

**POST-DEVELOPED BYPASS 2**  
 AREA = 7.00 Ac.  
 RUNOFF 'C' = 0.21  
 Tc = 0.1000 Hr.

**POST-DEVELOPED BYPASS 1**  
 AREA = 17.22 Ac.  
 RUNOFF 'C' = 0.26  
 Tc = 0.2333 Hr.

**POST-DEVELOPED SHED 6**  
 AREA = 61.00 Ac.  
 RUNOFF 'C' = 0.48  
 Tc = 0.2167 Hr.

SUMMARY OF STRUCTURAL AND NON-STRUCTURAL ERS CONTROL BMP'S AS DETAILED IN THE ATTACHED EXHIBITS LOCATED ON THIS SUBMISSION INCLUDE THE FOLLOWING: 4 PERMANENT SWALES, PERMANENT SWALES, TEMPORARY SWALES, EROSION CONTROL BLANKETS, CURBWAY DIVERSIONS, SEDIMENT BARRIERS, CURBWAY DIVERSIONS, DIVERSION BARRIERS, STABILIZED CONSTRUCTION ENTRANCES AND GROUND COVER STABILIZATION SEEDING.

**STRUCTURAL BMP'S:**  
 - PERMANENT AND TEMPORARY SWALES (VARYING AREAS) - CONVEY STORM RUNOFF AND PROMOTE INFILTRATION  
 - STORMWATER DETENTION FACILITY DESIGNED WITH A FOREBAY TO DISCHARGE RUNOFF AFTER ALLOWING SEDIMENT TO SETTLE  
 - DETENTION BASIN 2 (17.22 ACRES) - STORMWATER DETENTION FACILITY DESIGNED TO DISCHARGE RUNOFF AFTER ALLOWING SEDIMENT TO SETTLE  
 - DETENTION BASIN 3 (0.73 ACRES) - STORMWATER DETENTION FACILITY DESIGNED TO DISCHARGE RUNOFF AFTER ALLOWING SEDIMENT TO SETTLE  
 - F-BOARDS (INSTALLATION AREAS HAVE BEEN DESIGNED)  
 - BMP TRENCHES - 2,308 CF OF UNDERGROUND STORAGE TO ALLOW GROUNDWATER RECHARGE OF CHAMBERS - 12 LOCATIONS (66,833 CF OF STORAGE) HAVE BEEN DESIGNED WITH VARYING GROUNDWATER RECHARGE.

**NON-STRUCTURAL BMP'S:**  
 - STABILIZE VEGETATED SWALES BY PREVENTING EROSION OF SOIL FROM HEAVY FLOWS AND/OR CONCENTRATED FLOWS.  
 - GROUND COVER STABILIZATION SEEDING - PREVENTS EROSION AND PROMOTES INFILTRATION.

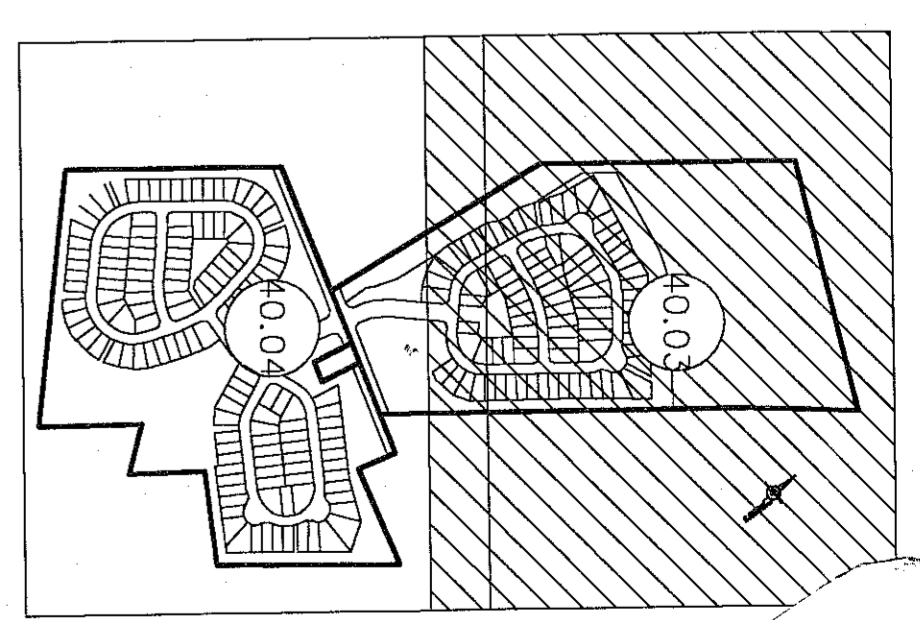
**DESIGN CONSIDERATIONS:**  
 - SWALES WITH VEGETATIVE LINING (VARYING AREAS)  
 - 2.50% OF BMP TRENCH UNDERGROUND STORAGE  
 - 65,833 CF OF STORMWATER CHAMBERS AT 12 LOCATIONS.

