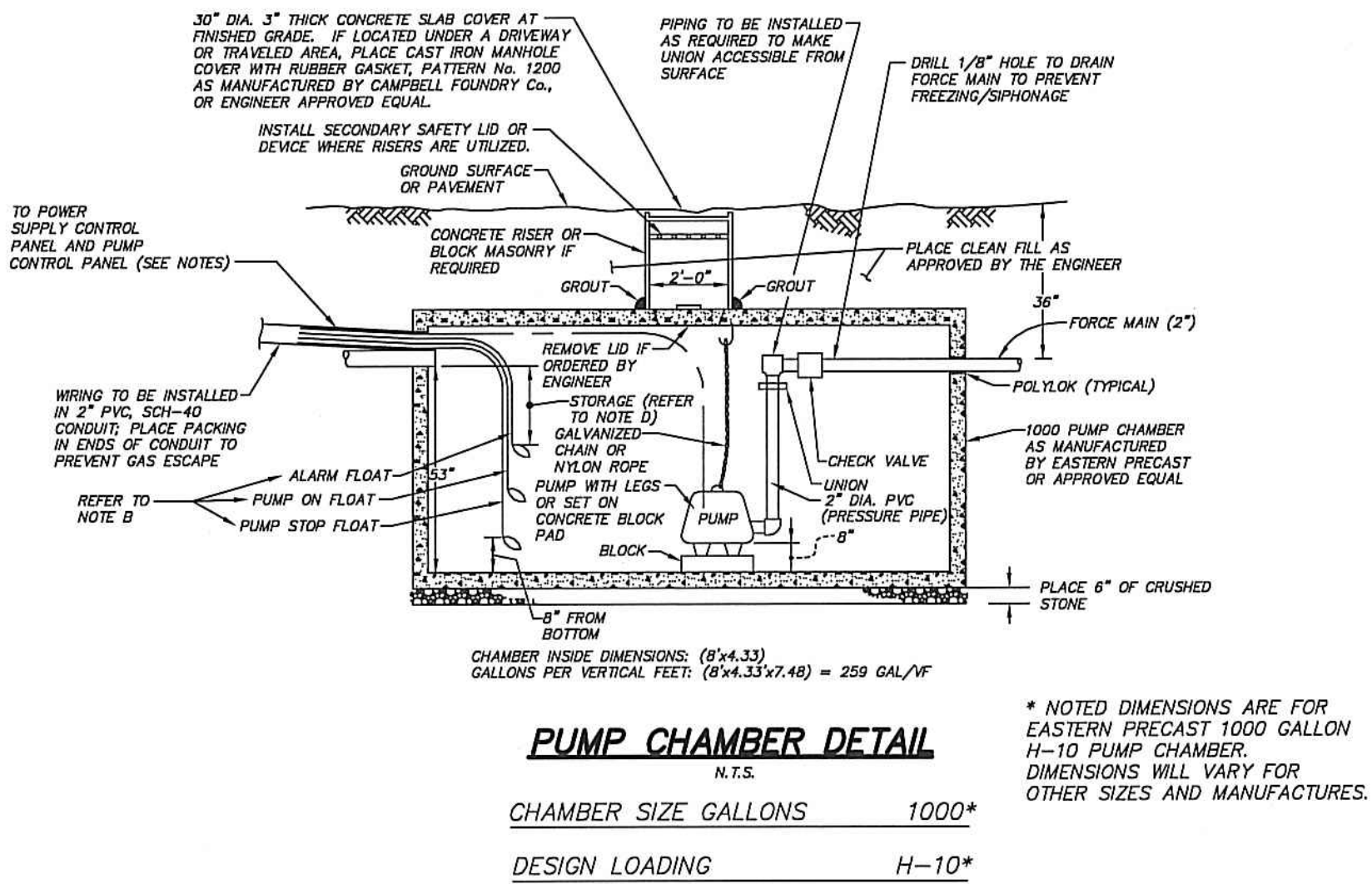
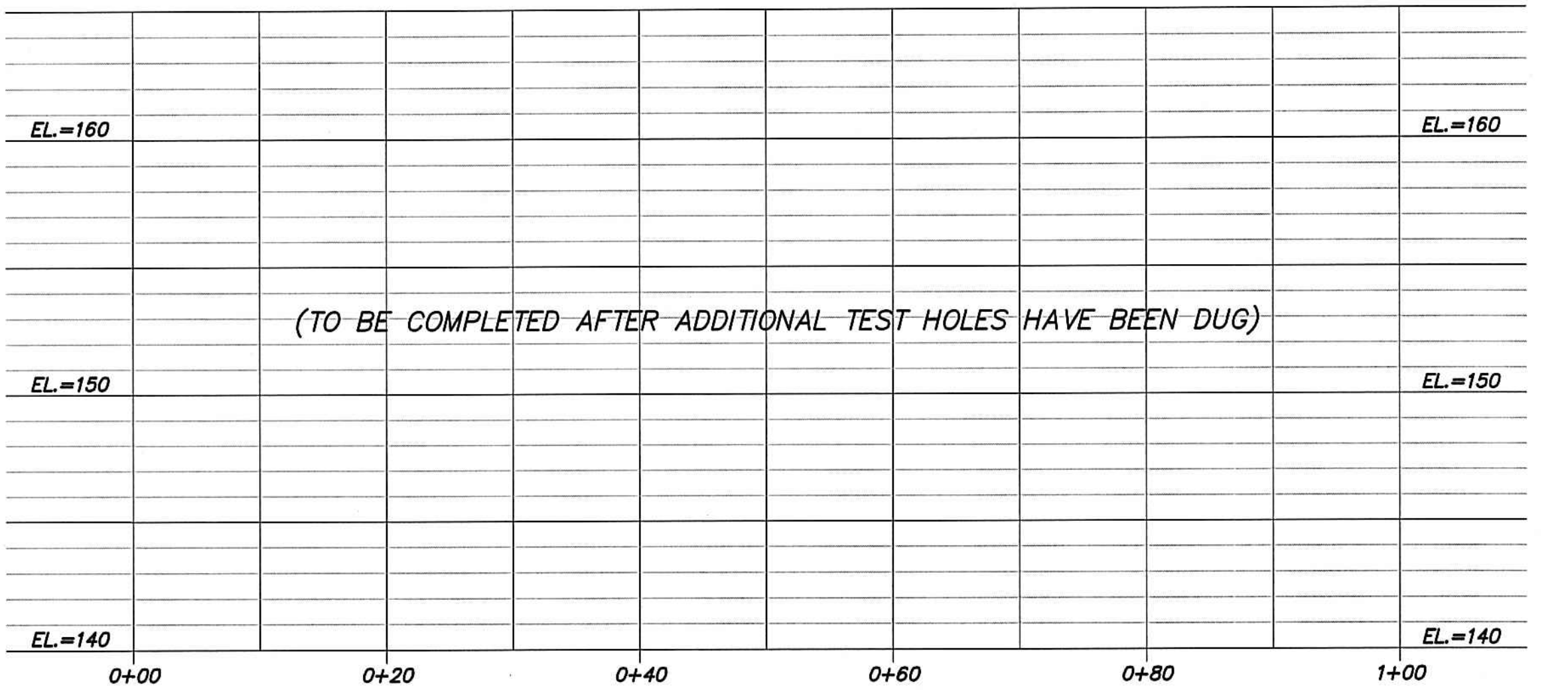
Hydraulic Factor (HF): *Average Restrictive Layer @ 36.0"; HF = 34
Flow Factor (FF): 4 bedrooms dwelling = (525/300) = 1.75
Percolation Factor (PF): PF = 1.0 (Percolation rate: 1" in 10 minutes)
MLSS = (HF)*(FF)*(PF) = (34)(1.75)(1.0) = 59.5 If (Required)

