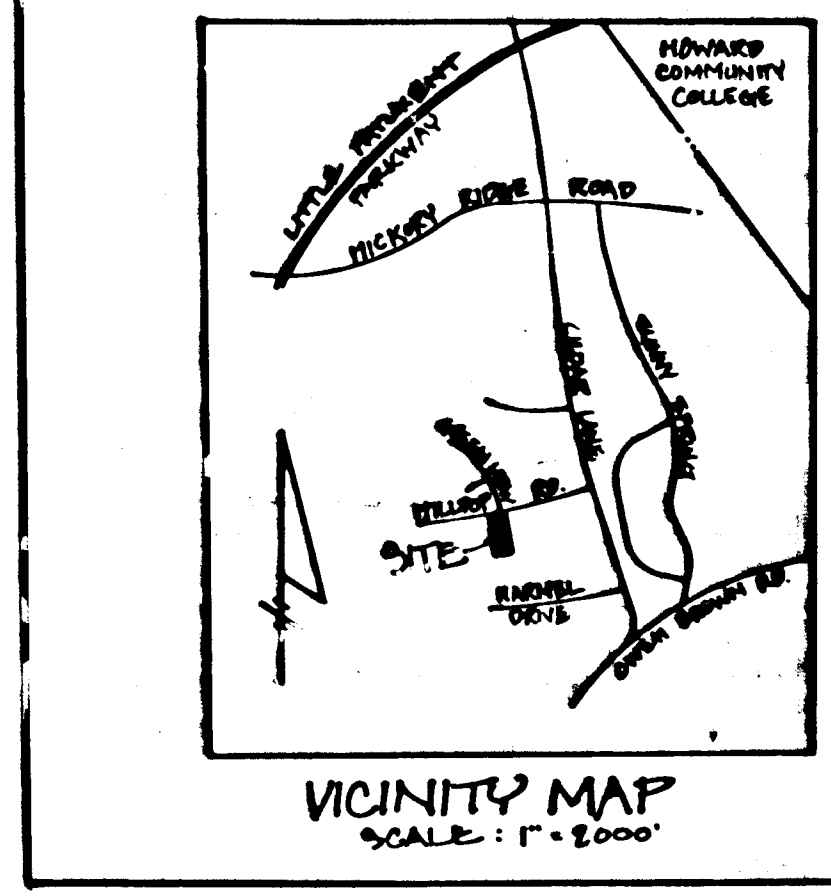


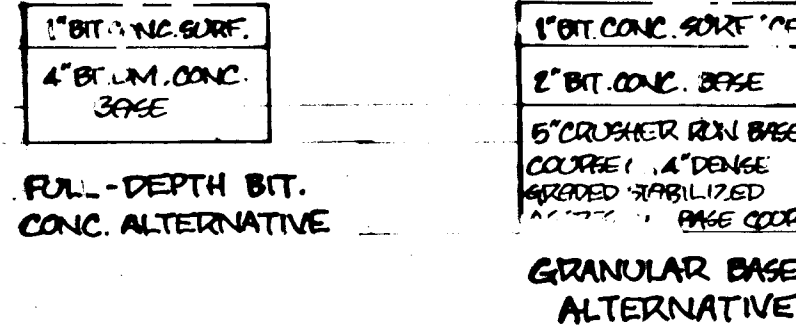
3.3.6. Construction Specifications

- 3.3.6.1. Timing
An infiltration trench shall not be constructed or placed in service until all of the contributing drainage area has been stabilized and approved by the responsible inspector.
- 3.3.6.2. Trench Preparation
Excavate the trench to the design dimensions. Excavated materials shall be placed away from the trench sides to enhance wall stability. Large tree roots must be trimmed flush with the trench sides in order to prevent fabric puncturing or tearing during subsequent installation procedures. The side walls of the trench shall be roughened where sheared and sealed by heavy equipment.
- 3.3.6.3. Fabric In/Out
The filter fabric roll must be cut to the proper width prior to installation. The cut width must include sufficient material to conform to trench perimeter irregularities and for a 6-inch minimum top overlap. Place the fabric roll over the trench and unroll a sufficient length to allow placement of the fabric down into the trench. Stones or other anchoring objects should be placed on the fabric at the edge of the trench to keep the lined trench open during windy periods. When overlaps are required between rolls, the upstream roll should lap a minimum of 2 feet over the downstream roll in order to provide a shingled effect. The overlap ensures fabric continuity or to ensure that the fabric conforms to the excavation surface during aggregate placement and compaction.

