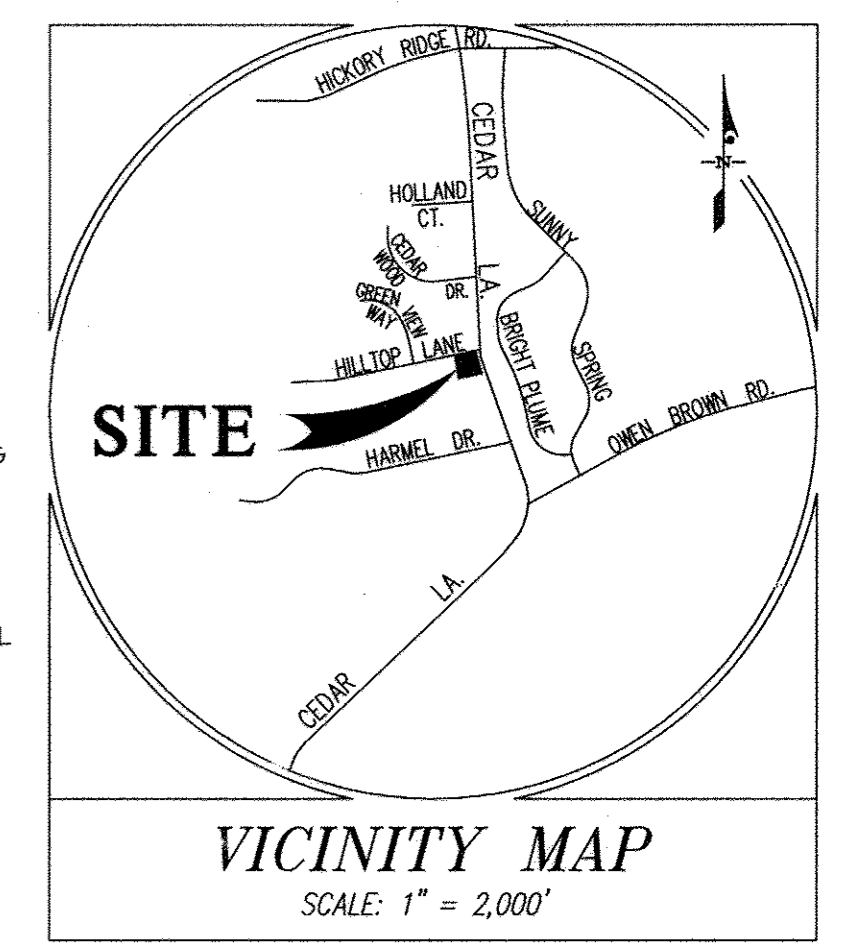


**SITE ANALYSIS**

- SITE AREA:
  - LOT 1: 1.17 AC.
  - DISTURBED AREA: 1.17 AC.
  - EXISTING FORESTED AREA: 0.00 AC.
  - TOTAL: 2.34 AC.
- EXISTING FORESTED AREA: 0.00 AC.
- TOTAL: 2.34 AC.
- PROPOSED IMPERVIOUS AREA: 0.22 AC.
- COMPLIANCE WITH COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAT AND SITE DEVELOPMENT PLAN STAGES. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.
- THE ENVIRONMENTAL CONCEPT PLAN IS FOR STORMWATER MANAGEMENT PURPOSES ONLY. APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION AND/OR SITE DEVELOPMENT PLAN.
- THIS SITE IS SUBJECT TO HOWARD COUNTY FOREST CONSERVATION REQUIREMENTS. FOREST CONSERVATION WILL BE PROVIDED BY A FEE-IN-LIEU DURING THE SITE DEVELOPMENT PROCESS.
- EXISTING TOPOGRAPHY WAS FIELD OBTAINED BY KGI TECHNOLOGIES INC.
- BOUNDARY WAS SURVEYED BY KGI TECHNOLOGIES INC.



**DESIGN NARRATIVE**

THE PROPOSED DEVELOPMENT ON THE SUBJECT LOT IS INTENDED TO MEET ALL OF THE GOALS OF ENVIRONMENTAL SITE DESIGN (ESD). THE EXISTING LOT IS UNDEVELOPED GRASS AREA. THE PROPOSED SEDIMENT CONTROLS FOR CONSTRUCTION INCLUDE: SUPER SILT FENCES, SILT FENCE, AND A STONE CONSTRUCTION ENTRANCE. THESE DEVICES WILL BE USED TO REMOVE SEDIMENTATION DURING CONSTRUCTION AND DISAPATE FLOW VELOCITIES.