Leaching System Spread Provided = (30+30) = 60 If

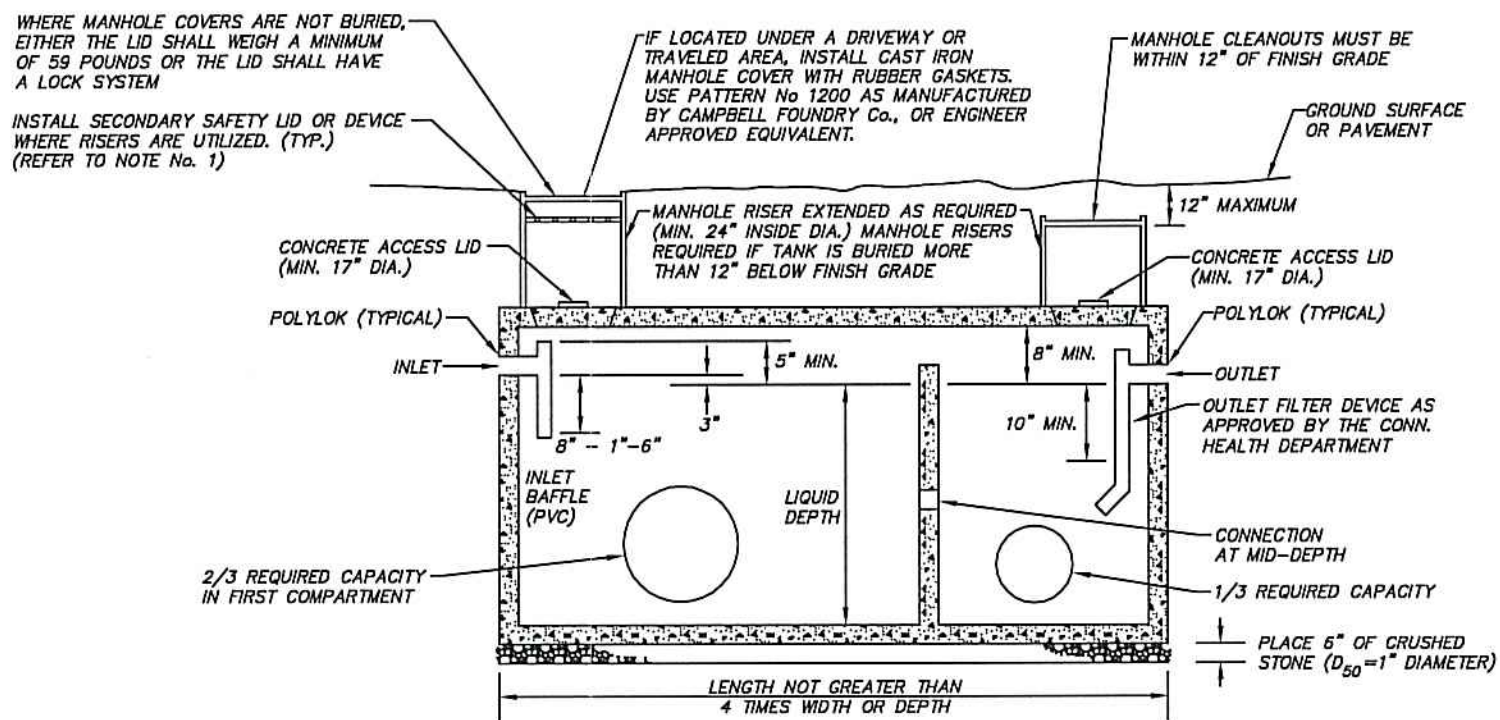
Stacking Analysis: None Required

***AVERAGE RESTRICTIVE LAYER**

Depth
TP#1 = 36" (HAND DUG)
TP#2 = 36" (HAND DUG)
72/2 = 36.0"



- The two (2) inch diameter pump discharge line shall be installed 3' below grade (minimum). Material shall be SCH 40 PVC conforming to ASTM D 1785 with solvent weld joints or 2" HDPE (SDR 15- P.R. 100 PSI) meeting ASTM D 2239 & ASTM 2737.
- The pump chamber shall contain a Liberty LE41M-2 1/2" ACHP pump for total heads less than 15'. For total heads from 15' to 50', the pump shall be a Liberty LE41M-2 2" ACHP. The discharge pipe be 1 1/2" diameter, or approved equal by the design engineer. Pump controls shall be set to discharge 125 gallons per cycle (5 3/4" drawdown, 0.48"). A high level alarm with light and bell shall be installed in the dwelling and a service shut-off switch, visible from the pump chamber, shall be installed outside the dwelling. Alarm float activates 3" above pump on pump on.
- The pump shall have a manual run option and thus have a Liberty Simplex Control Panel SKL21-3 with alarm noted above, and additionally the pump shall be 115v and have 20' of cord. Coordinate panel location with Engineer, but typically the panel should be in the basement proximate to other control panels.
- Electrical connections for the pump shall be housed in a water proof box set a minimum of 12" above finished grade. All electrical installations shall meet State and local codes. Underground cable shall be installed in PVC conduit; The septic system installer shall provide a pull line in each conduit. Electrical wiring shall be installed by a licensed electrician; an electrical permit shall be obtained.
- Bottom of tank to "STOP" float = 173 Gallons (8" Vertical Depth)
Dosing Volume = 525 Gallons / 5 = 105 Gallons (4.86" Vertical Depth)
Storage between "ON" float and "ALARM" float = 64.8 Gallons (3" Vertical Depth)
24-hour Emergency Storage above "ALARM" float = 525 Gallons (24.3" Vertical Depth)
Total Vertical Depth = (8" + 4.86 + 3" + 24.3") = 40.2" < 53".
- Submit Pump and Control Specification package for review and approval by Engineer.



