

**IMPERVIOUS COVERAGE:**

Previously Approved For Lot 8  
 Dwelling = 1,620 S.F.  
 Macadam = 894 S.F.  
 Landings & Steps = 24 S.F.  
 Walks = 34 S.F.  
 Adjoining Pool = 520 S.F.  
 Total = 3,123 S.F.

Proposed for Lot 8  
 Dwelling = 1,938 S.F.  
 Covered Porch = 26 S.F.  
 Macadam = 1,022 S.F.  
 Steps & Walk = 174 S.F.  
 Total = 3,160 S.F.

Increase from Previously Approved = 73 S.F.

**DRAINAGE CALCULATIONS:**

**PURPOSE:**  
 As per the approved report entitled "Stormwater Drainage Report Prepared For Braen Avenue & Sotnick Street" prepared by Rigg Associates revised through 01/08/14, all of the runoff from the proposed dwelling shall be collected and the retention system shall be designed based on a rainfall depth of 2.81 in/hr for a 60 minute duration.

**VOLUME REQUIRED:**  
 Area Collected = 1,964 S.F.  
 Rainfall Depth = 2.81 in/hr or 0.23'  
 Rain Volume = 0.23' x 1,964 S.F. = 451.7 C.F.  
 Runoff Amount = 451.7 C.F. x 0.99 = 447.2 C.F.  
 Storage Required = 447.2 C.F.

**VOLUME PROVIDED:**  
 Two seepage pits 6.0' ID by 6.5' OD by 6' Deep in a bed of 2.5" crushed stone 16.5' long by 8.5' wide by 6.5' deep.  
 Volume Of Pits = 169.6 x 2 = 339.2 C.F.  
 Voids In Stone = 194.3 C.F.  
 Total Volume Provided = 533.5 C.F.

**GENERAL NOTES:**

- 1) Site information shown hereon is based on a map entitled "Topographic Survey Of Property At 10 Sotnick Street, Borough Of Hawthorne, N.J., County Of Passaic" dated October 23, 2018 as prepared by Rigg Associates, PA.
- 2) The proposed dwelling shown hereon is based on plans entitled "Proposed Two Family House For 53 Braen Ave, LLC" revised 09/24/18 as prepared by Evans Architects AIA.
- 3) The subject property is located in Zones R-1 and contains 45,556 S.F. or 1.05 acres.
- 4) Copies of this map not having the embossed seal of the Professional Engineer and the Professional Land Surveyor shall not be valid.
- 5) It is the responsibility of the owner and/or contractor to verify they are using the correct plans for construction. The Plans should contain signed approval blocks by the appropriate officials, the signature of the professional and the raised seal of the professional affixed thereon.
- 6) Design professionals shown hereon may not be observing construction or installation. Conformance with design specifications is the responsibility of the owner and/or contractor.
- 7) All Utilities shown on this plan have been located through the review of old maps and plans, through the respective utility companies and confirmed by field inspection and location where possible. There may be additional utilities or different underground locations that are not available to the preparer of this plan. Care should be taken during project design and construction to verify the locations through all available measures, including the New Jersey One Call System (811) to preserve the utilities where they exist or plan for their relocation, if necessary.
- 8) There has been no environmental evaluation as to the presence or absence of freshwater wetlands or associated transition areas provided or completed as part of the preparation of this plan.
- 9) In accordance with the information available on Panel 207 of the Flood Insurance Rate Map revised to 09/28/2007, the subject property is outside the 0.2% annual chance flood plain.
- 10) Elevations based on N.G.V.D. 1929.
- 11) All service connections shall be installed and tested in accordance with all applicable local and state requirements. All utilities, including telephone & cable television, shall be placed underground.
- 12) The minimum slope on the 6" PVC sanitary sewer laterals shall be 0.5%.
- 13) The roof drains from the proposed dwelling shall be installed with overflow tee connections. The roof drains and trench drain shall be connected to the proposed retention system using 6" PVC Sch. 40 or SDR 35 pipe at a minimum 1% slope.
- 14) Soil erosion and sediment control measures shall be installed and maintained in accordance with the State standards.