NEARLY HALF OF THE PROPOSED SITE WILL DRAIN TO AN ESD MEASURE. THE ESD MEASURE THAT IS BEING EMPLOYED IS A MICRO-BIORETENTION DEVICE. THE MICRO-BIORETENTION DEVICE WILL HAVE AN OVERFLOW INLET WHICH WILL ALLOW RAINFALL FROM LARGE STORM EVENTS TO SAFELY PASS TO THE PROPOSED STORM DRAIN SYSTEM. THE PROPOSED STORM DRAIN SYSTEM WILL THEN CONNECT TO THE EXISTING DOWNSTREAM STORM DRAIN SYSTEM. THE PROPOSED FACILITY WILL PROVIDE THE REQUIRED ESD VOLUME FOR THE PROJECT AREA.

- NATURAL RESOURCE PROTECTION. THERE ARE NO NATURAL RESOURCES SUCH AS STREAMS, WETLANDS, FLOOD PLAIN OR SIMILAR ENVIRONMENTALLY SENSITIVE AREAS TO PROTECT. THE SITE CONTAINS 0.00 ACRES OF EXISTING FOREST AND IS COMPRISED COMPLETELY OF LAWN AREA.
- MAINTENANCE OF NATURAL FLOW PATTERNS. THE SITE TERRAIN SLOPES FROM THE NORTHSIDE OF THE PROPERTY TOWARDS THE SOUTHWEST CORNER OF THE LOT. THE EXISTING DRAINAGE PATTERN WILL BE MAINTAINED.
- REDUCTION OF IMPERVIOUS AREA. SINCE THE SITE IN ITS EXISTING CONDITION DOES NOT CONTAIN ANY IMPERVIOUS AREA, THERE IS NO REDUCTION OF IMPERVIOUS AREA. HOWEVER, THE INCREASE IN IMPERVIOUS AREA WILL BE TREATED BY ESD.
- INTEGRATION OF EROSION AND SEDIMENT CONTROL INTO THE SWM STRATEGY. SEDIMENT CONTROL HAS BEEN INTEGRATED INTO THE SWM STRATEGY BY IMPLEMENTING ENVIRONMENTAL SITE DESIGN (ESD) TO THE MAXIMUM EXTENT PRACTICABLE (MEP). THESE ESD DEVICES MAY BE UTILIZED FOR SOME SEDIMENT CONTROL AS WELL DURING CONSTRUCTION. SILT FENCE AND SUPER SILT FENCE WILL ENHANCE SEDIMENT CONTROL DURING CONSTRUCTION.
- IMPLEMENTATION OF ESD TO THE MEP. ESD IS BEING PROVIDED TO THE MEP AND ALL ESD REQUIREMENTS WILL BE MET OR EXCEEDED.