TANK SIZE GALLONS 1250

DESIGN LOADING H-10

- NOTE:
- SEPTIC TANK TO COMPLY WITH JANUARY 2023 REVISIONS OF THE CONNECTICUT HEALTH CODE.
 - SEPTIC TANK TO COMPLY WITH ASTM C-1227, WITH EXCEPTIONS AS ALLOWED BY THE CONNECTICUT HEALTH CODE.
 - BY EASTERN PRECAST OR APPROVED EQUAL

D'ANDREA SURVEYING & ENGINEERING, P.C.

• LAND PLANNERS
• ENGINEERS
• SURVEYORS

P.O. BOX 549
RIVERSIDE, CT 06878

6 NEIL LANE
TEL. 637-1779

PROJECT RESIDENTIAL IMPROVEMENTS

PREPARED FOR JEFFREY CASALE

LOCATION 1402 RIVERBANK ROAD STAMFORD, CONNECTICUT

3 OF 4 SEPTIC NOTES & DETAILS

REV.	DATE	DESCRIPTION
0	11-12-24	ADDED S&E SHEET SHOWING CONST. ACCESS
1	11-12-24	ENGINEER

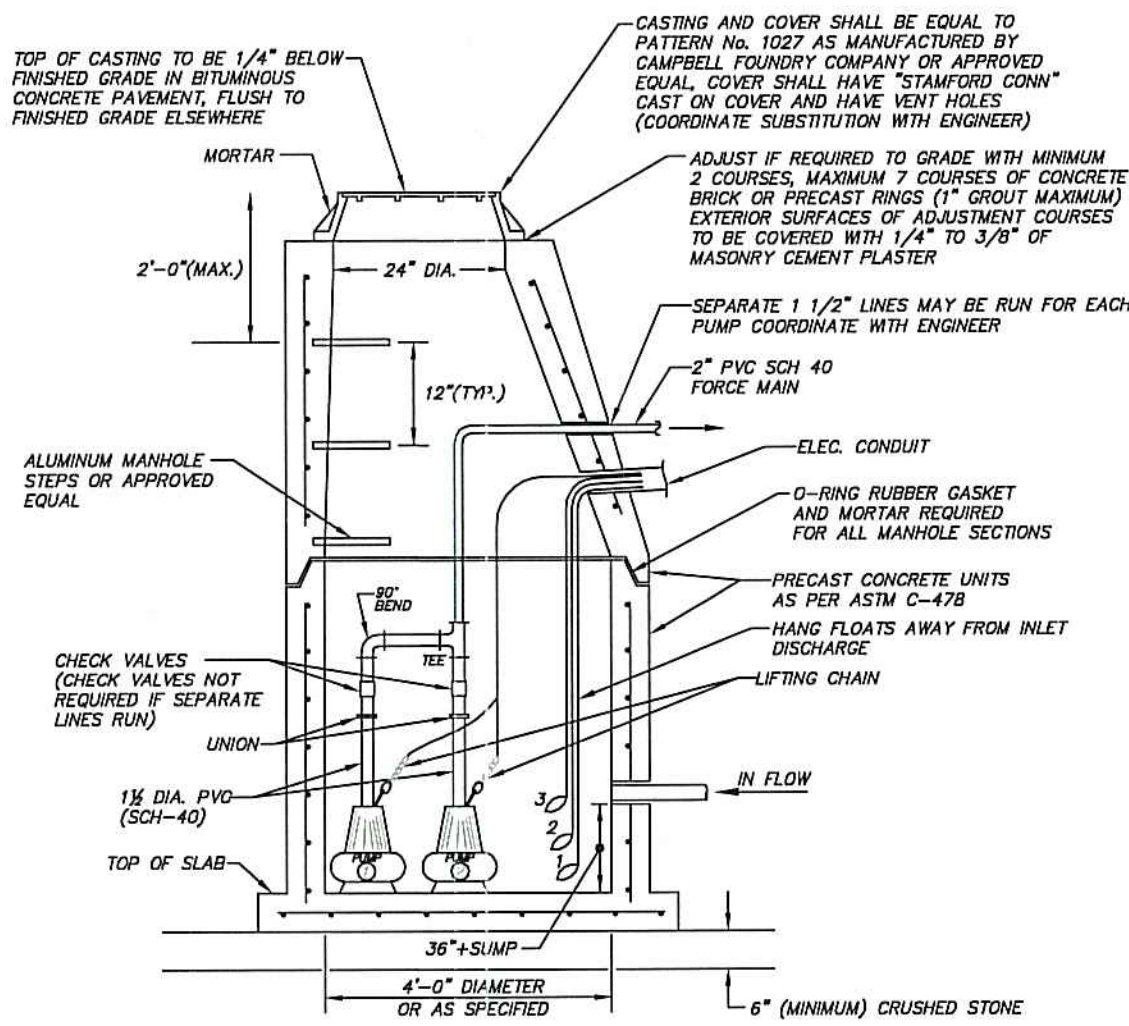
ONLY COPIES OF THIS PLAN BEARING AN ORIGINAL IMPRINT OF THE ENGINEER'S EMBOSSED SEAL ARE TRUE, VALID COPIES.

