

PROFILE OF BUILDING HEIGHT  
1"=20'

DESIGN POINT FOR STORM WATER MANAGEMENT ANALYSIS

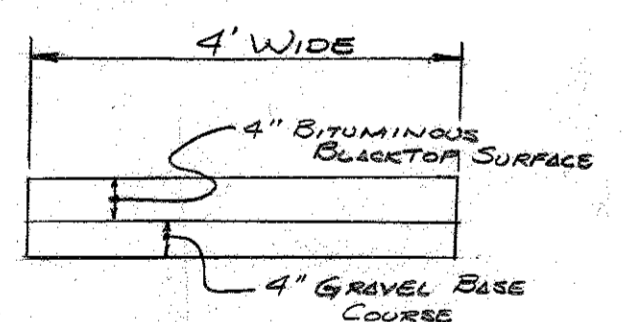
NOTE: The existing pond shall be drained and converted to a storm water management facility. See drawing #3 of 3 for details.

DRAINAGE AREA TO DESIGN POINT FOR STORM WATER MANAGEMENT ANALYSIS = 35.47 ACRES

APPROVED  
DIVISION OF LAND DEVELOPMENT

HOWARD COUNTY, MARYLAND  
DATE 10-16-80

OWNER AND APPLICANT  
GLENELG COUNTRY DAY SCHOOL  
GLENELG, MARYLAND 21737



TYPICAL SECTION FOR WALKWAY (D.T.S.)

**SITE ANALYSIS**  
 SITE: PARCEL 146 BLOCK 22  
 TPA MAP 22 5<sup>TH</sup> ERECT DIST.  
 GLENELG, HOWARD COUNTY, MD  
 AREA = 50.20 ACRES - TOTAL AREA OF DEVELOPMENT = 3.00 AC  
 ZONING: R2 RESIDENTIAL  
 BUILDING: GRASS AREA OF NEW BUILDING  
 MAIN FLOOR = 10,488 SF

UPPER FLOOR = 23,409  
 TOTAL 33,897  
**PARKING:** (PER HOWARD COUNTY ZONING REGULATIONS)  
 11 PARKING SPACES - 220 STUDENTS  
 10 PARKING SPACES - 50 ALL PURPOSE SEATS  
 5 PARKING SPACES - VISITORS  
 20 PARKING SPACES REQUIRED  
 NEW PARKING SPACES - NOT APPLICABLE  
 EXISTING PARKING: 59 SPACES  
 NEW FACILITY: 6 SPACES  
 TOTAL: 65 SPACES

NOTE: EXISTING PARKING TO BE UTILIZED FOR NEW FACILITY AS REQUIRED.

"BA CASE NO. 80-17"

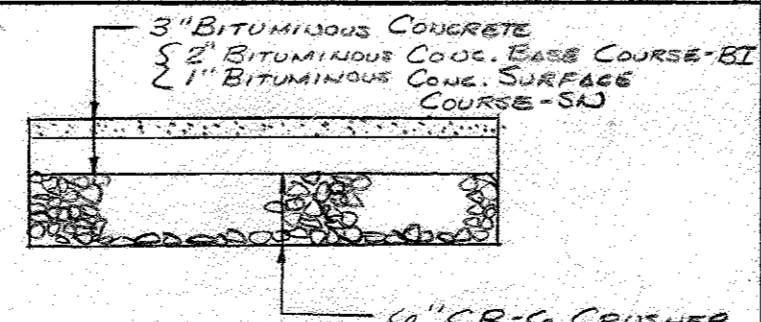
NOTE: PROJECTED POPULATION OF THE SCHOOL AFTER COMPLETION OF THE NEW BUILDING = 280 STUDENTS, ALL IN GRADES K THRU 8<sup>TH</sup>. THE STAFF OF 22 IS THE PROJECTED STAFF AFTER COMPLETION OF NEW BUILDING.

ATTORNEY  
 RICHARD J. WILKINSON  
 SUITE 120, CLARK BUILDING  
 COLUMBIA, MARYLAND 21044  
 TELE: 992-4345

APPROVED: FOR PRIVATE WATER AND PRIVATE SANITARY SYSTEMS  
 HOWARD COUNTY HEALTH DEPARTMENT

*Joseph Boyer* 11-6-80  
 COUNTY HEALTH OFFICER  
*Richard J. Wilkinson* 11-21-80  
 COUNTY PLANNING AND ZONING  
*Richard J. Wilkinson* 11-21-80  
 COUNTY DIVISION OF LAND DEVELOPMENT

APPROVED: FOR STORM DRAINAGE SYSTEMS AND ROADS - HOWARD COUNTY DEPT. PUBLIC WORKS  
*John F. Nunn* 11-17-80  
 DIRECTOR  
*Richard J. Wilkinson* 11-17-80  
 COUNTY BUREAU OF ENGINEERING



TYPICAL SECTION FOR DRIVEWAYS AND PARKING AREAS (D.T.S.)

