

(2.08 acs) TO BMP #1
 90,533 sf DA NT
 05 1 68%
 IA= 61,464 sf

(1.57 acs) TO BMP #2
 60,566 sf DA NT
 79 2 31%
 IA= 21,478 sf

(0.99 acs) TO BMP #6
 43,338 sf DA NT
 05 6 69%
 IA= 30,078 sf

(0.36 acs) TO BMP #7
 15,648 sf DA NT
 05 7 32%
 IA= 5,048 sf

(0.32 acs) TO BMP #3
 14,080 sf DA NT
 05 3 25%
 IA= 3,556 sf

(0.41 acs) TO BMP #5
 17,717 sf DA NT
 05 5 43%
 IA= 7,535 sf

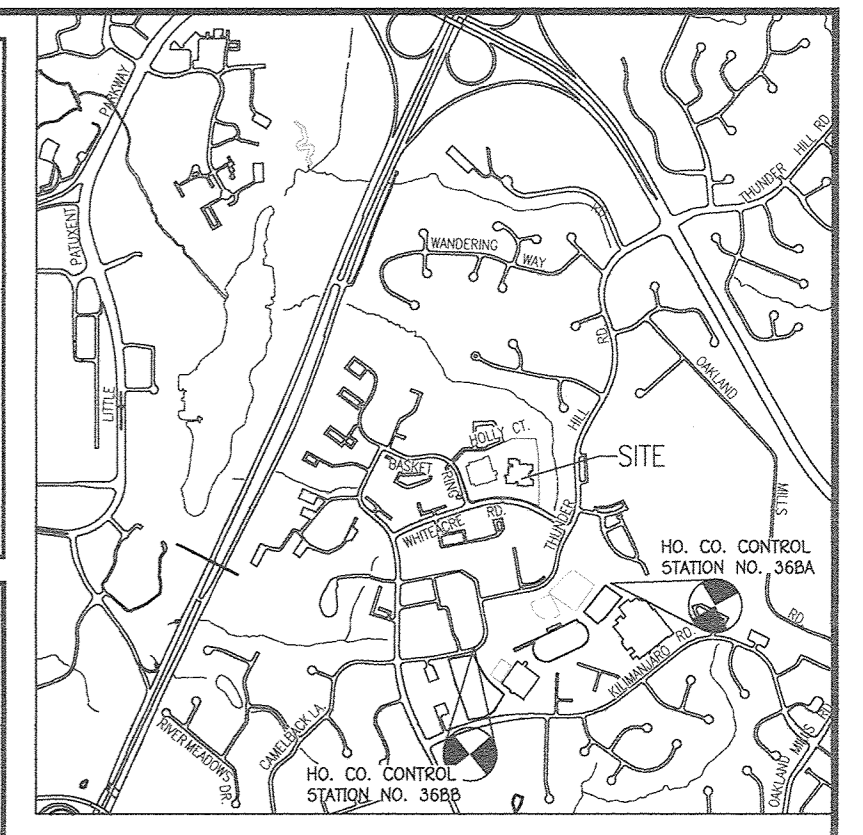
(1.50 acs) TO BMP #4
 65,419 sf DA NT
 05 4 48%
 IA= 31,953 sf

BENCH MARKS (NAD '83/NAVD '80)
 HOCO. # 368A ELEV. 416.772
 N 562,135.536 E 1,357,571.674
 LOCATED 1.5' SOUTH OF THE ASPHALT WALKWAY, NORTH OF BASEBALL BACKSTOP AT OAKLAND MILLS HIGH SCHOOL.
 HOCO. #368B ELEV. 409.240
 N 561,504.228 E 1,356,203.715
 LOCATED 4.5' WEST OF SANTIAGO ROAD, BETWEEN OAKLAND MILLS INTERFAITH CENTER AND OAKLAND MILLS HIGH SCHOOL ATHLETIC FIELDS.
 BENCH MARKS ARE STAMPED (BRASS OR ALUMINUM) DISC SET ON TOP OF A CONCRETE COLUMN 1" OR 2" BELOW GRADE.