CONSTRUCTION NOTES:

- In accordance with Connecticut Public Act 87-71 and Connecticut General Statutes Sections 16-345 through 16-359, the owner or the contractor shall be required to verify the depth and location of all utilities prior to commencing construction, and shall contact "Call Before You Dig, Inc." at 1-800-922-4455, 48 hours prior to commencing construction for mark out of underground utilities.
- The contractor shall be solely responsible to coordinate his work with the work being done by others. The contractor shall likewise bear the responsibility for delays or other factors related to the work by others. No claims shall be allowed due to the contractor's failure to adequately coordinate such work.
- THE CITY OF STAMFORD ENGINEERING BUREAU SHALL BE NOTIFIED THREE DAYS PRIOR TO THE COMMENCEMENT OF EACH PHASE OF CONSTRUCTION AFFECTING THE CITY RIGHT-OF-WAY.
- All construction shall comply with applicable sections of the State of Connecticut, Local, and International Building codes, and those criteria shall take precedent over these plans.
- All construction shall be inspected by a professional engineer prior to backfill and as the work progresses.
- The project engineer shall be notified a minimum of three working days prior to the commencement of each phase of construction.
- Appropriate measures shall be taken to control any sedimentation and erosion which may result during construction.
- All excavated material shall be stockpiled and contained on-site within silt fencing. The contractor shall be responsible for the removal of all excavated material during construction. All excess material shall be removed in a careful and environmentally sound manner and shall be disposed of legally off-site.
- All specimen trees shall be protected during the construction period, except those specifically designated to be removed, in accordance with generally accepted standards.
- The proposed building shall be designed by an architect in order to conform with current applicable zoning setback criteria and regulations, and a building permit shall be obtained prior to commencing construction.
- Existing utilities in conflict through or above this parcel shall be relocated as directed by the appropriate utility company or the owner. The contractor shall excavate test pits to verify the location and depth of utilities where conflicts may exist.
- Pavement replacement shall be bituminous concrete, placed in accordance with the City of Stamford standards and/or Connecticut State Highway specifications.
- Shoulders and disturbed areas shall receive four inches of topsoil, fine graded and seeded as soon as practical to prevent erosion.
- The contractor shall not commence any paving until the grading and shaping of the compacted gravel base has been approved by the project engineer.
- Re-grading, filling, and other such alterations to the site shall be restricted to the minimum level necessary to complete the project as shown on the plan.
- Existing inverts on storm drains, sanitary sewers, and utility conduits shall be field verified where appropriate, before commencing construction. The contractor shall excavate test pits where indicated hereon or whenever conflicts may occur. The contractor shall notify the project engineer of the test pit schedule. Design conflicts if any, shall be brought to the immediate attention of the project engineer. Plate or backfill and patch test pits as directed by the project engineer.
- The project engineer with the approval of the City of Stamford, may direct a change in the location of the storm drainage or sanitary sewer structures to meet field conditions.
- On-site driveway catch basins shall be 24"x24" as manufactured by Eastern Precast Co., Inc., with Pattern No. 2815, cast iron frame and grate, as manufactured by Campbell Foundry, Co., or engineer approved equal, unless noted otherwise. All catch basins shall have 2" (minimum) sumps and bell traps, installed immediately upon making pipe connections, unless noted otherwise.
- All gravity PVC storm drain and sanitary sewer pipes shall conform to ASTM D 3034 "Standard Specification for type PSM Poly Vinyl Chloride (PVC) Sewer Pipe and Fittings" or approved equal (SDR35). Bends in pipes shall not exceed 45 degrees.
- Where unsuitable foundation is encountered during construction of storm drains or sanitary sewers, the contractor shall remove the unsuitable material and replace it with other material approved by the project engineer.
- Bedding and backfill material shall conform to ASTM D2321 specification "standard recommended practice for underground installations of flexible thermoplastic sewer pipe (PVC)."
- All site drainage connections shall be sloped at 2% (minimum) or as otherwise noted.
- All drainage and sewer conduits if located under a paved or traveled way shall have 1 foot minimum cover for residential driveways and 2 1/2 foot minimum cover within the municipal right-of-way, or be encased in concrete as ordered by the supervising engineer.
- The contractor shall provide all equipment, tools, labor and materials necessary to satisfactorily clean and remove all visible obstructions, dirt, sand, sludge, roots, gravel, stones, etc., from the storm drains, sanitary sewers, and manholes.
- Processed aggregate shall be in accordance with the City of Stamford standards and/or Connecticut State Highway specifications.
- Individual residential driveway pavement shall be one course of 2 1/2" compacted Class 2 bituminous concrete with a 6" processed aggregate base.
- All retaining walls greater than three feet are required to be designed, and inspected during construction by a Professional Engineer registered in the State of Connecticut. A Retaining Wall Certification Sign-Off and Retaining Wall Field Inspection Record form shall be submitted prior to the issuance of a Certificate of Occupancy.
- All detention/retention systems shall be installed per manufacturers specifications. All systems shall use a manifold system to distribute runoff evenly into each row of infiltrators. The manifold shall be installed on the inlet and overflow sides.
- The contractor shall be responsible for securing all required permits from the City of Stamford for completion of the project, including but not limited to Health Department approval.

Standard City of Stamford Notes:

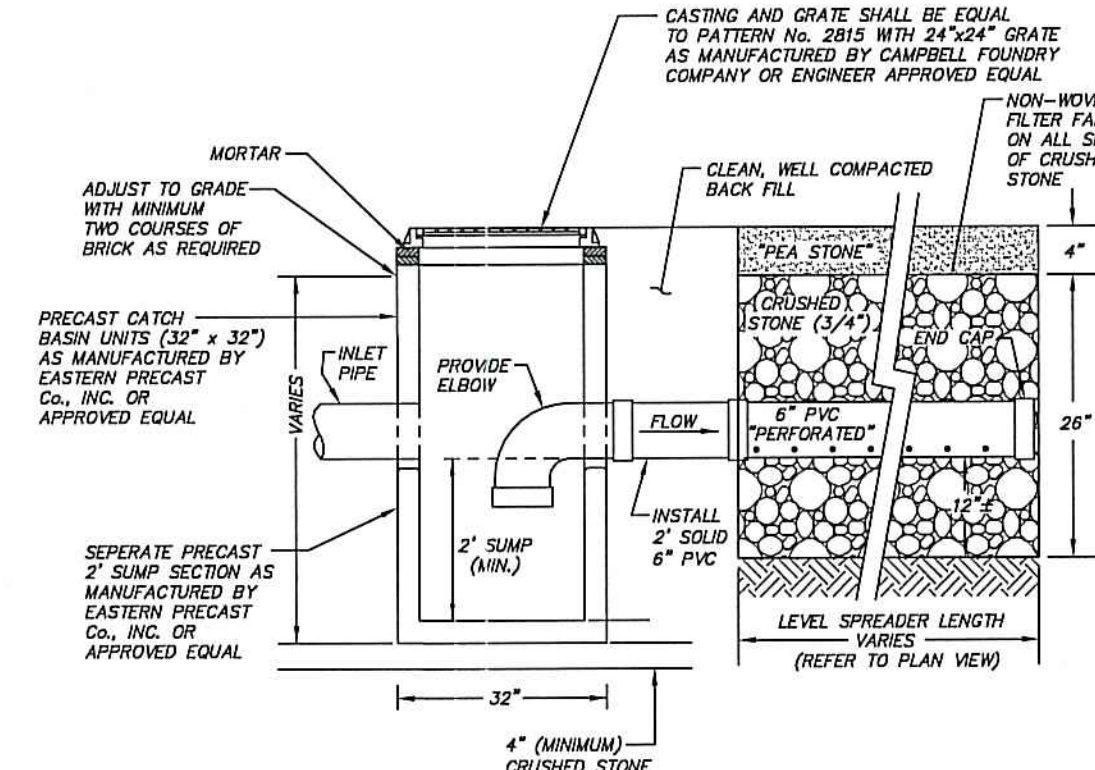
- A Street Opening Permit is required for all work within the City of Stamford Right-of-Way.
- All work within the City of Stamford Right-of-Way shall be constructed to City of Stamford requirements, the State of Connecticut Basic Building Code and the Connecticut Guidelines for Soil Erosion and Sedimentation Control.
- The Engineering Bureau of the City of Stamford shall be notified three days prior to any commencement of construction or work within the City of Stamford Right-of-Way.
- Trees within the City of Stamford Right-of-Way to be removed shall be posted in accordance with the Tree Ordinance.
- Prior to any excavation the Contractor and/or Applicant/Owner, in accordance with Public Act 77-350, shall be required to contact "Call Before You Dig" at 1-800-922-4455 for mark out of underground utilities.
- All retaining walls three (3) feet or higher measured from finished grade at the bottom of the wall to finished grade at the top of the wall and retaining walls supporting a surcharge or impounding Class I, II or III-A liquids are required to have a Building Permit. Retaining walls shall be designed and inspected during construction by a Professional Engineer licensed in the State of Connecticut. Prior to the issuance of a Certificate of Occupancy, retaining walls shall be certified by a Professional Engineer licensed in the State of Connecticut.
- Certification will be required by a professional engineer licensed in the State of Connecticut that work has been completed in compliance with the approved drawings.
- A Final Improvement Location Survey will be required by a professional land surveyor licensed in the State of Connecticut.
- Connection to a city-owned storm sewer shall require the Waiver Covering Storm Sewer Connection to be filed with the City of Stamford Engineering Bureau.
- Granite block or other decorative stone or brick, depressed curb, driveway apron and curbing within the City of Stamford Right-of-Way shall require the Waiver Covering Granite Block Depressed Curb and Driveway Aprons to be filed with the City of Stamford Engineering Bureau.
- Sediment and erosion controls shall be maintained and repaired as necessary throughout construction until the site is stabilized.
- To obtain a Certificate of Occupancy, submittal must include all items outlined in the Checklist for Certificate of Occupancy (Appendix D of the City of Stamford Drainage Manual).
- Reference EPB Permit #, Zoning Permit #, Zoning Board of Appeals #, Subdivision #, if applicable.



STORM DRAIN MANHOLE WITH SUMP PUMPS DETAIL

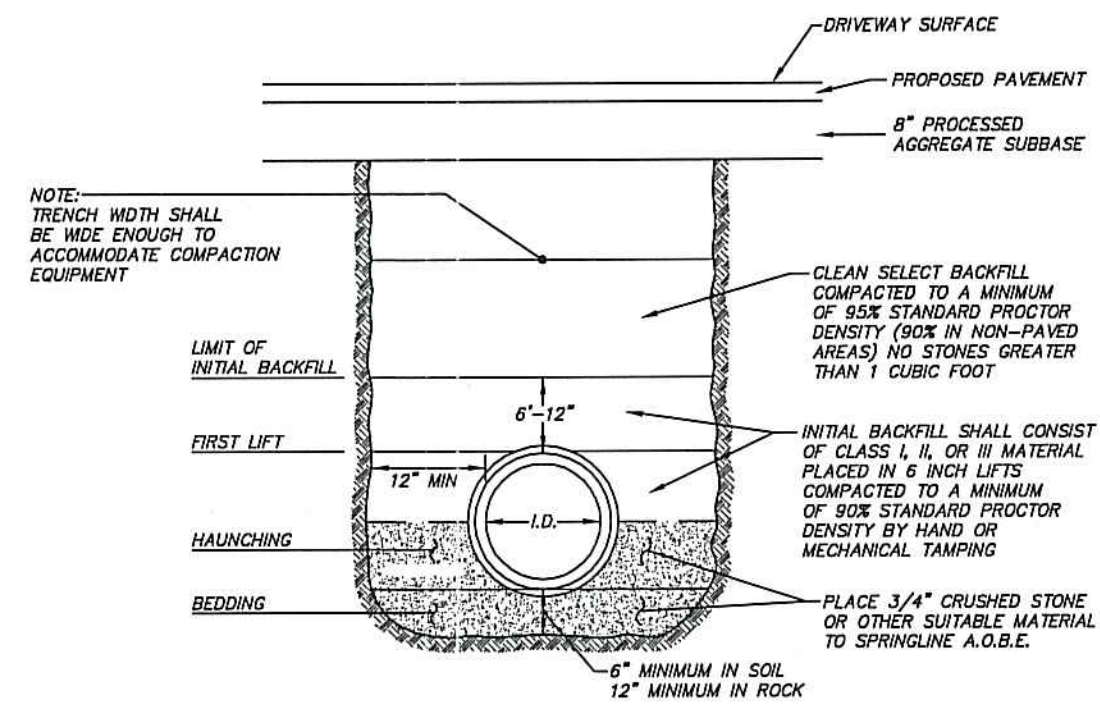
N.T.S.
(FOR DUPLEX SUMP PUMPS)

- NOTES:
1. PUMP OFF: (0'-3\"/>



LEVEL SPREADER WITH 32\"/>

N.T.S.