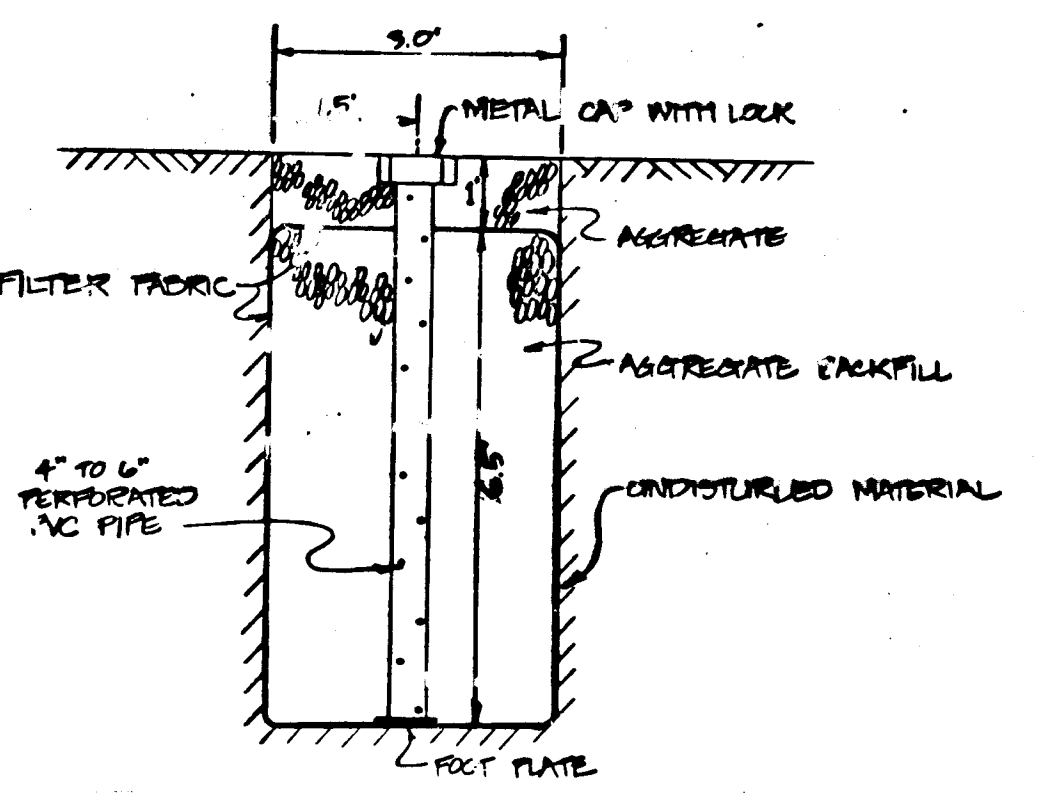


- 3.3.6.4. Stone Aggregate Placement and Compaction
The stone aggregate should be placed in lifts and compacted using plate compactors. As a rule of thumb, a maximum loose thickness of 12 inches is recommended. The compaction process ensures fabric conformity to the excavation sides, thereby reducing the potential for soil piping, fabric clogging, and settlement problems.
- 3.3.6.5. Overlapping and Covering
Following the stone aggregate placement, the filter fabric shall be folded over the stone aggregate to form a 6" minimum longitudinal lap. The desired fill soil or stone aggregate shall be placed over the lap at sufficient intervals to maintain the lap during subsequent backfilling.
- 3.3.6.6. Contamination
Care shall be exercised to prevent natural or fill soils from intermingling with the stone aggregate. All contaminated stone aggregate shall be removed with unco taminated stone aggregate.
- 3.3.6.7. Voids Behind Fabric
Voids can be created between the fabric and excavation sides and shall be avoided. Removing boulders or other obstacles from the trench walls is one source of such voids. Natural soils should be placed in these voids at the most convenient time during construction to ensure fabric conformity to the excavation sites. Soil piping, fabric clogging, and possible surface subsidence will be avoided by this remedial process.
- 3.3.6.8. Unstable Excavation Sides
Vertically excavated walls may be difficult to maintain in areas where the soil moisture is high or where soft cohesive or cohesionless soils predominate. These conditions may require laying back of the side slopes to maintain stability; trapezoidal rather than rectangular cross sections may result.
- 3.3.6.9. Vegetative Buffer
The vegetative buffer of at least 20 feet (wider, if possible) shall be used to intercept surface runoff from all impervious areas.
- 3.3.6.10. Traffic Control
Heavy equipment and traffic shall be restricted from travelling over the infiltration areas to minimize compaction of the soil.
- 3.3.6.11. Observation Well
An observation well, as described in subsection 3.3.4.8. and Figure 3-5 shall be provided. The depth of the well at the time of installation will be clearly marked on the well cap.