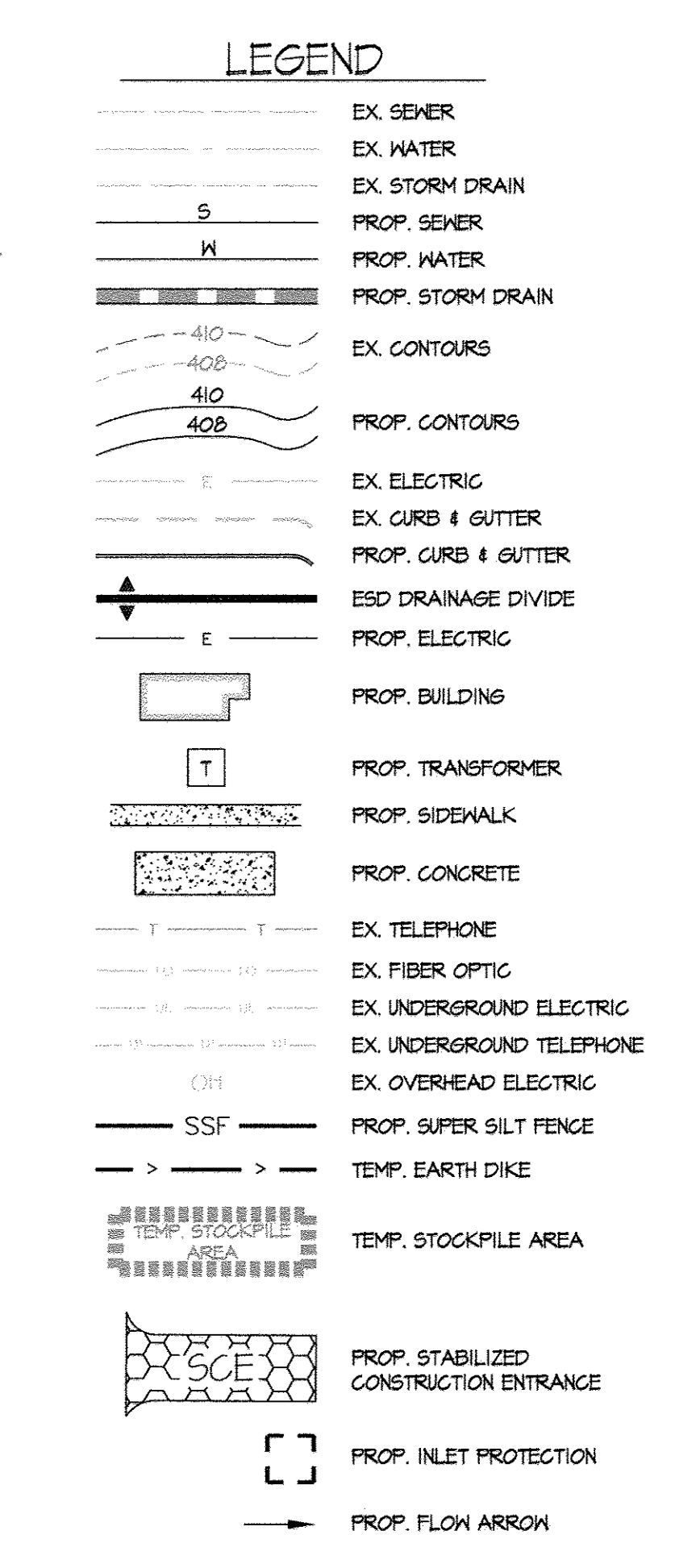
**SOIL TYPES**

GFB GLADSTONE-URBAN LAND COMPLEX, 0 to 8 percent slopes B k=0.20

**HC CONTROL STATIONS**

35F1 NORTHING: 557,181,364 EASTING: 1345,217,326 ELEVATION: 400.452 (LATEST ADJ. FEB. 2014)

35I1 NORTHING: 557,180,385 EASTING: 1344,843,672 ELEVATION: 400.049 (LATEST ADJ. FEB. 2014)



**STORMWATER MANAGEMENT REQUIREMENTS**

STUDY AREA:	1.17 Ac.
EX IMPERVIOUS AREA:	0.00 Ac.
PROPOSED IMPERVIOUS AREA:	0.22 Ac.
SITE IS 100% B SOILS.	
TARGET P <sub>e</sub> =	1.2"
ESDv REQUIREMENT =	1,128 CF

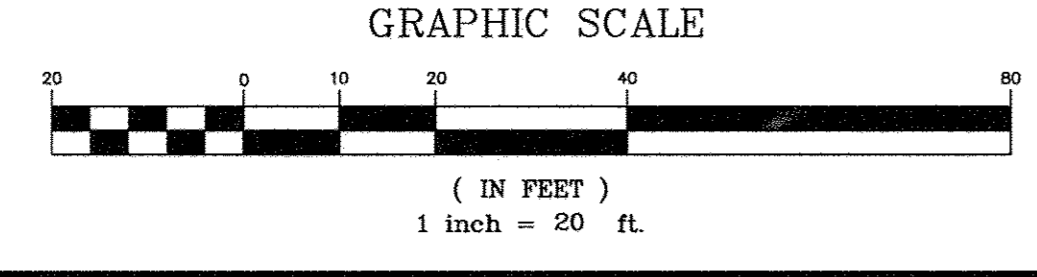
**ESD SUMMARY TABLE**

AREA NO.	AREA (SF)	IMPERVIOUS AREA (SF)	ESDv (CF)	P <sub>e</sub> PROVIDED
DA 1	17,742	7,475	1,181	1.86
TOTAL	17,742	7,475	1,181	1.86

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

T. Marchant G. KS 2-2-18  
 Chief, Division of Land Development  
 Date

Chief, Development Engineering Division 2-2-18  
 Date



**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3809 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
 BURTONSVILLE, MARYLAND 20866  
 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

PREPARED FOR:  
 OWNER:  
 DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 9250 BENDIX ROAD  
 COLUMBIA, MD 21045  
 (410)-313-4400

PROFESSIONAL CERTIFICATION  
 I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.  
 LICENSE NO. 17286  
 EXPIRATION DATE: MARCH 17, 2018

**ENVIRONMENTAL CONCEPT PLAN**

**CEDAR LANE WATER PUMPING STATION**  
 LOT 1, BLOCK 'B'

SCALE: 1"=20'  
 ZONING: R-20  
 DATE: SEPT., 2017  
 TAX MAP - GRID: 35-11  
 SHEET: 1 OF 1

G. L. W. FILE NO. 16018  
 ELECTION DISTRICT No. 05  
 HOWARD COUNTY, MARYLAND

L:\CADD\DRAWINGS\16018\PLANS BY G.L.W\EP\16018-EP-01.dwg, PLOTTED: 1/21/2018 2:05 PM, LAST SAVER: 1/21/2018 2:04 PM, PLOTTED BY: Evan Mitchell