**SOIL INFILTRATION:**  
 MONMOUTH COUNTY SOIL SURVEY STATES IN TABLE 6 THAT READINGTON (RE22) HAS A PERMEABILITY OF BETWEEN 0.63 AND 2.0 INCHES PER HOUR AT A DEPTH OF 44 INCHES. ON SITE INVESTIGATION WAS PERFORMED IN SEVERAL LOCATIONS AND VARIOUS DEPTHS AND THE RESULTS ARE AS FOLLOWS:  
 TEST LOCATION: D 60 MIN/IN  
 F 60 MIN/IN  
 J 70 MIN/IN  
 L 10 MIN/IN  
 M 10 MIN/IN

**MAINTENANCE NOTES:**  
 1. THE BASINS AND BMP FACILITIES WILL BE MAINTAINED BY THE HOMEOWNER AND THE TOWNSHIP HAS THE RIGHT TO INSPECT AND MAINTAIN THE DETENTION BASINS AND SEDIMENT BARRIERS. THE HOMEOWNER SHALL MAINTAIN THE DETENTION BASINS AND SEDIMENT BARRIERS. THIS PLAN WILL BE ATTACHED TO THE HOMEOWNERS ASSOCIATION DOCUMENTS.  
 2. THE BASIN FOREBAYS MUST BE ASSOCIATED WITH A CLEANED OR SEDIMENT BUILD-UP BY EXCAVATING, VACUUM, OR PUMPING.  
 3. THE MILETS ALONG THE STORMWATER PIPE SYSTEM AND SEWERAGE TRENCHES WILL BE INSPECTED BY EXCAVATING, VACUUM, PUMP, OR ELEVAC.  
 4. THE STORMWATER ISOLATOR PUMPS WILL BE INSPECTED BY EXCAVATING, VACUUM, PUMP, OR ELEVAC.

**STORMWATER GENERAL NOTES**

- STORMWATER DETENTION FACILITY REQUIRES INSTALLING CONCRETE CURB WALLS AND SEDIMENT BARRIERS TO PREVENT OVERFLOW OF STORMWATER INTO ADJACENT AREAS.
- OUR TECHNICAL SERVICES DEPARTMENT OFFERS CONSULTING SERVICES FOR THE DESIGN AND INSTALLATION OF STORMWATER MANAGEMENT SYSTEMS. WE ARE AVAILABLE TO ASSIST YOU WITH ANY ASPECTS OF YOUR STORMWATER MANAGEMENT SYSTEM. VISIT WWW.STORMWATER.COM FOR MORE INFORMATION.
- STORMWATER RECOMMENDATIONS FOR SYSTEMS WITH MAINTENANCE AREAS SHOULD BE CONSIDERED. VISIT WWW.STORMWATER.COM FOR MORE INFORMATION.
- THE CONTRACTOR SHALL VERIFY ANY DEVIATIONS FROM THE DESIGN AND INSTALLATION OF STORMWATER MANAGEMENT SYSTEMS TO THE DESIGN ENGINEER. VISIT WWW.STORMWATER.COM FOR MORE INFORMATION.
- STORMWATER MANAGEMENT SYSTEMS SHOULD BE DESIGNED TO PREVENT OVERFLOW OF STORMWATER INTO ADJACENT AREAS. VISIT WWW.STORMWATER.COM FOR MORE INFORMATION.
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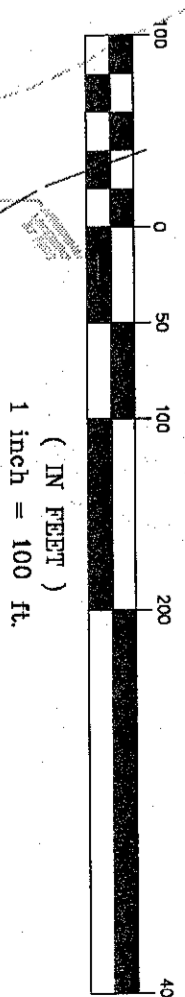


KEYMAP

**LEGEND**

- EXISTING CONTOURS
- EXISTING TREE LINE
- SOILS LINE
- WETLANDS LIMIT
- TO PATH
- POST-DEVELOPED WATERSHED BOUNDARY

**GRAPHIC SCALE**



**ESE EASTERN STATES ENGINEERING**  
 CIVIL ENGINEERS - LAND SURVEYORS - LANDSCAPE ARCHITECTS

250 GIBLARTAR ROAD  
 SUITE 200  
 HORSHAM, PA 19033  
 TEL: (215) 261-1111  
 FAX: (215) 261-1112

REV.	DATE	DESCRIPTION	DRAWN
5	1/31/05	FINAL CONSTRUCTION DRAWINGS	MDD
4	11/22/04	REVIEW LETTER 9/28/04; RDS; A, B, D, COMM CTR	MDD
3	8/04/04	AGENCY REVIEW LETTER DATED 7/29/04	MDD
2	7/21/04	AGENCY REVIEW LETTERS 6/29/2004, 6/30/2004	MDD
1	6/07/04	AGENCY REVIEW LETTERS; TOWNSHIP COMMENTS	PAB

POST-DEVELOPED DRAINAGE AREA AND POST CONSTRUCTION STORMWATER MANAGEMENT PLANS  
**REGENCY AT PROVIDENCE (a.k.a. FOGEL TRACT)**  
 PROVIDENCE TWP., MONTGOMERY CO., PENNSYLVANIA

DATE: 12/9/03  
 SCALE: 1"=100'  
 DESIGN: JT  
 DRAWMAN: PAB  
 JOB NO.: 1114  
 FILE NAME: S-DR-POST  
 NO.: DR40.03  
 SHEET 75 OF 78