

SITE ANALYSIS:

- 1. Area: 14.8608 Acres
- 2. Zoning: New Town Open Space
- 3. Building Coverage: 0

NOTES:

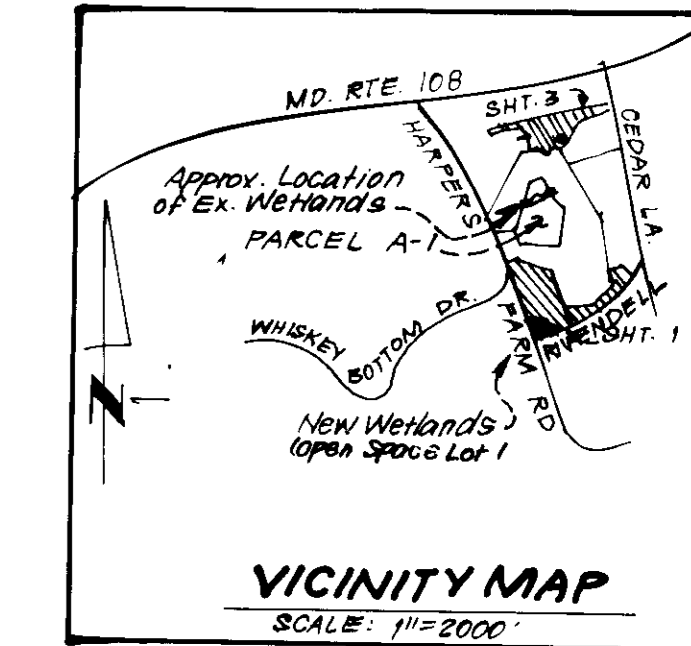
- 1. Min. Building Setback Restrictions from property lines and right-of-way of any public streets or roads to be in accordance with FDP Phase 200 Plat 3054 A 970-983 and FDP 204, ESDP 89-135
- 2. See O.P.Z. File No's F88-151, WF 88-23 & F 89-201
- 3. Topography compiled from field/aerial survey
- 4. Deed Reference: L1535 F 193

LOT 5
COLUMBIA
VILLAGE OF HARPERS CHOICE
HOBBITS GLEN GOLF COURSE
PLAT 6970
ZONING: NEW TOWN

ENVIRONMENTAL INFORMATION

- A. No 15-25% or greater slopes exist on site.
- B. Limit of Wetlands have been shown on plan.
- C. Soils are Glenalg loam (G1B2) 3 to 8 percent slopes.
- D. Secondary growth dominates the site with open areas of cut and uncut field. Dominant species are Maple and Oak at 5" typical caliper or less. Entire site is in fair to poor condition in vegetative growth. No specimen trees exist.

WETLANDS PLANTING PLAN
SCALE: 1"=50'



Developers Certification:
"We certify that all development and/or construction will be done according to these plans, and that any 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 will provide the Howard Soil Conservation District with an "as built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District."
[Signature]
Signature of Developer

Note:
The purpose of this plan is to show a new wetlands area created in order to replace a strip of wetlands that were filled on Parcel A-1 in Village of Harpers Choice, Section 7 Area 1. (See vicinity map) SDP 89-135, W&C 88-0040.

PLANT SCHEDULE

KEY	PLANT NAME	SIZE	QUA.	REMARKS
MAJOR TREE				
AK	RED BIRCH	6/8"	1	
LM	LONGLEAF PINE	2 1/2"	1	
AC	AMERICAN Sycamore	4/4"	9	
GD	GLIMP WHITE OAK	4/4"	7	
SMALL TREE				
AC	AMERICAN Sycamore	2/4"	9	
CP	CERCIS CANADENSIS	2/4"	9	
CP	EASTERN REDBUD	2/4"	9	
SHRUB				
LM	LONGLEAF PINE	2 1/2"	9	
PRIMARY WETLAND VEGETATION				
W	WATER HYacinth	1/2"	100	100 CLUMPS OF 3
W	WATER CRESS	1/2"	100	100 CLUMPS OF 3
SECONDARY WETLAND VEGETATION				
W	WATER HYacinth	2/4"	25	7 CLUMPS OF 5
W	WATER CRESS	1/2"	25	7 CLUMPS OF 5
W	WATER CRESS	2/4"	25	7 CLUMPS OF 5
W	WATER CRESS	2/4"	25	7 CLUMPS OF 5

NOTE:
1. MIN. 11' SETBACK OF BUILDING TO BE MAINTAINED ON ALL SIDES.
2. COMPLETE VEGETATION OF LAND MATERIAL MAY BE REQUIRED TO MAINTAIN THE AREA ARCHITECT.

OWNER:
The Howard Research & Development Land Company
10275 Little Paxton Pkwy. Columbia, MD 21043

ENGINEER'S CERTIFICATE

"I certify that this plan for pond construction, erosion, and sediment control represents a workable and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer of the requirements of the Howard Soil Conservation District with a certified "as built" of the pond within 30 days of completion."