TYPICAL PAVING SECTION (P1) FOR PANHANDLE DRIVEWAY



WELL OBSERVATION DETAIL

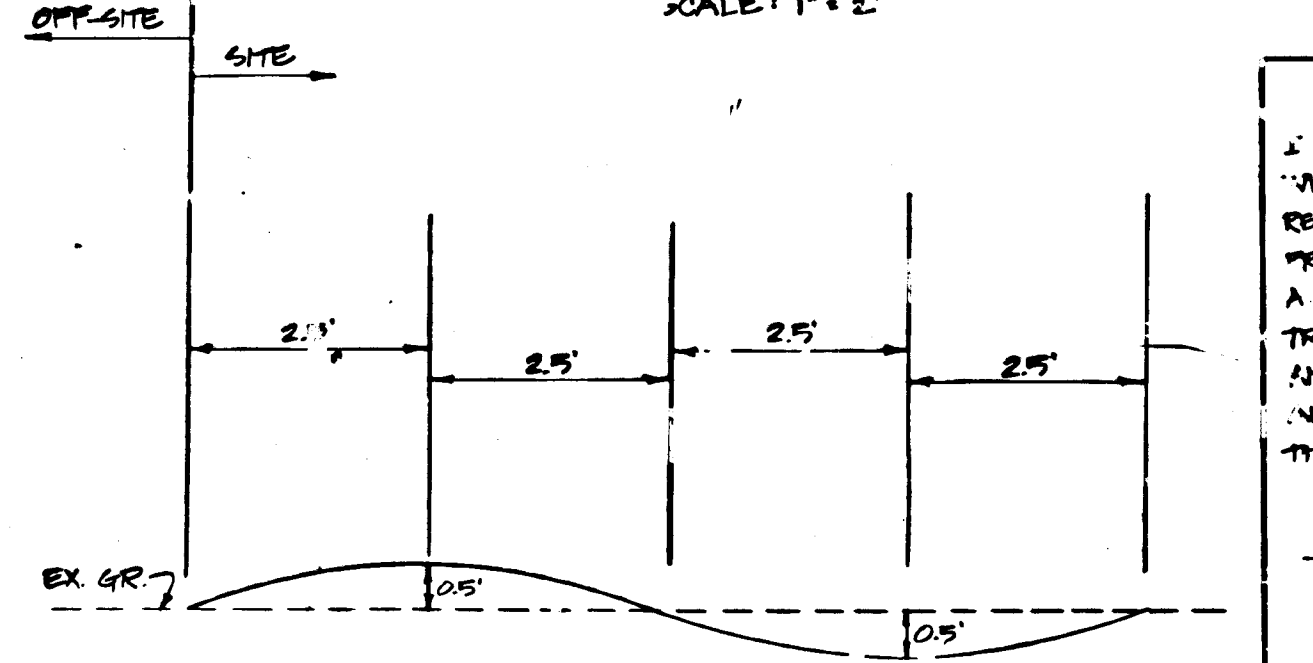


CONSULT N.T.S. CERT. 1041 N

I CERTIFY THAT HIS PLAN OF ERECTION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND FEASIBLE SOLUTION BASED ON HIS PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