**BUILDING HEIGHT CALCULATIONS:**

Average Finished Grade Elevation = 166.4  
 FF to Mean Roof Height = 26.5 Feet  
 Mean Roof Height Elevation = 200.8  
 Building Height = 34.4 Feet

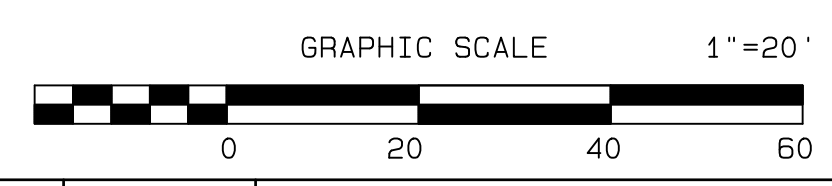
**ZONING REQUIREMENTS ZONE R-1 ONE FAMILY**

Description	Required	Previously Approved	Proposed
Minimum Lot Area	18,750 S.F.	45,556 S.F.	45,556 S.F.
Minimum Lot Width	125 Ft.	172.4 Ft.	172.4 Ft.
Minimum Lot Depth	150 Ft.	254.6 Ft.	254.6 Ft.
Minimum Front Yard Setback To ROW	50 Ft.	50.5 Ft.	50.3 Ft.
Minimum Front Yard Setback To CL	75 Ft.	98.5 Ft.	98.3 Ft.
Minimum Side Yard Setback One/Both	15 Ft./40 Ft.	32.8 Ft./94.5 Ft.	38.9 Ft./107.9 Ft.
Minimum Rear Yard Setback	50 Ft.	137.8 Ft.	124.5 Ft.
Maximum Building Height Feet/Stories	35 / 2 1/2	<35 / 2 1/2	34.4 / 2 1/2
Maximum Lot Coverage	25%	3.6%	4.3%
Maximum Impervious Coverage	50%	6.8%	6.7%
Minimum Dwelling Ground Floor Area	1,200 S.F.	>1,200 S.F.	>1,200 S.F.

Indicates Variance Condition \* Indicates Pre-Existing Non-Conforming Condition

**VARIANCE REQUESTED:**

Section 540.10.A(1): Only single family detached dwellings permitted in the R-1 Zone where one two-family dwelling is proposed



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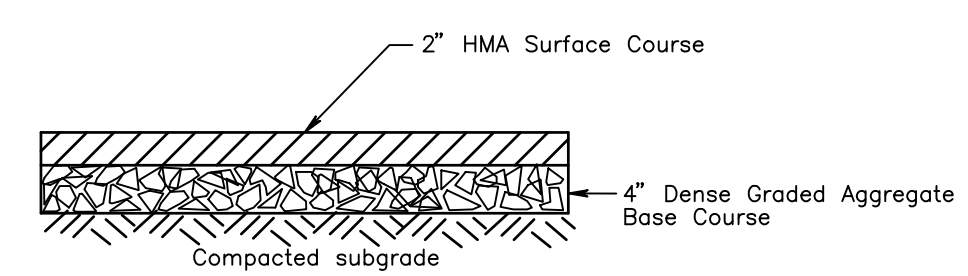
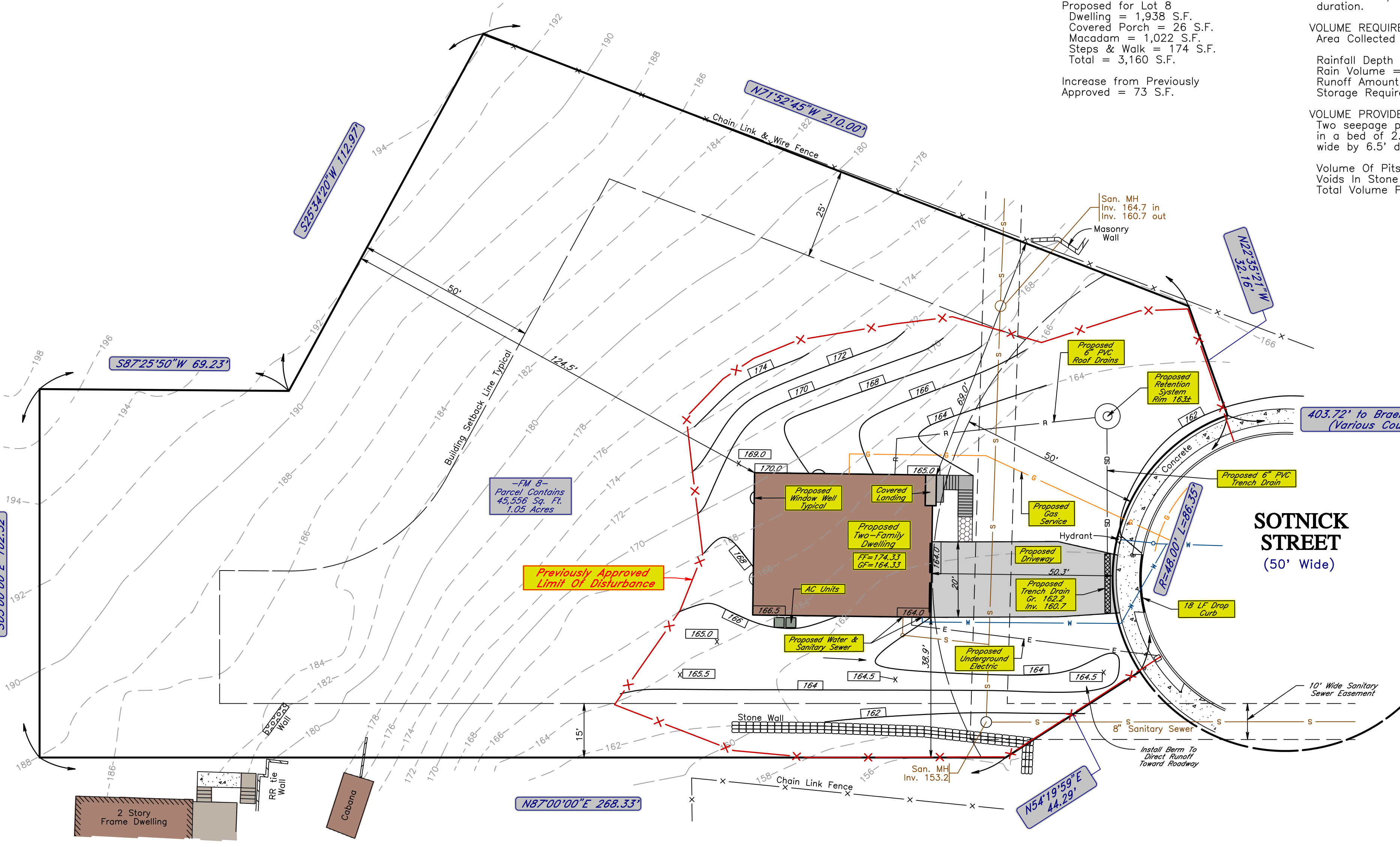
**PLOT PLAN FOR PROPERTY AT 10 SOTNICK STREET**  
 Borough of Hawthorne, N.J. County of Passaic  
 Scale: 1"=20'  
 June 29, 2020