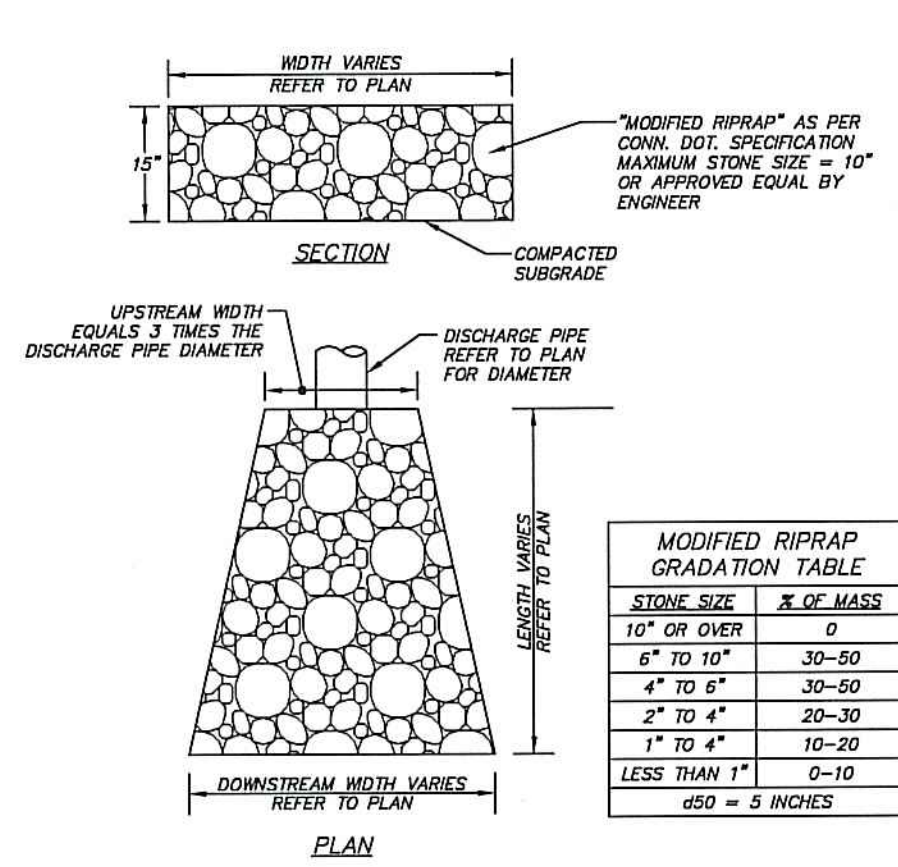


DETAIL FOR PVC SANITARY SEWER AND PVC/CPP STORM DRAIN INSTALLATION

N.T.S.

NOTES:

1. REFER TO ASTM D2321 (STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS) FOR TRENCHING SPECIFICATIONS.

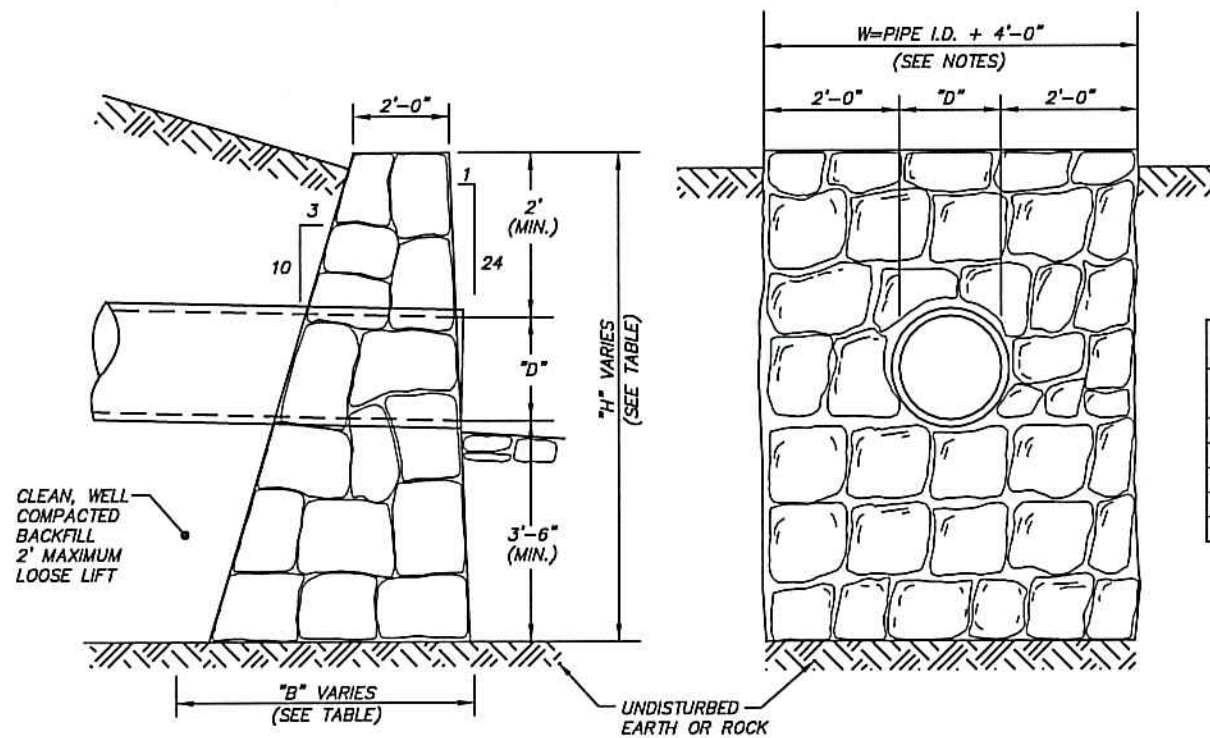


MODIFIED RIPRAP PAD DETAIL

N.T.S.

NOTES:

1. THE BOTTOM WIDTH OF THE RIPRAP PROTECTION SHALL BE AT LEAST EQUAL TO THE BOTTOM WIDTH OF THE DOWNSTREAM CHANNEL. THE RIPRAP LINING SHALL EXTEND NO LOWER THAN TWO-THIRDS OF THE CONDUIT'S VERTICAL DIMENSIONS ABOVE THE CULVERT INVERT.
2. REFER TO THE DEVELOPMENT PLANS FOR LENGTHS OF RIPRAP PROTECTION.
3. SIDE SLOPES OF RIPRAP PROTECTION SHALL BE 2H:1V OR FLATTER.
4. THERE SHALL BE NO VERTICAL DROP AT THE END OF THE APRON OR AT THE END OF THE CULVERT.