**GLENELG COUNTRY DAY SCHOOL**  
 ELECTION DISTRICT No. 5, HOWARD COUNTY, MARYLAND

**EVANS, HAGAN & HOLDEFER, INC.**

DATE	REVISION	BY
8-12-80	ADDED SWIM ANALYSIS INFO.	RB
8-11-80	REVISED PER CO. COMMENTS	RB
8-5-80	REVISED BLDG. LOCATION	RB

SUBMITTED BY: *LES KILL*  
 COMPILED BY: *LES KILL*  
 DRAWN BY: *R.E.E.*  
 CHECKED BY: *R. CHURCH*  
 Drwg. No. 2/37A

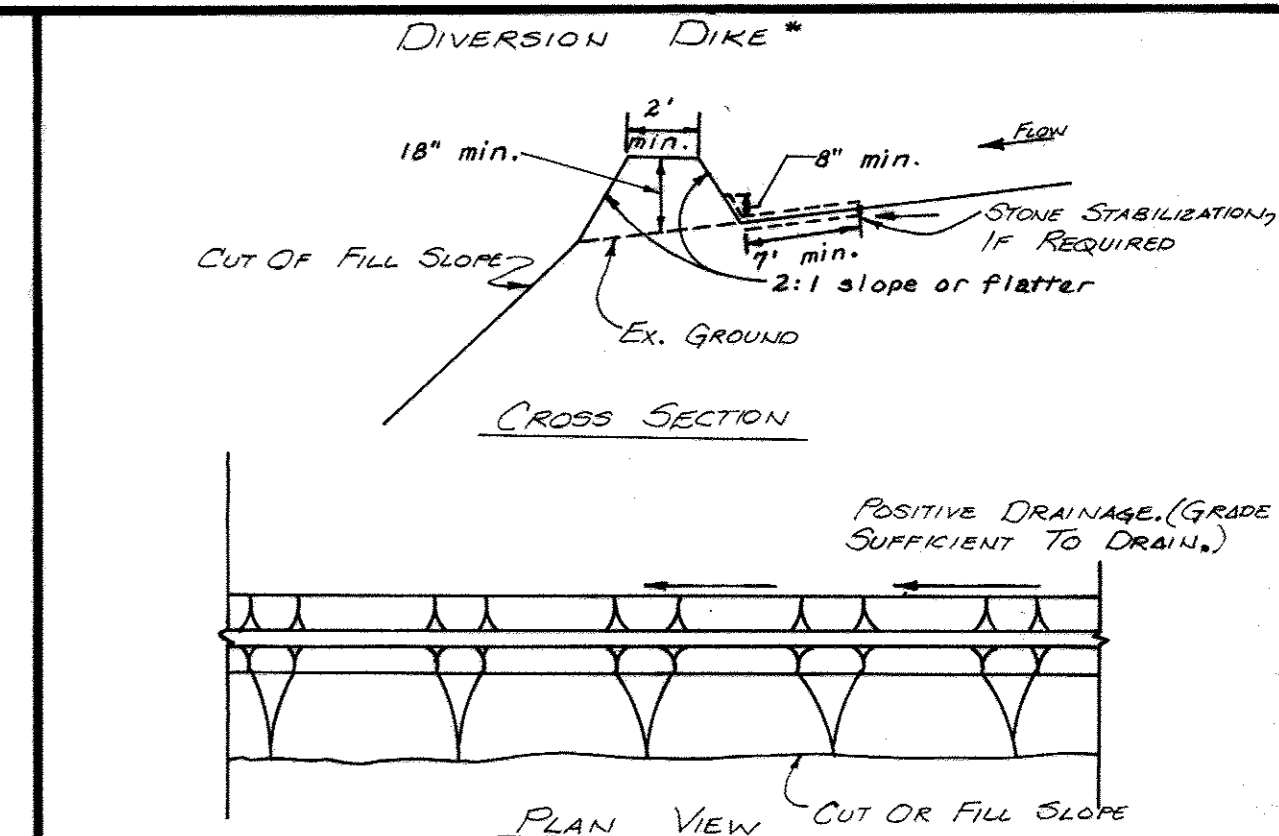
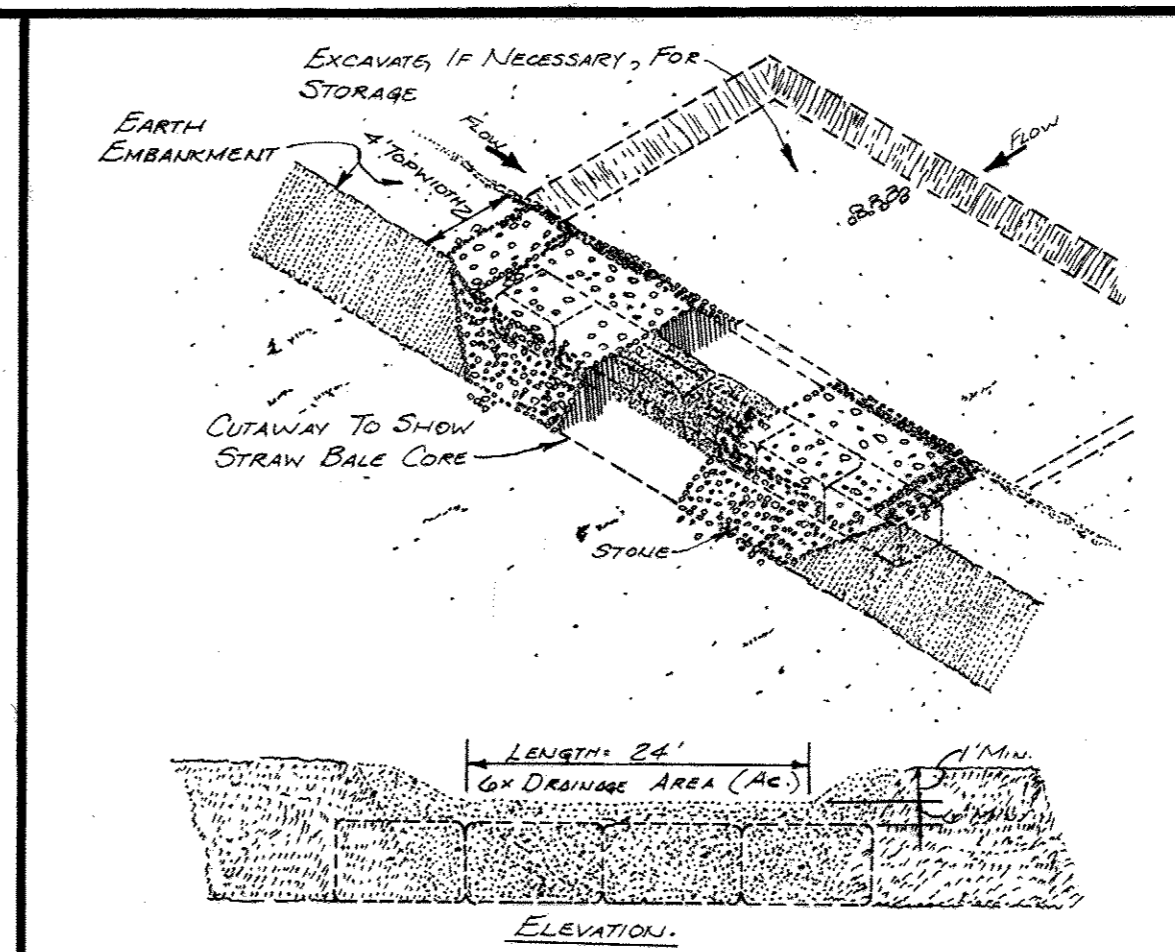
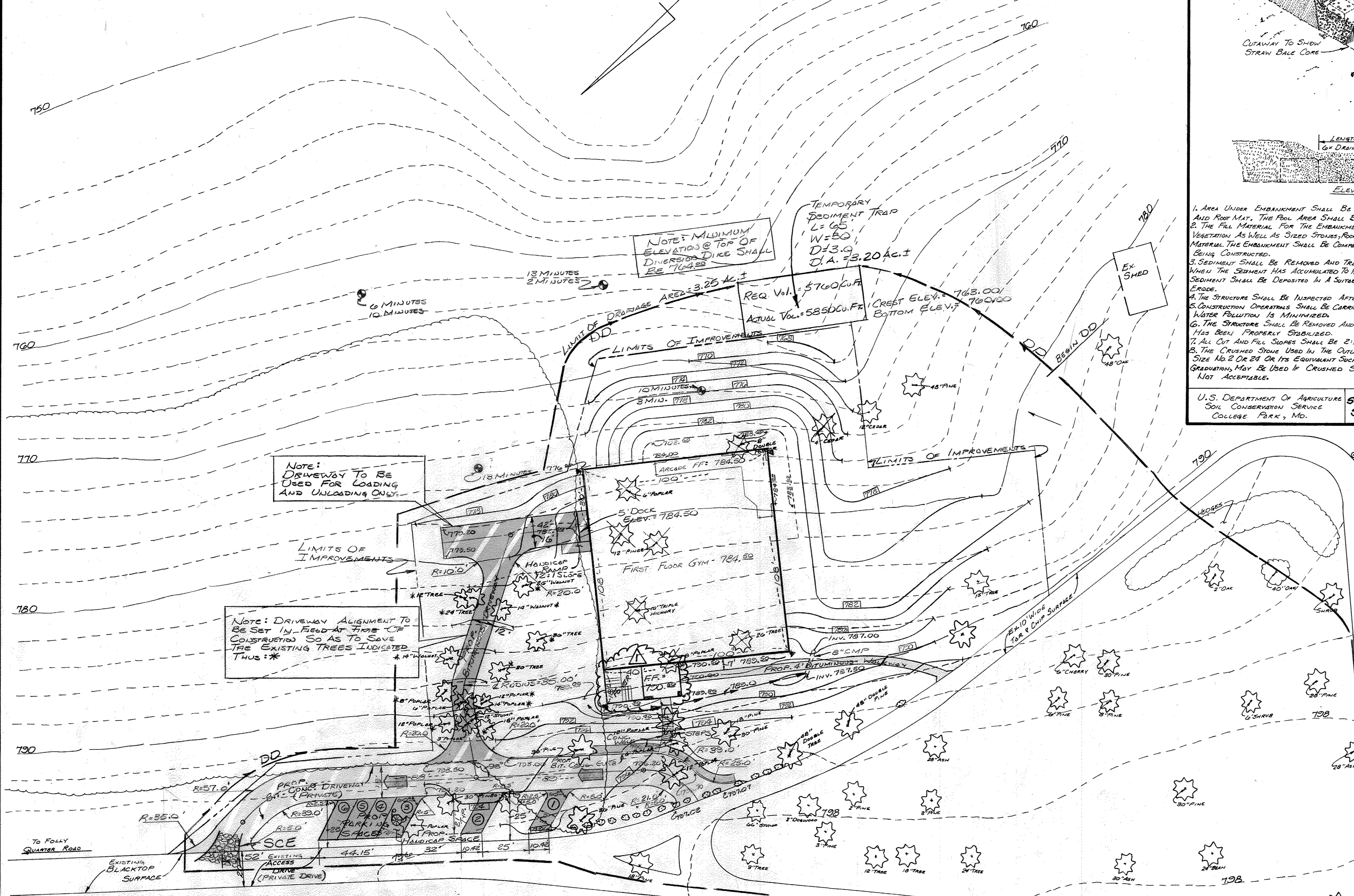
SURVEYORS AND CIVIL ENGINEERS  
 111 JOHN STREET / WESTMINSTER, MARYLAND 21157  
 (301) 898-1780 / (876) 2017