[Signature]
Signature of Engineer
Date: 4-11-89



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
[Signature] 10-27-89
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
[Signature] 11/8/89
DIRECTOR DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE.
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] 10/24/89
DIRECTOR DATE

APPROVED: These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.
[Signature] 4/12/89
U.S. Soil Conservation Service Date

ADDRESS CHART

Lot Number	STREET ADDRESS
1	11,000 Rivendell Lane
146	5000 Cedar Lane

SUBDIVISION NAME: VILLAGE OF HARPERS CHOICE

PLAT # OR L.P.	BLOCK#	STREET	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
8100	11	N.T.	29	5TH	6053.01

WATER CODE: _____ **SEWER CODE:** _____

POND SPECIFICATIONS

I. SITE PREPARATION

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1.

Areas to be covered by the pond or reservoir will be cleared of all trees, brush, logs, fence, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface.

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

II. EARTH FILL

Material

The fill material shall be taken from approved designated borrow area or areas. It shall be free of roots, stumps, wood, rubbish, oversized stones, frozen or other objectionable materials. The embankment shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height all along the length of the embankment shall be increased above the design elevation (including freeboard) as shown on the plans.

Placement

Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in 8-inch maximum thickness (before compaction) layers which are to be continuous over the entire length of the fill. The most-potential water material shall be placed in the downstream portions of the embankment.

Compaction

The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction can be obtained with the equipment used.

Where a minimum required density is specified, each layer of fill shall be compacted as necessary to obtain that density and is to be certified by the Engineer.

Cutoff Trench

Where specified, a cutoff trench shall be excavated along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be as shown on the drawings, with the minimum width being four feet. The depth shall be at least four feet or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill material for the cutoff trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability.

III. STRUCTURAL BACKFILL

Backfill material shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no size during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe unless there is a compacted fill of twenty-four inches or greater over the structure or pipe.

IV. PIPE MATERIALS

All pipes shall be circular in cross section.

A. Corrugated Metal Pipe

1. **Materials - (Steel Pipe)** - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of ASTM Specification M-190 Type A with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

Steel pipes with polymeric coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. The following coatings are commercially available: Necon, Plast-Coat, Black-Rid, and Beth-Purloy. Coated corrugated steel pipe shall meet the requirements of ASTM M-245 and M-246.

2. **Materials - (Aluminized Steel Pipe)** - This pipe and its appurtenances shall conform to the requirements of ASTM Specification M-274-791 with watertight coupling bands or flanges.

3. **Materials - (Aluminum Pipe)** - This pipe and its appurtenances shall conform to the requirements of ASTM Specification M-198 or shall conform to the requirements of ASTM Specification M-199 with watertight coupling bands or flanges. Coupling bands, anti-seep collars, and sections, etc. must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 26 mils in thickness. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be less than 9 and greater than 4.

4. **Connections** - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Watertight coupling bands or flanges shall be used at all joints. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight. Dimple bands are not considered to be watertight.

5. **Bedding** - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

6. **Laying pipe** - The pipe shall be placed with inside circumferential laps pointing downstream and with the longitudinal laps at the sides.

7. **Backfilling** shall conform to structural backfill as shown above.

8. **Other details** (anti-seep collars, valves, etc.) shall be as shown on the drawings.

V. CONCRETE

1. Materials

- a. **Cement** - Normal Portland cement shall conform to the latest ASTM Specification C-150.
- b. **Water** - The water used in concrete shall be clean, free from oil, acid, alkali, scales, organic matter or other objectionable substances.
- c. **Sand** - The sand used in concrete shall be clean, hard, strong and durable, and shall be well graded with 100 percent passing a one-quarter inch sieve. Limestone sand shall not be used.
- d. **Coarse Aggregate** - The coarse aggregate shall be clean, hard, strong and durable, and free from clay or dirt. It shall be well graded with a maximum size of one and one-half (1-1/2) inches.
- e. **Reinforcing Steel** - The reinforcing steel shall be deformed bars of intermediate grade billet steel or rail steel conforming to ASTM Specification A-615.

- 2. **Design Mix** - The concrete shall be mixed in the following proportions, measured by weight. The water-cement ratio shall be 5-1/2 to 6 U.S. Gallons of water per 94 pound bag of cement. The proportion of materials for the trial mix shall be 1:2:1 1/2. The combination of aggregates may be adjusted to produce a plastic and workable mix that will not produce harshness in placing or honeycombing in the structure.
- 3. **Mixing** - The concrete ingredients shall be mixed in batch mixers until the mixture is homogeneous and of uniform consistency. The mixing of each batch shall continue for not less than one and one-half minutes after all the ingredients, except the full amount of water, are in the mixer. The minimum mixing time is predicted on proper control of the speed of rotation of the mixer and on the introduction of the water prior to, during, and following the mixer-charging operations. Excessive overmixing requiring the addition of water to preserve the required concrete consistency shall not be permitted. Truck mixing will be allowed provided that the use of this method shall cause no violation of any applicable provisions of the specifications given here.

