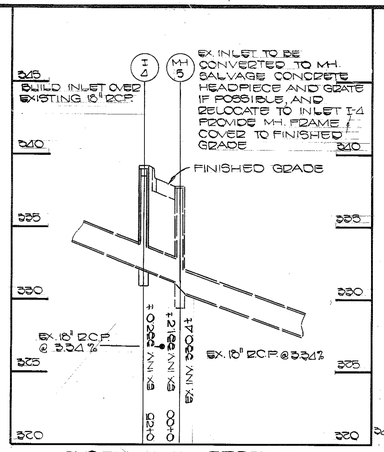
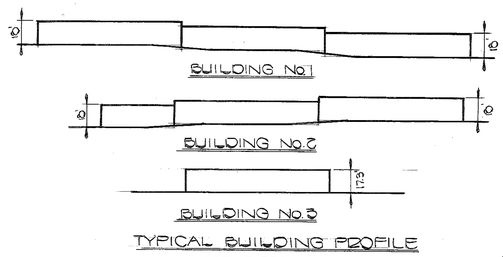
GENERAL NOTES:

1. TOTAL AREA OF PARCEL: 4.269 AC.±
2. PRESENT ZONING: NEW TOWN (N.T.-EMPLOYMENT CENTER INDUSTRIAL)
3. PROPERTY IS RECORDED IN PLAT BOOK 27 AT FOLIO 63.
4. FINAL DEVELOPMENT PLAN PHASE 85 IS RECORDED IN PLAT BOOK 19, AT FOLIO 132.
5. PROPERTY IS SHOWN ON TAX MAP 42, PART OF PARCEL 411.
6. PARKING DATA:
   A. INTENDED USE OF STRUCTURE: OFFICES OFFICE/WAREHOUSE, AND FOOD BANK CLIENT AREA
   B. TOTAL AREA BUILDING: 49,600 S.F. (27% COVERAGE)
      1) TOTAL AREA OFFICES: 18,300± S.F.
      2) TOTAL AREA WAREHOUSE: 29,189 S.F.
      △ TOTAL RETAIL = 1975 ± S.F.
   C. TOTAL NUMBER OF SPACES REQUIRED: 64 SPACES
      1) FDP CRITERIA
         a) 5 SPACES/1000 S.F. NET LEASABLE AREA DEVOTED TO RETAIL SALES: 1975 S.F. ÷ 1000 SF/S = 1.0 SPACES
         b) 2 SPACES/1000 S.F. OFFICE USE: 18,300 S.F. ÷ 1000 x 2 = 37 SPACES
         c) 1 SPACE/MAX. NUMBER OF INDUSTRIAL EMPLOYEES: 22 EMPLOYEES (PROJECTED) ÷ 1 = 22 SPACES
   D. TOTAL NUMBER OF SPACES PROVIDED: 100 SPACES
      1) REGULAR SPACES (9' x 18'): 95 SPACES
      2) HANDICAPPED SPACES (8' x 18'): 5 SPACES
   E. OPEN SPACE (GREEN AREA): 1.60 AC.± (37%)
7. THE CONTRACTOR SHALL NOTIFY THE HOWARD COUNTY CONSTRUCTION INSPECTION/ SURVEY DIVISION 24 HOURS PRIOR TO COMMENCEMENT OF WORK AT 992-2437.
8. HANDICAPPED FACILITIES TO BE CONSTRUCTED IN ACCORDANCE WITH THE "DESIGN OF BARRIER FREE FACILITIES" AND THE "MARYLAND BUILDING CODE FOR THE HANDICAPPED AND AGED".
9. ALL PAVING AND STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.
10. EXISTING UTILITIES SHOWN HEREON HAVE BEEN LOCATED FROM FIELD AND OFFICE INFORMATION. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF EXISTING UTILITIES TO HIS OWN SATISFACTION BEFORE MAKING ANY CONNECTION THERETO OR EXCAVATING IN THE AREA THEREOF.
11. THE CONTRACTOR SHALL NOTIFY MISS UTILITY 559-0100 A MINIMUM OF THREE DAYS PRIOR TO BEGINNING ANY CONSTRUCTION SHOWN HEREON.
12. SEE ARCHITECTURAL DRAWINGS FOR BUILDING DIMENSIONS.



STORMDRAIN PROFILE

SCALE: HOR. 1"=50' VERT. 1"=5'



TYPICAL BUILDING PROFILE

NOT TO SCALE

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. 12795 Expiration Date: May 26, 2018

STATE OF MARYLAND — CHARLES LEWIS CARTER — REG. NO. 12795 — PROFESSIONAL ENGINEER

8/16/16 (for revision #2)

ADDRESS CHART	
BUILDING NO.	STREET ADDRESS
1	9385 GERWIG LANE
2	9375 GERWIG LANE
3	9365 GERWIG LANE

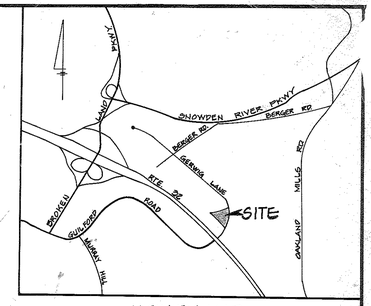
APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 4-2-86

DATE	NO.	REVISIONS
8.16.16	△	Rev. General Note 6 (By GLW)
1.30.96	△	ADDED DEWATER DEVICE, C.O. & 8" N-12 H.D.P.E. @ PERM. SWMP.

E.G.U. SUBDIVISION
SECTION 2 AREA 3
PARCEL "D"
FB. 21 F. 65
ZONED: NT/IND
EDWARD ST. JOHN
582/0378

HIDDEN ROCK TRIBE
1292/0504
E.G.U. SUBDIVISION
SECTION 2 AREAS
PARCEL "E2"
FB. 27 F. 65
ZONED: NT/IND

PERMANENT STORMWATER MANAGEMENT POND



VICINITY MAP

SCALE: 1"=2000'

OWNER & DEVELOPER
WILLIAMS PROPERTIES
JEROME M. WILLIAMS
6660 DOBBIN ROAD COLUMBIA, MARYLAND 21045
PHONE (301) 997-7766

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERS & LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043
(301) 461-2855

ENGINEER'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER — DATE 4/4/86

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ONSITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

SIGNATURE OF DEVELOPER — DATE 4/11/86

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

U.S. SOIL CONSERVATION SERVICE — DATE 4-18-86

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED:

DISTRICT HOWARD SOIL CONSERVATION DISTRICT — DATE 4/18/86

APPROVED: OFFICE OF PLANNING AND ZONING

PLANNING DIRECTOR — DATE 4-24-86

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 4-24-86

APPROVED: HOWARD COUNTY HEALTH DEPARTMENT FOR PUBLIC WATER AND SEWERAGE SYSTEMS

HEALTH OFFICER — DATE 4-24-86

APPROVED: DEPARTMENT OF PUBLIC WORKS. FOR PUBLIC WATER & SEWER AND STORM DRAINAGE SYSTEMS AND ROADS.

DIRECTOR, PUBLIC WORKS — DATE 4-22-86

CHIEF, BUREAU OF ENGINEERING — DATE 4-21-86

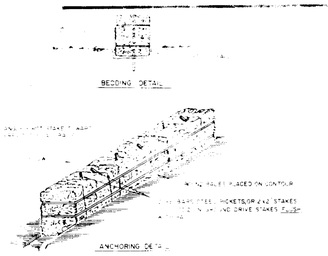
SUBDIVISION				SECTION/AREA		PARCEL
E.G.U. SUBDIVISION				2/3		F-2
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.		CENSUS TR.
27/63	10	NT-IND	4E	6TH		6061.02
WATER CODE			SEWER CODE			
E-06			5000400			

SITE DEVELOPMENT PLAN

COLUMBIA
E.G.U. SUBDIVISION
SECTION 2, AREA 3
PARCEL F-2

6TH ELECTION DISTRICT HOWARD COUNTY, MD
SCALE: 1"=50' DATE: NOVEMBER 26, 1985
REVISED: APRIL 7, 1986
SHEET 1 OF 5

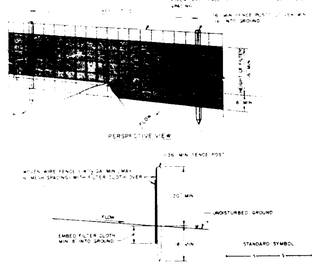
S.D.P. 86-124



INSTALLATION

1. BALE SHALL BE PLACED AT THE TOE OF A SLOPE, A MINIMUM OF 5' FROM THE TOE IF POSSIBLE SO THAT FAILURE OF THE SLOPE WILL NOT CAUSE FAILURE OF THE BARRIER.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4 INCHES, AND PLACED SO THAT BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR REBARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD THE PREVIOUSLY LAID BALE TO AID IN FORCING THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