8018 BELAIR ROAD / BALTIMORE, MD. 21286 (301) 648-1501  
 539 HUNTER STREET / CAMBRIDGE, MD. 21613 (301) 228-9350  
 18 S. WASHINGTON STREET / ELSTON, MD. 21001 (301) 282-5433

DATE: MARCH 18, 1980 SCALE: 1"=100'

NOTES:  
 1. EXISTING STORM DRAIN SYSTEM IN IMMEDIATE AREA OF EXISTING BUILDINGS ONLY. NO EXISTING STORM DRAIN SYSTEMS WITHIN THE DRAINAGE AREA OF THE PROPOSED IMPROVEMENTS. DRAINAGE RUNOFF IN AREA OF PROPOSED IMPROVEMENTS TO BE VIA SHEET FLOW.

NOTE: ALL SHEET FLOW RUNOFF IS DIRECTED TO EXISTING SWALE WHICH RUNS INTO THE EXISTING ROAD.



**CONSTRUCTION SPECIFICATIONS**

1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED & STRIPPED OF ANY VEGETATION AND ROOF MAT. THE POOL AREA SHALL BE CLEARED.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE CONSTRUCTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
3. SEDIMENT SHALL BE REMOVED AND TRAPPED RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO THE DESIGN DEPTH OR THE TRAP REMOVED. SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
4. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MAY BE NEEDED.
5. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.
6. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
7. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
8. THE CRUSHED STONE USED IN THE OUTLET SHALL MEET AASHTO DESIGNATION M-43, SIZE NO. 2 OR 24 OR ITS EQUIVALENT SUCH AS MSHA NO. 2. GRAVEL, MEETING THE ABOVE SPECIFICATIONS, MAY BE USED IF CRUSHED STONE IS NOT AVAILABLE. CRUSHER RUN IS NOT ACCEPTABLE.

**CONSTRUCTION SPECIFICATIONS**

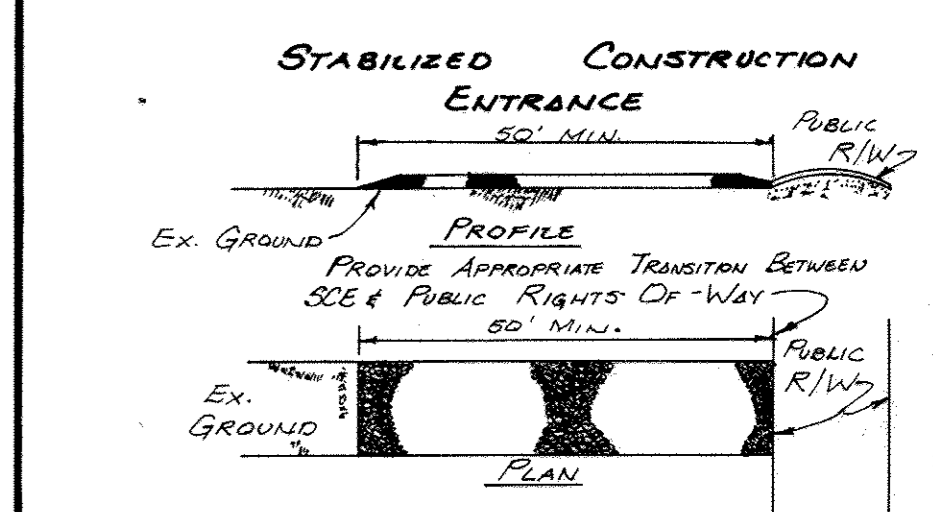
1. ALL DIKES SHALL BE MACHINE CONSTRUCTED.
2. ALL DIVERSION DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. A DIVERTED RUNOFF FROM A PROTECTED OR STABILIZED AREA SHALL OUTLET DIRECTLY TO AN UNDISTURBED STABILIZED AREA OR INTO A LEVEL SPREADER OR GRADE STABILIZATION STRUCTURE.
4. DISTURBED RUNOFF FROM A DISTURBED OR EXPOSED UPLAND AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR A SEDIMENT BASIN OR TO AN AREA PROTECTED BY ANY OF THESE PRACTICES.
5. STABILIZATION, AS SPECIFIED BY THE PLANS, SHALL BE (1) IN ACCORDANCE WITH STANDARDS AND SPECIFICATIONS FOR GRASSED WATERWAYS, AND THE AREA TO BE STABILIZED SHALL BE THE CHANNEL (FLOW AREA) OR (2) THE FLOW AREA SHALL BE LINED WITH STONE THAT MEETS MSHA SIZE NO. 2 OR AASHTO M43 SIZE #2 OR 24 WHICH IS PLACED IN A 3 INCH THICK LAYER AND PRESSED INTO THE SOIL. THE AREA COVERED BY THE STONE SHALL BE AS SHOWN ON THE DRAWING ABOVE.
6. PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PROVIDED.