- 4. **Forms** - The forms shall have sufficient strength and rigidity to hold the concrete and to withstand the necessary pressure, tamping, and vibration without deflection from the prescribed lines. They shall be mortar-tight and constructed so that they can be removed without hammering or prying against the concrete.

The inside of forms shall be oiled with a non-staining mineral oil or thoroughly wetted before concrete is placed.

Forms may be removed 24 hours after the placement of concrete. All wire ties and other devices used shall be recessed from the surface of the concrete.

- 5. **Reinforcing Steel** - All reinforcing material shall be free of dirt, rust, scale, oil, paint or any other coatings. The steel shall be accurately placed and securely tied and blocked into position so that no movement of the steel will occur during placement of concrete.

- 6. **Consolidating** - Concrete shall be consolidated with internal type mechanical vibrators. Vibration shall be supplemented by tapping and hand tamping as necessary to insure smooth and dense concrete along form surfaces, in corners, and around embedded items.

- 7. **Finishing** - Defective concrete, honeycombed areas, voids left by the removal of the rods, ridges on all concrete surfaces permanently exposed to view or exposed to water on the finished structure, shall be repaired immediately after the removal of forms. All voids shall be repaired and completely filled with dry-patching mortar.

- 8. **Protection and Curing** - Exposed surfaces of concrete shall be protected from the direct rays of the sun for at least the first three (3) days. All concrete shall be kept continuously moist for at least ten (10) days after being placed. Moisture may be applied by spraying or sprinkling as necessary to prevent the concrete from drying. Concrete shall not be exposed to freezing during the curing period. Curing compounds may also be used.

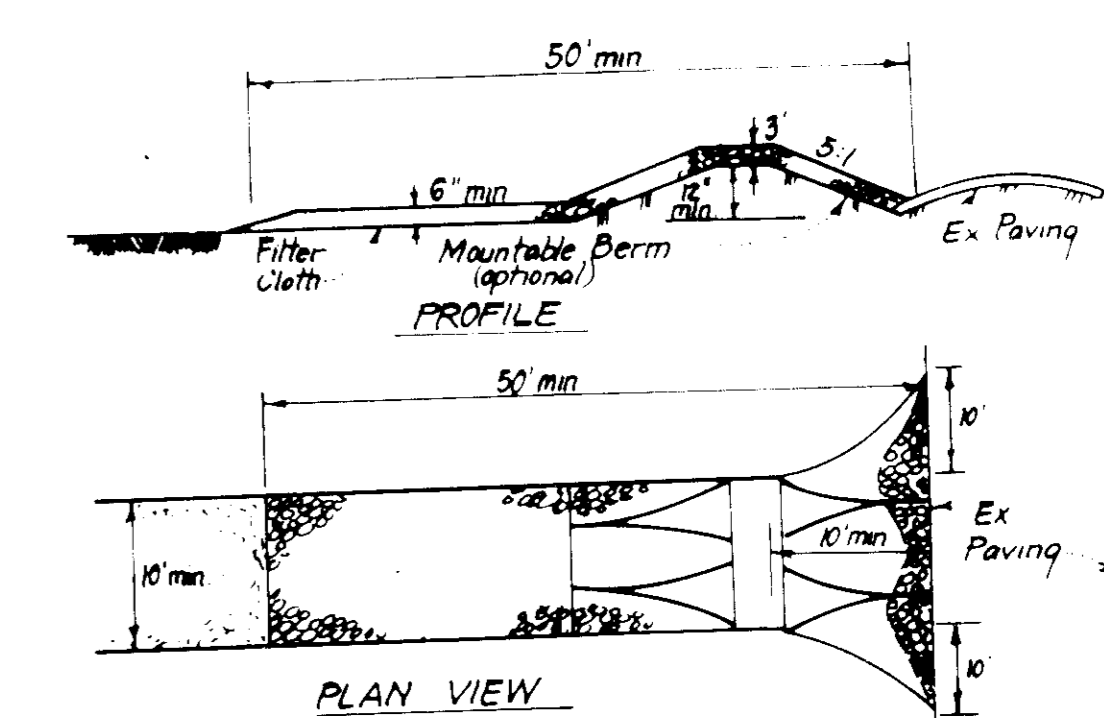
- 9. **Placing Temperature** - Concrete may not be placed at temperatures below 32° F with the temperature falling, or 34° with the temperature rising.

VI. STABILIZATION

All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching (if required) in accordance with the vegetative treatment specifications or as shown on the accompanying drawings.

VII. EROSION AND SEDIMENT CONTROL

Construction operations will be carried out in such a manner that erosion and sediment will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures to be employed during the construction process.



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.
- 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, tracked 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 (SCE)

NO SCALE

CONSTRUCTION SEQUENCE (MITIGATION PLAN)	No. of DAYS
1. Obtain Grading Permit.	7
2. Install sediment and erosion control devices and stabilize.	3
3. Excavate for Mitigation Pond and temporarily stabilize.	30
4. Fine grade and stabilize in accordance with bids and specs.	7
5. Upon approval of the sediment control inspector, remove sediment and erosion controls and stabilize.	7

Developers Certification:

"We certify that all development and/or construction will be done according to these plans, and that any 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 Sedimentation and Erosion before beginning the project. I will also have the Howard Soil Conservation District with an "as built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District."