**REFERENCES:**  
 TAX MAP LOT 8 - BLOCK 287  
 TAX MAP PLATE 21  
 ZONE R-1

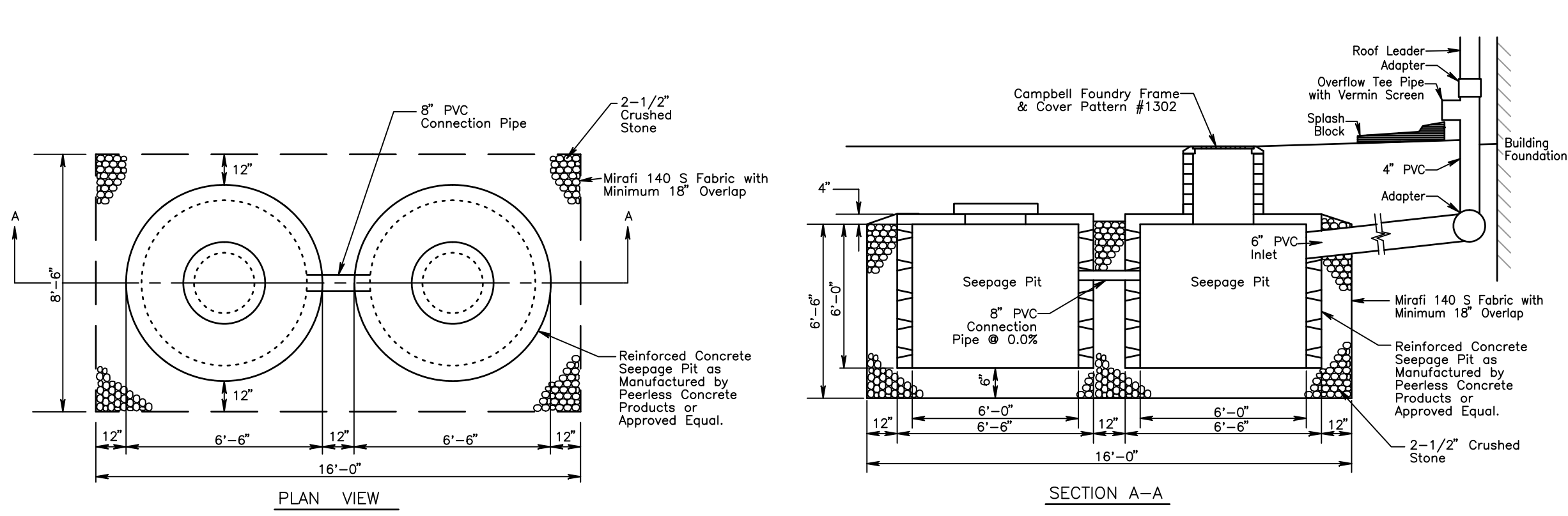
**RIGG ASSOCIATES, P.A.**  
 1000 Maple Avenue, Glen Rock, N.J. 07452  
 Tel. (201) 445-0053 Fax (201) 445-6526  
 www.RiggAssociates.com