U.S. DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 COLLEGE PARK, MD.

STANDARD DRAWING  
 DIVERSION DIKE  
 STANDARD DRAWING DD-1

NOTE: DRIVEWAY TO BE USED FOR LOADING AND UNLOADING ONLY.

NOTE: DRIVEWAY ALIGNMENT TO BE SET IN FIELD AT TIME OF CONSTRUCTION SO AS TO SAVE THE EXISTING TREES INDICATED THUS: \*



**CONSTRUCTION SPECIFICATIONS**

1. STONE SIZE - USE MSHA SIZE NO. 2 (2 1/2" TO 1") OR AASHTO DESIGNATION M-43, SIZE NO. 2 (2 1/2" TO 1"). USE CRUSHED STONE.
2. LENGTH - AS EFFECTIVE, BUT NOT LESS THAN 50 FEET.
3. THICKNESS - NOT LESS THAN 8".
4. WIDTH - NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS & EGRESS.
5. WASHING - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF SANDBAGS, GEOTEX, BOARDS OR OTHER APPROVED METHODS.
6. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND & REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRAPPED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.

**SEQUENCE OF OPERATIONS**

- 1) INSTALL ALL TEMPORARY SEDIMENT CONTROL MEASURES. THIS MAY BE DONE WHILE STRIPPING TOPSOIL.
- 2) ROUGH GRADE ROADWAYS AND PARKING AREAS.
- 3) CONSTRUCT BUILDING.
- 4) PAVE AND STABILIZE ALL DISTURBED AREAS.
- 5) REMOVE SEDIMENT CONTROL FACILITIES.

**LEGEND**

EXISTING CONTOURS - 780  
 PROPOSED CONTOURS - 790

EX. TREES TO REMAIN  
 EX. TREES TO BE REMOVED

EX. PERC TEST LOCATIONS  
 (SHOWS DRAINAGE & PARKING AREAS)

**PROPOSED CONSTRUCTION SCHEDULE**

▲ DENOTES 250 WATT MERCURY VAPOR WALL MOUNTING PACK (4)

BEGIN EXCAVATION.....  
 COMPLETE SITE GRADING AND STABILIZATION.....

**METHOD OF SOIL STABILIZATION**

1. SPREAD STOCKPILED TOPSOIL OVER DISTURBED AREAS.
2. SPREAD SEEDBED PREPARATION CONSISTING OF THE FOLLOWING:
  - a. FULVERIZED DOLOMITIC LIMESTONE AT THE RATE OF 2000 LBS/AC.
  - b. 0-20-0 SUPER PHOSPHATE OR ITS EQUIVALENT AT THE RATE OF 500 TO 1000 LBS/AC.
  - c. 10-20-10 FERTILIZER OR ITS EQUIVALENT AT THE RATE OF 1000 LBS/AC.
3. SEED USING KENTUCKY-31 GULF FESCUE AT THE RATE OF 60 LBS/AC. AND FIRM UP SEEDBED BY CULTIVATOR, ROLLER OR LIGHT DRAG.
4. MULCH IMMEDIATELY AFTER SEEDING USING UNWEATHERED SMALL GRAIN STRAW (PREFERABLY WHEAT) AT THE RATE OF 15 TO 2 TONS AN ACRE.

**NOTE:**  
 THE CONTRACTOR OR DEVELOPER SHALL CONTACT THE CONSTRUCTION INSPECTION/SURVEY DIVISION OF HOWARD COUNTY 24 HOURS IN ADVANCE OF COMMENCEMENT OF WORK AT 332-2417 OR 332-2418.

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT  
 COUNTY HEALTH OFFICER  
 DATE 11-6-80

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
 PLANNING DIRECTOR  
 DATE 11-21-80

APPROVED: FOR STORM DRAINAGE SYSTEMS AND ROADS  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 DIRECTOR  
 DATE 11-17-80

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.  
 U.S. SOIL CONSERVATION SERVICE  
 DATE 11-17-80

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 HOWARD SOIL CONSERVATION DISTRICT  
 DATE 11-17-80

**ENGINEER**  
 I CERTIFY THAT THIS PLAN OF SEDIMENT CONTROL IS DESIGNED WITH MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND HAS BEEN DESIGNED TO THE STANDARDS AND SPECIFICATIONS ADOPTED BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 DATE 11-12-80

**DEVELOPER**  
 I CERTIFY THAT THE PLAN OF SEDIMENT CONTROL WILL BE IMPLEMENTED TO THE FULLEST EXTENT, AND ALL STRUCTURES WILL BE INSTALLED TO THE DESIGN AND SPECIFICATIONS AS SPECIFIED IN THIS PLAN. I ALSO AUTHORIZE PERIODIC OIL SITE EVALUATION BY THE HOWARD SOIL CONSERVATION DISTRICT PERSONNEL AND COOPERATING AGENCIES.  
 DATE 3/26/80