STRAW BALE DIKE
NOT TO SCALE

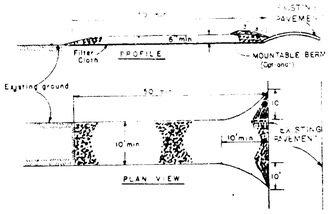


CONSTRUCTION NOTES FOR FILTERED SILT FENCE

1. WOVEN WIRE (14½) TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN THE SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD
FENCE: WOVEN WIRE (14½) 6' MAX. POST SPACING
FILTER CLOTH: FILTER X, MIRAFI 100, STABILINKA, OR 100N OR APPROVED EQUAL
PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

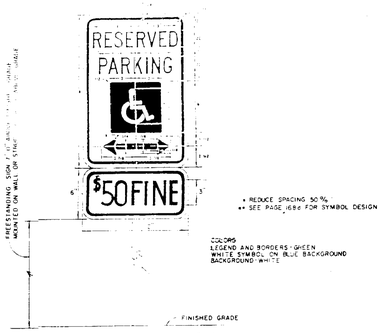
SILT FENCE
NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

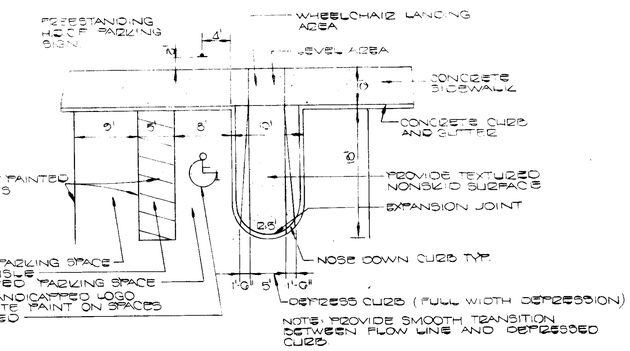
1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. 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 and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

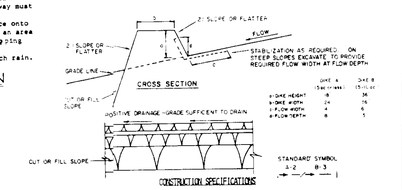


* REDUCE SPACING 50%
** SEE PAGE 186 FOR SYMBOL DESIGN

HANDICAPPED SIGN DETAIL
NOT TO SCALE



TYPICAL PARKING SPACE / HANDICAPPED RAMP DETAIL
NOT TO SCALE



	DIKE A	DIKE B
SIDE HEIGHT	18"	36"
SIDE WIDTH	24"	72"
FLOW WIDTH	4'	6'
FLOW DEPTH	8"	8"

CONSTRUCTION SPECIFICATIONS

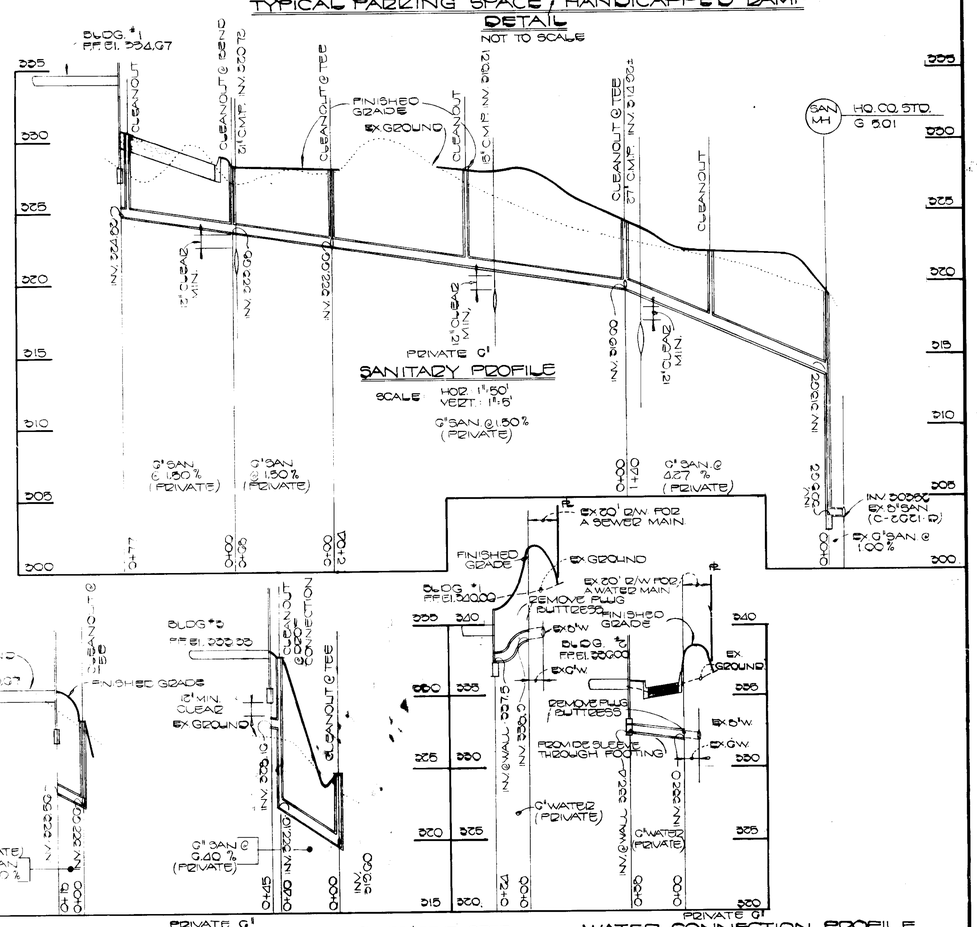
1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FLOW LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
6. STABILIZATION SHALL BE (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF IN SEEDING SEASON, (B) FLOW CHANNEL AS PER THE CHART BELOW:

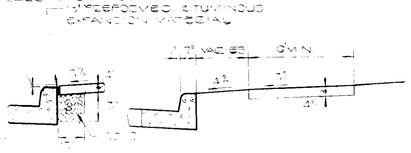
FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	.5-5.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	5.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELSTOR, SOD, 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOD; 2" STONE	LINED RIP-RAP 4-8"
4	8.1-20%	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES IN THICKNESS AND PRESSED INTO THE SOIL.
C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

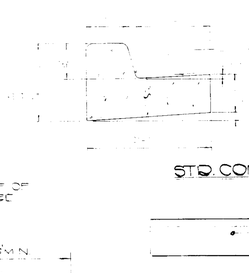
EARTH DIKE
NOTE TO SCALE





SIDEWALK TO BE SCRIBED IN 4' MAXIMUM SQUARES.
EXPANSION JOINTS ACROSS THE SIDEWALK NOT TO BE MORE THAN 20' APART.
PREFORMED BITUMINOUS EXPANSION MATERIAL IN EXPANSION JOINTS TO BE KEPT 1" BELOW SURFACE OF SIDEWALK.
EXPANSION JOINTS TO BE MIX NO. 2.
WHERE SIDEWALK ABUTS CURB, WALK SHALL BE 1/4" ABOVE CURB WITH PREFORMED BITUMINOUS EXPANSION MATERIAL BETWEEN SIDEWALK AND CURB AND RESTING ON A COMPACTED CRUSHED STONE BASE. SEE DETAIL A THIS SHEET.
ON LONGITUDINAL SIDEWALK GRADES OF 5% OR GREATER, A CONCRETE HEADER, 6" THICK AND 6" DEEP BELOW THE NORMAL 4" SIDEWALK THICKNESS SHALL BE CONSTRUCTED FOR THE FULL WIDTH OF THE SIDEWALK AT INTERVALS OF 40 FEET. THE HEADERS SHALL BE POURED AT EXPANSION JOINT LOCATIONS AND SHALL BE MONOLITHIC WITH THE SIDEWALK.

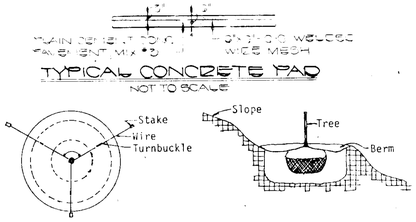
CONCRETE SIDEWALK
NOT TO SCALE



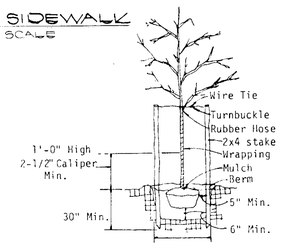
SIDEWALK DETAIL
NOT TO SCALE

STD. COMB. CONCRETE CURB / GUTTER
NOT TO SCALE

TYPICAL PAVING SECTION
NOT TO SCALE

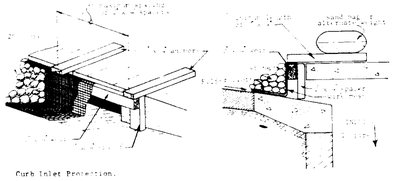


TYPICAL CONCRETE PAD
NOT TO SCALE



Note: Remove Burlap from Top 1/3 of Ball

TYPICAL TREE PLANTING
NOT TO SCALE



Curb Inlet Protection.

