AGENDA EAST GOSHEN TOWNSHIP CONSERVANCY BOARD MEETING February 8, 2017 7:00 PM

- 1. CALL TO ORDER / PLEDGE OF ALLEGIANCE / MOMENT OF SILENCE
- 2. APPROVAL OF MINUTES
 - A. January 11, 2017 Minutes
- 3. NEW BUSINESS
 - A. Discuss keep east Goshen beautiful day advertising and planning
 - **B. Spring Planting Locations**
- 4. SUB DIVISION REVIEW
 - A. 1420 E. Strasburg Rd
- 5. OLD BUSINESS
- 6. CHAIRMAN'S REPORT
- 7. VARIANCES
- 8. BOARD MEMBER CONCERNS
- 9. LIAISON REPORTS
- 10. CORRESPONDENCE
- 11. DATES OF IMPORTANCE
- 12. PUBLIC COMMENT
- 13. ADJOURNMENT

1	Draft		
2	EAST GOSHEN TOWNSHIP		
3	CONSERVANCY BOARD MEETING		
4	JANUARY 11, 2017		
5			
6			
7	The East Goshen Township Conservancy Board held a regularly scheduled meeting		
8	on Wednesday, January 11, 2017 at 7:00 p.m. at the Township Building. In		
9	attendance were: Vice Chairman Erich Meyer, Andy Tyler, Walter Wujcik, and John		
10	Scheidt. Also in attendance was Supervisor Janet Emanuel.		
11			
12	Call to Order		
13	Erich called the meeting to order at 7:00 p.m.		
14	Die des ef Allevieues Q Memort of Cilones		
15	Pledge of Allegiance & Moment of Silence		
16	Erich led those present in the Pledge of Allegiance and then asked for a moment of		
17	silence to remember those who serve in our military and our first responders.		
18 19	Minutes		
20	The minutes of the December 14, 2016 meeting were approved as corrected.		
21	The infinites of the December 14, 2010 incetting were approved as corrected.		
22	New Business		
23	Keep East Goshen Beautiful Day		
24	1. Put notice in Spring newsletter		
25	2. Andy will contact Jason to have him promote KEGB Day in the Park and		
26	Recreation News.		
27	3. Have Sandy start emailing past participating groups about this year's		
28	event and add the Milltown Dam Committee to the list.		
29			
30	Spring Planting – Location/Date		
31	1. Marydell Pond – willow trees, etc.		
32	2. Reservoir Road area – select plants during February meeting		
33	3. Date – Saturday, May 6, 2017.		
34			
35			
36	Old Business		
37	Reorganization - Walter nominated Sandy as Chairman and Erich as Vice Chairman.		
38	This would be the second year for each in these positions. The Conservancy Board		
39	keeps to a 2-year rotation. John seconded the nomination. The vote was		
40	unanimous.		
41			
42	The Law Description		
43	Liasion Report Municipal Authority Welton progented the highlights of the meeting. Most of the		
44 45	Municipal Authority – Walter presented the highlights of the meeting. Most of the		
45	time was spent discussing West Goshen issues.		

CB 1-11-17 draft 1

Board of Supervisors - Janet reported that the Home Occupation request was
resolved with 11 conditions.
Also, there is an open position on the Board of Supervisors due to the resignation of
Senya Isayeff. Anyone who is interested must submit their resume by this Friday,
January 13 th .
Adjournment
There being no further business, Walter moved to adjourn the meeting. John
seconded the motion. The meeting was adjourned at 8:00 p.m. The next meeting
will be February 8, 2017 at 7:00 pm.
Respectfully submitted,
Walter Wujcik
Conservancy Board Member

CB 1-11-17 draft 2

Memorandum

East Goshen Township
1580 Paoli Pike
West Chaster, BA 1939

West Chester, PA 19380

Voice: 610-692-7171 Fax: 610-692-8950

E-mail: mgordon@eastgoshen.org

Date: 2/3/2017

To: Sandy Snyder, Conservancy Board Chairman

From: Mark Gordon, Township Zoning Officer

Re: 1420 E. Strasburg Rd.

Board Members,

As you know the parcel at 1420 E. Strasburg Rd. is currently going through the subdivision process. Staff, the Township Engineer and the applicant have been working through a number of challenges over the last several months. The plan is nearing completion and we anticipate having all the engineering comments addressed and ready to present to the Planning Commission at their meeting in March.

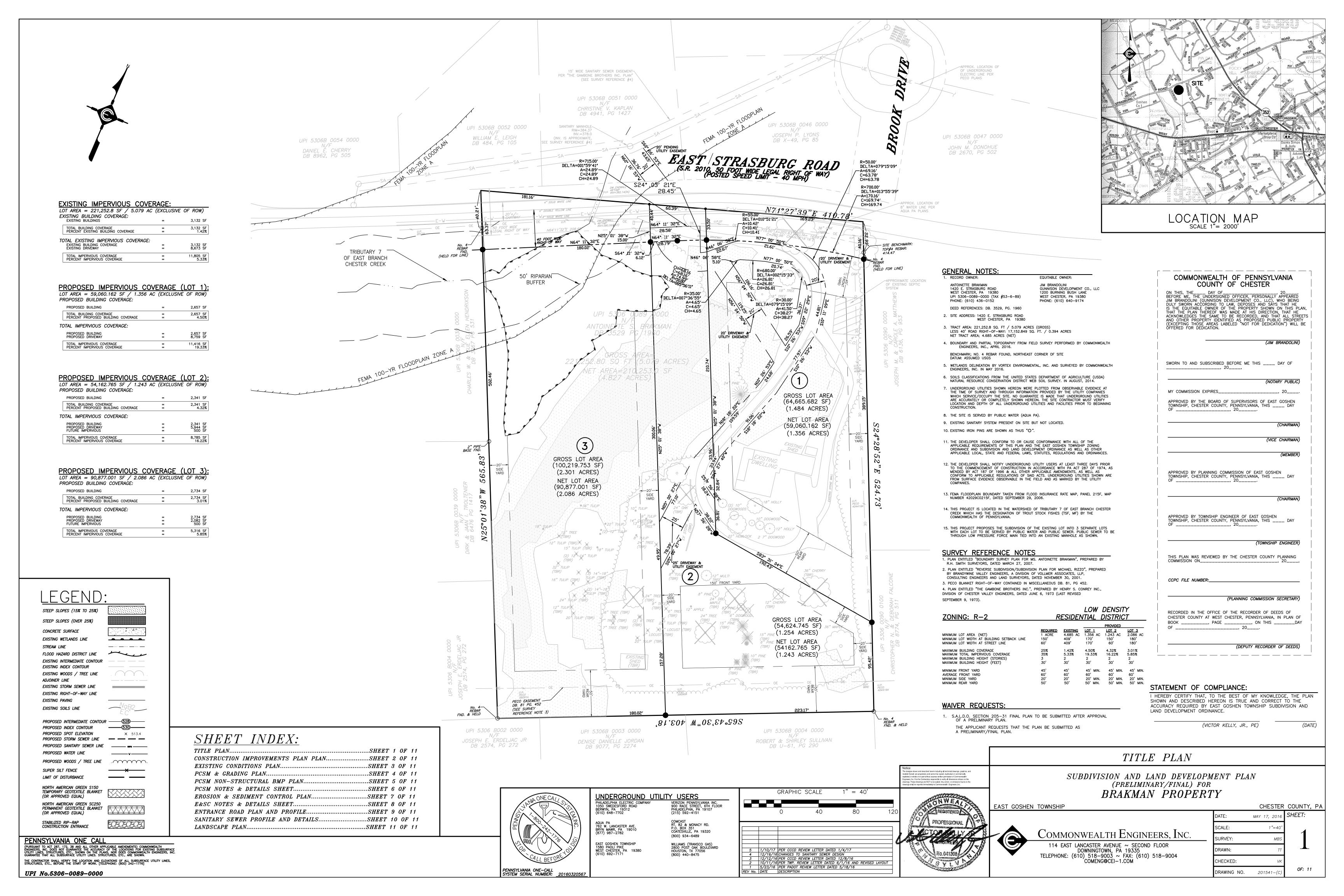
One of the outstanding comments is that a landscape plan has not been submitted and the applicant has not asked for a waiver.

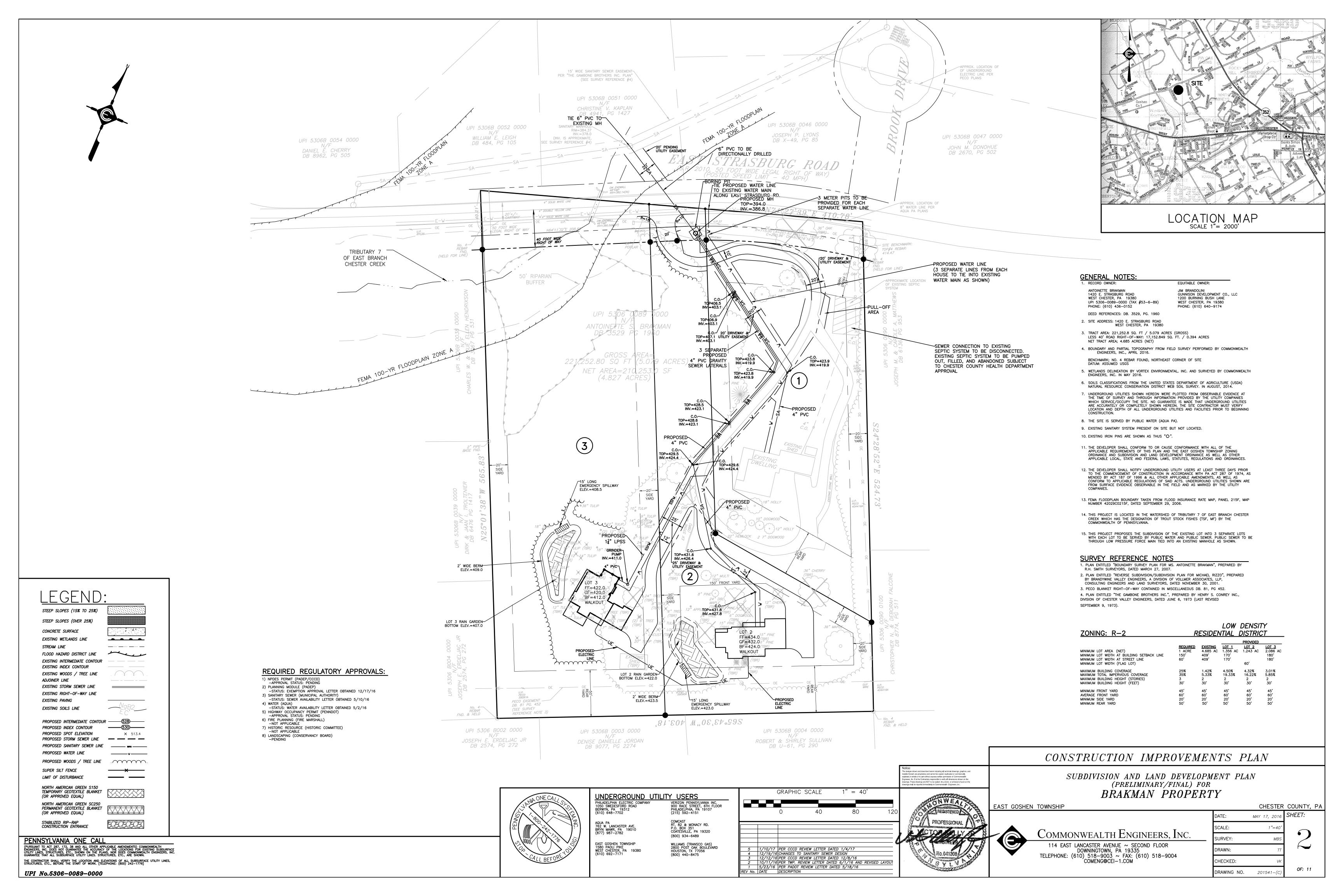
It is the opinion of the Staff and the Planning Commission that the configuration of the landscape plantings around the home is not as critical as the varieties and number of plants proposed.