**ORAINAGE AREA MAP, SEDIMENT CONTROL AND GRADING PLAN FOR GLENELG COUNTRY DAY SCHOOL**  
 ELECTION DISTRICT No. 5, HOWARD COUNTY, MARYLAND  
 TAX MAP No. 22, BLOCK 22, PARCEL No. 146

**EVANS, HAGAN AND HOLDEFER, INC.**  
 SURVEYORS AND CIVIL ENGINEERS  
 111 JOHN STREET WASHINGTON, MD. 21157  
 (301) 848-1780 / 876-2017

DATE 10-16-80

DATE MARCH 12, 1980 SCALE 1"=30'

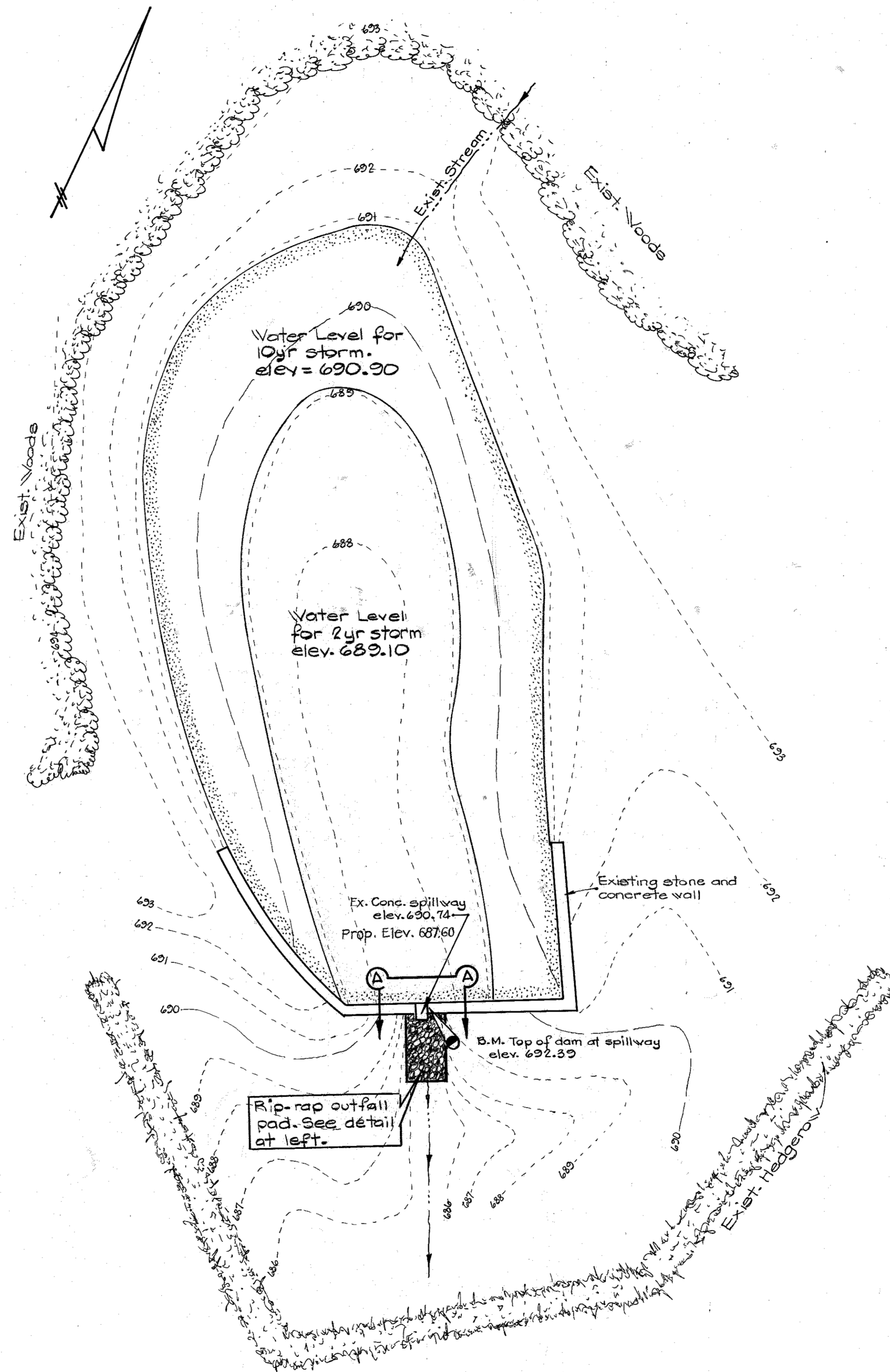
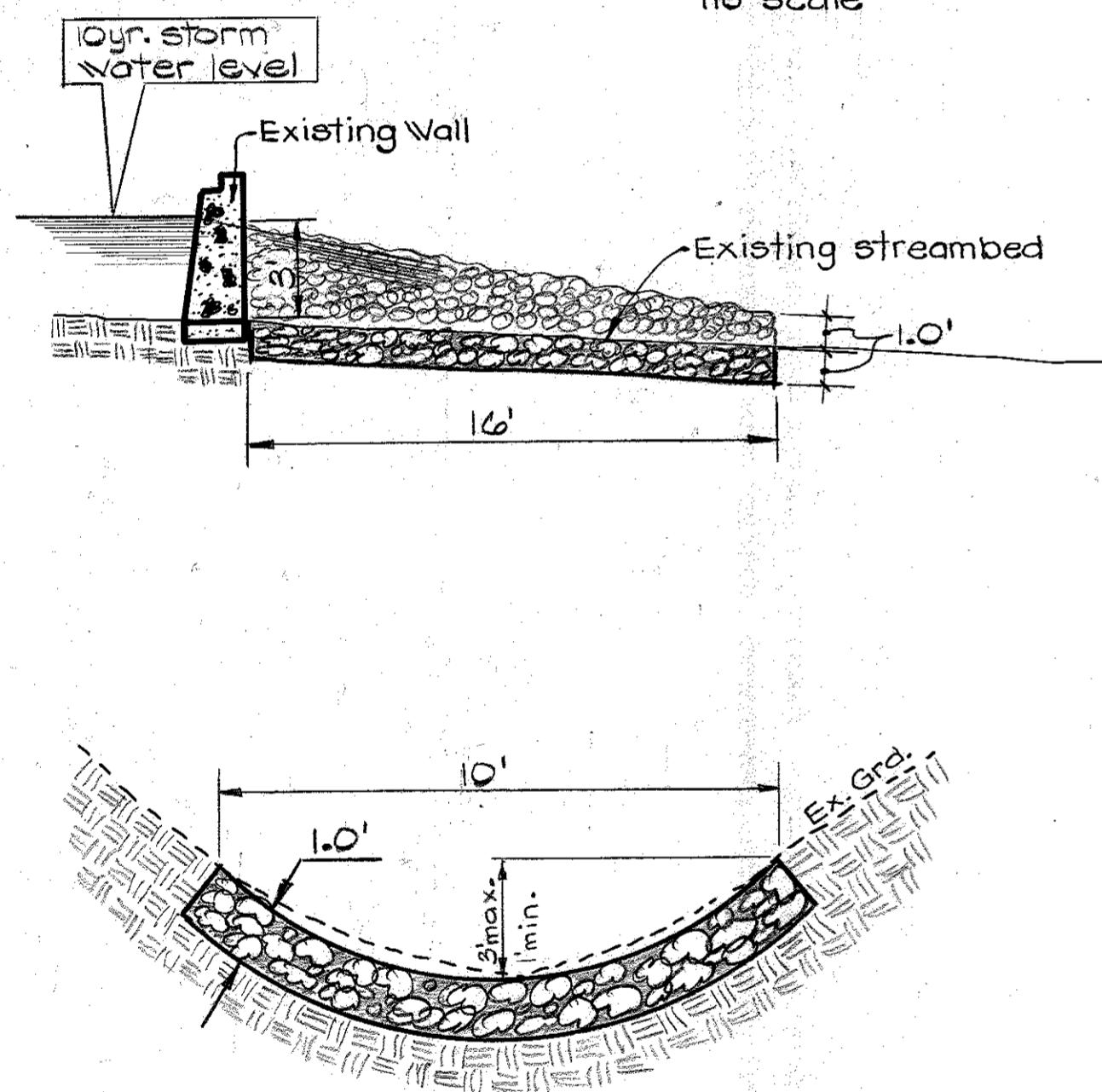
SDP-80-144 SHEET 2 OF 3