1. Attach a continuous piece of wire mesh (30" min. width by throat length plus 4") to the 2" x 4" weir (measuring throat length plus 2") as shown on the standard drawing.
2. Place a piece of approved filter cloth (40 AS sieve) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2" x 4" weir.
3. Securely nail the 2" x 4" weir to 9" long vertical spacers to be located between the weir and inlet face (max. 4' apart).
4. Place the assembly against the inlet throat and nail (minimum 2" lengths of 2" x 4" to the top of the weir at spacer locations. These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.
6. Form the wire mesh and filter cloth to the concrete gutter and against the face of curb on both sides of the inlet. Place clean 2" stone over the wire mesh and filter fabric in such a manner as to prevent water from entering the inlet under or around the filter cloth.
7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
8. Assure that storm flow does not bypass inlet by installing temporary earth or asphalt dikes directing flow into inlet.

INLET PROTECTION DETAIL
NOT TO SCALE

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE: 4-2-86

OWNER / DEVELOPER
WILLIAMS PROPERTIES
JEROME M. WILLIAMS
8660 DOBBIN ROAD COLUMBIA, MARYLAND 21045
PHONE (301) 997-7766

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERS & LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043
(301) 461-2855

ENGINEER'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER — 4/11/86 DATE

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ONSITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

Jerome M. Williams 4/11/86
SIGNATURE OF DEVELOPER — DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

U.S. SOIL CONSERVATION SERVICE — 4-18-86 DATE

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

APPROVED

DISTRICT — 4/18/86 DATE
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: OFFICE OF PLANNING AND ZONING

PLANNING DIRECTOR — 4-24-86 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — 4-24-86 DATE

APPROVED: HOWARD COUNTY HEALTH DEPARTMENT FOR PUBLIC WATER AND SEWERAGE SYSTEMS

HEALTH OFFICER — 4-24-86 DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS. FOR PUBLIC WATER & SEWER AND STORM DRAINAGE SYSTEMS AND ROADS.

DIRECTOR, PUBLIC WORKS — DATE

CHIEF, BUREAU OF ENGINEERING — 4-21-86 DATE

NOTES / DETAIL

COLUMBIA
E.G.U. SUBDIVISION

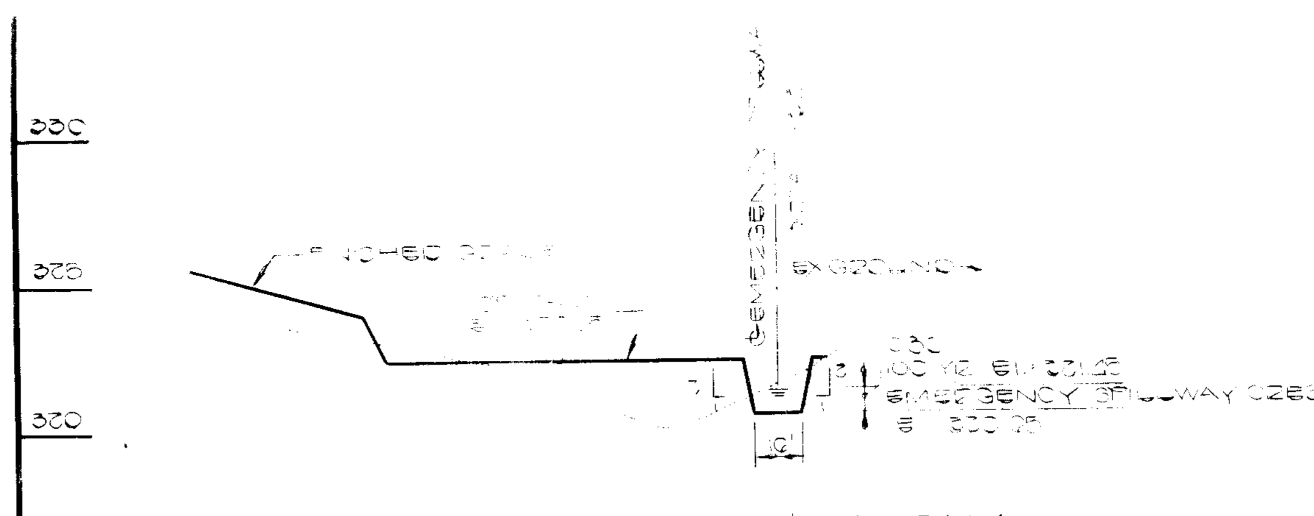
SECTION 2 AREA 5
PARCEL F-2

6TH ELECTION DISTRICT, HOWARD COUNTY, MD.
SCALE AS SHOWN DATE NOVEMBER 20, 1985
REVISED APRIL 7, 1986
SHEET 2 OF 5

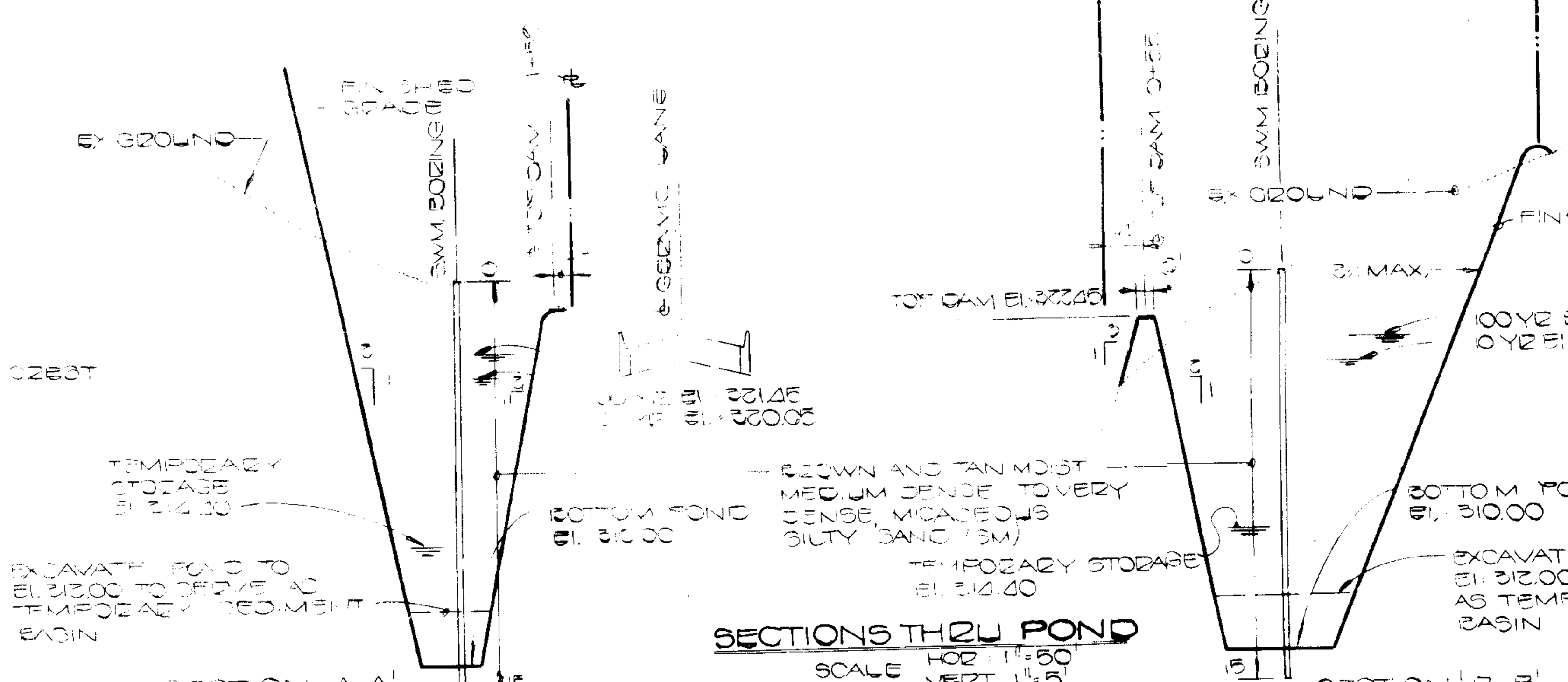
SUBDIVISION		SECTION/AREA	PARCEL/LOT NO.
E.G.U. SUBDIVISION		2/5	F-2
PLAT NO. 27/28	BLOCK NO. 10	ZONE MXD-3	TAX/ZONE 42
ELEC. DIST. 6TH	CENSUS TR. 6001.05		
WATER CODE 00		SEWER CODE 5000400	