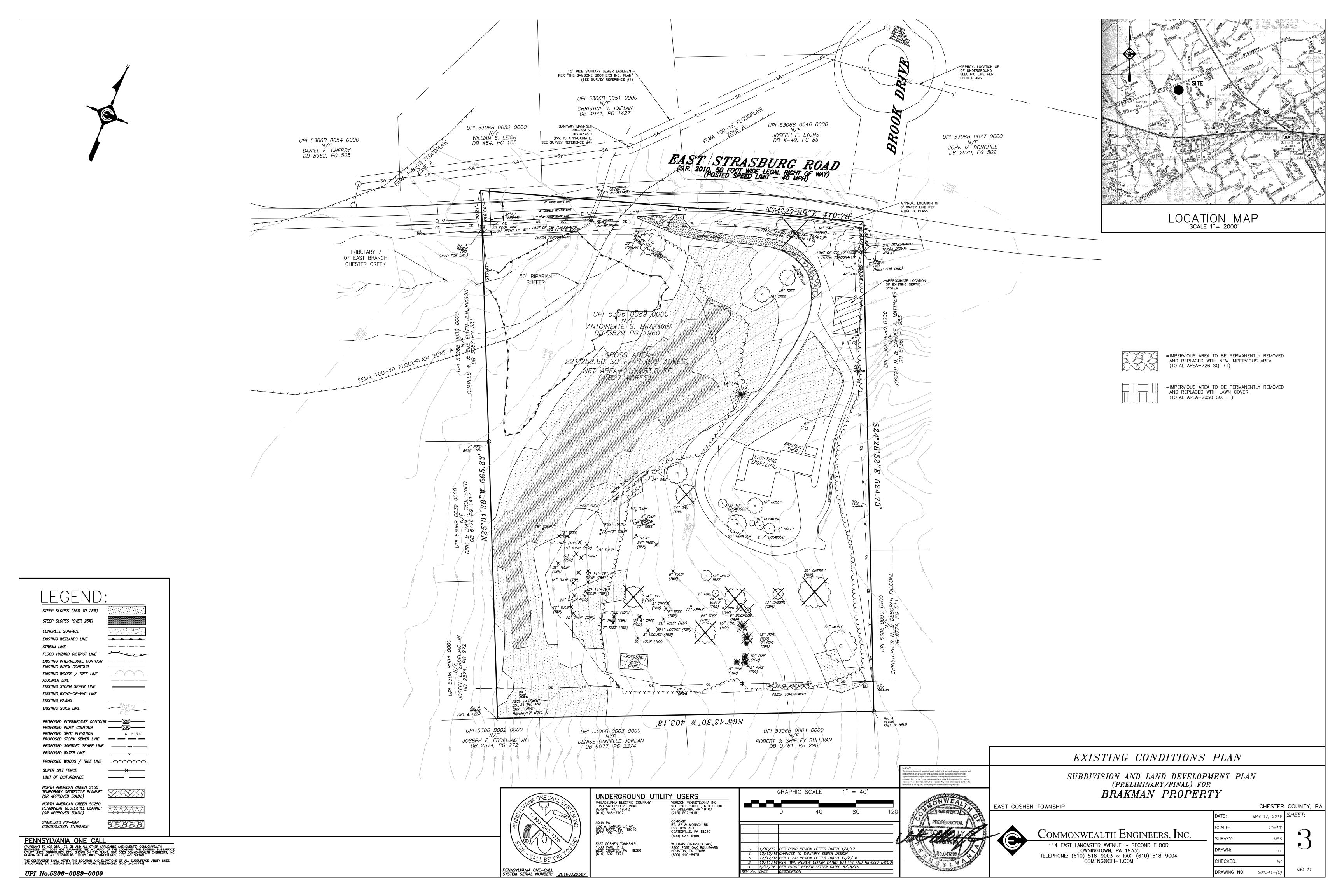
I recommend that the Board consider the following motion:

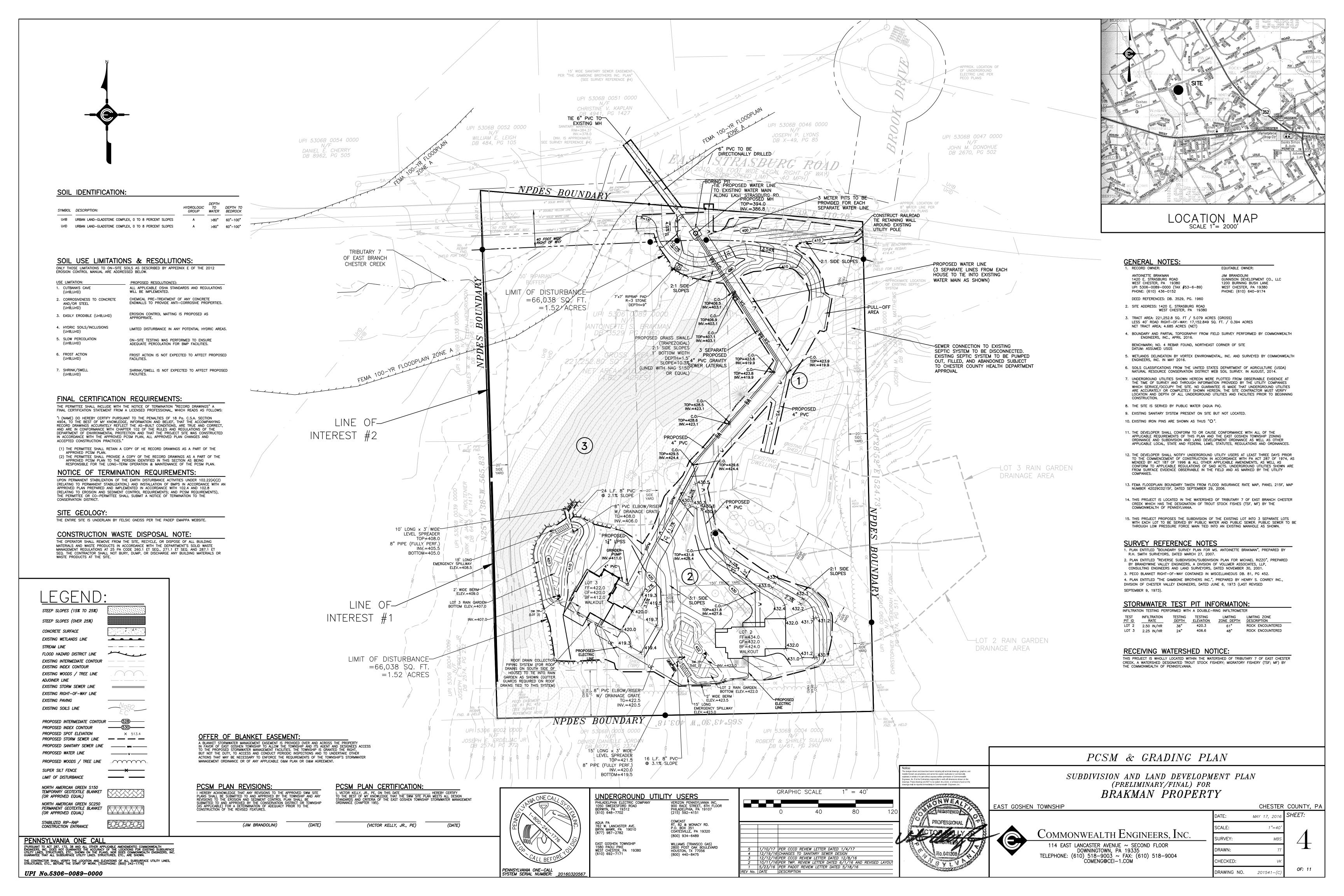
Madam Chairman, I move that we recommend that the Planning Commission recommend approval of the SD and LD Plan for 1420 E. Strasburg Rd. with the following condition:

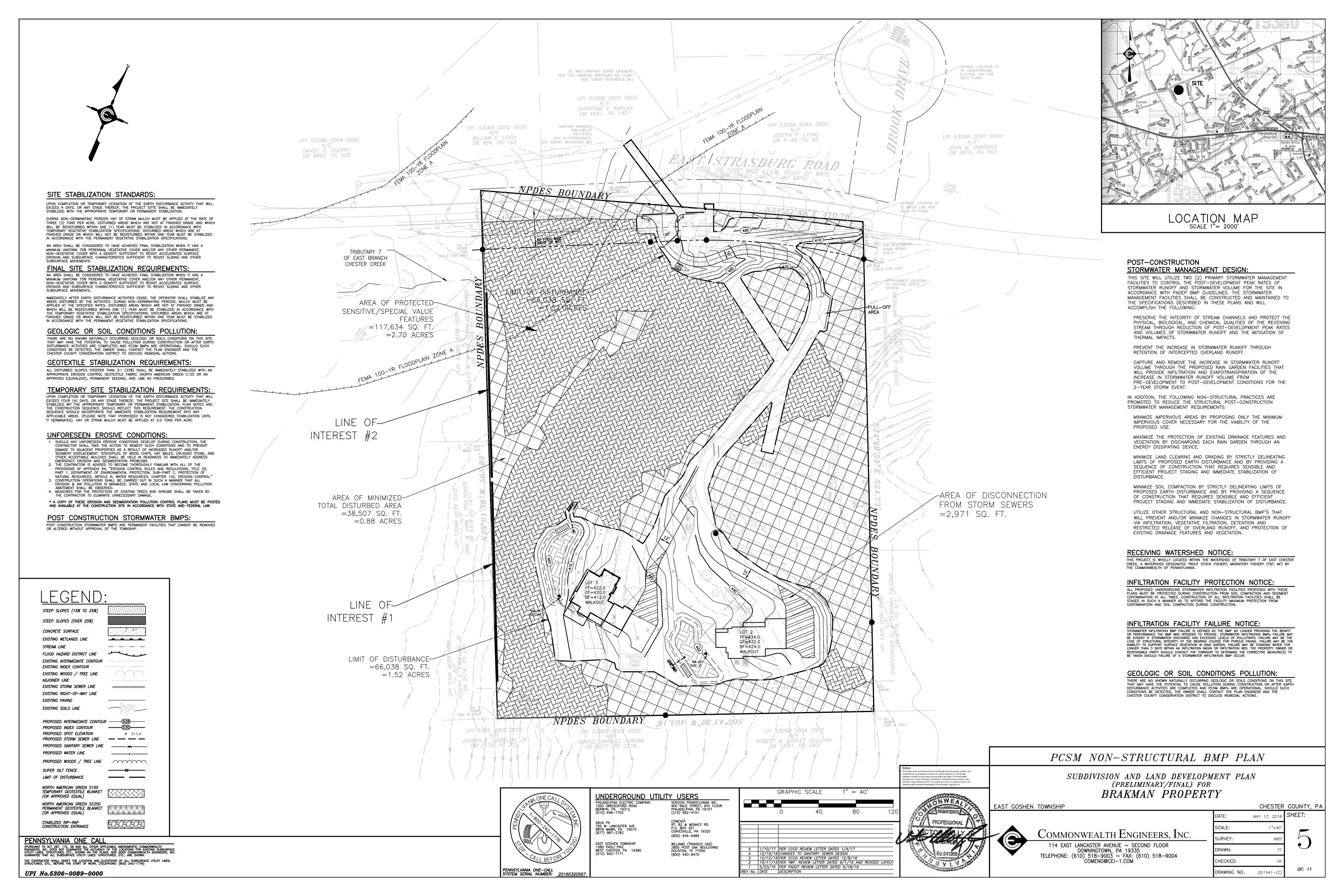
1. The applicant shall add a note to the plan listing the proposed varieties and number of plants proposed for landscaping for each lot on the preliminary / final plan and a LS plan shall be provided to the Township along with the building permit applications for the two new homes. The Township staff will confirm that the proposed plantings are not invasive species, the trees proposed are listed on the Township Recommended Tree Species List (Resolution 2015-20) and that the landscaping is installed prior to issuance of a use and occupancy certificate.











APPLICANT/RESPONSIBLE PARTY: GUNNISON DEVELOPMENT CO., 1200 BURNING BUSH LANE, WEST CHESTER, PA 19380.

PROJECT DESCRIPTION (PER EAST GOSHEN TOWNSHIP STORMWATER MANAGEMENT ORDINANCE SECTION 195-27.C:

1) The project site is currently a combination of woods, meadow, and lawn with one existing dwelling and two existing sheds. There is also an existing septic system on the site Stormwater runoff drains off the site from east to west into Tributary 7 of East Branch Chester 2) This site achieves the requirements of East Goshen Township Stormwater Management

Ordinance Section 195-18 by controlling stormwater runoff to pre-development conditions. These requirements are displayed throughout the PCSM Plans, E&SPC Plans, and the corresponding reports. 3) This site achieves the requirements of East Goshen Township Stormwater Management Ordinance Sections 195-15 through 195-25 through the use of a variety of stormwater BMP's (rain gardens) and conveyance systems (swales) to control stormwater runoff to

pre-development conditions while complying with the design standards stated in the above stormwater management ordinance sections. 4) This project proposes the construction of 2 new dwellings and new paved driveway areas Stormwater runoff from the new buildings will be directed to individual on-lot rain gardens through overland flow or roof drain collection piping systems. These rain gardens will retain and infiltrate runoff for the various design storms. Erosion and sediment control will be achieved primarily through the use of silt fences.