# GENERAL NOTES

- The purpose of this plan is to show modifications to the existing pond in order to convert it to a storm water management facility. This shall be accomplished as follows:
  - The existing wall shall be breached at the location of the existing weir and the pond shall be drained.
  - The width of the existing weir shall be held constant and the existing stone and masonry wall shall be removed down to the bottom of the pond.
  - The opening shall be repaired with concrete so that all edges are squared off and the width is a constant 25 1/2".
  - Contractor shall not remove the wall below the ground line. Stream flow shall have a solid bed of stone or concrete as it passes through the wall.
- Contractor shall allow the pond area to drain for at least 48 hours after which time the former pond area shall be topsoiled, seeded and mulched in accordance with the methods specified on the site plan.
- Pieces of concrete and stone from the section of wall being removed shall be broken down so the maximum size is 14" and shall be placed as erosion protection at the outfall of the dam opening. This shall be supplemented with 8"-12" diameter rip-rap as necessary to provide the amount the amount of outfall protection shown on the plan. See detail below.

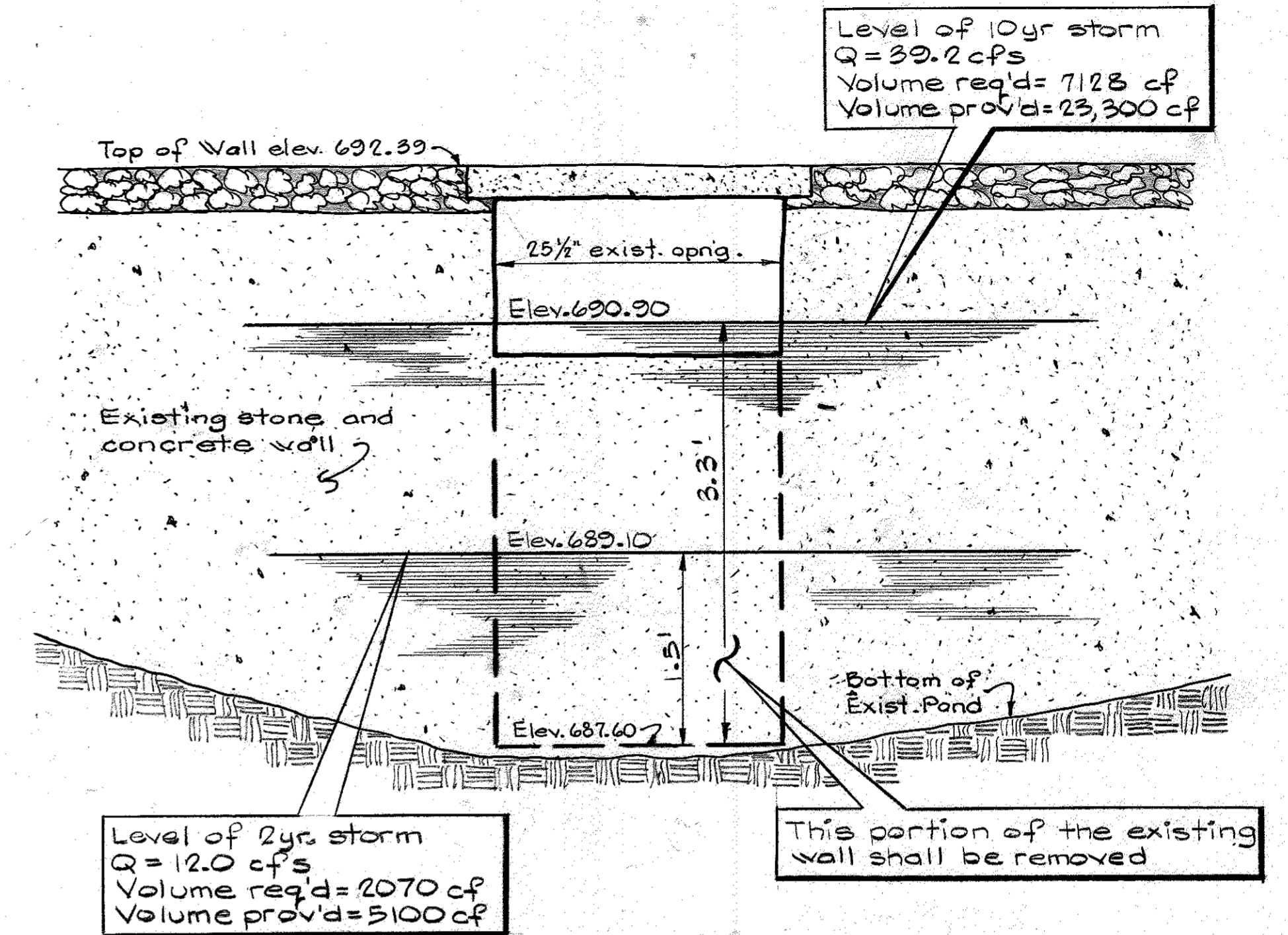
## DETAIL - RIP-RAP OUTFALL PAD

no scale



## PLAN

Scale: 1" = 20'



## SECTION A-A

no scale

APPROVED: For private water and private sewerage systems, Howard Co. Health Dept.

*Jay M. Boyd* 11-6-80  
County Health Official Date

APPROVED: Howard County Office of Planning and Zoning

*Shirley M. Mendenhall* 11-21-80  
Chief, Division of Land Development Date

*Donna L. Harris* 11-21-80  
Planning Director Date

APPROVED: For storm drainage systems and roads - Howard Co. Dept. of Public Works.

*Walter F. Newman* 11-17-80  
Director Date

*William S. Ray* 11-17-80  
Chief, Bureau of Engineering Date

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENT FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

*James M. Hahn* 11-19-80  
U.S. SOIL CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*Robert W. Ziehm* 11-19-80  
HOWARD SOIL CONSERVATION DISTRICT DATE

Owner and Applicant:  
GLENELG COUNTRY DAY SCHOOL  
Glenelg, Maryland 21737

Attorney:  
Richard J. Wilkinson  
Suite 120, Clark Bldg.  
Columbia, Md. 21044 ph. 992-4545

Plan for:  
**STORM WATER MANAGEMENT**  
for:  
**GLENELG COUNTRY DAY SCHOOL**  
Election District #5, Howard County, Md.  
Tax Map #22, Block #22, Parcel #146

APPROVED  
DIVISION OF LAND DEVELOPMENT

HOWARD COUNTY, MARYLAND  
DATE 10-16-80

*Jum*

EVANS, HAGAN & HOLDEFER, INC.		
DATE	REVISION	BY
SURVEYORS AND CIVIL ENGINEERS 111 JOHN STREET / WESTMINSTER, MARYLAND 21157 (301) 848-1700 / 876-2017		
SURVEYED BY	COMPUTED BY	
DESIGN BY		
DRAWN BY		
Drwg. No. 2137B	<i>Luigi R. Pulswan</i> DATE: Oct. 16, 1980 SCALE: As Shown	