S-DP-86-124 c

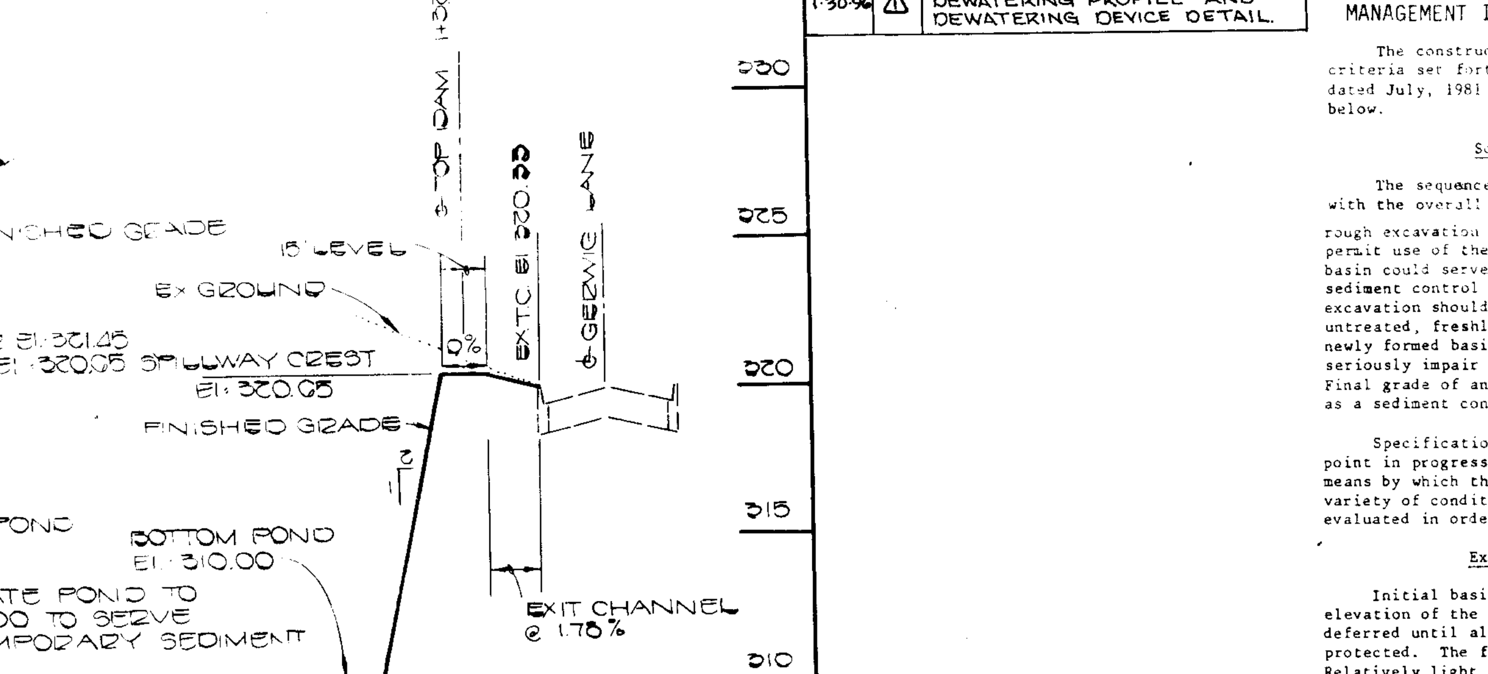
DATE	No.	REVISION
1-30-96	1	ADDED REVISION BLOCK, DEWATERING PROFILE AND DEWATERING DEVICE DETAIL.



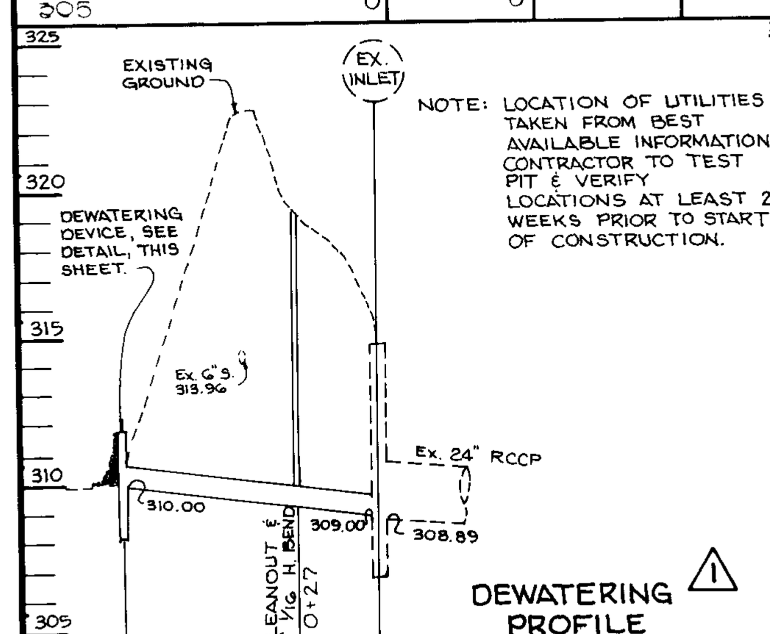
PROFILE ALONG ₵ TOP DAM
SCALE HOR 1"=50' VERT 1"=5'



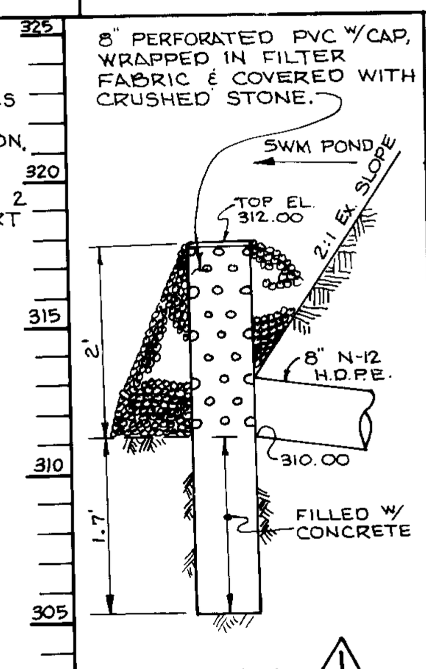
SECTIONS THRU POND
SCALE HOR 1"=50' VERT 1"=5'



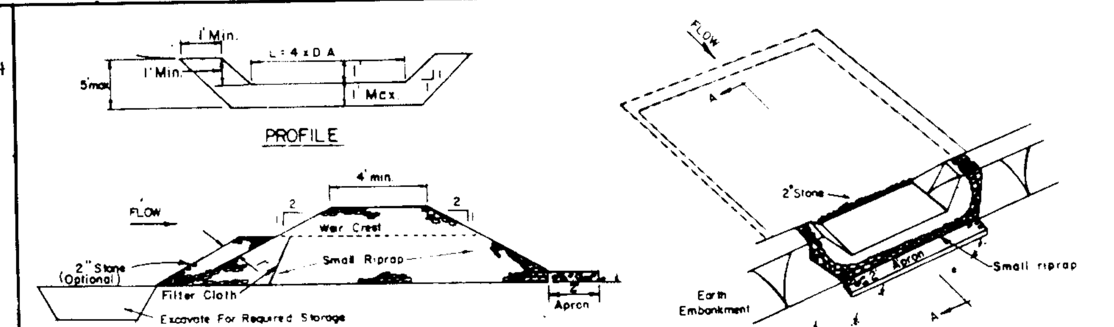
PROFILE ALONG ₵ EMERGENCY SPILLWAY
SCALE HOR 1"=50' VERT 1"=5'



DEWATERING PROFILE
SCALE: HORIZ. 1" = 50' VERT. 1" = 5'



DETAIL DEWATERING DEVICE
NO SCALE

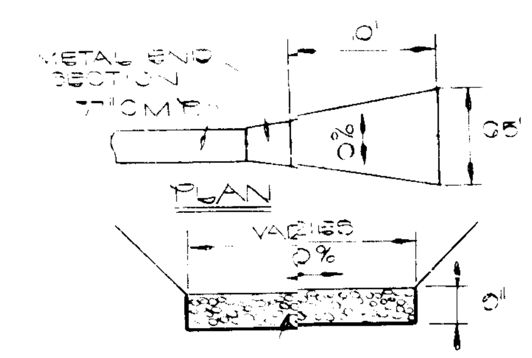


OPTION: A one foot layer of 2" stone may be placed on the upstream side of the riprap in place of the embedded filter cloth.