5) The project proposes no adverse effects on adjacent or downstream properties or conveyance systems since the project proposed the use of stormwater BMP's that will control stormwater runoff to pre-development conditions for various design storm events and that will retain runoff volume onsite for the 2-year storm.

6) The project implements water quality BMP's in the form of conserving of riparian buffers and minimizing of total disturbed areas. 7) Construction of this project is anticipated to begin the winter of 2017 and end the summer of 8) This project will be constructed as a single phase.

SWM GENERAL NOTES:

THE STORMWATER MANAGEMENT PLAN APPROVED BY THE TOWNSHIP SHALL BE ON SITE HROUGHOUT THE DURATION OF THE REGULATED ACTIVITY. 2) THE SWM PLAN FOR THIS PROJECT IS ASSOCIATED WITH THE POST-CONSTRUCTION STORMWATER MANAGEMENT NARRATIVE NAMED "BRAKMAN PROPERTY" AND DATED 5/17/16. 3) THE SWM PLAN FOR THIS PROJECT IS ASSOCIATED WITH THE "EROSION AND SEDIMENT CONTROL PLAN" (SHEET 7) OF THE FULL SITE PLAN SET TITLED "BRAKMAN PROPERTY" DATED

4) THE RECORD OWNER EACH LOT WILL BE RESPONSIBLE FOR ONGOING INSPECTIONS, OPERATION, RÉPAIR, AND MAINTENANCE OF THE SWM BMP's AND CONVEYANCES AFTER THE COMPLETION OF

INFILTRATION GENERAL NOTES:

1) DURING SITE CONSTRUCTION ALL INFILTRATION PRACTICE COMPONENTS SHALL BE PROTECTED FROM COMPACTION DUE TO HEAVY EQUIPMENT OPERATION OR STORAGE OF FILL OR 2) DURING SITE CONSTRUCTION INFILTRATION AREAS SHALL BE PROTECTED FROM SEDIMENTATION. 3) AREAS THAT ARE ACCIDENTALLY COMPACTED OR GRADED SHALL BE REMEDIATED TO RESTORE SOIL COMPACTION AND POROSITY. ADEQUATE DOCUMENTATION TO THIS EFFECT SHALL BE SUBMITTED TO THE TOWNSHIP ENGINEER FOR REVIEW. 4) ALL AREAS DESIGNATED FOR INFILTRATION SHALL NOT RECEIVE RUNOFF UNTIL THE CONTRIBUTORY DRAINAGE AREA HAS ACHIEVED FINAL STABILIZATION.

RAIN GARDEN

SEQUENCE OF CONSTRUCTION

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH ALL EARTH DISTURBANCE ACTIVITIES SHALL FROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BI LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. FOLLOW ALL GUIDELINES AND PROCEDURES AS STATED IN "EROSION & SEDIMENTATION POLLUTION CONTROL MEASURES" DURING ENTIRE CONSTRUCTION EXCAVATE RAIN GARDEN AREA AND CONSTRUCT BERM, EMERGENCY SPILLWAY, OUTLET PIPE, AND

LEVEL SPREADER WHILE KEEPING CONSTRUCTION EQUIPMENT OFF RAIN GARDEN BOTTOM AS MUCH AS POSSIBLE. (2.) BACKFILL RAIN GARDEN BOTTOM WITH AMENDED SOIL/PLANTING MIXTURE. PLANT BOTTOM OF RAIN GARDEN WITH THE "RAIN GARDEN SEED MIXTURE" OR AN APPROVED FOLLOW REQUIRED MAINTENANCE AND MONITORING GUIDELINES.

© CRITICAL STAGES OF THE SEQUENCE OF CONSTRUCTION ARE CIRCLED. THESE STAGES WITHIN THE SEQUENCE REQUIRE INSPECTION BY THE SITE ENGINEER.

RAIN GARDEN

LONG-TERM MAINTENANCE SCHEDULE:

THE OWNER OF THE PROPERTY AND ITS SUCCESSORS SHALL BE RESPONSIBLE FOR ALL ROUTINE AND NON-ROUTINE MAINTENANCE AS DESCRIBED BELOW. MAINTENANCE IS NECESSARY TO ENSURE THE PROPER FUNCTIONALITY OF THE RAIN GARDEN FACILITY, AND SHOULD TAKE PLACE AT LEAST 2 TIMES PER YEAR. A WRITTEN REPORT DOCUMENTING EACH INSPECTION AND ALL BMP REPAIR AND MAINTENANCE ACTIVITIES SHALL BE MADE AVAILABLE UPON REQUEST. REPLACEMENT OF THIS PCSM BMP MAY BE REQUIRED TO ENSURE PROPER FUNCTION AND OPERATION

 DETRITUS MAY NEED TO BE REMOVED ONCE A YEAR.
 PERENNIAL PLANTINGS MAY BE CUT DOWN AT THE END OF THE GROWING SEASON. . THE RAIN GARDEN SHOULD BE INSPECTED AT LEAST 2 TIMES PER YEAR FOR SEDIMENT BUILDUP, EROSION, 4. DURING PERIODS OF EXTENDED DROUGHT, THE RAIN GARDEN MAY REQUIRE WATERING. 5. FAILURE OF THE RAIN GARDEN OCCURS WHEN THE RAIN GARDEN DOES NOT DEWATER WITHIN 72 HOURS AFTER A RUNOFF EVENT. IN THE EVENT OF FAILURE OF THE RAIN GARDEN, THE PLUG THAT WAS USED TO COVER THE 2" CIRCULAR ORIFICE IN THE RISER PIPE SHALL BE REMOVED UNTIL THERE IS NO LONGER ANY STANDING WATER REMAINING IN THE RAIN GARDEN. ONCE THE RAIN GARDEN HAS BEEN DEWATERED, THE PLUG SHALL BE REPLACED

RAIN GARDEN SEED MIXTURE:

PERCEN WEIGHT SPECIES NAME COMMON NAME Chasmanthium latifolium (Uniola latifolia)
PA/VA Ecotype blend
Carex vulpinoidea, PA Ecotype
Elymus virginicus, PA, Ecotype
Agrostis perennans, PA Ecotype
Carex scoparia, PA Ecotype
Jungus effusus RIVER OATS, PA/VA ECOTYPE BLEND 46% VIRGINIA WILDRYE, PA ECOTYPE
AUTUMN BENTGRASS, PA ECOTYPE
BLUNT BROOM SEDGE, PA ECOTYPE Juncus effusus SOFT RUSH PATH RUSH, PA ECOTYPE Juncus tenuis, PA Ecotype SEED MIX APPLICATION RATE: 15 LBS/ACRE WITH A COVER CROP OF GRAIN RYE AT 30 LBS/ACRE ERNST CONSERVATION SEEDS 8884 MERCER PIKE MEADVILLE, PA 16335 PHONE: (800) 873–3321 FAX: (814) 336–2403 SEED MIX AVAILABILITY: PRODUCT No.: ERNMX-180-1

RECEIVING WATERSHED NOTICE:

THIS PROJECT IS WHOLLY LOCATED WITHIN THE WATERSHED OF TRIBUTARY 7 OF EAST CHESTER CREEK, A WATERSHED DESIGNATED TROUT STOCK FISHERY; MIGRATORY FISHERY (TSF; MF) BY THE COMMONWEALTH OF PENNSYLVANIA.

LEGEND: STEEP SLOPES (15% TO 25%) STEEP SLOPES (OVER 25%) CONCRETE SURFACE EXISTING WETLANDS LINE ____ STREAM LINE _..._ FLOOD HAZARD DISTRICT LINE EXISTING INTERMEDIATE CONTOUR EXISTING INDEX CONTOUR EXISTING WOODS / TREE LINE ADJOINER LINE EXISTING STORM SEWER LINE EXISTING RIGHT-OF-WAY LINE EXISTING PAVING EXISTING SOILS LINE -----(530)----- PROPOSED INDEX CONTOUR PROPOSED SPOT ELEVATION × 513.4 PROPOSED STORM SEWER LINE ____

PERMANENT SEED MIXTURE:

WITH HAY OR STRAW AT A RATE OF 3 TONS PER ACRE.

OR SPRING OATS (CAN BE USED BUT WILL WINTER KILL)

ANNUAL RYEGRASS

OR WINTER WHEAT

OR WINTER RYE

PERCENT PURITY GERMINATION KENTUCKY BLUE GRASS VARIETIES PENNSTAR/PENNFINE PERENNIAL RYEGRASS 85% PENNLAWN FESCUE

TEMPORARY SEED MIXTURE: SITE PREPARATION: APPLY 1 TON OF AGRICULTURAL—GRADE LIMESTONE PER ACRE PLUS FERTILIZER AT THE RATE OF 50-50-50 PER ACRE. WORK INTO THE SOIL WHERE POSSIBLE SUCURE A SOIL TEST BEFORE APPLICATION OF PERMANENT SEEDING. AFTER SEEDING, MULCH

SPECIES: FOR SPRING SEEDING (UP TO JUNE 15) LBS/ACRE: ANNUAL RYEGRASS OR SPRING OATS 96 (3 BU) OR SPRING OATS PLUS RYEGRASS 64 LBS OATS (2BU) + 20 LBS ANNUAL OR PERENNIAL RYGRASS OR WINTER WHEAT 180 (3 BU) OR WINTER RYE 168 (3 BU) FOR LATE SPRING & SUMMER SEEDING (JUNE 16 TO AUGUST 15)

ANNUAL RYEGRASS OR JAPANESE OR FOXTAIL MILLET OR SUDANGRASS OR SPRING OATS 96 (3 BU) OR WINTER WHEAT 180 (3 BU) OR WINTER RYE 168 (3 BU) FOR LATE SUMMER & FALL SEEDING (AUGUST 16 AND LATER)

MULCH, LIME, FERTILIZER, SOD & SEED NOTES:

APPLIED MILCH SHALL BE EITHER HAY/STRAW OR HYDROMULCH, HAY/STRAW MULCH SHALL BE FREE OF WEEDS AND, NOT MOLDY OR ROTTEN, AND SHALL BE APPLIED TO ALL AREAS AT A RATE OF 3 TONS PER ACRES, ON STEEP SLOPE AREAS (GREATER THAN 3:1), COVER SEEDED AREAS WITH AN ACCEPTABLE GEOTEXTILE EROSION CONTROL BLANKET. ALL AREAS RECEIVING HAY/STRAW MULCH SHALL BE IMMEDIATELY ANCHORED EITHER BY CRIMPING WITH A TRACTOR DRAWN IMPLEMENT OR WITH EMULSIFIED ASPHALT CONTAINING NO SOLVENTS OR DILLUTING AGENTS. TO PLANT OR ANIMAL LIFE UNIFORMLY APPLIED AT THE RATE OF 31 GAL

HYDROMULCH SHALL BE COMPOSED OF WOOD FIBER OR RECYCLED PAPER AND SHALL BE MECHANICALLY APPLIED AT THE RATE OF 65 LBS PER 1,000 SQUARE

180 (3 BU)

AGRICULTURAL GRADE LIME SHALL BE APPLIED TO ALL DISTURBED AREAS PRIOR TO

10-20-20 FERTILIZER SHALL BE APPLIED TO ALL DISTURBED AREAS PRIOR TO SEEDING AT THE RATE OF ONE THOUSAND (1,000) LBS PER ACRE

SEEDING AT THE RATE OF FOUR (4) TONS PER ACRE.