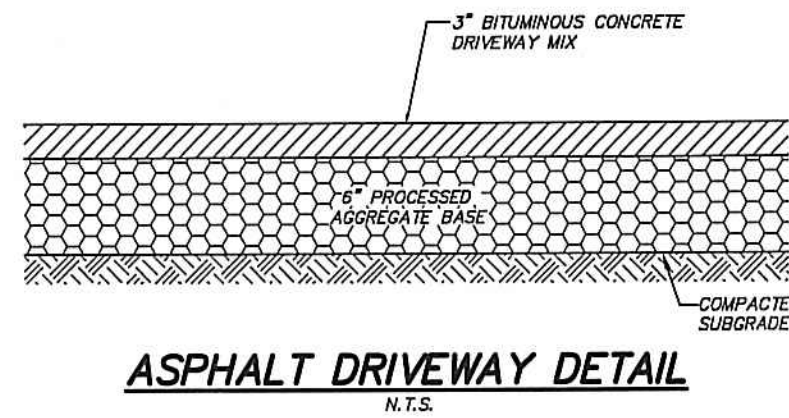


STONE MASONRY END/HEAD WALL

N.T.S.

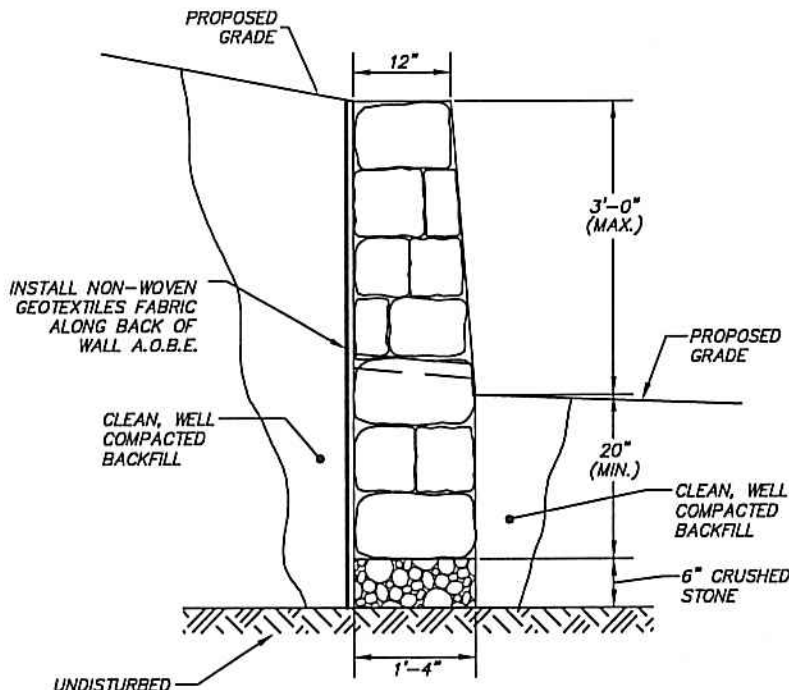
STONE RETAINING WALL NOTES

SHOULD THERE BE MORE THAN ONE LINE OF PIPES, THE TOTAL WIDTH OF HEADWALL/ENDWALL WILL BE EQUAL TO THE SUM OF PIPE DIAMETERS AND SPACING(S) BETWEEN PIPES AND 4'-0\"/>



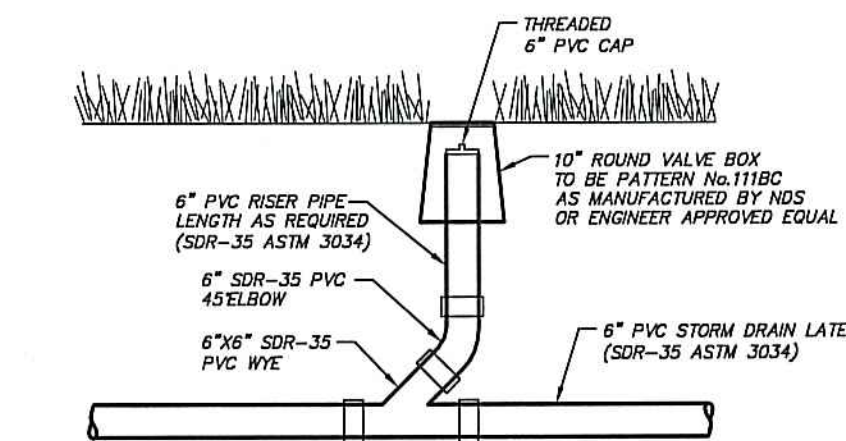
ASPHALT DRIVEWAY DETAIL

N.T.S.



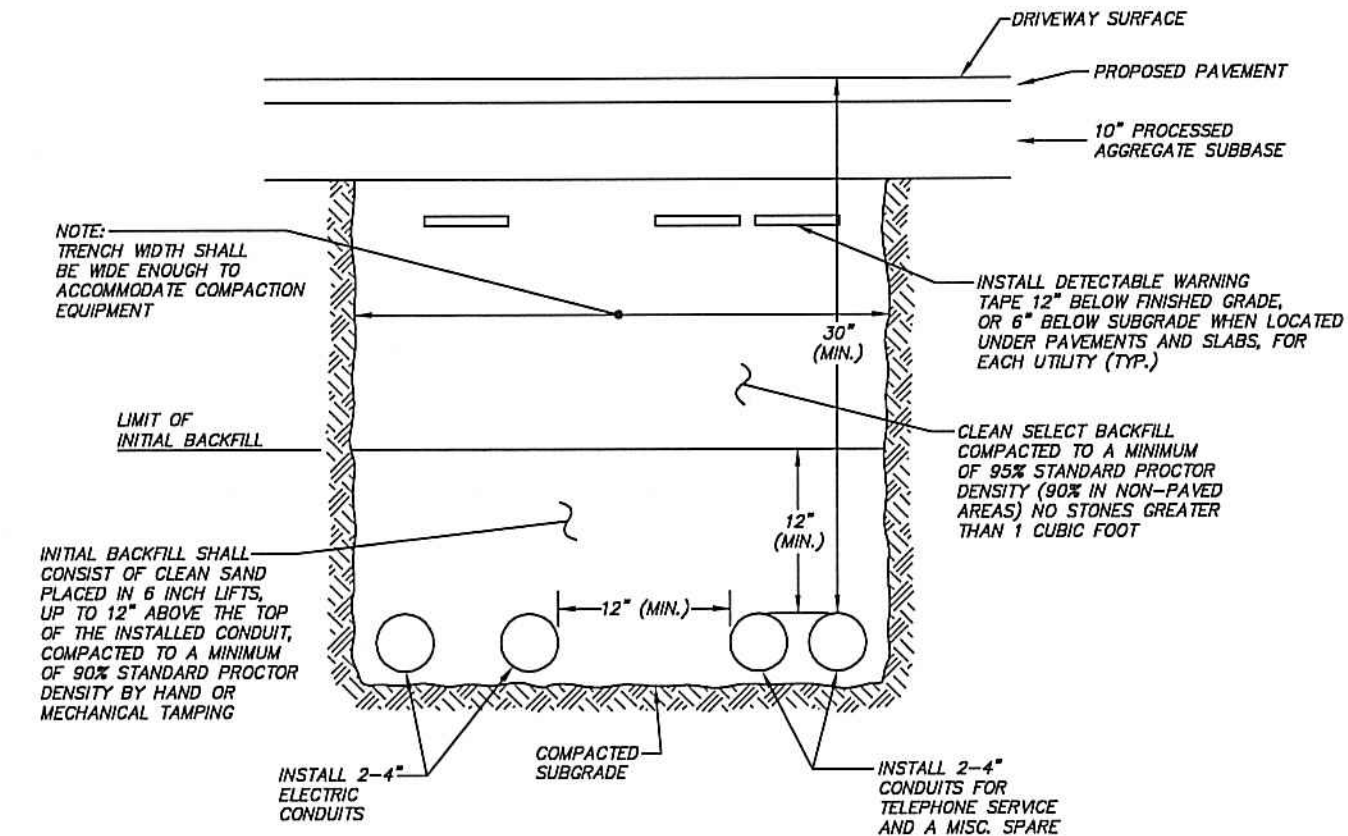
LOW-PROFILE STONE MASONRY RETAINING WALL