GENERAL ECP NOTES
 1. STORMWATER MANAGEMENT HAS BEEN PROVIDED USING "E50 TO THE MEP". SPECIFICALLY, FOUR (4) BIoretENTION (F-6) FACILITIES AND THREE (3) MICRO-BIoretENTION FACILITIES ARE PROPOSED TO ADDRESS THE STORMWATER MANAGEMENT FOR THIS SITE.
 2. THE PROPERTY BOUNDARY AND TOPOGRAPHIC SURVEY WAS PREPARED BY FISHER COLLINS & CARTER, INC. (ELLCOTT CITY) IN OCTOBER, 2017, AND IS BASED ON HOWARD COUNTY HORIZONTAL AND VERTICAL CONTROL. TOPOGRAPHY OUTSIDE OF THE SUBJECT PROPERTY IS BASED ON HOWARD COUNTY GIS TOPO.
 3. APPROVAL OF THIS ECP DOES NOT CONSTITUTE APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN, SITE DEVELOPMENT PLAN, OR GRADING OR BUILDING PERMIT PLAN. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION, SITE DEVELOPMENT PLAN, OR GRADING AND BUILDING PERMIT STAGES. THE APPLICANT AND CONSULTANT SHALL 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.
 4. THE SCHOOL'S STORMWATER PRACTICES WILL BE PRIVATELY OWNED AND MAINTAINED.
 7. THERE ARE NO FOREST CONSERVATION REQUIREMENTS IN THE NT ZONING.
 8. THE EXISTING VEGETATION IN THE LOD IS GRASS AND SEVERAL TREES PER THE FEBRUARY, 2018 SITE VISIT BY ECO-SCIENCE PROFESSIONALS, INC.
 9. EXISTING UTILITY LOCATIONS SHOULD BE CONSIDERED APPROXIMATE.
 10. THIS PLAN IS A CONCEPT ONLY AND IS NOT TO BE USED FOR CONSTRUCTION.
 12. REFER TO THE ECP REPORT FOR THE DRAINAGE AREA MAP.
 13. THE TWO BMPs ON THE NORTH SIDE OF THE PROPERTY WILL BE USED AS TEMPORARY SEDIMENT BASINS.

DESIGN NARRATIVE
 1. NATURAL RESOURCES PROTECTION ENHANCEMENT: THE PROPOSED NEW SCHOOL BUILDING WILL NOT IMPACT WETLANDS, OR WETLAND BUFFERS. 0.26 ACRES OF FOREST WILL BE DISTURBED AND IS NECESSARY TO MAKE THE SCHOOL PROGRAM WORK. THERE ARE NO FLOODPLAINS ON-SITE. GRADING AND RECHARGE (REV) WILL BE PROVIDED TO COMPENSATE FOR PAVED AREAS IN THE LOD. APPROXIMATELY 3,460 SQ.FT. OF STEEP SLOPES (>25%) AND 14,933 SQ.FT. OF 15-25% SLOPES WILL BE DISTURBED.
 2. MAINTENANCE OF NATURAL FLOW PATTERNS: THERE IS NO ON-SITE GRADING THAT WILL SIGNIFICANTLY ALTER DRAINAGE PATTERNS. STORMWATER GENERALLY FLOWS TO THE SAME LOCATION AFTER DEVELOPMENT AS BEFORE DEVELOPMENT. A MINOR AMOUNT OF DRAINAGE AREA WILL BE DIVERTED FROM THE SOUTH PART OF THE SITE TO THE NORTH. IN ADDITION, THE POST-DEVELOPMENT ONE (1) YEAR PEAK FLOWS ARE NOT EXPECTED TO INCREASE DUE TO THE CAPTURED ESDV IN THE BMPs.
 3. REDUCTION OF IMPERVIOUS AREAS THROUGH BETTER SITE DESIGN, ALTERNATIVE SURFACES, NON-STRUCTURAL PRACTICES: THE NEW SCHOOL IS BEING BUILT ON A SITE OF THE SAME SITE AS THE EXISTING SCHOOL. THE PREVIOUS SITE HAD NO KNOWN SWM.
 4. INTEGRATION OF E&SC INTO SWM STRATEGY: DESIGN WILL FOLLOW HSCD STANDARDS & SPECIFICATIONS AND WILL MEET THE GOAL OF KEEPING SEDIMENT FROM LEAVING THE SITE. THE PRACTICES WILL BE INTEGRATED IN SWM STRATEGY BY EMBRACING SHEET FLOW PATTERNS WHERE PRACTICABLE AND IS A PREFERRED ESD PRACTICE.
 5. IMPLEMENTATION OF ESD PLANNING TECHNIQUES AND PRACTICES: FOUR (4) BIoretentions (F-6) AND THREE (3) MICRO-BIoretentions WILL BE UTILIZED. THE NEW DEVELOPMENT IS PROPOSED ON EXISTING IMPERVIOUS AREAS AS MUCH AS POSSIBLE.
 6. REQUEST FOR DESIGN MANUAL WAIVERS: NO WAIVERS ARE REQUIRED. THE GRADING OF 3,460 SQ.FT. (0.08 ACRES) OF STEEP SLOPES (25% OR GREATER) ADJACENT TO THE PROPOSED SOCCER FIELD IS "NECESSARY DISTURBANCE". ALSO, THE GRADING OF 11,433 SQUARE FEET (0.26 ACRES) OF FOREST IS ALSO CONSIDERED NECESSARY DISTURBANCE. FOREST CONSERVATION IS NOT REQUIRED IN THE NT ZONING.