KENTUCKY BLUEGRASS SOD (IF CALLED FOR.) SHALL BE GROWN UNDER THE SUPERVISION OF THE PA DEPARTMENT OF AGRICULTURE BUREAU OF PLANT INDUSTRY OR BE COMPOSED OF ONLY BLUE TAC CERTIFIED SEED. ALL SEED SHALL BE FRESH. ALL NEW CROP SEED SHALL BE LABELED IN ACCORDANCE WITH THE US DEPT OF AGRICULTURE RULES AND REGULATIONS UNDER THE FEDERAL SEED ACT IN EFFECT ON THE DATE OF INVITATION FOR BIDS. L SEED SHALL BE FURNISHED IN SCALE STANDARD TO KIND. PERCENT BY IGHT, PURITY AND GERMINATION, THE GRASS SEED SHALL CONTAIN THE PERCENTAGES OF PURITY AND GERMINATION INDICATED ON THE LIST FURNISHED WITH THE APPLICABLE PLAN. SEED MIX SHALL BE AS SPECIFIED, SPREAD AT THE RATE OF 5 POUNDS PER 1,000 SQUARE FEET (MINIMUM). FOR SLOPE 3:1 OR

GREATER, USE 7.5 POUNDS OF SEED PER 1,000 SQUARE FEET

SEEDING & MULCHING NOTES

DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITY HAS CEASED MUST BE IMMEDIATELY SEEDED AND MULCHED. DURING NON-GERMINATION PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES (MINIMUM OF 3 TONS/ACRE.) DISTURBED AREAS WHICH ARE E IMMEDIATELY MULCHED AT 3 TONS PER ACRE AND SEEDED WITH A QUICK-GROWING TEMPORARY SEED MIXTURE. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN ONE YEAR MUST BE IMMEDIATELY MULCHED AT 3 TON:

PER ACRE AND SEEDED WITHIN ONE TEAR MOST BE IMMEDIATELY MOLCHED AT 3 TONS
PER ACRE AND SEEDED WITH THE PERMANENT SEED MIXTURE. LIME SHALL BE APPLIED IN
ALL CASES AT THE PRESCRIBED RATE.

DIVERSIONS, CHANNELS, SWALES, SEDIMENT BASINS, SEDIMENT TRAPS AND SOIL
STOCKPILES SHALL BE SEEDED AND MULCHED IMMEDIATELY.

HAY/STRAW MULCH MUST BE APPLIED AT A RATE OF AT LEAST 3 TONS PER ACRE.

AREAS UTILIZING VEGETATIVE STABILIZATION MUST BE SEEDED AND MULCHED WITHIN THE APRIL 15TH TO OCTOBER 15TH GERMINATION WINDOW. SEEDING WILL BE ACCOMPLISHED THROUGH HYDROSEEDING OF CONVENTIONAL SEEDING METHODS.

5. GEOTEXTILE EROSION CONTROL CHANNEL LINING AND SLOPE PROTECTION SHALL BE INSTALLED WHERE INDICATED AND PER THE MANUFACTURER'S SPECIFICATIONS IMMEDIATELY UPON THE COMPLETION OF GRADING ACTIVITIES.

BMP MAINTENANCE REQUIREMENTS:

UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION BMPs MUST BE MAINTAINED BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL SITE INSPECTIONS WILL B DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE. THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG WILL BE KEPT ON SITE AT ALL TIMES & MADE AVAILABLE TO HE DISTRICT UPON REQUEST. ALL PREVENTIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING, MUST BE PREFORMED IMMEDIATELY. IF EROSION AND SEDIMENTATION BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS OR MODIFICATIONS OF THOSE INSTALLED WILL BE NEEDEL WHERE BMPs ARE FOUND TO FAIL TO ALLEVIATE EROSION OR SEDIMENT POLLUTION, THE PERMITTEE OR CO-PERMITTEE SHALL INCLUDE THE FOLLOWING INFORMATION:

A. THE LOCATION AND SEVERITY OF THE BMPs FAILURE AND ANY POLLUTION EVENTS. . ALL STEPS TAKEN TO, REDUCE, ELIMINATE, & PREVENT RECURRENCE OF NON-COMPLIANCE.

C. THE TIME FRAME TO CORRECT THE NON-COMPLIANCE, INCLUDING THE EXACT DATES WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE.

AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMPs MUST BE

PCSM LONG TERM OPERATIONS AND MAINTENANCE REQUIREMENTS:

UNTIL THE PERMITTEE HAS RECEIVED WRITTEN APPROVAL OF A NOTICE OF TERMINATION, THE PERMITTEE OR CO-PERMITTEE WILL REMAIN RESPONSIBLE FOR COMPLIANCE WITH THE PERMI TERMS AND CONDITIONS INCLUDING LONG-TERM OPERATION AND MAINTENANCE OF ALL POSM BMPS ON THE PROJECT SITE AND IS RESPONSIBLE FOR VIOLATIONS OCCURRING ON THE

THE PERMITTEE OR CO-PERMITTEE SHALL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF PCSM BMPS UNLESS A DIFFERENT PERSON IS IDENTIFIED IN THE NOTICE OF TERMINATION AND HAS AGREED TO LONG-TERM OPERATION AND MAINTENANCE OF PCSM BMPS. FOR ANY PROPERTY CONTAINING A PCSM BMP, THE PERMITTEE OR CO-PERMITTEE SHALL RECORD AN INSTRUMENT WITH THE RECORDER OF DEEDS WHICH WILL ASSURE DISCLOSUREOF THE PCSM BMP AND THE RELATED OBLIGATIONS IN THE ORDINARY COURSE OF A TITLE SEARCH OF THE SUBJECT PROPERTY. THE RECORDED INSTRUMENT MUST IDENTIFY THE PCSM BMP, OF THE SUBJECT PROPERTY. THE RECORDED INSTRUMENT MUST IDENTIFY THE PCSM BMP, PROVIDE FOR NECESSARY ACCESS RELATED TO LONG-TERM OPERATION AND MAINTENANCE FOR PCSM BMPS AND PROVIDE NOTICE THAT THE RESPONSIBILITY FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM BMP IS A COVENANT THAT RUNS WITH THE LAND THAT IS BINDING UPON AND ENFORCEABLE BY SUBSEQUENT GRANTEES, AND PROVIDE PROOF OF FILING WITH

THE NOTICE OF TERMINATION UNDER 102.7(B)(5) (RELATING TO PERMIT TERMINATION.) THE PERSON RESPONSIBLE FOR PERFORMING LONG-TERM OPERATION AND MAINTENANCE MAY ENTER INTO AN AGREEMENT WITH ANOTHER PERSON INCLUDING A CONSERVATION DISTRICT, NONPROFIT ORGANIZATION, MUNICIPALITY AUTHORITY, PRIVATE CORPORATION OR OTHER PERSON, TO TRANSFER THE RESPONSIBILITY FOR PCSM BMPS OR TO PERFORM LONG—TERM OPERATION AND MAINTENANCE AND PROVIDE NOTICE THEREOF TO THE DEPARTMENT. A PERMITTEE OR CO-PERMITTEE THAT FAILS TO TRANSFERLONG-TERM OPERATION AND

MAINTENANCE OF THE PCSM BMP OR OTHERWISE FAILS TO COMPLY WITH THIS REQUIREMENT SHALL REMAIN JOINTLY AND SEVERALLY RESPONSIBLE WITH THE LANDOWNER FOR LONG-TERM DPERATION AND MAINTENANCE OF THE PCSM BMPS LOCATED ON THE PROPERTY PCSM REPORTING AND RECORD KEEPING: THE PCSM PLAN, INSPECTION REPORTS AND MONITORING RECORDS SHALL BE AVAILABLE FOR REVIEW AND INSPECTION BY THE DEPARTMENT OR THE CONSERVATION DISTRICT. PCSM FACILITY SCHEDULE OF INSPECTIONS:

REGULARLY SCHEDULED INSPECTIONS: ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSPECTED AT LEAST 2 TIMES PER YEAR TO ENSURE PROPER FUNCTIONALITY AND THE CONTINUING INTEGRITY OF THE FACILITY.

SPOT INSPECTIONS: ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSPECTED IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL EVENT TO ENSURE PROPER FUNCTIONALITY AND THE CONTINUING INTEGRITY OF THE FACILITY. ANY MAINTENANCE, REPAIR OR FACILITY REPLACEMENT SHALL BE IMMEDIATELY PERFORMED IN ACCORDANCE WITH THE MAINTENANCE PROCEDURES DESCRIBED IN THESE PLANS. CONSTRUCTION OVERSIGHT REQUIREMENTS: THE PERMITTEE SHALL PROVIDE ENGINEERING CONSTRUCTION OVERSIGHT FOR THE PROPOSED STORMWATER BMPS, ADDITIONAL SOIL TESTING MAY BE REQUIRED PRIOR TO THE INSTALLATION OF INFILTRATION BMPS TO ENSURE PROPER LOCATION & FUNCTION. A LICENSED PROFESSIONAL ENGINEER KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF STORMWATER BMPS, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.

OVERALL SEQUENCE OF CONSTRUCTION:

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. FOLLOW ALL GUIDELINES AND PROCEDURES AS STATED IN "EROSION & SEDIMENTATION POLLUTION CONTROL MEASURES" DURING ENTIRE CONSTRUCTION PROCEDURE. AT LEAST 7 DAYS BEFORE ANY EARTHMOVING BEGINS, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THIS PROJECT, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE PLAN ENGINEER, THE CHESTER COUNTY CONSERVATION DISTRICT, AND THE SOUTHEAST REGIONAL OFFICE DEPARTMENT OF ENVIRONMENTAL PROTECTION ENGINEER TO AN

ALL INFILTRATION FACILITIES AND RAIN GARDENS SHALL BE PROTECTED FROM SEDIMENT—LADEN RUNOFF. FAILURE TO ADEQUATELY PROTECT INFILTRATION FACILITIES AND RAIN GARDENS FROM SEDIMENT DEPOSITION WILL REQUIRE REHABILITATION TO RESTORE THEM TO PROPER

UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY THAT WILL EXCEED 4 DAYS, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.

CLEARLY DELINEATE ALL PROPOSED DISTURBANCE LIMITS AND TREES TO BE PROTECTED. INSTALL THE STABILIZED ROCK CONSTRUCTION ENTRANCES INSTALL SUPER SILT FENCES AS SHOWN ON EROSION & SEDIMENT CONTROL PLAN.
INSTALL COMPOST SOCK CONCRETE WASHOUT STATION. BEGIN CLEARING AND GRUBBING OF AREAS FOR THE PROPOSED BUILDINGS AND DRIVEWAY

REMOVE THE EXISTING SHED AS NOTED ON THE PLANS. PERFORM GRADING OPERATIONS FOR DRIVEWAY AREAS AND AROUND PROPOSED BUILDINGS.
INSTALL EROSION CONTROL LINING ON NEWLY GRADED AREAS AS SHOWN ON EROSION &
SEDIMENT CONTROL PLAN IMMEDIATELY AFTER GRADING FOR EACH AREA IS COMPLETED. 8. CONSTRUCT GRASS SWALE #1. RIP-RAP PAD. AND ASSOCIATED EROSION CONTROL LINING.

CONSTRUCT BUILDINGS. 10. INSTALL UTILITIES.
10.1. ANY TRENCHES THAT ARE EXCAVATED FOR UTILITY INSTALLATIONS TO BE BACKFILLED 10.2. ANY EARTH DISTURBANCE ASSOCIATED WITH UTILITY INSTALLATIONS TO BE RESTORED AND STABILIZED IMMEDIATELY WITH EROSION CONTROL LINING (OR OTHER MEANS).

MMEDIATELY INSTALL ROCK FILTER AS SHOWN ON PLAN

11. PAVE DRIVEWAY AREAS.

12) ONCE ALL UPSTREAM AREAS ARE STABILIZED IN ACCORDANCE WITH FINAL SITE STABILIZATION REQUIREMENTS, REMOVE ORANGE CONSTRUCTION FENCES AND INSTALL THE RAIN GARDENS FOR LOT 2 AND LOT 3 (SEE SEPARATE "RAIN GARDEN SEQUENCE OF CONSTRUCTION" ON SHEET 6, PCSM NOTES AND DETAILS). INSTALL EROSION CONTROL LINING ON NEWLY GRADED AREAS AS SHOWN ON EROSION & SEDIMENT CONTROL PLAI IMMEDIATELY AFTER GRADING FOR EACH RAIN GARDEN IS COMPLETED.

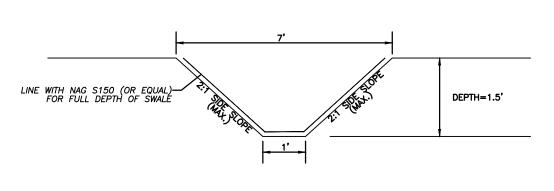
13. IMMEDIATELY STABILIZE ANY DORMANT DISTURBANCE WITH PERMANENT SEED MIXTURE, MULCH AT 3 TONS/AC, AND LIME AND FERTILIZER AS PRESCRIBED.