**Bruce D. Rigg - Professional Engineer & Land Surveyor**  
 N.J. Reg. No. GB22720 - Prof. Planner N.J. No. 2523

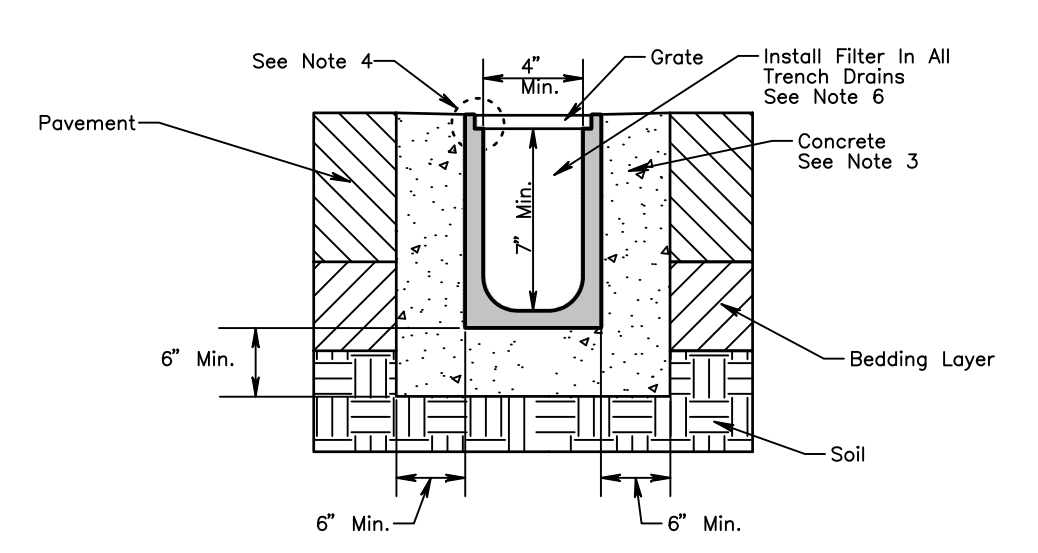
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**DRIVEWAY PAVEMENT DETAIL**  
 N.T.S.



**RETENTION SYSTEM DETAIL**  
 N.T.S.



- NOTES:**
- 1) Trench drain & grate to be as manufactured by ACO Polymer Products, Inc. Powerdrain S100 K series or approved equal.
  - 2) It is necessary to ensure the minimum dimensions shown are suitable for the existing ground conditions.
  - 3) A minimum concrete strength of 300 PSI is recommended. The concrete should be vibrated to reduce air pockets.
  - 4) The finished level of the concrete surround must be approximately 1/8" above the top of the channel edge.
  - 5) All installations shall conform to ACO's latest installation specifications.
  - 6) The trench drain shall have a minimum clear opening width (L.O.) of 4" and a minimum depth of 7" from the bottom of the grate for the installation of the Flo-Grain Trench Drain Filter.

**TRENCH DRAIN DETAIL**  
 N.T.S.

**RETENTION SYSTEM LIMITATIONS:**

- 1) This system design is based upon an assumption that the soil is permeable and will percolate the storm water within a maximum period of 72 hours after the storm has ended. The following MUST be verified before installation is started:
  - A) Soil log of subsurface conditions to insure groundwater elevation (if encountered).
  - B) Permeability tests and evaluation of soil before installation. Failure to perform the proper soil inspection and/or permeability tests may result in system failure, flooding of adjoining surface areas, flooding of adjoining subsurface structures and the inability to obtain a certificate of occupancy upon completion of project.
- 2) The proper placement of the retention system and drainage design is subject to actual soil conditions. System design and/or location may need to be revised based on actual soil conditions and permeability test results.
- 3) Individual property owners shall be responsible for performing maintenance on the retention system(s) located within their property. The system(s) shall be inspected and cleaned as necessary, at least four times annually. Any debris, trash, sediment or other waste material shall be removed and disposed of in accordance with local, state and federal regulations. If a significant increase in the normal drain time is observed, or if the drain time exceeds 72 hours, appropriate measures must be taken. The landowner, at his own expense, shall comply with the maximum drain time requirements and maintain the proper functioning of the system(s).

**ENGINEER'S CERTIFICATION / SYSTEM INSTALLATION:**

The retention system shall be installed under the direction of the Design Engineer and the following inspections will be required. The actual timing and number of inspections should be verified with the project engineer before work commences.

- A) Soil log inspection and permeability test results.
- B) The limit and depth of excavation shall be determined by the project engineer.
- C) Bottom excavation before any part of the system is installed.
- D) After system and pipe installation but before the structures, pipe and connections are covered by stone and fabric.

Certification of the retention system(s) will NOT be provided unless all inspections have been completed.