James M. Hester
 Director of Developer



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

James M. Hester 10-27-89
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

James M. Hester 11/2/89
 DIRECTOR DATE

James M. Hester 11/2/89
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS,
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

James M. Hester 10-24-89
 DIRECTOR DATE

James M. Hester 10-24-89
 CHIEF BUREAU OF ENGINEERING DATE

10-2-89
 LS

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

Approved: *James M. Hester* 11/19/89
 Howard S.C.D.

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

James M. Hester 11/19/89
 Howard S.C.D.

ENGINEER'S CERTIFICATE

"I certify that this plan for pond construction, erosion, and sediment control is a true and correct and workable plan based on a survey of all site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that this plan is to be filed with the Howard Soil Conservation District with a "as built" plan of the pond within 30 days of completion."

James M. Hester 11-1-89
 Signature of Engineer Date

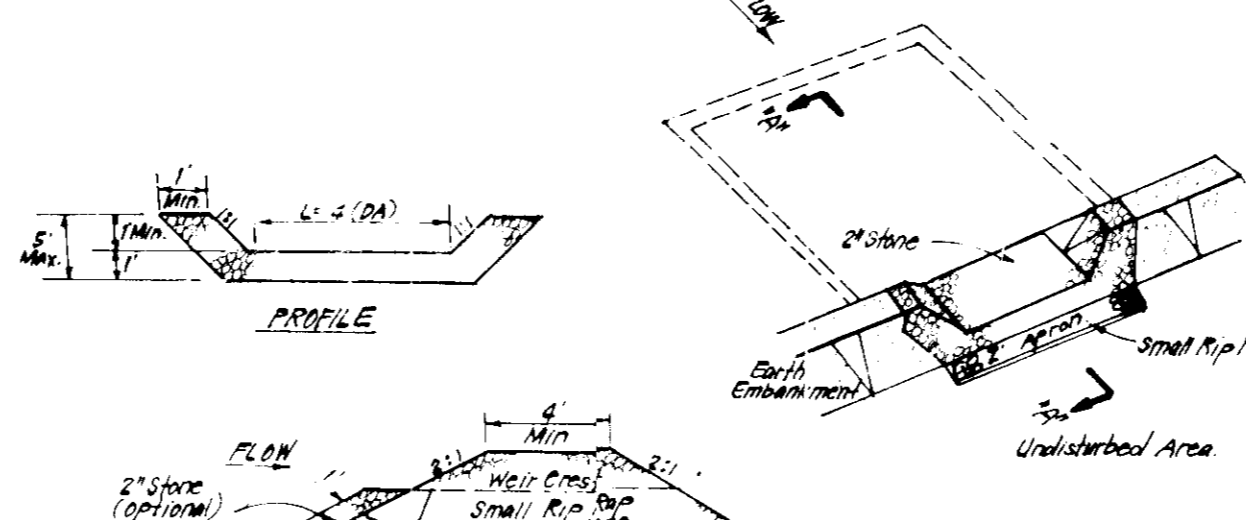
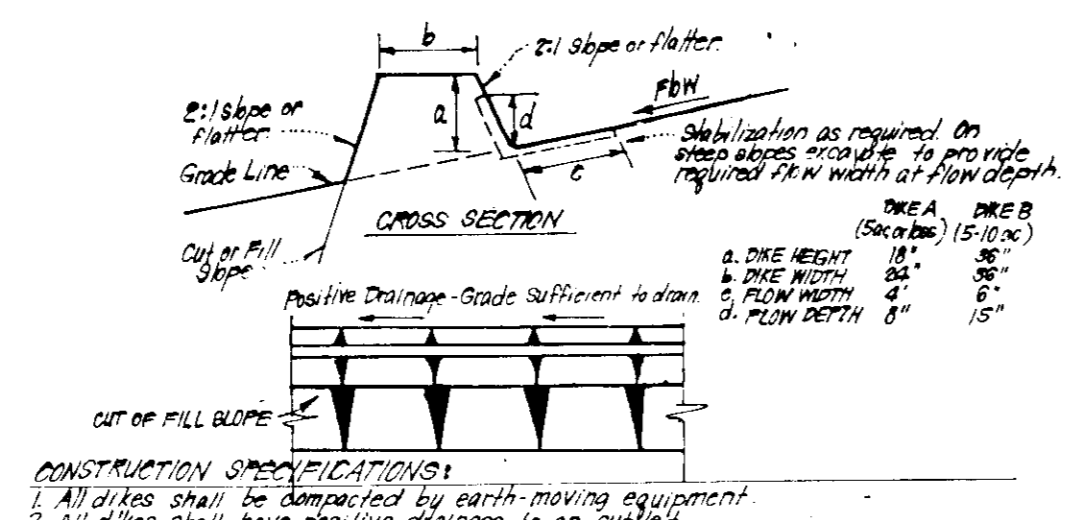
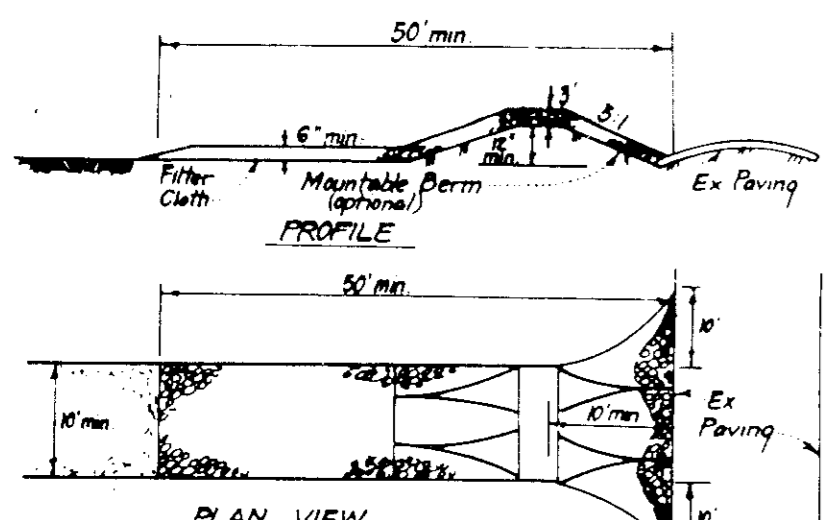
CLARK • FINEROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS

7135 MINSTREL WAY • COLUMBIA, MD 21046 • (301) 981-7500 • BALTO • WASH DC

DESIGNED	JLS	SCALE	As Shown
DRAWN	JLS	DRAWING	2 OF 3
CHECKED	KIM	JOB NO	87-119
DATE	8-24-89	FILE NO	87-119-X

SITE DEVELOPMENT PLAN & WETLANDS MITIGATION DETAILS
OPEN SPACE LOT 1 & OPEN SPACE LOT 14G
COLUMBIA
 VILLAGE OF HARPER'S CHOICE AREA 4
 SECTION 7 AREA 2 & SECTION 7 AREA 4
 TAX MAP # 23 PARCELS 57, 60 & 12G
 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

DEVELOPER: NVR LAZEROV ASSOC
 13278 STYER CT.
 HIGHLAND MD, 20777



CONSTRUCTION SPECIFICATIONS

- Stone size - Use 2" stone or equivalent in recycled concrete equipment.
- Length - As required, but not less than 15' feet (exception to a single residence lot where a 30' foot minimum length would apply).
- Thickness - Not less than six (6) inches.
- Width - Ten (10) feet minimum, but not less than the full width of points where ingress or egress occurs.
- Filter Cloth - Will be placed over the entire area prior to placement of stone. Filter will not be required on a single family residence lot.
- Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mounded berm with 5' slopes will be permitted.
- 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 or conditioner demand and/or use of a conditioner. All materials used to trap sediment and sediment applied, trapped, washed or tracked onto public rights-of-way must be removed immediately.
- Warning - 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.
- Periodic inspection and needed maintenance shall be provided after each rain.

CONSTRUCTION SPECIFICATIONS

- All dikes shall be constructed by earth-moving equipment.
- All dikes shall have positive drainage to an outlet.
- Top width may be wider and side slopes may be flatter if desired, to facilitate crossing by construction vehicles.
- Final location should be adjusted as needed to utilize a stabilized slope without dikes.
- Earth dikes shall have an outlet that functions with a minimum of project disruption. It shall be connected 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.
- Final location shall be: (A) in accordance with standard specifications for seed and straw mulch or straw mulch if not in seeding season, (B) flow channel as per chart below.

FLOW CHANNEL STABILIZATION

TIME OF TREATMENT	PHASE	DIKE A	DIKE B
1	Seed	Seed or Straw Mulch	Seed or Straw Mulch
2	1-3-00%	Seed or Straw Mulch	Seed or Straw Mulch
3	3-1-50%	Seed or Straw Mulch	Seed or Straw Mulch
4	3-1-50%	Seed or Straw Mulch	Seed or Straw Mulch
5	3-1-50%	Seed or Straw Mulch	Seed or Straw Mulch

A dike to be 2' Stone, or recycled concrete equipment, in a layer at least 3" thick and be pressed into soil with construction equipment.

