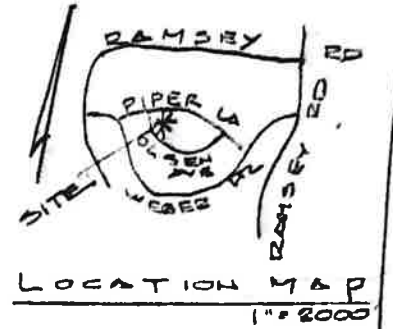


SOIL: U1B URBAN LAND

ZONED R-2 RESIDENTIAL

MIN. FRONT YARDS	40'	PROVIDED	> 40
SIDE YARD	15'		> 15
MAX IMPERVIOUS	13%		25.8%



REFERENCE: GRADING PLAN OF LOT 132, "QUEENS GRANT," BY EZRA GOLUB ASSOC., DATED 11-21-78

Plan was prepared without the benefit of a title report and is subject to easements and documents (unrecorded and unrecorded)

Pool construction and fence installation to comply with Township codes and regulation

Any damage to the curb and sidewalk to be the responsibility of the owner who will make the necessary repairs

Grading to remain as current conditions exist. No proposed runoff to reach adjacent properties

Plan to be used as a pool permit plan only.

PROPOSED FENCE
 MIN. 4' HIGH
 MAX 2" SPACING
 SELF LATCHING / LOCKING GATES
 IRC CODE
 DOOR ALARMS REQUIRED
 ENTIRE POOL TO BE ENCLOSED
 OUTWARD SWINGING GATES

LEGEND

- EXISTING CONTOUR
- - - PROPOSED CONTOUR
- FLOW
- - - SILT FENCE
- LIMIT OF DISTURBANCE
- /// TIRE CLEANING AREA

LOW LEVEL EARTHEN BERM TO SERVE AS PROTECTION FOR THE POTENTIAL OF INCREASED RUNOFF FROM THE NEW CONSTRUCTION AFFECTING ADJACENT PROPERTIES

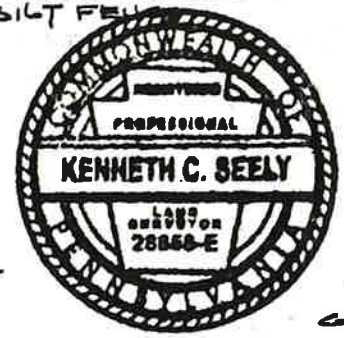
IMPERVIOUS AREAS

EXISTING DWELLING	2711
DRIVEWAY:	1030
WALKS/PATIOS:	470
SHED/GARAGE:	—
TOTAL:	23.2% 4211
PROPOSED DECK	
EQUIP PADS:	459
TOTAL:	25.8% 4670

PROPOSED 3'x6'x33' LONG INFILTRATION TRENCH (SEE SHEET 3)

KENNETH C. SEELY, P.L.S.
 P.O. BOX 1832
 RIDGELAND, S.C. 29936

Joseph Leondi
 343 271-0737



ADDRESS
 927 PIPER LANE
 YARLEY, PA 19067

GRAPHIC SCALE IN FEET

POOL PERMIT PLAN
 PREPARED FOR
GREG + CARA WHITESIDE
 LOWER MAKEFIELD TOWNSHIP
 BUCKS COUNTY, PA
 SHEET 1 OF 3
 SCALE: 1" = 20'
 DATE: 01-09-24

EAS STANDARD NOTES

TOOPILE HEIGHTS MUST NOT EXCEED 35 FEET; STOCKPILE SLOPES MUST NOT EXCEED 2:1.

THE OPERATOR/RESPONSIBLE PERSON (O/RP) ON SITE SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.

IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENTATION POLLUTION, THE O/RP SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENTATION POLLUTION.

THE O/RP SHALL INSURE THAT AN EROSION AND SEDIMENTATION CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE COUNTY CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS REGARDLESS OF THEIR LOCATIONS.

ALL PUMPING OF SEDIMENT-LOADED WATER SHALL BE THROUGH A SEDIMENTATION CONTROL BMP SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER UNDISTURBED AREAS.

A COPY OF THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN MUST BE AVAILABLE ON THE PROJECT SITE AT ALL TIMES.

EROSION AND SEDIMENTATION BMPs MUST BE CONSTRUCTED, STABILIZED AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPs.

AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENTATION BMP CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMPs MUST BE STABILIZED IMMEDIATELY.

AT LEAST SEVEN DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITY, THE O/RP SHALL INVITE THE CONTRACTORS INVOLVED IN THAT ACTIVITY, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENTATION CONTROL PLAN PREPARER AND THE COUNTY CONSERVATION DISTRICT TO PRE-CONSTRUCTION MEETING ALSO, AT LEAST THREE DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITY, ALL CONTRACTORS INVOLVED IN THAT ACTIVITY SHALL NOTIFY THE PA ONE-CALL SYSTEM, AT 1-800-242-1776 TO DETERMINE ANY UNDERGROUND UTILITIES LOCATION.

IMMEDIATELY AFTER EARTH DISTURBANCE CEASES, THE O/RP SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT SPECIFIED RATES. DISTURBED AREAS THAT ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS THAT ARE AT FINISH GRADE OR WHICH WILL NOT BE RE-DISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.

AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70 PERCENT VEGETATIVE OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.

UPON INSTALLATION OF TEMPORARY SEDIMENT BASH RISER(S), AN IMMEDIATE INSPECTION OF THE RISER(S) SHALL BE CONDUCTED BY A QUALIFIED SITE REPRESENTATIVE. WHEREUPON THE COUNTY CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING THAT THE RISER(S) IS SEALED (WATERTIGHT).

AT STEAM CROSSINGS A 50 FOOT BUFFER SHALL BE MAINTAINED. ON BUFFERS, CLEARINGS, SOD DISTURBANCES AND EXCAVATIONS, EQUIPMENT TRAFFIC SHOULD BE MINIMIZED. ACTIVITY SUCH AS STACKING LOGS, BURNING CLEARED BRUSH, DISCHARGING RAINWATER FROM TRENCHES, WELDING PIPE SECTIONS, REFUELING AND MAINTAINING EQUIPMENT SHOULD BE AVOIDED WITHIN BUFFER ZONES.

UNTIL A SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION BMPs MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION CONTROL BMPs AFTER EACH RAINFALL EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING, AND RE-NETTING MUST BE PERFORMED AS EXPECTED. REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED, WILL BE REQUIRED.

SEDIMENT REMOVAL FROM BMPs SHALL BE DISPOSED OF ON-SITE IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE CHANNELS AND IMMEDIATELY STABILIZED OR PLACED IN SOIL STOCKPILES AND STABILIZED.

ALL BUILDING MATERIAL AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR RECYCLED IN ACCORDANCE WITH DEP'S SOLID WASTE REGULATIONS (25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ., AND/OR ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS. NO BUILDING MATERIALS (USED OR UNUSED) OR WASTES MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED ON SITE.

SEEDING SPECIFICATIONS

TEMPORARY SEEDING:

- LIME: 180 LBS/1000 SF
- GROUND LIMESTONE INCORPORATED 4 INCHES INTO SOIL
- FERTILIZER: 25 LBS/1000 SF
- 10-20-20 INCORPORATED 4 INCHES INTO SOIL
- SEED: 1.0 LBS/1000 SF
- ANNUAL RYEGRASS
- MULCH: 140 LBS/1000 SF
- STRAW MULCH
- MINIMUM STANDARD FOR LIMESTONE AND FERTILIZER
- LIMESTONE SHALL BE APPLIED AT A RATE OF 1 TON PER ACRE
- FERTILIZER SHALL BE APPLIED AT A RATE OF:
- NITRATE NITROGEN: 30 LBS/ACRE AVERAGE
- PHOSPHORUS: 100 LBS/ACRE AVERAGE
- POTASSIUM: 120 LBS/ACRE AVERAGE

PERMANENT SEEDING:

- LIME: 180 LBS/1000 SF
- GROUND LIMESTONE INCORPORATED 4 INCHES INTO SOIL
- FERTILIZER: 25 LBS/1000 SF
- 10-20-20 INCORPORATED 4 INCHES INTO SOIL
- SEEDING: LAWN AND MOWED AREAS KENTUCKY BLUEGRASS 30 LBS/AC
- REDTOP 3 LBS/AC
- PERENNIAL RYEGRASS 20 LBS/AC
- TOTAL SEEDING = 53 LBS/AC
- OR
- PENNSYLVANIA-FINE FESCUE 40 LBS/AC
- REDTOP 3 LBS/AC
- PERENNIAL RYEGRASS 20 LBS/AC
- TOTAL SEEDING = 63 LBS/AC
- SLOPES OR UNMOWED AREAS CROWN VETCH 25 LBS/AC
- PERENNIAL RYEGRASS 25 LBS/AC
- TOTAL SEEDING = 50 LBS/AC