SITE DATA
 SITE/PARCEL AREA: 10.0+ ACRES
 WETLANDS AND WETLAND BUFFERS: NONE
 FLOODPLAIN: NONE
 FORESTS: 11,433 SF (0.26) ACRES IN LOD.
 FOREST CONSERVATION EASEMENT: NOT REQUIRED.
 STEEP SLOPES: 3,460 SF OF >25% SLOPES NEED TO BE DISTURBED IN THE LOD TO KEEP SOCCER FIELD "LEVEL".
 ERODIBLE SOILS: NONE IN PROPOSED LOD
 LOD: 440,500 SF (10.1 ACRES)
 SITE USES: ELEMENTARY SCHOOL, PARKING, BALLFIELDS, SWM FACILITIES.
 FILE REFERENCES: SDP-72-176, SDP-00-11, FDP-51-A
 GREEN OPEN AREA: N/A



VICINITY MAP
 SCALE: 1" = 2,000'
 ADC 4935-E6

SOILS TABLE
 Soils Map:
 No. 24

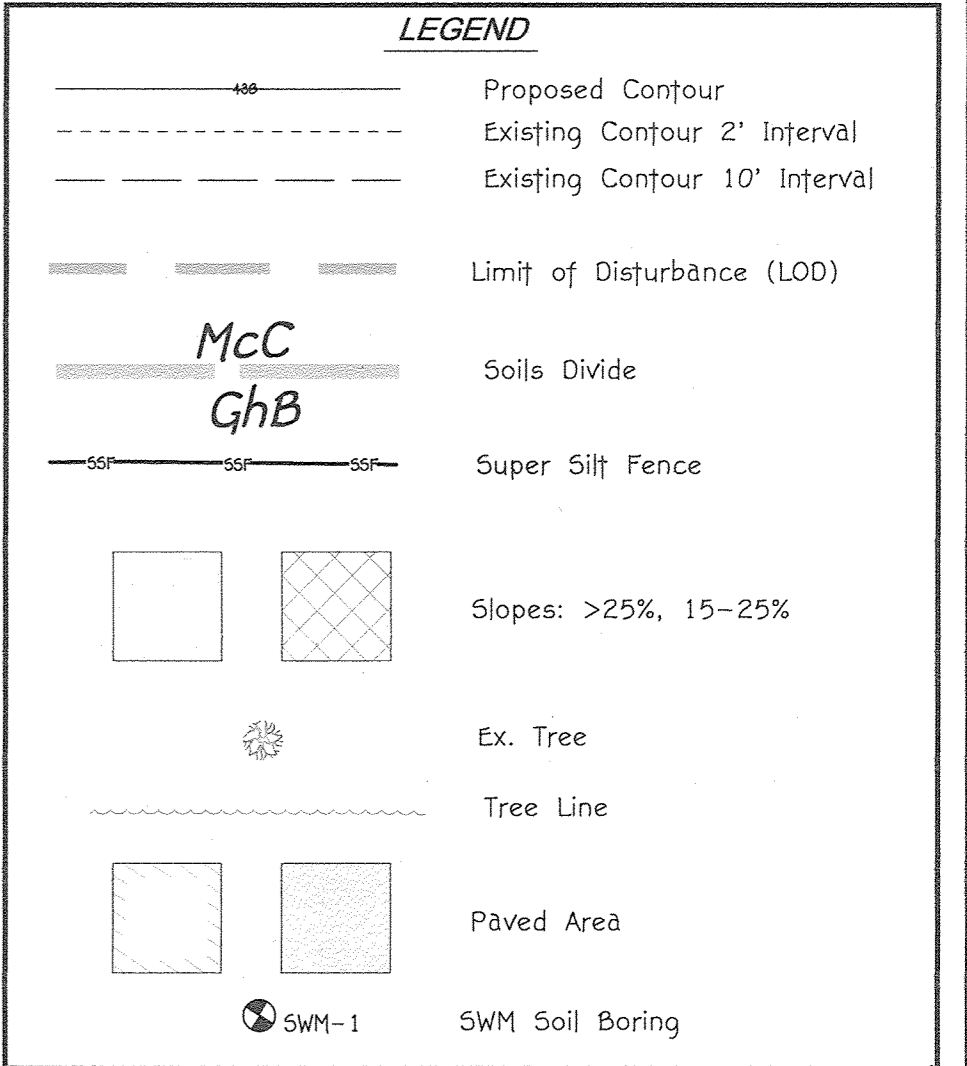
SYMBOL	NAME	HSQ
GhB	Glenelg-Urban land complex 0-8% Slopes; K Value = 0.20	B