14. STABILIZE ALL DISTURBANCE AREAS.

STABILIZE ALL DISTORBANCE AREAS.
 ONCE ALL FEATURES (INCLUDING THE PROPOSED BUILDINGS AND DRIVEWAY AREAS) HAVE
BEEN CONSTRUCTED AND ALL DISTURBANCE STABILIZED IN ACCORDANCE WITH FINAL SITE
STABILIZATION REQUIREMENTS, REMOVE THE SUPER SILT FENCES, ROCK FILTER, AND THE
REMAINDER OF THE ROCK CONSTRUCTION ENTRANCE.
 ONCE THE SITE HAS BEEN STABILIZED IN ACCORDANCE WITH FINAL SITE STABILIZATION
REQUIREMENTS, FILE AN NPDES PERMIT NOTICE OF TERMINATION FORM WITH THE
CONSEDICTION DISTRICT BED THE "NOTICE OF TERMINATION PEOLIPEMENTS" NOTE IN THESE

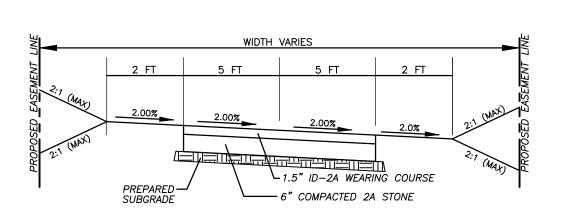
CONSERVATION DISTRICT PER THE "NOTICE OF TERMINATION REQUIREMENTS" NOTE IN THESE

 $\ensuremath{\overline{\#}}$ critical stages of the sequence of construction are circled. These stages within the sequence require inspection by the site engineer.



GRASS SWALE DETAIL (TYPICAL SECTION)

(NOT TO SCALE)



PROPOSED PRIVATE DRIVEWAY CROSS SECTION DETAIL (OUTSIDE OF PENNDOT ROW)

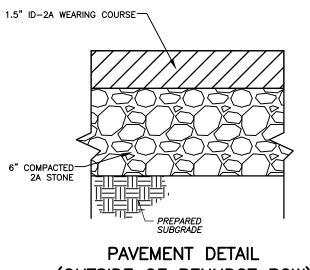
AREAS WHICH ARE TO RECEIVE FILL SHOULD BE PROOFROLLED WITH A SEGMENTED

AREAS NOTED DURING THE PROOFROLLING SHALL BE UNDERCUT TO SUITABLE MATERIALS AS DIRECTED BY THE TOWNSHIP ENGINEER.

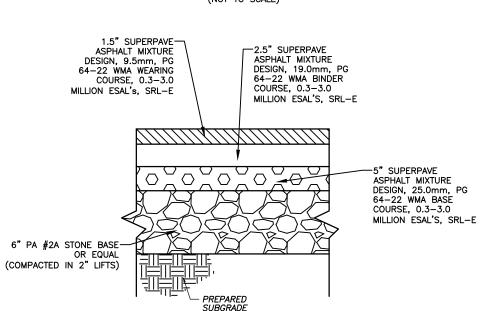
PAD OR "SHEEPSFOOT" ROLLER PRIOR TO FILL PLACEMENT. ANY SOFT OR UNSTABLE

MATERIALS AS DIRECTED BY THE TOWNSHIP ENGINEER.

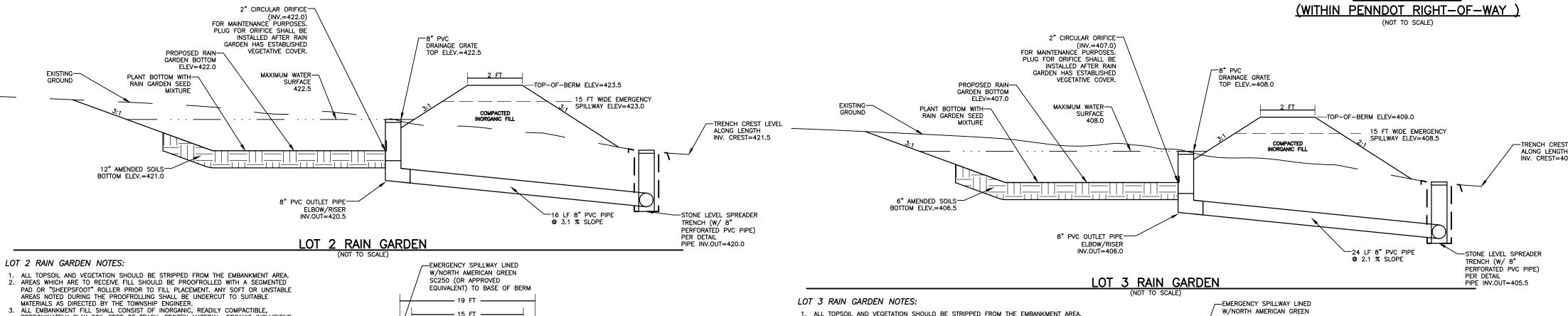
3. ALL EMBANKMENT FILL SHALL CONSIST OF INORGANIC, READILY COMPACTIBLE,
PREDOMINATELY CLAY SOIL FREE OF TRASH, FROZEN MATERIAL, ORGANIC INCLUSIONS,
OR EXCESS MOISTURE. FILL SHALL BE PLACED IN HORIZONTAL LIFTS WITH A MAXIMUM
THICKNESS OF EIGHT INCHES (8"). EACH LIFT SHALL BE COMPACTED TO AT LEAST
90% OF THE MAXIMUM "MODIFIED" DRY DENSITY AS DETERMINED BY ASTM D 1557.



(OUTSIDE OF PENNDOT ROW)



PAVEMENT DETAIL



MATERIALS AS DIRECTED BY THE TOWNSHIP ENGINEER.

ALL EMBANKMENT FILL SHALL CONSIST OF INORGANIC, READILY COMPACTIBLE, PREDOMINATELY CLAY SOIL FREE OF TRASH, FROZEN MATERIAL, ORGANIC INCL

THICKNESS OF EIGHT INCHES (8"). EACH LIFT SHALL BE COMPACTED TO AT LEAST 90% OF THE MAXIMUM "MODIFIED" DRY DENSITY AS DETERMINED BY ASTM D 1557.

FULLY PERFORATED 8"— PVC PIPE

____ 15 FT _____ **EMERGENCY SPILLWAY DETAIL**

ELEV=421.5 No.57 [TYP] @ 3.1% SLOPE PROFILE VIEW

PLAN VIEW STONE TRENCH LEVEL SPREADER & PERFORATED PIPE DETAIL (FOR LOT 2 RAIN GARDEN) (NOT TO SCALE)

No.57 [TYP]

THE PERFORATED PIPE / STONE TRENCH LEVEL SPREADER SHALL BE CONSTRUCTED SO THAT THERE IS A MINIMUM OF
10 INCHES OF COVER OVER THE TOP OF THE PIPE.
 A TEE FITTING SHALL BE USED TO CONNECT THE TWO PERFORATED LEVEL SPREADER PIPES TO THE STORMWATER FACILITY

AMENDED SOIL— DEPTH 12" (MIN) / ELEV.=422.5 `—AMENDED SOIL/PLANTING
MIXTURF AMENDED SOILS DETAIL (FOR LOT 2 RAIN GARDEN)

1.AMENDED SOILS SHALL BE A 2:1 MIXTURE OF BASE SOIL TO COMPOSTED ORGANIC MATERIAL. AMENDED SOIL DEPTH SHALL BE 6" MINIMUM, AND THE AMENDED SOILS SHALL EXTEND TO ELEVATION 422.5 (THE LEVEL OF NON-DRAINING BMP STORAGE). 3.THE RAIN GARDEN SHALL BE PLANTED WITH THE "RAIN GARDEN SEED MIXTURE" OR AN APPROVED EQUIVALENT

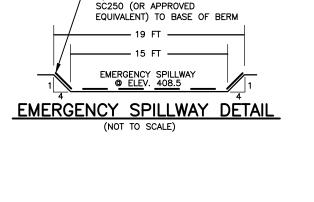
PROVIDE GEOTEXTILE LINING WITH 6" OVERLAF PVC FITTING-PROFILE VIEW PLAN VIEW

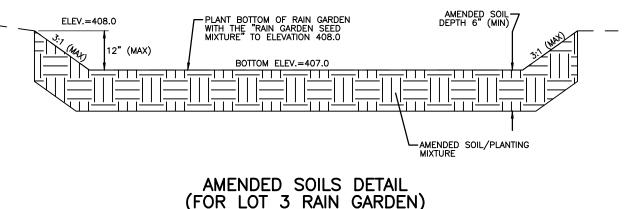
STONE TRENCH LEVEL SPREADER & PERFORATED PIPE DETAIL (FOR LOT 3 RAIN GARDEN)

(NOT TO SCALE)

1. THE PERFORATED PIPE / STONE TRENCH LEVEL SPREADER SHALL BE CONSTRUCTED SO THAT THERE IS A MINIMUM OF ONE FOOT (1') OF COVER OVER THE TOP OF THE PIPE.

2. A PVC FITTING SHALL BE USED TO CONNECT THE PERFORATED LEVEL SPREADER PIPE TO THE STORMWATER FACILITY OUTLET PIPE AS SHOWN.





1.AMENDED SOILS SHALL BE A 2:1 MIXTURE OF BASE SOIL TO COMPOSTED ORGANIC MATERIAL. AMENDED SOIL DEPTH SHALL BE 6" MINIMUM, AND THE AMENDED SOILS SHALL EXTEND TO ELEVATION 408.0 (THE LEVEL OF NON-DRAINING BMP STORAGE).

2.SOILS SHALL HAVE A PH OF BETWEEN 5.5 AND 6.5, A CLAY CONTENT OF LESS THAN 10%, AND BE FREE OF TOXIC SUBSTANCES AND UNWANTED PLANT MATERIAL. SOILS HAVE AN ASSUMED POROSITY OF 20% WITH AN ASSUMED PERMEABILITY RATE OF AROUND 3.3 IN/HR. 3.THE RAIN GARDEN SHALL BE PLANTED WITH THE "RAIN GARDEN SEED MIXTURE" OR AN APPROVED EQUIVALENT. 4.THE AMENDED SOILS CAN EITHER BE PRE-MIXED AND IMPORTED OR BE MIXED ONSITE ACCORDING TO THE BASE SOIL TO COMPOST MATERIAL PROPORTION SPECIFIED IN NOTE 1.

4.THE AMENDED SOILS CAN EITHER BE PRE-MIXED AND IMPORTED OR BE MIXED ONSITE ACCORDING TO THE BASE SOIL TO COMPOST MATERIAL PROPORTION SPECIFIED IN NOTE 1. GRAPHIC SCALE JNDERGROUND UTILITY USERS 40 PROFESSIONAL RT. 82 & MONACY RD. P.O. BOX 351 COATESVILLE, PA 19320 (800) 934-6489 WILLIAMS (TRANSCO GAS) 2800 POST OAK BOULEVARD HOUSTON, TX 77056 (800) 440-8475

PCSM NOTES & DETAILS SHEET

SUBDIVISION AND LAND DEVELOPMENT PLAN (PRELIMINARY/FINAL) FOR BRAKMAN PROPERTY

Commonwealth Engineers, Inc.