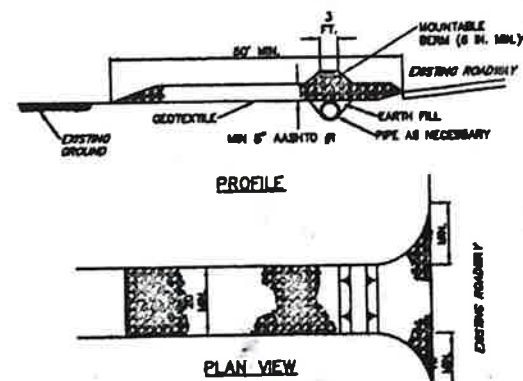
PLANTING DATE: MARCH 1ST TO MAY 15TH, AND AUGUST 15TH TO OCTOBER 1ST.
MULCH: STRAW AT A RATE OF 140 LBS/1000 SF. MULCH SHALL BE SECURED BY APPROVED METHODS.



CONSTRUCTION SEQUENCE

1. NOTIFY TOWNSHIP, TOWNSHIP ENGINEER AND COUNTY CONSERVATION DISTRICT THREE (3) WORKING DAYS PRIOR TO START OF CONSTRUCTION
2. INSTALL SEDIMENT BARRIERS AND CONSTRUCTION ENTRANCE AS SHOWN IN PLAN VIEW
3. CLEAR AND GRUB PROPOSED CONSTRUCTION AREA OF EXISTING VEGETATION. STRIP TOPSOIL AND STOCKPILE.
4. GRADE REMAINING PORTIONS OF LOT WHICH ARE NECESSARY TO FACILITATE CONSTRUCTION.
5. CONSTRUCT PROPOSED STRUCTURES AND APPURTENANCES.
6. COMPLETE OTHER SITE IMPROVEMENTS.
7. FINAL GRADE ALL DENuded AREAS AND SPREAD STOCKPILED TOPSOIL AT MINIMUM OF 8". IMMEDIATELY STABILIZE ALL DENuded AREAS TO REESTABLISH VEGETATION.
8. UPON RE-ESTABLISHMENT OF ALL DENuded AREAS, REMOVE EROSION AND SEDIMENTATION CONTROLS.
9. IMMEDIATELY RE-STABILIZE ANY RE-DISTURBED AREAS.

* IF THE EXISTING DRIVEWAY WILL BE USED AS THE CONSTRUCTION ENTRANCE, THE STABILIZED ROCK CONSTRUCTION ENTRANCE MAY BE OMITTED. ALL DIRT AND MUD MUST BE REMOVED FROM VEHICLES PRIOR TO ENTRY ONTO A PUBLIC CARTWAY. FAILURE TO DO SO MAY RESULT IN DIRECTED FROM THE TOWNSHIP TO INSTALL THE STABILIZED ROCK CONSTRUCTION ENTRANCE TO ITS PROPOSED OR FULL LENGTH. WHATEVER IS REQUIRED TO ALLEVIATE THE SITUATION, THE HOMEOWNER CONTRACTOR SHALL MAINTAIN THE DRIVEWAY DURING THE PROJECT TO PREVENT SOIL FROM BEING TRACKED ONTO THE PUBLIC ROADWAY.



**STANDARD CONSTRUCTION DETAIL #3-1
ROCK CONSTRUCTION ENTRANCE**
NOT TO SCALE

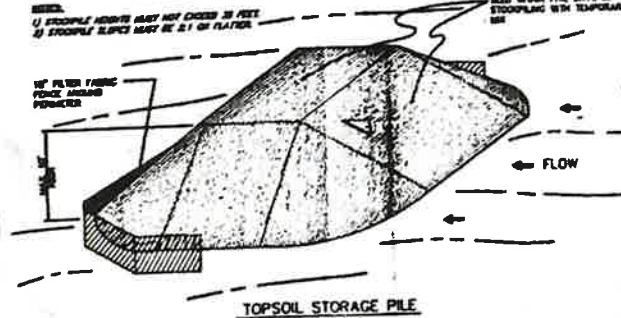
NOTES:
1. MOUNTABLE BEAM USED TO PROVIDE PROPER COVER FOR PIPE

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUSTAINABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