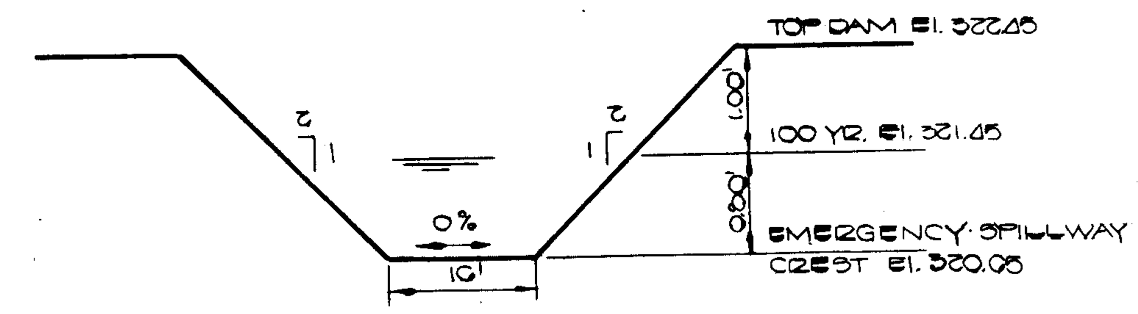
CONSTRUCTION SPECIFICATIONS FOR ST-V

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small riprap 4"-8" along with a 1' thickness of 2" aggregate placed on the up-grade side on the small riprap OR embedded filter cloth in the riprap.
5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to ½ the design depth of the trap.
6. The structure shall be inspected after each rain and repairs made as needed.
7. Construction operations shall be carried out in such a manner than erosion and water pollution is minimized.
8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STONE OUTLET SEDIMENT TRAP
NOT TO SCALE



RIP-RAP APRON @ E-1
NOT TO SCALE

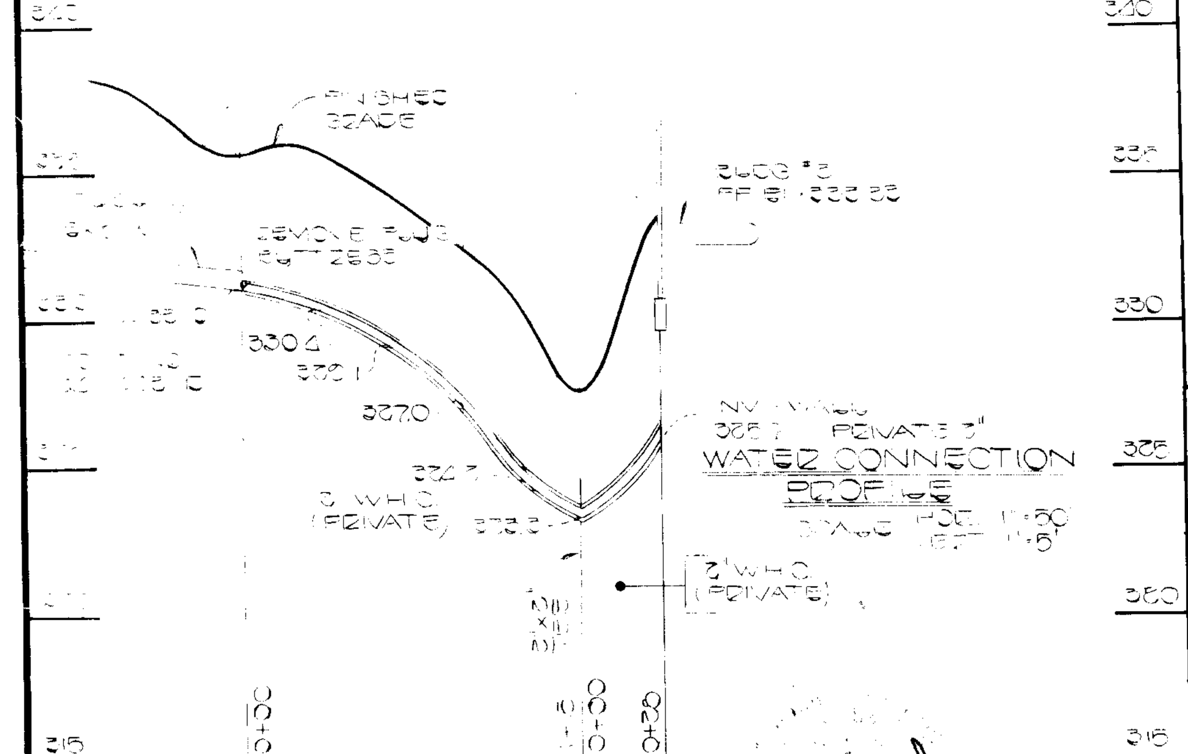


SECTION THRU EMERGENCY SPILLWAY
NOT TO SCALE

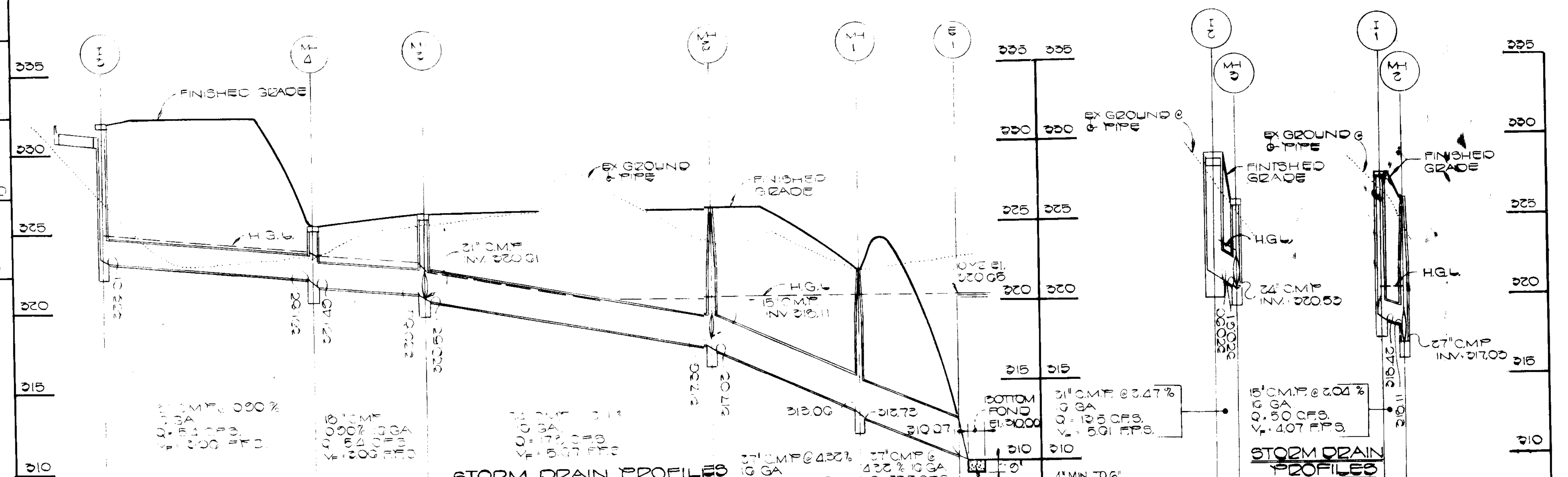
STRUCTURE SCHEDULE:					
NO.	TYPE	TOP ELEV.	INV. IN	INV. OUT	REMARKS*
I-1	A-5	327.63	--	318.42	SD 4.01
I-2	A-10	329.00	--	320.96	SD 4.02
I-3	A-5	331.83	--	323.01	SD 4.01
I-4	Double 'S' Comb.	339.23	332.1±	332.0±	SD 4.34
MH-1	Std.	322.10	313.06	312.73	G 5.01
MH-2	Std.	326.00	318.11 317.36	317.03	G 5.01
MH-3	Shallow	326.00	320.86 320.61	320.53	G 5.05
MH-4	Shallow	325.20	321.82	321.49	G 5.05
MH-5	Special	337.75	331.2±	330.4±	**
E-1	Metal End Section	312.32	--	310.07	SD 5.61

* ALL DETAILS REFER TO HOWARD COUNTY STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION

** EXISTING INLET TO BE CONVERTED TO MANHOLE. SALVAGE CONCRETE HEADPIECE AND GRATE, IF POSSIBLE, RELOCATE TO INLET I-4. PROVIDE MANHOLE FRAME AND COVER TO FINISHED GRADE.



WATER CONNECTION PROFILE
SCALE HOR 1"=50' VERT 1"=5'



STORM DRAIN PROFILES
SCALE HOR 1"=50' VERT 1"=5'

CONSTRUCTION SPECIFICATIONS FOR PERMANENT STORMWATER MANAGEMENT INFILTRATION BASIN

The construction of all infiltration basins should comply with the criteria set forth in the Maryand SCS Standards and Specifications 378-Ponds dated July, 1981 or subsequent revisions and the additional criteria provided below.

Schedule

The sequence of various phases of basin construction shall be coordinated with the overall project construction schedule. A program should schedule rough excavation of the basin with the rough grading phase of the project to permit use of the material as fill in earthwork areas. The partially excavated basin could serve as a sedimentation basin in order to assist in erosion and sediment control during construction. However, basins near final stages of excavation should never be used prematurely for runoff disposal. Drainage from untreated, freshly constructed slopes within the watershed area would load the newly formed basin with a heavy concentration of fine sediment. This could seriously impair the natural infiltration characteristics of the basin floor. Final grade of an infiltration basin shall not be attained until after its use as a sediment control basin is completed.

Specifications for basin construction should state: (1) the earliest point in progress when storm drainage may be directed to the basin, and (2) the means by which this delay in use is to be accomplished. Due to the wide variety of conditions encountered among projects, each should be separately evaluated in order to postpone use as long as is reasonably possible.