Shirley A. Naberger
OF SCOTT SHANBERGER PROFESSIONAL L.S. # 10845 D/ME

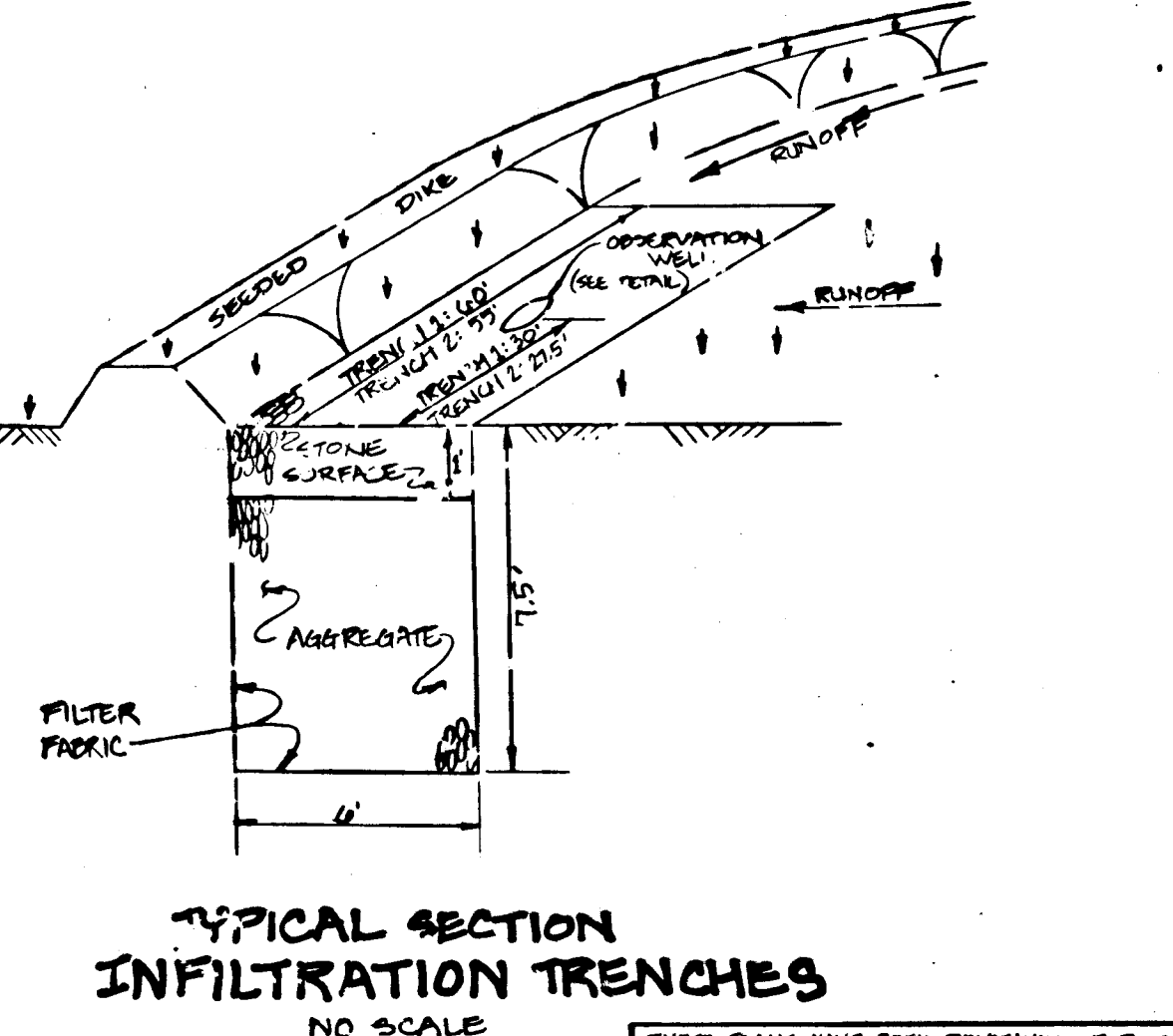
SWALE CROSS-SECTION 'A-A' (ALONG WESTERN PROPERTY LINE)



DEVELOPER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION HAS BEEN DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A COPY HEREOF OF ATTENTION AT A DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT TRAINING PROGRAM FOR THE CONTROL OF SEDIMENTATION AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERSONS ON SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

Shirley A. Naberger
DATE



APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Mark S. ...
DATE: 7/25/08

APPROVED: DEPARTMENT OF PUBLIC WORKS
...
DATE: 7/25/08

APPROVED: BUREAU OF ENGINEERING
...
DATE: 7/25/08

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

SHIRLEY A. NABERGER & LANE
8726 TOWN & COUNTRY BLVD.
SUITE 203
BELLICOTT CITY, MARYLAND 21043
(410) 61-9563



DESIGNED	6/15/08	BY NO.	
DRAWN	SM	REVISION	
CHECKED		DATE	3/28/08

STORMWATER MANAGEMENT PLAN
CEDAR ACRES
LOTS 9, 10, AND 17
ELECTION DISTRICT, HOWARD COUNTY, MD
TAX MAP 35, PARCEL 92

SCALE: AS SHOWN
SHEET 1
OF 2

F-98-60