B. Ratio to be 4:1, in a layer at least 1/2" thick, pressed into 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.

CONSTRUCTION SPECIFICATIONS

- Area under construction shall be cleared, grubbed and stripped of any vegetation and root mat. The final area shall be exposed.
- The fill material for the embankment shall be free of rocks and other impurities, as well as over-sized stones, rocks, organic material or other phytotoxic material. The embankment shall be compacted by tamping with equipment while it is being constructed.
- All cut and fill slopes shall be 2:1 or flatter.
- The stone used in the outlet shall be small river stone of 1/2" to 1" in diameter placed on the down-slope side of the outlet. The stone shall be placed in the original dimensions when the outlet has been installed.
- The structure shall be inspected after each rain and repairs made as needed.
- Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
- The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STABILIZED CONSTRUCTION ENTRANCE (SCE)

CONSTRUCTION SEQUENCE (STOCKPILE AREA)

NO. OF DAYS	NO. OF DAYS
1. Obtain building permit	7
2. Install sediment & erosion control devices and stabilize.	15
3. Fill stockpile area and temporarily stabilize.	7
4. Fine grade and stabilize in accordance with Stds. & Specs.	30
5. Upon approval of sediment control inspector, remove sediment & erosion controls and stabilize.	7

EARTH DIKE DETAIL (E.D.)

STONE OUTLET SEDIMENT TRAP (SOST) STV

TRAP # 2 S.O.S.T. (STV)