COMENG@CEI-1.COM

SHEET: MAY 17, 201 AS SHO SURVEY: RAWN: CHECKED: DRAWING NO. 201541-

<u>PENNSYLVANIA ONE CALL</u> (PURSUANT TO ACT 287, 172, 38 AND ALL OTHER APPLICABLE AMENDMENTS) COMMONWEALTH ENGINEERS, INC. DOES NOT GUARANTEE THE ACCURACY OF THE LOCATIONS FOR EXISTING SUBSURFACE UTILITY LINES, STRUCTURES, ETC., SHOWN ON THE PLANS, NOR DOES COMMONWEALTH ENGINEERS, INC. GUARANTEE THAT ALL SUBSURFACE UTILITY LINES. STRUCTURES, ETC., ARE SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATIONS OF ALL SUBSURFACE UTILITY LINES, STRUCTURES, ETC., BEFORE THE START OF WORK. [TELEPHONE: (800) 242–1776]

UPI No.5306-0089-0000

PROPOSED WATER LINE

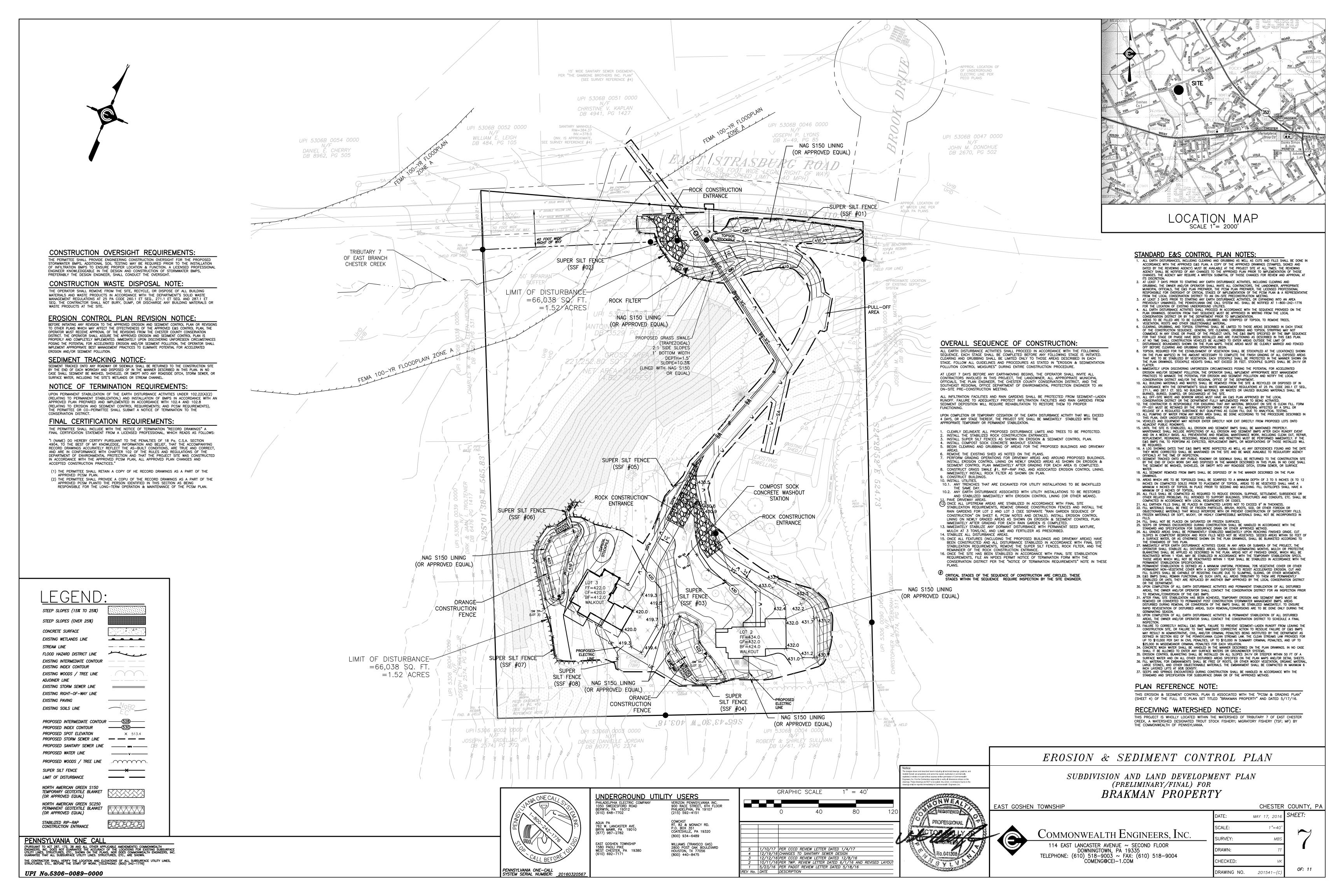
PROPOSED SANITARY SEWER LINE

1/10/17 PER CCCD REVIEW LETTER DATED 1/4/17
12/19/16 CHANGES TO SANITARY SEWER DESIGN
12/12/16 PER CCCD REVIEW LETTER DATED 12/8/16
10/11/16 PER TWP. REVIEW LETTER DATED 6/1/16 AND REVISED LAYOUT
5/23/16 PER PADOT REVIEW LETTER DATED 5/18/16

114 EAST LANCASTER AVENUE ~ SECOND FLOOR DOWNINGTOWN, PA 19335 TELEPHONE: (610) 518-9003 ~ FAX: (610) 518-9004

AST GOSHEN TOWNSHIP

CHESTER COUNTY, PA



PLAN REFERENCE NOTE:

THIS EROSION & SEDIMENT CONTROL PLAN IS ASSOCIATED WITH THE "PCSM & GRADING PLAN" (SHEET 4) OF THE FULL SITE PLAN SET TITLED "BRAKMAN PROPERTY" AND DATED 5/17/16. <u>SITE STABILIZATION STANDARDS:</u>

UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY THAT WILL EXCEED 4 DAYS, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE DURING NON-GERMINATING PERIODS, HAY OR STRAW MULCH MUST BE APPLIED AT THE RATE OF THREE (3) TONS PER ACRE. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE

AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM

RÉDISTURBED WITHIN ONE (1) YEAR MUST BE STABILIZED IN ACCORDANCE WITH TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT

UNIFORM 70% PERENNIAL VEGETATIVE COVER AND/OR ANY OTHER PERMANENT, NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE

TEMPORARY SITE STABILIZATION REQUIREMENTS:

UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY THAT WILL EXCEED FOUR (4) DAYS, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION. PLAN NOTES. AND THE CONSTRUCTION SEQUENCE SHOULD REFLECT THIS REQUIREMENT. THE CONSTRUCTION. SEQUENCE SHOULD INCORPORATE THE IMMEDIATE STABILIZATION REQUIREMENT INTO ANY APPLICABLE AREAS. (PLEASE NOTE THAT HYDROSEED IS NOT CONSIDERED STABILIZATION UNTIL IT GERMINATES). HAY OR STRAW MULCH MUST BE

FINAL SITE STABILIZATION REQUIREMENTS:

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

IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE (1) YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT

<u>STABILIZATION NEAR SURFACE WATERS:</u> DISTURBED AREAS TO BE RE-VEGETATED WITHIN 50 FEET OF SURFACE WATERS SHALL BE STABILIZED WITH EROSION CONTROL BLANKETING.

SEEDING & MULCHING NOTES:

- . DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITY HAS CEASED MUST BE IMMEDIATELY SEEDED AND MULCHED. DURING NON-GERMINATION PERIODS. MULCH MUST BE APPLIED AT THE RECOMMENDED RATES (MINIMUM OF 3 TONS/ACRE.) DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE (1) YEAR SHALL BE IMMEDIATELY MULCHED AT 3 TONS PER ACRE AND SEEDED WITH A QUICK—GROWING TEMPORARY SEED MIXTURE. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN ONE YEAR MUST BE IMMEDIATELY MULCHED AT 3 TONS PER ACRE AND SEEDED WITH THE PERMANENT SEED MIXTURE. LIME SHALL BE APPLIED IN
- DIVERSIONS, CHANNELS, SWALES, SEDIMENT BASINS, SEDIMENT TRAPS AND SOIL STOCKPILES SHALL BE SEEDED AND MULCHED IMMEDIATELY.
- 3. HAY/STRAW MULCH MUST BE APPLIED AT A RATE OF AT LEAST 3 TONS PER ACRE.

 4. AREAS UTILIZING VEGETATIVE STABILIZATION MUST BE SEEDED AND MULCHED WITHIN THE APRIL 15TH TO OCTOBER 15TH GERMINATION WINDOW. SEEDING WILL BE ACCOMPLISHED THROUGH HYDROSEEDING OF CONVENTIONAL SEEDING METHODS 5. GEOTEXTILE EROSION CONTROL CHANNEL LINING AND SLOPE PROTECTION SHALL BE INSTALLED WHERE INDICATED AND PER THE MANUFACTURER'S SPECIFICATIONS IMMEDIATELY UPON THE COMPLETION OF GRADING ACTIVITIES.

FINAL CERTIFICATION REQUIREMENTS:

THE PERMITTEE SHALL INCLUDE WITH THE NOTICE OF TERMINATION "RECORD DRAWINGS" A FINAL CERTIFICATION STATEMENT FROM A LICENSED PROFESSIONAL, WHICH READS AS FOLLOWS: "I (NAME) DO HEREBY CERTIFY PURSUANT TO THE PENALTIES OF 18 Pa. C.S.A. SECTION 4904, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THE ACCOMPANYING RECORD DRAWINGS ACCURATELY REFLECT THE AS-BUILT CONDITIONS, ARE TRUE AND CORRECT, AND ARE IN CONFORMANCE WITH CHAPTER 102 OF THE RULES AND REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THAT THE PROJECT SITE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PCSM PLAN, ALL APPROVED PLAN CHANGES AND ACCEPTED CONSTRUCTION PRACTICES.

(1) THE PERMITTEE SHALL RETAIN A COPY OF HE RECORD DRAWINGS AS A PART OF THE (2) THE PERMITTEE SHALL PROVIDE A COPU OF THE RECORD DRAWINGS AS A PART OF THE APPROVED PCSM PLANTO THE PERSON IDENTIFIED IN THIS SECTION AS BEING RESPONSIBLE FOR THE LONG-TERM OPERATION & MAINTENANCE OF THE PCSM PLAN.

NOTICE OF TERMINATION REQUIREMENTS: UPON PERMANENT STABILIZATION OF THE EARTH DISTURBANCE ACTIVITIES UNDER 102.22(A)(2) (RELATING TO PERMANENT STABILIZATION,) AND INSTALLATION OF BMPS IN ACCORDANCE WITH AN APPROVED PLAN PREPARED AND IMPLEMENTED IN ACCORDANCE WITH 102.4 AND 102.8 (RELATING TO EROSION AND SEDIMENT CONTROL REQUIREMENTS; AND PCSM REQUIREMENTS), THE PERMITTEE OR CO-PERMITTEE SHALL SUBMIT A NOTICE OF TERMINATION TO THE

E&S PLAN PLANNING & DESIGN: APPROXIMATELY 1.52 ACRES OF DISTURBANCE ARE ANTICIPATED WITH THIS PROPOSAL. IMPROVEMENTS WILL BE CONSTRUCTED AS A SINGLE PHASE:

PRIMARY E&S BMPS: THE PRIMARY EROSION CONTROL FACILITIES FOR THIS SITE WILL CONSIST OF SUPER SILT FENCE INSTALLED DOWNSLOPE OF ANTICIPATED DISTURBANCE. SECONDARY E&S BMPS: SECONDARY EROSION CONTROL FACILITIES WILL INCLUDE STABILIZED CONSTRUCTION ENTRANCES, TOPSOIL STOCKPILES. GEOTEXTILE STABILIZATION. IMMEDIATE STABILIZATION. AND PROPOSED SEQUENCES OF CONSTRUCTION THAT WILL ENSURE MINIMAL OVERALL DISTURBANCE AND THE POTENTIAL FOR SEDIMENT POLLUTION.

MINIMIZATION OF EXTENT & DURATION OF EARTH DISTURBANCE: THE EROSION & SEDIMENT CONTROL PLAN HAS BEEN DESIGNED TO MINIMIZE THE EXTENT & DURATION OF EARTH DISTURBANCE BY STRICTLY DELINEATING THE LIMITS OF DISTURBED AREAS AND PROVIDING A SEQUENCE OF CONSTRUCTION THAT REQUIRES SENSIBLE AND EFFICIENT PROJECT STAGING AND IMMEDIATE STABILIZATION OF DISTURBANCE. MAXIMIZATION OF PROTECTION OF EXISTING DRAINAGE FEATURES & VEGETATION: THE EROSION AND SEDIMENT CONTROL PLAN HAS BEEN DESIGNED TO MAXIMIZE THE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION BY DISCHARGING STORMWATER FACILITIES THROUGH LEVEL SPREADERS

MINIMIZATION OF SOIL COMPACTION: SOIL COMPACTION WILL BE MINIMIZED BY STRICTLY DELINEATING

MEASURES THAT PREVENT OR MINIMIZE GENERATION OF INCREASED STORMWATER RUNOFF: THE PROPOSED SUPER SILT FENCE WILL PROVIDE STORMWATER RATE CONTROL DURING CONSTRUCTION THROUGH THE SLOWED RELEASE OF RUNOFF.