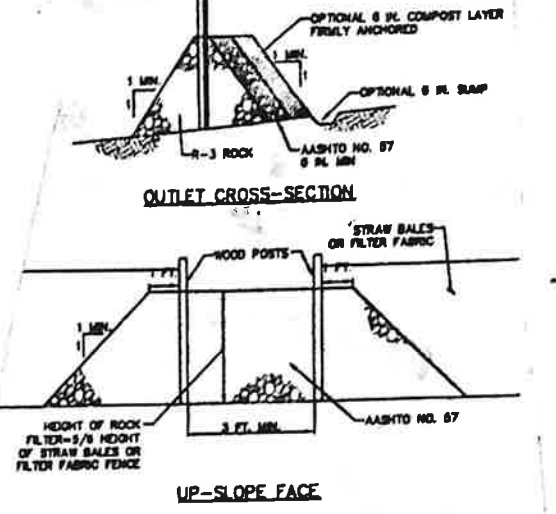
MOUNTABLE BEAM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SQUEEZING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.



TOPSOIL STORAGE PILE
NOT TO SCALE

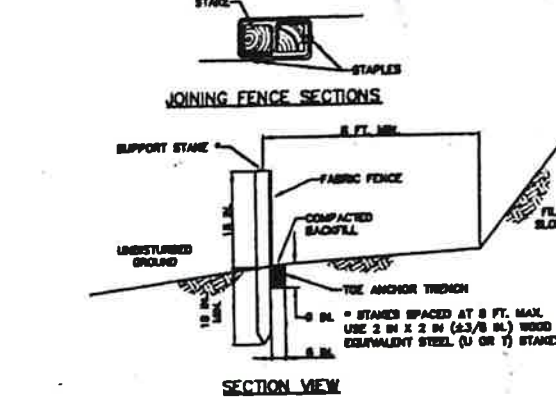
NOTES:
1. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET.
2. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.



**STANDARD CONSTRUCTION DETAIL #4-8
ROCK FILTER OUTLET**
NOT TO SCALE

NOTES:
A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.



**STANDARD CONSTRUCTION DETAIL #4-7
STANDARD SILT FENCE (18" HIGH)**

NOTES:
FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

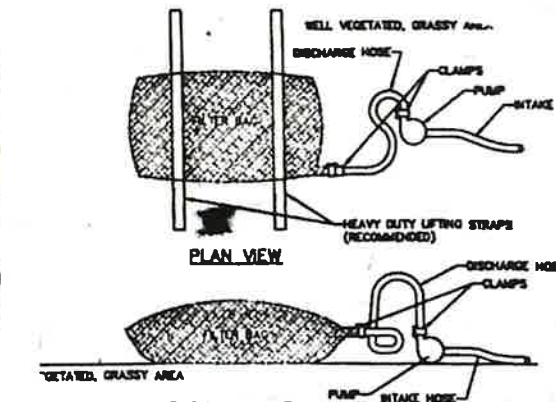
FABRIC WIDTH SHALL BE 30 IN. MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES.

SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

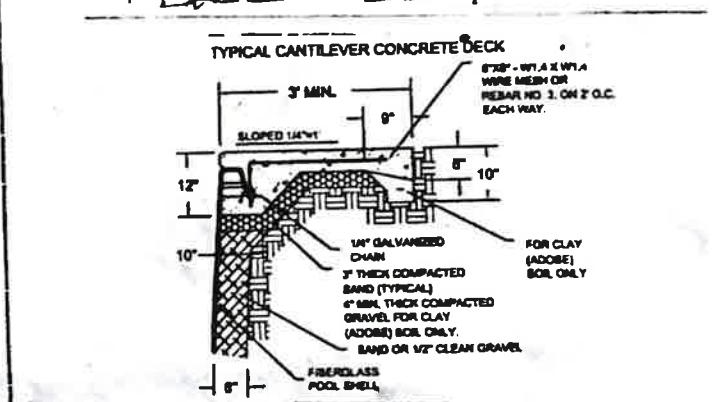
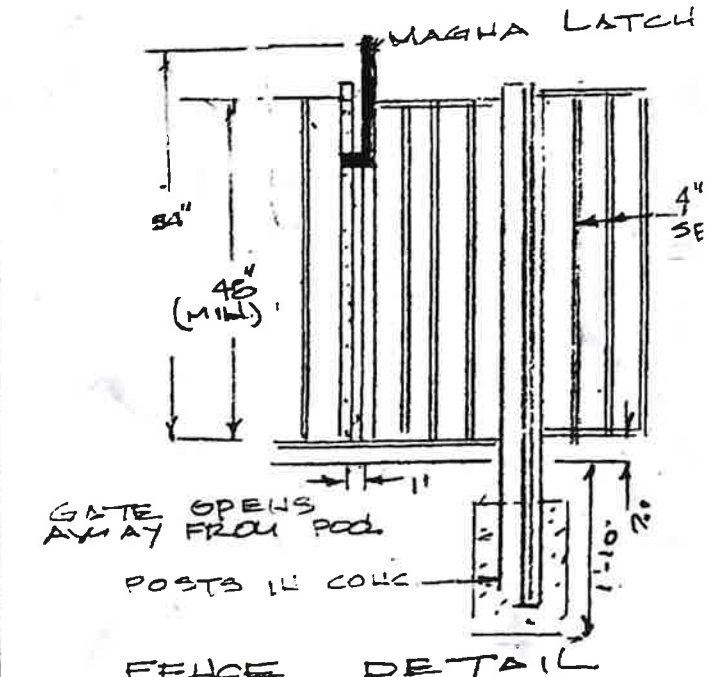
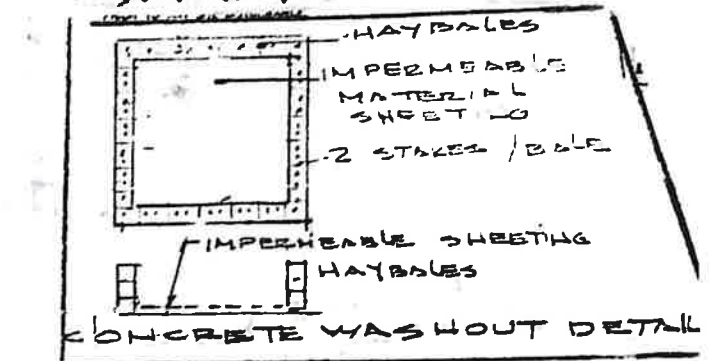
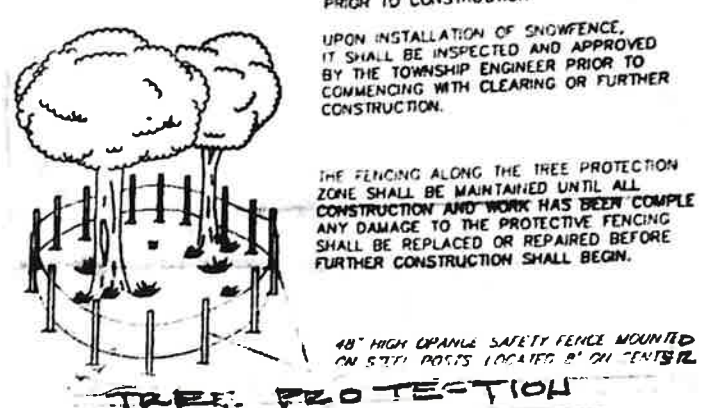
SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET (STANDARD CONSTRUCTION DETAIL #4-8).