Excavation

Initial basin excavation should be carried to within 1 foot of the final elevation of the basin floor. Final excavation to the finished grade should be deferred until all disturbed areas on the watershed have been stabilized or protected. The final phase excavation should remove all accumulated sediment. Relatively light tracked equipment is recommended for this operation to avoid compaction of the basin floor. After the final grading is completed, the basin floor should be deeply tilled by means of rotary tillers or disc harrows to provide a well-aerated, highly porous surface texture.

Lining Material

Infiltration basins may be lined with a 6- to 12-inch layer of filter material such as coarse sand to help prevent the buildup of impervious deposits on the soil surface. The filter layer can be replaced or cleaned when it becomes clogged. When a 6-inch layer of coarse organic material is specified for discing (such as hulls, leaves, stems, etc.) or spading into the basin floor to increase the permeability of the soils, the basin floor should be soaked or inundated for a brief period, then allowed to dry subsequent to this operation. This induces the organic material to decay rapidly, loosening the upper soil layer.

Establishing dense vegetation on the basin side slopes and floor is recommended. A dense vegetative stand will not only prevent erosion and sloughing, but will also provide a natural means of maintaining relatively high infiltration rates. Erosion protection of inflow points to the basin shall also be provided. Removal of accumulated sediment is a problem only at the basin floor. Little maintenance is normally required to maintain the infiltration capacity of slope areas.

Selection of suitable vegetative materials for the side slope and all other areas to be stabilized with vegetation and application of required fertilizer and mulches shall be done in accordance with the Maryland Standards and Specifications for Soil Erosion and Sediment Control. Local Extension Agencies should also be consulted.

Maintenance

Inspection Schedule

Drainage systems must be inspected on a routine basis to ensure that they are functioning properly. Inspections can be on a semiannual basis but should always be conducted following major storms.

Sediment Control Effect on Vegetated Basins

Cleanout frequency of infiltration basins will depend on whether they are vegetated or nonvegetated and will be a function of their storage capacity, recharge characteristics, volume of inflow, and sediment load. Infiltration basins should be inspected at least once a year. Sedimentation basins and traps may require more frequent inspection and cleanout.

Grass bottoms on infiltration basins seldom need replacement since grass serves as a good filter material. This is particularly true of Kentucky 31 Tall Fescue, which is extremely hardy and can withstand several days of submergence. If silty water is allowed to trickle through the turf, most of the suspended material is strained out within a few yards of surface travel. Well established turf on a basin floor will grow up through sediment deposits, forming a porous turf and preventing the formation of an impermeable layer. Grass filtration would work well with long, narrow, shoulder-type (swales, ditches, etc.) depressions where highway runoff flows down a grassy slope between the roadway and the basin. Kentucky 31 Tall Fescue demands very little attention and looks attractive when trimmed. Grass planted on basin side slopes will also prevent erosion.

Sediment Removal From Nonvegetated Basin

(a) Technique. Remove sediment only when the basin floor is completely dry, after the silt layer has mud-cracked and separated from the basin floor. Equipment maneuverability and precise blade control are essential in small areas and can greatly reduce the quantity of material to be removed.

(b) Frequency. All sediment must be removed prior to tilling operations. As tilling is required periodically and at least once annually, the frequency of sediment removal will be reduced to small operations on a regular basis.

Tilling of Nonvegetated Basin Floor

In all cases, tilling must be preceded by thorough removal of surface sediment as previously above.

(a) Purposes. It is necessary to restore the natural infiltration capacity by overcoming the effects of surface compaction, and to control weed growth on the basin floor.

(b) Technique. Rotary tillers or disc harrows will normally serve this purpose. Light tractors should be employed for these operations. In the event that heavy equipment has caused deeper than normal compaction of the surface, these operations should be preceded by deep plowing. In its final condition after tilling, the basin floor should be level, smooth, and free of ridges and furrows to ease future removal of sediment and minimize the material to be removed during future cleaning operations. A levelling drag, towed behind the equipment on the last pass, will accomplish this.

(c) Frequency. In the spring, the basin surface is usually quite porous due to the effects of frost and subsequent thawing. The infiltration capacity diminishes rapidly thereafter. To enhance infiltration capacity, tilling should be thorough once each season, from late June through September. To control vegetative growth, an additional light tillage may be advisable during the growing season. Precautions must be observed, however, to avoid any possibility of working sediment accumulations into the basin floor as a part of light cultivation for the purpose of weed control. It is therefore stressed again that any cultivation or tilling operation be preceded in all cases by careful sediment removal.

Side Slope Maintenance

(a) Purpose. To promote a dense turf with extensive root growth, thereby enhancing infiltration through the slope surface and prevent weeds from gradually taking over the slope areas.

(b) Frequency. Grasses of the fescue family are recommended for seeding primarily due to their adaptability to dry sandy soils, drought resistance, hardiness, and ability to withstand brief inundations. The use of fescues will also permit long intervals between mowings. This is important due to the relatively steep slopes which make mowing difficult. Mowing twice a year, once in June and again in September, is generally satisfactory. Refertilization with 10-6-4 ratio fertilizer at a rate of 500 lb per acre (11 lb per 1000 sq ft) may be required the second year after seeding.

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 4-2-86

OWNER / DEVELOPER

WILLIAMS PROPERTIES

JEROME M. WILLIAMS

5660 DOBBIN ROAD COLUMBIA, MARYLAND 21045
PHONE (301) 997-7788

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERS & LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043
(301) 461-2855

ENGINEER'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER — DATE 4/11/86

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ONSITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY"

Jerome M. Williams 4/11/86
SIGNATURE OF DEVELOPER — DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

U.S. SOIL CONSERVATION SERVICE — DATE 4-18-86

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

APPROVED:
Stephen L. Hahn — DATE 4/18/86
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: OFFICE OF PLANNING AND ZONING

PLANNING DIRECTOR — DATE

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 4-24-86

APPROVED: HOWARD COUNTY HEALTH DEPARTMENT FOR PUBLIC WATER AND SEWERAGE SYSTEMS

HEALTH OFFICER — DATE 4-24-86

APPROVED: DEPARTMENT OF PUBLIC WORKS, FOR PUBLIC WATER & SEWER AND STORM DRAINAGE SYSTEMS AND ROADS.

DIRECTOR, PUBLIC WORKS — DATE

CHIEF, BUREAU OF ENGINEERING — DATE 4-21-86

SUBDIVISION			SECTION/AREA	PARCEL
E.G.U. SUBDIVISION			2/3	F-2
PLAT NO. 27/03	BLOCK NO. 10	ZONE NT-IND	TAX/ZONE 42	ELEC. DIST. 6TH	CENSUS TR. 6061.03
WATER CODE E 06			SEWER CODE 5200400	

NOTES / DETAIL
COLUMBIA
E.G.U. SUBDIVISION
SECTION 2 AREA 3
PARCEL F-2

6TH ELECTION DISTRICT HOWARD COUNTY MD.
SCALE AS SHOWN DATE NOVEMBER 20, 1985
REVISED APRIL 7, 1986
SHEET 3 OF 5

SDP 86-124 c

PERMANENT SEEDING NOTES:

APPLY TO GRADED OR CLEARED AREA NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE-INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULE.

1) PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQUARE FT) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE-INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ.FT.).

2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ.FT.) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (23 LBS/1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE-INCHES OF SOIL.

SEEDING: FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.4 LBS/1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (.05 LBS/1000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING: APPLY 1½ TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

TEMPORARY SEEDING NOTES:

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE-INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ.FT.)

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 2½ BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ.FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ.FT.). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING: APPLY 1½ TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT. OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

CONSTRUCTION SEQUENCE:

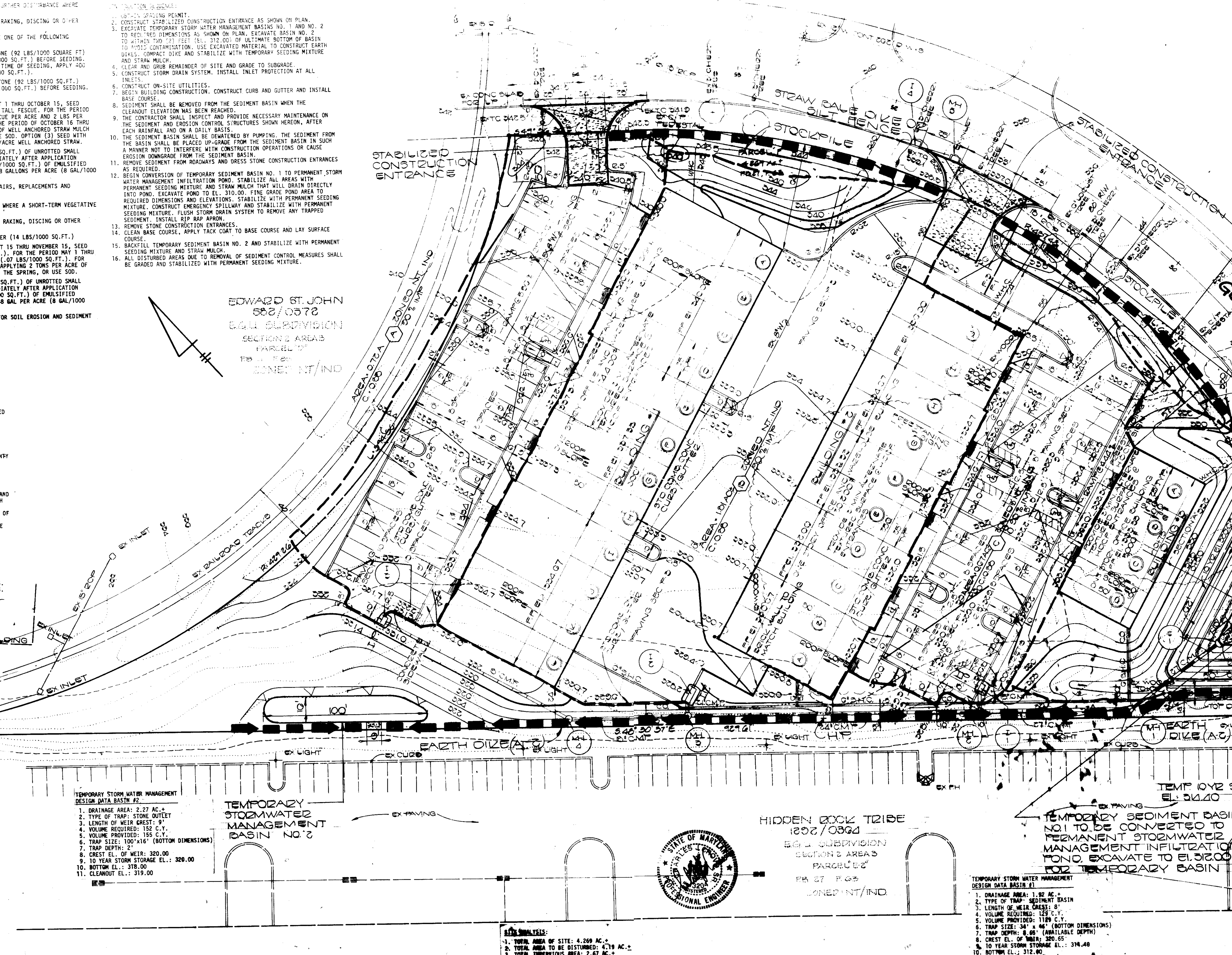
1. OBTAIN GRADING PERMIT.
2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AS SHOWN ON PLAN.
3. EXCAVATE TEMPORARY STORM WATER MANAGEMENT BASINS NO. 1 AND NO. 2 TO REQUIRED DIMENSIONS AS SHOWN ON PLAN. EXCAVATE BASIN NO. 2 TO WITHIN TWO (2) FEET (EL. 312.00) OF ULTIMATE BOTTOM OF BASIN TO AVOID CONTAMINATION. USE EXCAVATED MATERIAL TO CONSTRUCT EARTH DIKES. COMPACT DIKE AND STABILIZE WITH TEMPORARY SEEDING MIXTURE AND STRAW MULCH.
4. CLEAR AND GRUB REMAINDER OF SITE AND GRADE TO SUBGRADE.
5. CONSTRUCT STORM DRAIN SYSTEM. INSTALL INLET PROTECTION AT ALL INLETS.
6. CONSTRUCT ON-SITE UTILITIES.
7. BEGIN BUILDING CONSTRUCTION. CONSTRUCT CURB AND GUTTER AND INSTALL BASE COURSE.
8. SEDIMENT SHALL BE REMOVED FROM THE SEDIMENT BASIN WHEN THE CLEANOUT ELEVATION HAS BEEN REACHED.
9. THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON, AFTER EACH RAINFALL AND ON A DAILY BASIS.
10. THE SEDIMENT BASIN SHALL BE DEWATERED BY PUMPING. THE SEDIMENT FROM THE BASIN SHALL BE PLACED UP-GRADE FROM THE SEDIMENT BASIN IN SUCH A MANNER NOT TO INTERFERE WITH CONSTRUCTION OPERATIONS OR CAUSE EROSION DOWNGRADE FROM THE SEDIMENT BASIN.
11. REMOVE SEDIMENT FROM ROADWAYS AND DRESS STONE CONSTRUCTION ENTRANCES AS REQUIRED.
12. BEGIN CONVERSION OF TEMPORARY SEDIMENT BASIN NO. 1 TO PERMANENT STORM WATER MANAGEMENT INFILTRATION POND. STABILIZE ALL AREAS WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH THAT WILL DRAIN DIRECTLY INTO POND. EXCAVATE POND TO EL. 310.00. FINE GRADE POND AREA TO REQUIRED DIMENSIONS AND ELEVATIONS. STABILIZE WITH PERMANENT SEEDING MIXTURE. CONSTRUCT EMERGENCY SPILLWAY AND STABILIZE WITH PERMANENT SEEDING MIXTURE. FLUSH STORM DRAIN SYSTEM TO REMOVE ANY TRAPPED SEDIMENT. INSTALL RIP RAP APRON.
13. REMOVE STONE CONSTRUCTION ENTRANCES.
14. CLEAN BASE COURSE, APPLY TACK COAT TO BASE COURSE AND LAY SURFACE COURSE.
15. BACKFILL TEMPORARY SEDIMENT BASIN NO. 2 AND STABILIZE WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH.
16. ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADED AND STABILIZED WITH PERMANENT SEEDING MIXTURE.

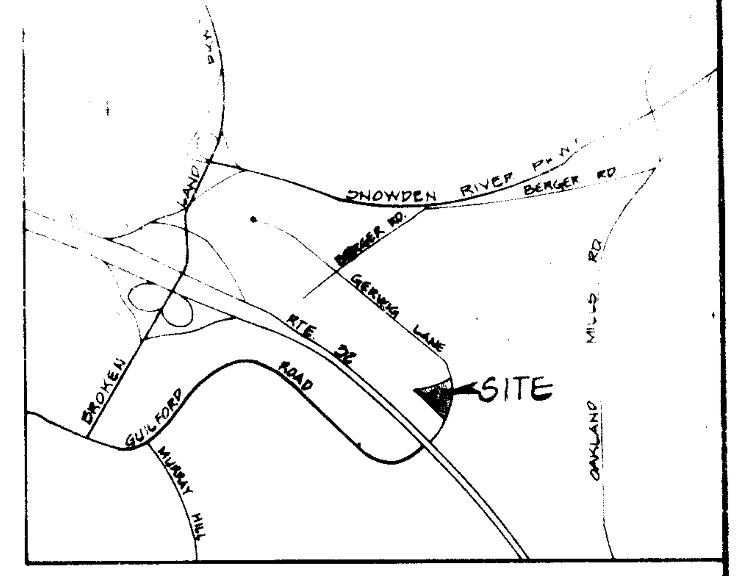
SEDIMENT CONTROL NOTES:

1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION. (992-2437)
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 51) AND (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONG CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
7. SITE ANALYSIS:

TOTAL AREA OF SITE	4.269	ACRES
AREA DISTURBED	4.19	ACRES
AREA TO BE ROOFED OR PAVED	2.67	ACRES
AREA TO BE VEGETATIVELY STABILIZED	1.52	ACRES
TOTAL CUT	6400	CU.YDS.
TOTAL FILL	6400	CU.YDS.
OFFSITE WASTE/BORROW AREA LOCATION	—	

8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.





VICINITY MAP
SCALE 1":2000'

TEMPORARY STORM WATER MANAGEMENT DESIGN DATA BASIN #2

1. DRAINAGE AREA: 2.27 AC.+
2. TYPE OF TRAP: STONE OUTLET
3. LENGTH OF WEIR CREST: 9'
4. VOLUME REQUIRED: 152 C.Y.
5. VOLUME PROVIDED: 155 C.Y.
6. TRAP SIZE: 100'x16' (BOTTOM DIMENSIONS)
7. TRAP DEPTH: 2'
8. CREST EL. OF WEIR: 320.00
9. 10 YEAR STORM STORAGE EL.: 320.00
10. BOTTOM EL.: 318.00
11. CLEANOUT EL.: 319.00

TEMPORARY STORM WATER MANAGEMENT DESIGN DATA BASIN #1

1. DRAINAGE AREA: 1.92 AC.+
2. TYPE OF TRAP: SEDIMENT BASIN
3. LENGTH OF WEIR CREST: 8'
4. VOLUME REQUIRED: 129 C.Y.
5. VOLUME PROVIDED: 1129 C.Y.
6. TRAP SIZE: 34' x 46' (BOTTOM DIMENSIONS)
7. TRAP DEPTH: 8.65' (AVAILABLE DEPTH)
8. CREST EL. OF WEIR: 320.65
9. 10 YEAR STORM STORAGE EL.: 314.40
10. BOTTOM EL.: 312.00
11. CLEANOUT EL.: [illegible]

SITE ANALYSIS:

1. TOTAL AREA OF SITE: 4.269 AC.+
2. TOTAL AREA TO BE DISTURBED: 4.19 AC.±
3. TOTAL IMPERVIOUS AREA: 2.67 AC.+
4. TOTAL AREA TO BE REVEGETATED: 1.52 AC.±