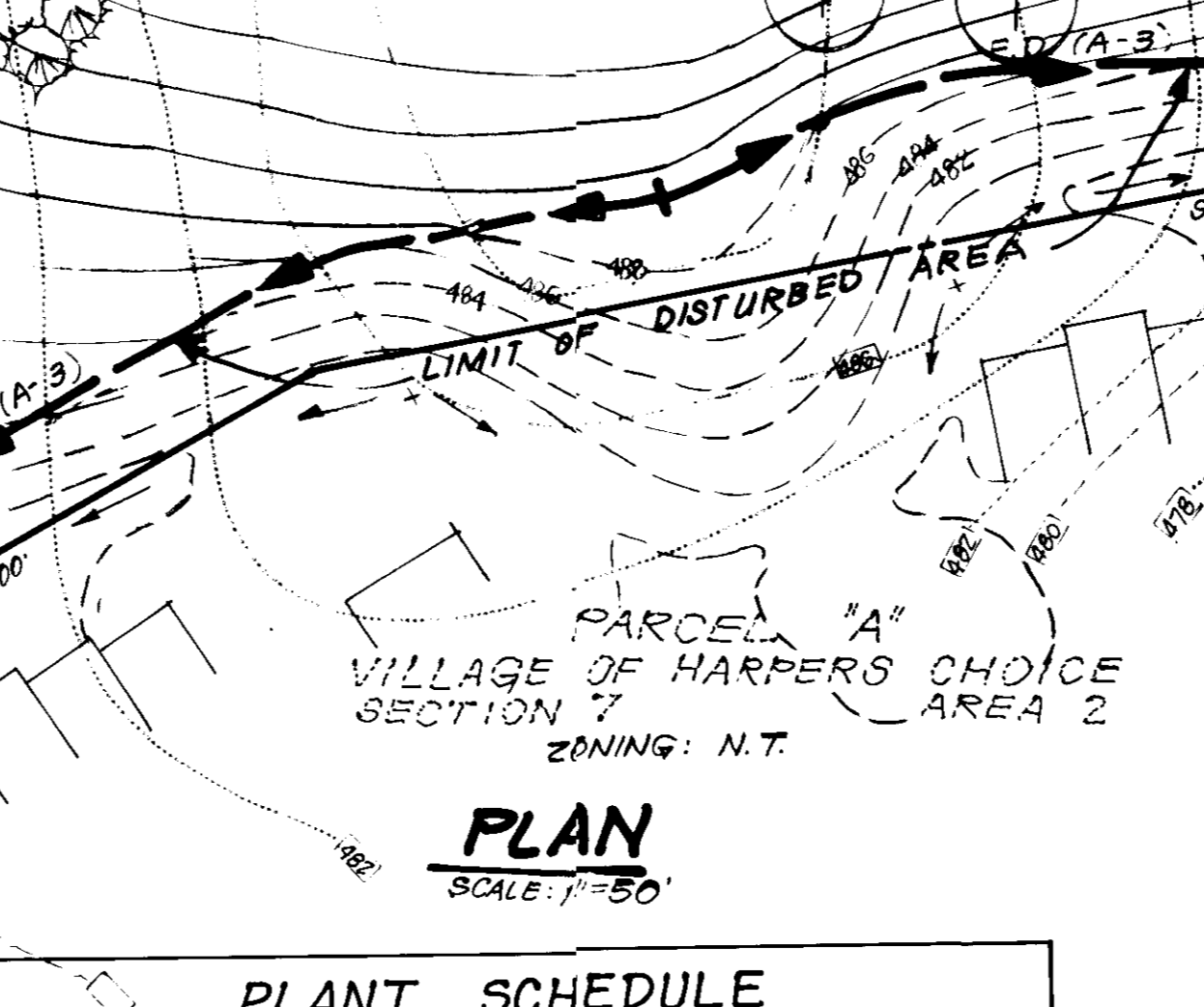
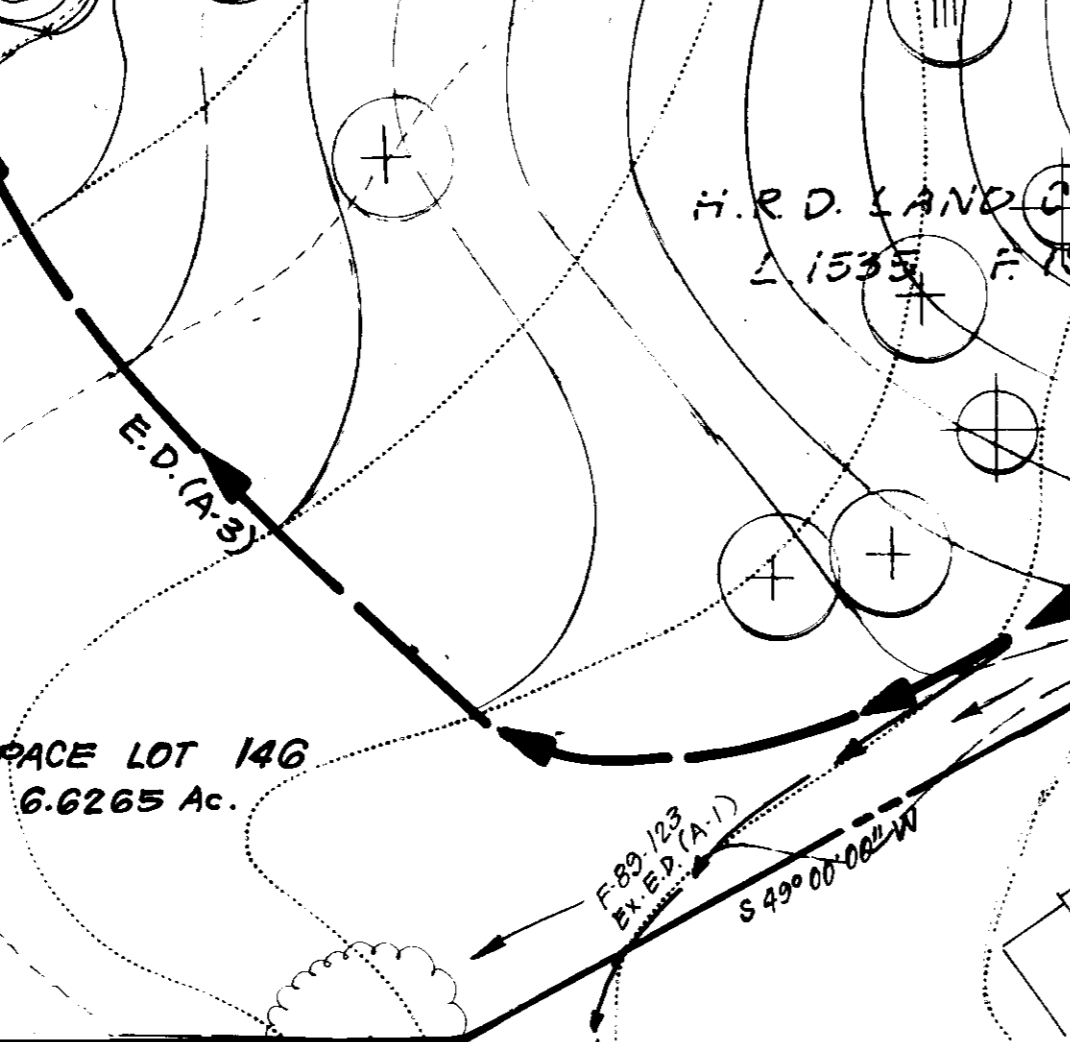
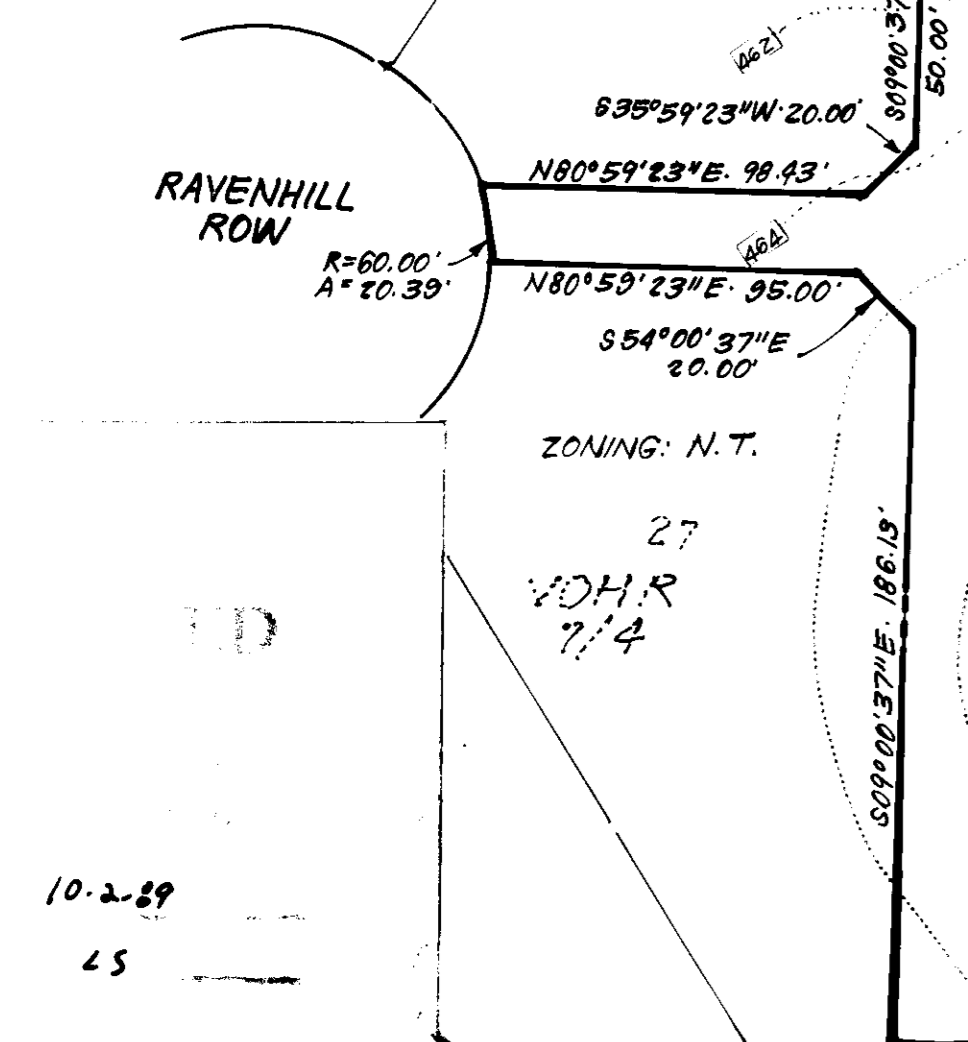
D.A. = 0.80 Ac.
 Storage Req'd = 5400 cf
 Storage Provided = 5400 cf
 Top of Stone Crest = 463.0
 Bottom Elev = 453.0
 Depth = 3'
 Clean Out Elev = 460.5
 Bottom Dimensions = 66'x19'