FENCE SHALL BE REPAIRED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

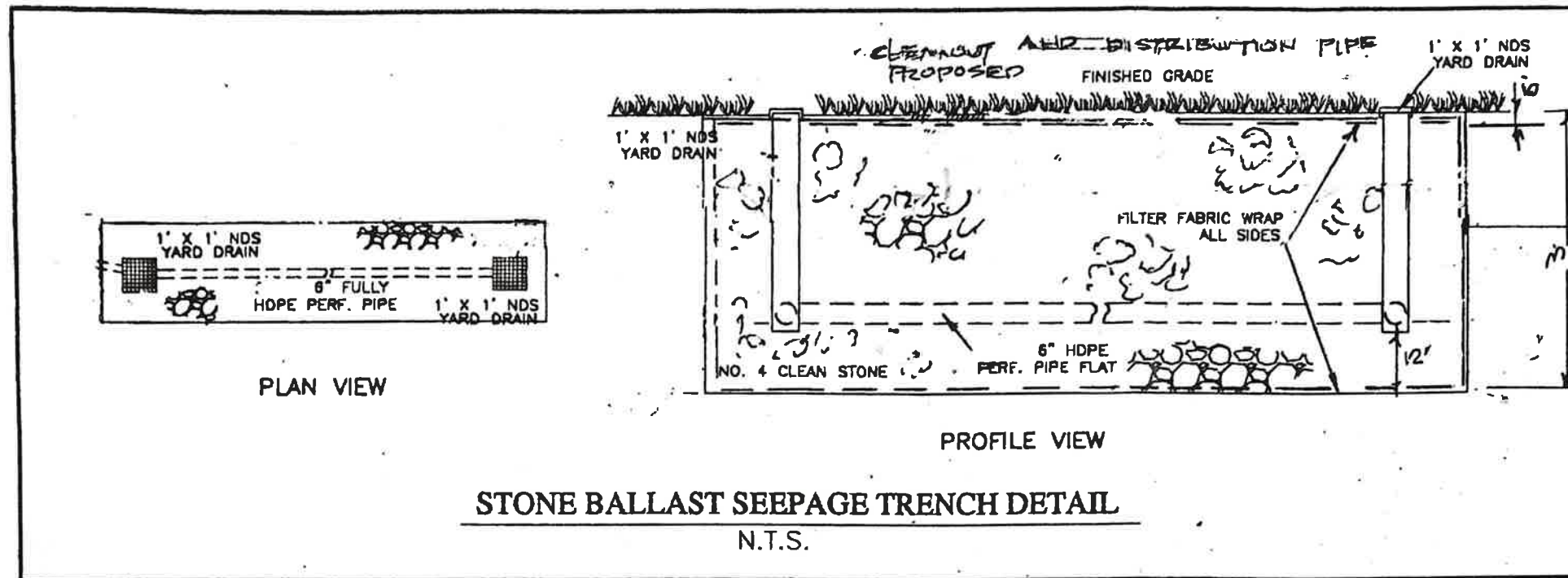


FILTER BAG DETAIL



CONCRETE DECK DETAIL

DETAIL SHEET



STONE BALLAST SEEPAGE TRENCH DETAIL
N.T.S.

• INLETS TO BE INSTALLED AT BOTH ENDS TO ALLOW ACCESS TO THE PERFORATED PIPES

• GEOTEXTILE MATS TO BE INSTALLED ALL SIDES, TOP, & BOTTOM

• WATER FLOW TO BE DIRECTED TO TRENCH

• MIN. 12" SUMP AT BOTTOM THAT WILL ACT AS A SEDIMENTATION TRAP TO PREVENT THE DISTRIBUTION PIPE FROM CLOGGING WITH SEDIMENT

• PROPERTY OWNER TO SIGN A O&M AGREEMENT FOR THE STORMWATER FACILITY

NOTES

1) TRENCH - 3' DEEP, 6' WIDE x 33' LONG

$1408 \text{ SF} \times 2" \text{ RAINFALL} / 12" = .4 \text{ VOLS} = 586.75 \text{ CU. FT}$ $586.75 / 6" = 97.8 \text{ CF}$ $97.8 / 3" = 32.6$

2) FENCE TO MEET THE REQUIREMENTS OF PA. UNIFORM CONST. CODE AS AMENDED 2015 INTERNATIONAL CODE

3) PROVISION OF DRAINAGE OF FLOOD AND BACKWASH WATER DISPOSAL TO MEET THE REQUIREMENTS OF THE DEPT. OF HEALTH. WATER SHALL ^{NOT} BE EMPTIED ONTO PUBLIC ROADS OR ADJOINING LANDS OR INTO THE PUBLIC SANITARY SYSTEM

4) EXISTING UTILITIES TO BE VERIFIED BEFORE CONSTRUCTION. IF ACCESS IS REQUIRED TO TRAVERSE EXISTING UTILITY LINES, ADEQUATE MEASURES FOR PROTECTION SHALL BE PROVIDED

5.) UTILITY LIST

- PECO ENERGY 1-800 841-4141
- BUCKS COUNTY WATER & SEWER AUTHORITY 215-843-2538
- AMERICAN WATER 1-800 565-7292

DETAIL SHEET

Impervious Surface Breakdown Calculation

updated: 3/22/2021

Address: 927 piper

18,121 S.F. **Lot Size** (to convert acres to square feet, multiply by 43,560 S.F.)