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 4-2-86

OWNER & DEVELOPER
WILLIAMS PROPERTIES
JEROME M. WILLIAMS
8000 DOBBIN ROAD COLUMBIA, MARYLAND 21045
PHONE (301) 997-7700

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERS & LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043
(301) 461-2855

ENGINEER'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

STATE OF MARYLAND — CHARLES J. CROVO, SR. — No. 13204 REGISTERED — PROFESSIONAL ENGINEER

SIGNATURE OF ENGINEER — DATE 4/11/86

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ONSITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

SIGNATURE OF DEVELOPER — DATE 4/11/86

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

U.S. SOIL CONSERVATION SERVICE — DATE 4-18-86

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED:

DISTRICT HOWARD SOIL CONSERVATION DISTRICT — DATE 4/18/86

APPROVED: OFFICE OF PLANNING AND ZONING

PLANNING DIRECTOR — DATE 4-24-86

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 4-24-86

APPROVED: HOWARD COUNTY HEALTH DEPARTMENT FOR PUBLIC WATER AND SEWERAGE SYSTEMS

HEALTH OFFICER — DATE 4-24-86

APPROVED: DEPARTMENT OF PUBLIC WORKS. FOR PUBLIC WATER & SEWER AND STORM DRAINAGE SYSTEMS AND ROADS.

DIRECTOR, PUBLIC WORKS — DATE 4-22-86

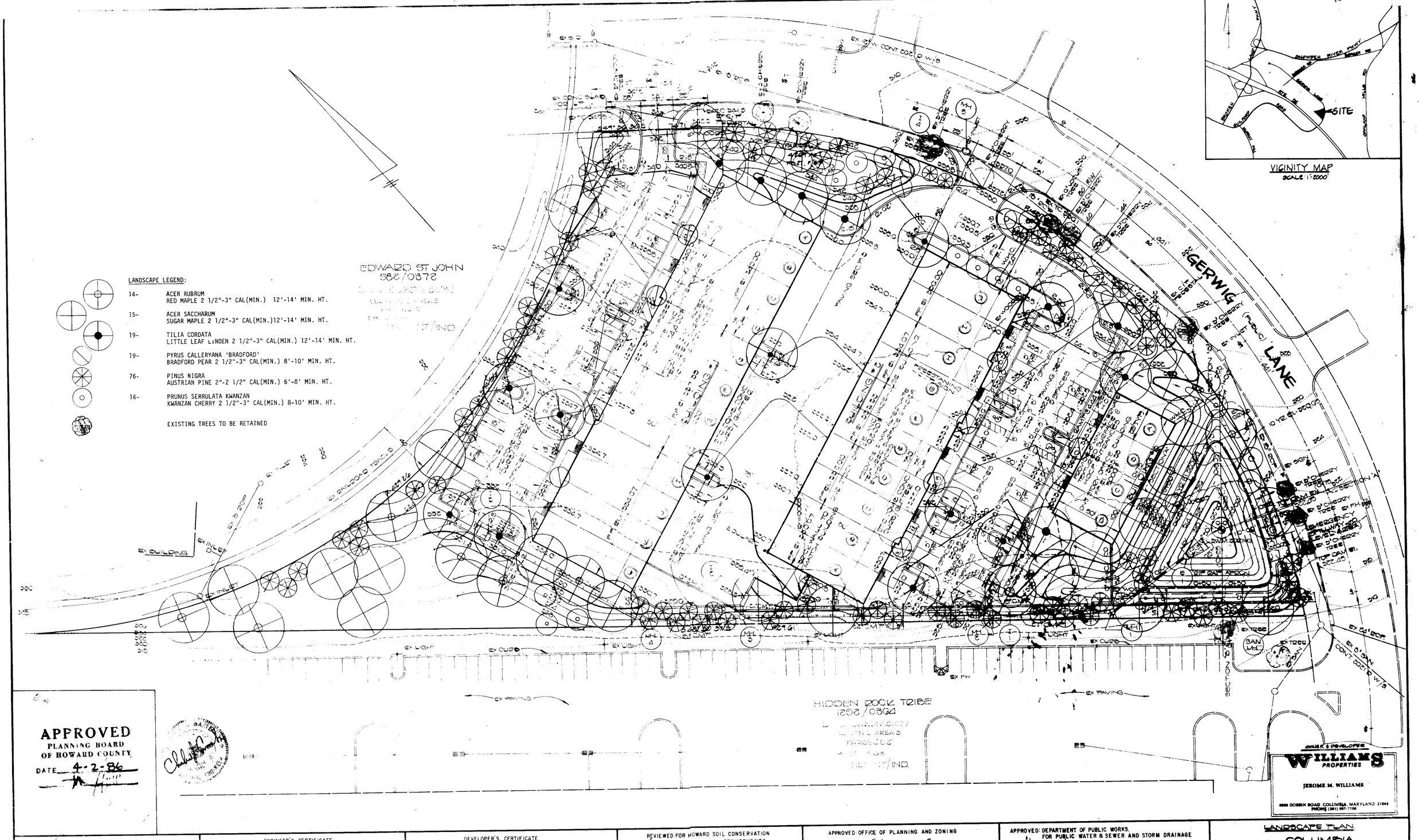
CHIEF, BUREAU OF ENGINEERING — DATE 4-21-86

SUBDIVISION					SECTION/AREA	PARCEL
E.G.U. SUBDIVISION					2/3	F-2
PLAT NO. 27/03	BLOCK NO. 10	ZONE NT-IND	TAX/ZONE 42	ELEC. DIST. 6TH	CENSUS TR. 6061.05	
WATER CODE E-00			SEWER CODE 5200400			

SEDIMENT CONTROL PLAN / DRAINAGE AREA MAP
COLUMBIA
E.G.U. SUBDIVISION
SECTION 2 AREA 3
PARCEL F-2

6TH ELECTION DISTRICT HOWARD COUNTY, MD
SCALE: 1" = 30' DATE: NOVEMBER 20, 1985
REVISED: APRIL 7, 1986
SHEET 4 OF 5

SDP 86-124



VICINITY MAP
SCALE 1"=2000'

LANDSCAPE LEGEND:

14-	ACER RUBRUM RED MAPLE 2 1/2"-3" CAL(MIN.) 12'-14' MIN. HT.
15-	ACER SACCHARUM SUGAR MAPLE 2 1/2"-3" CAL(MIN.)12'-14' MIN. HT.
19-	TILIA CORDATA LITTLE LEAF LINDEN 2 1/2"-3" CAL(MIN.) 12'-14' MIN. HT.
19-	PYRUS CALLERYANA 'BRADFORD' BRADFORD PEAR 2 1/2"-3" CAL(MIN.) 8'-10' MIN. HT.
76-	PINUS NIGRA AUSTRIAN PINE 2"-2 1/2" CAL(MIN.) 6'-8' MIN. HT.
16-	PRUNUS SERRULATA KWANZAN KWANZAN CHERRY 2 1/2"-3" CAL(MIN.) 8-10' MIN. HT.
	EXISTING TREES TO BE RETAINED

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 4-2-86

OWNER & DEVELOPER
WILLIAMS PROPERTIES
JEROME M. WILLIAMS
8000 DOBBIN ROAD COLUMBIA, MARYLAND 21045
PHONE (301) 997-7766

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERS & LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043
(301) 461-2855

ENGINEER'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER — DATE 4/11/86

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT I ALSO AUTHORIZE PERIODIC ONSITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

SIGNATURE OF DEVELOPER — DATE 4/11/86

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

U.S. SOIL CONSERVATION SERVICE — DATE 4-18-86

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
APPROVED

DISTRICT — DATE 4/18/86
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: OFFICE OF PLANNING AND ZONING

PLANNING DIRECTOR — DATE 4-24-86

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 4-24-86

APPROVED: HOWARD COUNTY HEALTH DEPARTMENT FOR PUBLIC WATER AND SEWERAGE SYSTEMS

HEALTH OFFICER — DATE 4-24-86

APPROVED: DEPARTMENT OF PUBLIC WORKS. FOR PUBLIC WATER & SEWER AND STORM DRAINAGE SYSTEMS AND ROADS.

DIRECTOR, PUBLIC WORKS — DATE 4-22-86

CHIEF, BUREAU OF ENGINEERING — DATE 4-24-86

SUBDIVISION	SECTION/AREA	PARCEL
E.G.U. SUBDIVISION	2/3	F-2

PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
27/65	10	NT IND	42	6TH	6061.05

WATER CODE E-06 — SEWER CODE 5200400

LANDSCAPE PLAN
COLUMBIA
E.G.U. SUBDIVISION
SECTION 2 AREA 3
PARCEL F-2

6TH ELECTION DISTRICT HOWARD COUNTY, MD
SCALE 1"=30' DATE NOVEMBER 26, 1985
REVISED: APRIL 7, 1986
SHEET 5 OF 5

SDP 86-124