POTENTIAL FOR THERMAL POLLUTION: ANY POTENTIAL THERMAL IMPACTS CREATED BY THE PROPOSED SITE IMPROVEMENTS WILL BE MITIGATED BY CAPTURING & INFILTRATING THE INCREASE IN STORMWATER RUNOFF FROM PRE-DEVELOPMENT CONDITIONS TO POST-DEVELOPMENT CONDITIONS FOR THE 2-YEAR DESIGN STORM EVENT. THIS PROVISION OF SIGNIFICANT GROUNDWATER RECHARGE WILL COOL THE COLLECTED OVERLAND FLOW. THE 2-YEAR DESIGN STORM OF 3.2 INCHES REPRESENTS MORE THAN 98% OF THE ANNUAL RAINFALL. THUS, THE INCREASED RUNOFF FROM APPROXIMATELY 98% OF THE ANNUAL RAINFALL EVENTS WILL BE INFILTRATED INTO THE GROUND AND WILL NOT BE RELEASED OVERLAND. IN ADDITION, THE REPORDISCH WETLAND PLANTINGS IN THE PAIN CARDERS WILL BROWNED OVERLAND. IN ADDITION, THE PROPOSED WETLAND PLANTINGS IN THE RAIN GARDENS WILL PROVIDE NATURAL GROUND COVER ALLOWING BIOFILTRATION AND FURTHER MITIGATION OF THERMAL IMPACTS AND COOLING OF OVERLAND RUNOFF. FINALLY, BOTH RAIN GARDENS WILL DISCHARGE TO A SUBSURFACE LEVEL SPREADER DEVICE THAT WILL PROMOTE SOME ADDITIONAL INFILTRATION AND COOLING OF BASIN DISCHARGE PRIOR TO RELEASE INTO THE RECEIVING WATERSHED.

GEOTEXTILE STABILIZATION REQUIREMENTS:

ALL DISTURBED SLOPES STEEPER THAN 3:1 (33%) SHALL BE IMMEDIATELY STABILIZED WITH AN APPROPRIATE EROSION CONTROL GEOTEXTILE FABRIC (NORTH AMERICAN GREEN C125 OR AN

PUMPED WATER FILTER BAG REQUIREMENTS: ALL PUMPING OF SEDIMENT LADEN WATER OR POTENTIALLY SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED

EROSION CONTROL PLAN REVISION NOTICE:

BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE CHESTER COUNTY CONSERVATION DISTRICT. THE OPERATOR SHALL ASSURE THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED

UNFORESEEN EROSIVE CONDITIONS:

EROSION AND/OR SEDIMENT POLLUTION.

 SHOULD ANY UNFORESEEN EROSIVE CONDITIONS DEVELOP DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE THE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS A RESULT OF INCREASED RUNOFF AND/OR SEDIMENT DISPLACEMENT. STOCKPILES OF WOOD CHIPS, HAY BALES, CRUSHED STONE, AND OTHER ACCEPTABLE MULCHES SHALL BE HELD IN READINESS TO IMMEDIATELY ADDRESS EMERGENCY EROSION AND SEDIMENTATION PROBLEMS.

2. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH ALL OF THE PROVISIONS OF APPENDIX 64, "EROSION CONTROL RULES AND REGULATIONS, TITLE 25 PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUB-PART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL."

3. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT ALL EROSION & AIR POLLUTION IS MINIMIZED. STATE AND LOCAL LAW CONCERNING POLLUTION ABATEMENT SHALL BE OBSERVED.

4. MEASURES FOR THE PROTECTION OF EXISTING TREES AND SHRUBS SHALL BE TAKEN BY THE CONTRACTOR TO ELIMINATE UNNECESSARY DAMAGE.

* A COPY OF THESE EROSION AND SEDIMENTATION POLLUTION CONTROL PLANS MUST BE POSTED AND AVAILABLE AT THE CONSTRUCTION SITE IN ACCORDANCE WITH STATE AND FEDERAL

DURING CONSTRUCTION THERMAL POLLUTION:

ANY POTENTIAL THERMAL IMPACTS CREATED BY THE PROPOSED SITE IMPROVEMENTS WILL BE MITIGATED DURING CONSTRUCTION BY UTILIZING THE SILT FENCE AND STORMWATER MANAGEMENT RAIN GARDENS. IN ADDITION, RUNOFF FROM SOME OF THE IMPERVIOUS AREAS WILL EVENTUALLY FLOW INTO SWALES THAT

GEOLOGIC OR SOIL CONDITIONS POLLUTION:

THERE ARE NO KNOWN NATURALLY OCCURRING GEOLOGIC OR SOILS CONDITIONS ON THIS SITE THAT MAY HAVE THE POTENTIAL TO CAUSE POLLUTION AFTER EARTH DISTURBANCE ACTIVITIES ARE COMPLETED AND

<u>IMPORTED FILL MATERIAL NOTICE:</u>

THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL

SPRINGS & SEEPS NOTICE:

SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER

<u>SEDIMENT TRACKING NOTICE:</u>

SEDIMENT TRACKED ONTO ANY ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORKDAY AND DISPOSED OF IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER, INCLUDING THE SITE'S WETLANDS OR STREAM CHANNEL.

TOPSOIL APPLICATION NOTE:

AREAS WHICH ARE TO BE TOP-SOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES (6 TO 12 INCHES ON COMPACTED SOILS) PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED (YARDS, OPEN SPACE AREAS, STORMWATER BASINS, ETC.) SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL

<u>SEDIMENT TRACKING NOTICE:</u>

SEDIMENT TRACKED ONTO ANY ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORKDAY AND DISPOSED OF IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR

PERMANENT SEED MIXTURE:

SURFACE WATER, INCLUDING THE SITE'S WETLANDS OR STREAM CHANNEL.

NAME_	PARTS BY WEIGHT	PERCENT PURITY	GERMINATION
KENTUCKY BLUE GRASS VARIETIES	25%	95%	85%
PENNSTAR/PENNFINE PERENNIAL RYEGRASS	25%	95%	85%
PENNLAWN FESCUE	25%	95%	85%
ANNUAL RYEGRASS	25%	95%	85%

TEMPORARY SEED MIXTURE:

SITE PREPARATION: APPLY 1 TON OF AGRICULTURAL—GRADE LIMESTONE PER ACRE PLUS FERTILIZER AT THE RATE OF 50-50-50 PER ACRE. WORK INTO THE SOIL WHERE POSSIBLE. SUCURE A SOIL TEST BEFORE APPLICATION OF PERMANENT SEEDING. AFTER SEEDING, MULCH WITH HAY OR STRAW AT A RATE OF 3 TONS PER ACRE.

ANNUAL RYEGRASS	40
OR SPRING OATS	96 (3 BU)
OR SPRING OATS PLUS RYEGRASS	64 LBS OATS (2BU) + 20 LBS ANNUAL OR PERENNIAL RYGRASS
OR WINTER WHEAT	180 (3 BU)
OR WINTER RYE	168 (3 BU)

ANNUAL RYEGRASS	40
OR JAPANESE OR FOXTAIL MILLET	35
OR SUDANGRASS	40
OR SPRING OATS	96 (3 BU)
OR WINTER WHEAT	180 (3 BU)
OR WINTER RYE	168 (3 BU)
FOR LATE SUMMER & FALL SEEDING (AUGUST 16 AND LATER)	

ANNUAL RYFGRASS OR SPRING OATS (CAN BE USED BUT WILL WINTER KILL) OR WINTER WHEAT 180 (3 BU) OR WINTER RYE 168 (3 BU)

MULCH, LIME, FERTILIZER, SOD & SEED NOTES:

APPLIED MILCH SHALL BE EITHER HAY/STRAW OR HYDROMULCH, HAY/STRAW MULCH SHALL BE FREE OF WEEDS AND, NOT MOLDY OR ROTTEN, AND SHALL BE APPLIED TO ALL AREAS AT A RATE OF 3 TONS PER ACRES, ON STEEP SLOPE AREAS (GREATER THAN 3:1), COVER SEEDED AREAS WITH AN ACCEPTABLE GEOTEXTILE EROSION CONTROL BLANKET. ALL AREAS RECEIVING HAY/STRAW MULCH SHALL BE IMMEDIATELY ANCHORED EITHER BY CRIMPING WITH A TRACTOR DRAWN IMPLEMENT OR WITH EMULSIFIED ASPHALT CONTAINING NO SOLVENTS OR DILUTING AGENTS TOXIC TO PLANT OR ANIMAL LIFE UNIFORMLY APPLIED AT THE RATE OF 31 GAL. PER 1,000 SQUARE YARDS.

HYDROMULCH SHALL BE COMPOSED OF WOOD FIBER OR RECYCLED PAPER AND SHALL BE MECHANICALLY APPLIED AT THE RATE OF 65 LBS PER 1,000 SQUARE

AGRICULTURAL GRADE LIME SHALL BE APPLIED TO ALL DISTURBED AREAS PRIOR TO SEEDING AT THE RATE OF FOUR (4) TONS PER ACRE.

10-20-20 FERTILIZER SHALL BE APPLIED TO ALL DISTURBED AREAS PRIOR TO FERTILIZER: SEEDING AT THE RATE OF ONE THOUSAND (1,000) LBS PER ACRE.

KENTUCKY BLUEGRASS SOD (IF CALLED FOR.) SHALL BE GROWN UNDER THE SUPERVISION OF THE PA DEPARTMENT OF AGRICULTURE BUREAU OF PLANT

ALL SEED SHALL BE FRESH. ALL NEW CROP SEED SHALL BE LABELED IN ACCORDANCE WITH THE US DEPT OF AGRICULTURE RULES AND REGULATIONS UNDER THE FEDERAL SEED ACT IN EFFECT ON THE DATE OF INVITATION FOR BIDS. ALL SEED SHALL BE FURNISHED IN SCALE STANDARD TO KIND. PERCENT BY WEIGHT, PURITY AND GERMINATION, THE GRASS SEED SHALL CONTAIN THE PERCENTAGES OF PURITY AND GERMINATION INDICATED ON THE LIST FURNISHED WITH THE APPLICABLE PLAN. SEED MIX SHALL BE AS SPECIFIED, SPREAD AT THE RATE OF 5 POUNDS PER 1,000 SQUARE FEET (MINIMUM). FOR SLOPE 3:1 OR GREATER, USE 7.5 POUNDS OF SEED PER 1,000 SQUARE FEET.

SOIL IDENTIFICATION:

SYMBOL	DESCRIPTION:	HYDROLOGIC GROUP	DEPTH TO WATER	DEPTH TO BEDROCK
UrlB	URBAN LAND-GLADSTONE COMPLEX, 0 TO 8 PERCENT SLOPES	A	>80"	60"-100"
UrlD	URBAN LAND-GLADSTONE COMPLEX, 0 TO 8 PERCENT SLOPES	Α	>80"	60"-100"

SOIL USE LIMITATIONS & RESOLUTIONS:

ONLY THOSE LIMITATIONS TO ON-SITE SOILS AS DESCRIBED BY APPEDNIX E OF THE 2012

<u>USI</u>	E LIMITATION:	PROPOSED RESOLUTION(S):
1.	CUTBANKS CAVE (UrlB,UrlD)	ALL APPLICABLE OSHA STANDARDS AND REGULATIONS WILL BE IMPLEMENTED.
2.	CORROSIVENESS TO CONCRETE AND/OR STEEL (UriB,UriD)	CHEMICAL PRE-TREATMENT OF ANY CONCRETE ENDWALLS TO PROVIDE ANTI-CORROSIVE PROPERTIES.
3.	EASILY ERODIBLE (UriB,UriD)	EROSION CONTROL MATTING IS PROPOSED AS APPROPRIATE.
4.	HYDRIC SOILS/INCLUSIONS (UrlB,UrlD)	LIMITED DISTURBANCE IN ANY POTENTIAL HYDRIC AREAS
5.	SLOW PERCOLATION (UriB,UriD)	ON-SITE TESTING WAS PERFORMED TO ENSURE ADEQUATE PERCOLATION FOR BMP FACILITIES.
6.	FROST ACTION (UrlB,UrlD)	FROST ACTION IS NOT EXPECTED TO AFFECT PROPOSEI FACILITIES.
7.	SHRINK/SWELL	SHRINK/SWELL IS NOT EXPECTED TO AFFECT PROPOSE

RECEIVING WATERSHED NOTICE:

THIS PROJECT IS WHOLLY LOCATED WITHIN THE WATERSHED OF TRIBUTARY 7 OF EAST CHESTER CREEK, A WATERSHED DESIGNATED TROUT STOCK FISHERY; MIGRATORY FISHERY (TSF; MF) BY THE COMMONWEALTH OF PENNSYLVANIA.