IMPERVIOUS SURFACE

Surfaces which do not absorb water, including all buildings and paved or hard surfaces. In addition, other areas determined by the Township Engineer to be impervious within the meaning of this definition shall also be classified as impervious. For purposes of this definition, that area of a swimming pool located inside the coping shall not be classified as impervious.

2,711 S.F. House Size
1,030 S.F. Driveway
470 S.F. Walkways
S.F. Patios
S.F. Accessory structures (sheds, detached garages)

4,211 S.F. **Total Existing Impervious Surface**

IMPERVIOUS SURFACE RATIO

The total area of all impervious surfaces within a lot divided by the gross lot area.

23.2% **Existing Impervious Surface Ratio**

4,211 S.F. Total Existing Impervious Surface
459 S.F. Proposed Impervious Surfaces to be constructed
S.F. Impervious Surface to be removed

4,670 S.F. **Total Proposed Impervious Surface**

25.8% **Proposed Impervious Surface Ratio**

Stormwater Management Small Project Volume Control < 5,000 S.F. of New Impervious Surfaces

Step 1

459 S.F. [Appendix I](#)
Impervious Surface Area to be controlled to mitigate

Step 2

77 C.F. Required Control Volume: $(ISA \text{ in S.F.} \times 2 \text{ inches runoff})/12 \text{ inches}$

For Step 3, you need to select a Best Management Practice technique from Appendix I and provide a calculation that demonstrates this requirement is met. This can consist of structural measures such as an infiltration trench, dry well or rain garden, or non-structural measures such as tree planting, preservation or minimization of soil compaction.

Step 3

Stone infiltration trench facility (Volume of Facility = Depth x Width x Length):

- 3 Feet Set Depth of trench and determine required surface area of trench.
- 6 Feet Width of the trench should be greater than 2 times its depth (2 x D)
- 33 Feet Set Trench Length

238 C.F. Trench Volume = Depth x Length x Width x 40% voids in stone

Determine the number of tree plantings:

- Trees A newly planted deciduous tree can reduce runoff volume by 6 cu. ft.
- Trees A newly planted evergreen tree can reduce runoff volume by 10 cu. ft.

0 C.F. Runoff Volume for trees planted

Calculate the volume reduction credit by preserving existing trees:

S.F. Approximate Area of Trees within 20 feet of impervious cover:

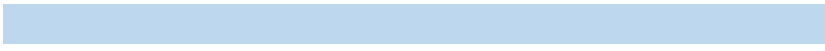
0 C.F. Volume Reduction = $(\text{Existing Tree Canopy sq. ft.} \times 1 \text{ inch})/12$

S.F. Approximate Area of Trees > 20 feet and within 100 feet of impervious cover:

0 C.F. Volume Reduction = $(\text{Existing Tree Canopy sq. ft.} \times 0.5 \text{ inch})/12$

238 C.F. Total Runoff Volume Controlled

Redo if Total Runoff Volume Controlled < Required Control Volume



1-11-24
FILED

Impervious Surface Breakdown Calculation

updated: 3/22/2021

Address: 927 PIPER LANE YARDLEY

S.F. **Lot Size** (to convert acres to square feet, multiply by 43,560 S.F.)

IMPERVIOUS SURFACE

Surfaces which do not absorb water, including all buildings and paved or hard surfaces. In addition, other areas determined by the Township Engineer to be impervious within the meaning of this definition shall also be classified as impervious. For purposes of this definition, that area of a swimming pool located inside the coping shall not be classified as impervious.

- 2711 S.F. House Size
- 1030 S.F. Driveway
- 470 S.F. Walkways
- S.F. Patios
- S.F. Accessory structures (sheds, detached garages)

4211 0 S.F. Total Existing Impervious Surface

IMPERVIOUS SURFACE RATIO

The total area of all impervious surfaces within a lot divided by the gross lot area.

23.2 Existing Impervious Surface Ratio

- 0 S.F. Total Existing Impervious Surface
- 459 S.F. Proposed Impervious Surfaces to be constructed
- S.F. Impervious Surface to be removed

4670 SF Total Proposed Impervious Surface

25.8 Proposed Impervious Surface Ratio