N.T.S.



ROOF DRAIN CLEAN OUT TO GRADE DETAIL

N.T.S.



DETAIL FOR UNDERGROUND UTILITY TRENCH

N.T.S.

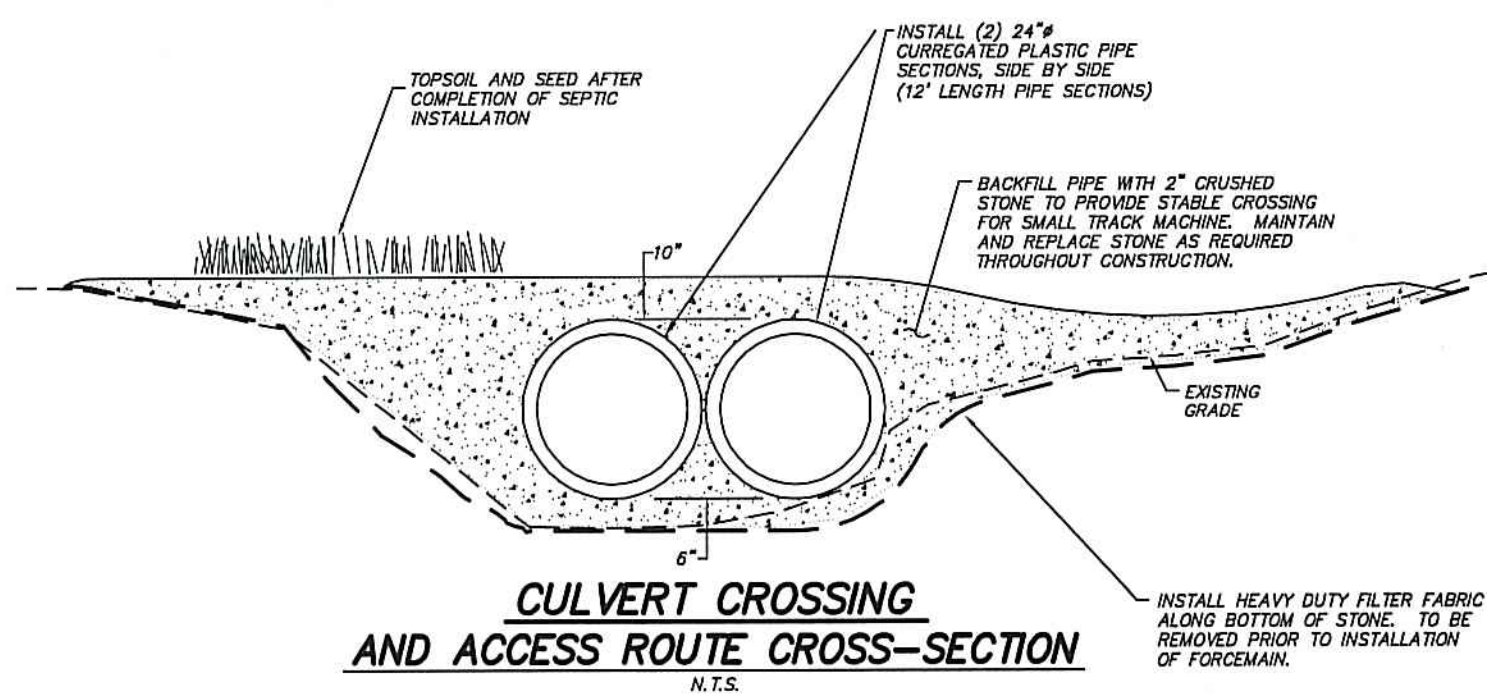
NOTES:

1. COORDINATE NUMBER AND SIZE OF CONDUIT WITH EACH RESPECTIVE UTILITY COMPANY PRIOR TO INSTALLATION.
2. THIS SECTION IS DESIGNED IN ACCORDANCE WITH SECTION 7.1 OF THE CITY OF STAMFORD ZONING REGULATIONS AND IS CAPABLE OF WITHSTANDING THE FLOOD DEPTHS, PRESSURES, VELOCITIES, IMPACT AND UPLIFT FORCES, AND OTHER FACTORS ASSOCIATED WITH THE BASE FLOOD.



RESIDENTIAL SPLASH PAD DETAIL

TYPICAL RESIDENTIAL SPECIFICATIONS:
WIDTH=11.5'
LENGTH=24.0'
HEIGHT=2.0'
(OR APPROVED EQUIVALENT)



CULVERT CROSSING AND ACCESS ROUTE CROSS-SECTION

N.T.S.

D'ANDREA SURVEYING & ENGINEERING, P.C.
• LAND PLANNERS
• ENGINEERS
• SURVEYORS
P.O. BOX 549
RIVERSIDE, CT 06878
LEONARD G. D'ANDREA, CT. PE No. 14869
6 NEIL LANE
TEL. 637-1779

PROJECT	RESIDENTIAL IMPROVEMENTS
PREPARED FOR	JEFFREY CASALE
LOCATION	1402 RIVERBANK ROAD STAMFORD, CONNECTICUT
4 OF 4	NOTES & DETAILS

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