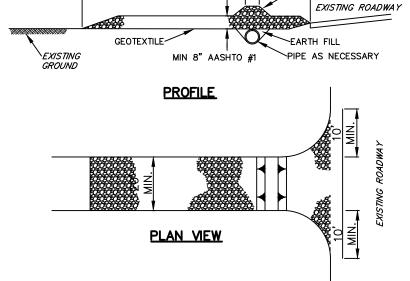
INFILTRATION FACILITY PROTECTION NOTICE:

ALL PROPOSED UNDERGROUND STORMWATER INFILTRATION FACILITIES PROPOSED WITH THESE PLANS MUST BE PROTECTED DURING CONSTRUCTION FROM SOIL COMPACTION AND SEDIMENT CONTAMINATION AT ALL TIMES. CONSTRUCTION OF ALL INFILTRATION FACILITIES SHALL BI STAGED IN SUCH A MANNER AS TO AFFORD THE FACILITY MAXIMUM PROTECTION FROM CONTAMINATION AND SOIL COMPACTION DURING CONSTRUCTION.

BMP MAINTENANCE REQUIREMENTS:

UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION BMPs MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTION OF ALL EROSION AND SEDIMENTATION BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL SITE INSPECTIONS WILL BE BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL SITE INSPECTIONS WILL BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE. THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG WILL BE KEPT ON SITE AT ALL TIMES & MADE AVAILABLE TO HE DISTRICT UPON REQUEST. ALL PREVENTIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEDING, REMULCHING AND RENETTING, MUST BE PREFORMED IMMEDIATELY. IF EROSION AND SEDIMENTATION BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S OR MODIFICATIONS OF THOSE INSTALLED WILL BE NEEDED. WHERE BMPs ARE FOUND TO FAIL TO ALLEVIATE EROSION OR SEDIMENT POLLUTION, THE PERMITTEE OR CO-PERMITTEE SHALL INCLUDE THE FOLLOWING INFORMATION:

- A. THE LOCATION AND SEVERITY OF THE BMPs FAILURE AND ANY POLLUTION EVENTS.
- B. ALL STEPS TAKEN TO, REDUCE, ELIMINATE, & PREVENT RECURRENCE OF NON-COMPLIANCE.
- C. THE TIME FRAME TO CORRECT THE NON-COMPLIANCE, INCLUDING THE EXACT DATES WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMPs MUST BE STABILIZED IMMEDIATELY.



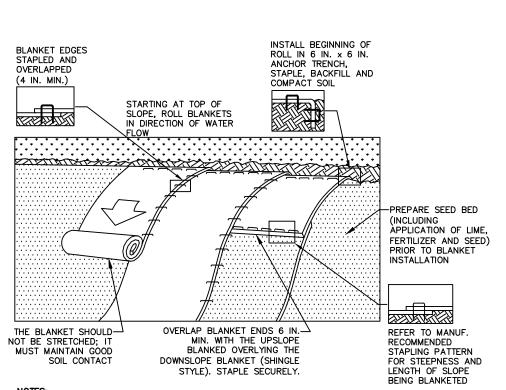
* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE. MOUNTABLE BERM 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 MAINTAINE 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

ROCK CONSTRUCTION ENTRANCE

NOT TO SCALE

50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

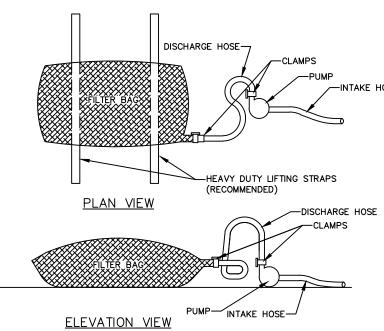


NOTES: 1. SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.

2. PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE. 3. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.
4. BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH.
LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH 5. THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. 6. BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

STANDARD CONSTRUCTION DETAIL #11-1 EROSION CONTROL BLANKET INSTALLATION

(NOT TO SCALE)



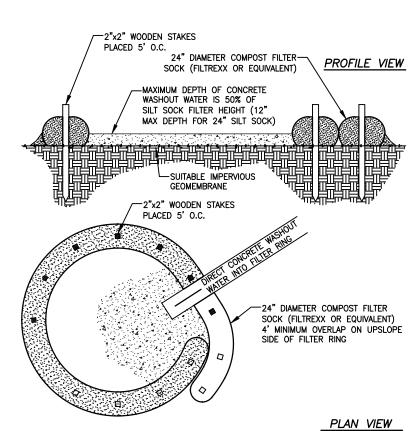
NOTES:	ATION VIEW			
LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:				
PROPERTY	TEST METHOD	MINIMUM STANDARD		
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN		
GRAB TENSILE	ASTM D-4632	205 LB		
PUNCTURE	ASTM D-4833	110 LB		
MULLEN BURST	ASTM D-3786	350 PSI		
UV RESISTANCE	ASTM D-4355	70%		
AOS % RETAINED	ASTM D-4751	80 SIEVE		

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES. SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE. EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5% FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED. PUMPED WATER FILTER BAG



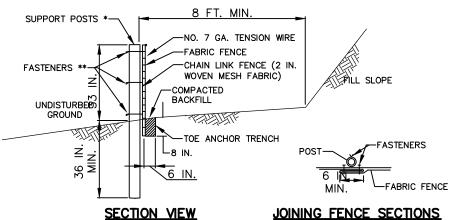
<u>COMPOST SOCK CONCRETE WASHOUT STATION</u>

1. FOR ANY PROJECT ON WHICH CONCRETE WILL BE POURED OR OTHERWISE FORMED ON SITE, A SUITABLE WASHOUT FACILITY MUST BE PROVIDED FOR THE CLEANING OF CHUTES, MIXERS, AND HOPPERS OF THE DELIVERY VEHICLES UNLESS SUCH A FACILITY WILL BE USED AT THE SOURCE OF THE CONCRETE. UNDER NO CIRCUMSTANCES MAY WASH WATER FROM THESE VEHICLES BE ALLOWED TO ENTER ANY SURFACE WATERS. MAKE SURE THAT PROPER SIGNAGE IS PROVIDED TO DRIVERS SO THAT THEY ARE AWARE OF THE PRESENCE OF WASHOUT FACILITIES.

2. WASHOUT FACILITIES SHOULD NOT BE PLACED WITHIN 50 FT OF STORM DRAINS, OPEN DITCHES OR SURFACE WATERS. THEY SHOULD BE IN A CONVENIENT LOCATION FOR THE TRUCKS, PREFERABLY NEAR THE PLACE WHERE THE CONCRETE IS BEING POURED, BUT FAR ENOUGH FROM OTHER VEHICULAR TRAFFIC TO MINIMIZE THE POTENTIAL FOR ACCIDENTAL DAMAGE OR SPILLS. WHEREVER POSSIBLE, THEY

SHOULD BE LOCATED ON SLOPES NOT EXCEEDING A 2% GRADE.
WHEREVER COMPOST SOCK WASHOUTS ARE USED, A SUITABLE IMPERVIOUS GEOMEMBRANE SHOULD BE
PLACED AT THE LOCATION OF THE WASHOUT. COMPOST SOCKS SHOULD BE STAKED IN THE MANNER RECOMMENDED BY THE MANUFACTURER AROUND PERIMETER OF THE GEOMEMBRANE SO AS TO FORM A RING WITH THE ENDS OF THE SOCK LOCATED AT THE UPSLOPE CORNER (FIGURE 3.18). CARE SHOULD BE TAKEN TO ENSURE CONTINUOUS CONTACT OF THE SOCK WITH THE GEOMEMBRANE AT ALL LOCATIONS. WHERE NECESSARY, SOCKS MAY BE STACKED AND STAKED SO AS TO FORM A TRIANGULAR

4. 18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" FILTER SOCKS IN A PYRAMIDAL



* POSTS SPACED AT 10 FT. MAX. USE 2-1/2 IN. DIA HEAVY DUTY GALVANIZED OR ALUMINUM POSTS. ** CHAIN LINK TO POST FASTENERS SPACED AT 14 IN. MAX. USE NO. 9 GA. ALUMINUM WIRE OR NO. 9 GALVANIZED STEEL WIRE. FABRIC TO SHAIN FASTENERS SPACED AT 24 IN. MAX. ON CENTER.

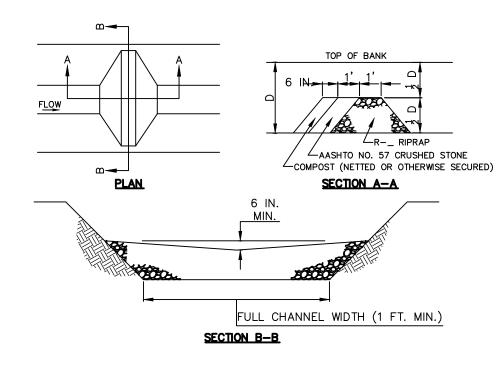
FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

FABRIC WIDTH SHALL BE 42 IN. MINIMUM. POSTS SHALL BE INSTALLED USING A POSTHOLE DRILL.

CHAIN LINK SHALL BE GALVANIZED NO. 11.5 GA. STEEL WIRE WITH 2-1/4 IN. OPENING, NO. 11 GA. ALUMINUM COATED STEEL WIRE IN ACCORDANCE WITH ASTM-A-491, OR GALVANIZED NO. 9 GA. STEEL WIRE TOP AND BOTTOM WITH GALVANIZED NO. 11 GA. STEEL INTERMEDIATE WIRES. NO. 7 GAGE TENSION WIRE TO BE INSTALLED HORIZONTALLY THROUGH HOLES AT TOP AND BOTTOM OF CHAIN-LINK FENCE OR ATTACHED WITH HOG RINGS AT 5 FT MAX. CENTERS

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

> STANDARD CONSTRUCTION DETAIL #4-10 SUPER SILT FENCE NOT TO SCALE



FILTER LOCATION (FT) N/A GRASS SWALE #1 1.5 | 3

SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE HEIGHT OF THE FILTERS. IMMEDIATELY UPON STABILIZATION OF EACH CHANNEL, REMOVE ACCUMULATED SEDIMENT, REMOVE ROCK FILTER, AND STABILIZE DISTURBED AREAS.

> STANDARD CONSTRUCTION DETAIL #4-14 ROCK FILTER NOT TO SCALE

EROSION CONTROL NOTES & DETAILS SHEET

SUBDIVISION AND LAND DEVELOPMENT PLAN (PRELIMINARY/FINAL) FOR BRAKMAN PROPERTY



NOTES:

MAY 17, 20 AS SHOW URVEY: RAWN: HECKED: RAWING NO. 201541-

(PURSUANT TO ACT 287, 172, 38 AND ALL OTHER APPLICABLE AMENDMENTS) COMMONWEALTH ENGINEERS, INC. DOES NOT GUARANTEE THE ACCURACY OF THE LOCATIONS FOR EXISTING SUBSURFACE UTILITY LINES, STRUCTURES, ETC., SHOWN ON THE PLANS, NOR DOES COMMONWEALTH ENGINEERS, INC. GUARANTEE THAT ALL SUBSURFACE UTILITY LINES. STRUCTURES, ETC., ARE SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATIONS OF ALL SUBSURFACE UTILITY LINES, STRUCTURES, ETC., BEFORE THE START OF WORK. [TELEPHONE: (800) 242–1776] UPI No.5306-0089-0000

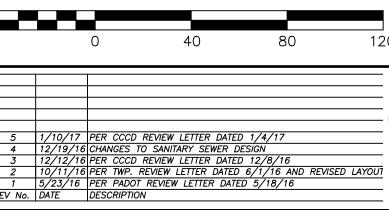
<u>PENNSYLVANIA ONE CALL</u>

PENNSYLVANIA ONE—CALL SYSTEM SERIAL NUMBER:

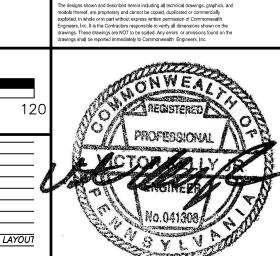
JNDERGROUND UTILITY USERS

EAST GOSHEN TOWNSHIP 1580 PAOLI PIKE WEST CHESTER, PA 19380 (610) 692-7171

RT. 82 & MONACY RD. P.O. BOX 351 COATESVILLE, PA 19320 (800) 934-6489 WILLIAMS (TRANSCO GAS) 2800 POST OAK BOULEVARD HOUSTON, TX 77056 (800) 440-8475



GRAPHIC SCALE



EAST GOSHEN TOWNSHIP

SHEET:

CHESTER COUNTY, PA