TRAP # 1 S.O.S.T. (STV)

D.A. = 0.80 Ac.
 Storage Req'd = 1440 cf
 Storage Provided = 1440 cf
 Top of Stone Crest = 475.0
 Bottom Elev = 471.0
 Depth = 3'
 Clean Out Elev = 472.5
 Bottom Dimensions = 18'x14'

ENVIRONMENTAL INFORMATION

- No 15 to 25% or greater slopes exist on site.
- No 100 year Floodplain or Non Tidal Wetlands exist on site.
- Soils are Baile silt loam (Ba).
- Open field dominates the site. No wooded areas exist. Site is in fair condition in vegetative growth.



ENVIRONMENTAL INFORMATION

- No 15 to 25% or greater slopes exist on site.
- No 100 year Floodplain or Non Tidal Wetlands exist on site.
- Soils are Baile silt loam (Ba).
- Open field dominates the site. No wooded areas exist. Site is in fair condition in vegetative growth.

LEGEND

Existing Contour - - - - - 4675
 Proposed Contour - - - - - 470
 Earth Dike - - - - - ED(A-3)

VICINITY MAP

SCALE: 1" = 2000'

DEVELOPER'S/BUILDER'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 have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as and deemed necessary."

James M. Palmer 10/19/89
 Signature of Developer/Builder

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 and conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

John R. Robertson 10/19/89
 Approved Date

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

HOWARD COUNTY HEALTH DEPARTMENT

Joseph M. Brink 10-27-89
 HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Joseph M. Brink 11/8/89
 DIRECTOR DATE

Mark S. DeCamp 11/8/89
 CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

James M. Palmer 10-24-89
 DIRECTOR DATE

James M. Palmer 10-24-89
 CHIEF BUREAU OF ENGINEERING DATE

PLANT SCHEDULE

KEY	PLANT NAME	SIZE	QUANT	REMARKS
III	PLATANUS x ACERIFOLIA LONDON PLANE TREE	1 1/2 - 1 3/4 c.	3	B + B HEAVY HEADS
+	QUERCUS PALUSTRIS PIN OAK	8-10' HT.	9	
o	QUERCUS RUBRA RED OAK		3	
o	CERCIS CANADENSIS EASTERN REDBUD	3-4' HT.	6	
o	PINUS STROBUS EASTERN WHITE PINE	4-5' HT.	9	

NOTES:
 • All planting shall be done in accordance with Columbia H.R.D. Planting Specifications.
 • Contractor shall verify location of all underground utilities prior to digging.

CLARK • FINEFROCK & SACKETT INC.

ENGINEERS • PLANNERS • SURVEYORS

11-87

OWNER:

The Howard Research & Development Land Company
 10275 Little Patuxent Pkwy. Columbia, Md 21043

SCALE: 1" = 50'

3 OF 3

JOB NO. 87-119

DATE: 8-24-89

DEVELOPER: INVR LAZOROV ASSOC.
 13278 STIVER CT.
 HIGHLAND, MD 20777

SDP 90-51