E 1,357,140
 N 563,030

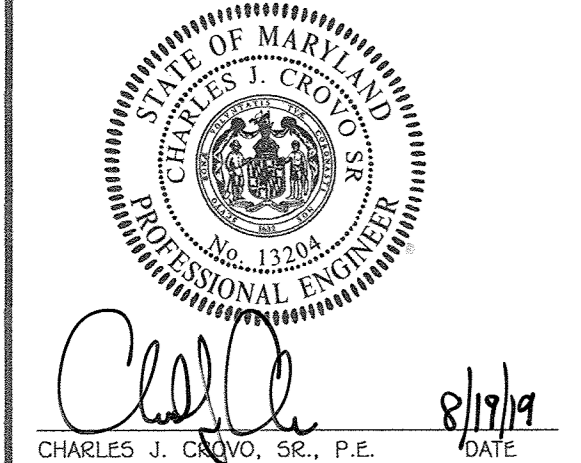
ESDv and Rev SUMMARY TABLE

Facility	ESDv Required (cf)	ESDv Provided (cf)	Rev Required (cf)	Rev Provided (cf)
BMP#1 (Bioretention)	6,732 cf	11,098 cf	1,327 cf	1,700 cf
BMP#2 (Bioretention)	2,560 cf	5,168 cf**	454 cf	1,839 cf
BMP#3 (Micro-Bioretention)	439 cf	718 cf*	75 cf	109 cf
BMP#4 (Bioretention)	3,542 cf	1,605 cf*	663 cf	447 cf
BMP#5 (Micro-Bioretention)	863 cf	314 cf*	175 cf	133 cf
BMP#6 (Bioretention)	3,289 cf	4,217 cf*	463 cf	574 cf
BMP#7 (Micro-Bioretention)	599 cf	915 cf	105 cf	429 cf
TOTALS	18,770 cf	24,035 cf	3,492 cf	5,231 cf

Note:
 1. 18,770 cf required as storage above ground. 25,026 cf required total.
 2. 29,366 cf provided total ESDv & Rev.
 3. * ESDv not provided in BMP #4 and #5 will be captured by the control structures and flow to BMP #2 (**) and be treated in the excess area in the facility.
 4. Rev required has been calculated by a percentage of total based on impervious to each facility (see just an approximate required). Total Rev provided exceeds total required Rev.



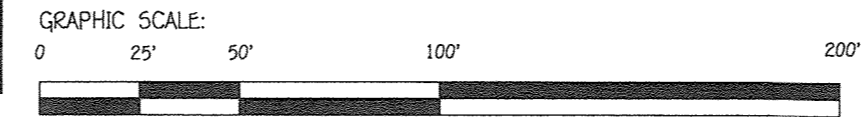
*PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13204, EXPIRATION DATE: NOVEMBER 3, 2020."



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE.
 ELLICOTT CITY, MARYLAND 21042
 (410) 461 - 2955

CONCEPT EROSION & SEDIMENT CONTROL
 • An Engineered E&SC Plan will be used for this site. The contractor will contact and meet with the E&SC inspector prior to construction.
 • Stabilized Construction Entrance (SCE). will be provided at the LOD entrances. Sediment basins and super silt fence will be used to control sediment runoff. The SSF will be used to promote a sheet flow condition where possible.
 • All disturbed area will be stabilized in accordance with NRCS methods and time frames.
 • The stockpile area shall be within the LOD and such that runoff will be filtered before leaving the site.

OWNER & DEVELOPER
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 9020 MENDENHALL COURT
 SUITE 'C'
 COLUMBIA, MARYLAND 21045
 Attention: MR. SCOTT WASHINGTON
 410.313.6803



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development *[Signature]* 8/28/19 Date
 Chief, Development Engineering Division *[Signature]* 9-1-19 Date

PROJECT	SECTION/AREA	PARCEL
TALBOTT SPRINGS ELEMENTARY SCHOOL	4/1	283

LIBER/FOLIO	GRID	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR
L 643/F. 62	3	NEW TOWN	36	6th	606603

ENVIRONMENTAL CONCEPT PLAN
 VILLAGE OF OAKLAND MILLS
 SECTION 4, AREA 1
 TALBOTT SPRINGS
 ELEMENTARY SCHOOL
 "PUBLIC SCHOOL"
 9550 Basket Ring Road, Columbia, MD 21045
 Tax Map 36 Parcel 283
 6th ELECTION DISTRICT HOWARD COUNTY, MD
 SCALE: 1" = 50' DATE: AUGUST, 2019 SHEET 1 of 1