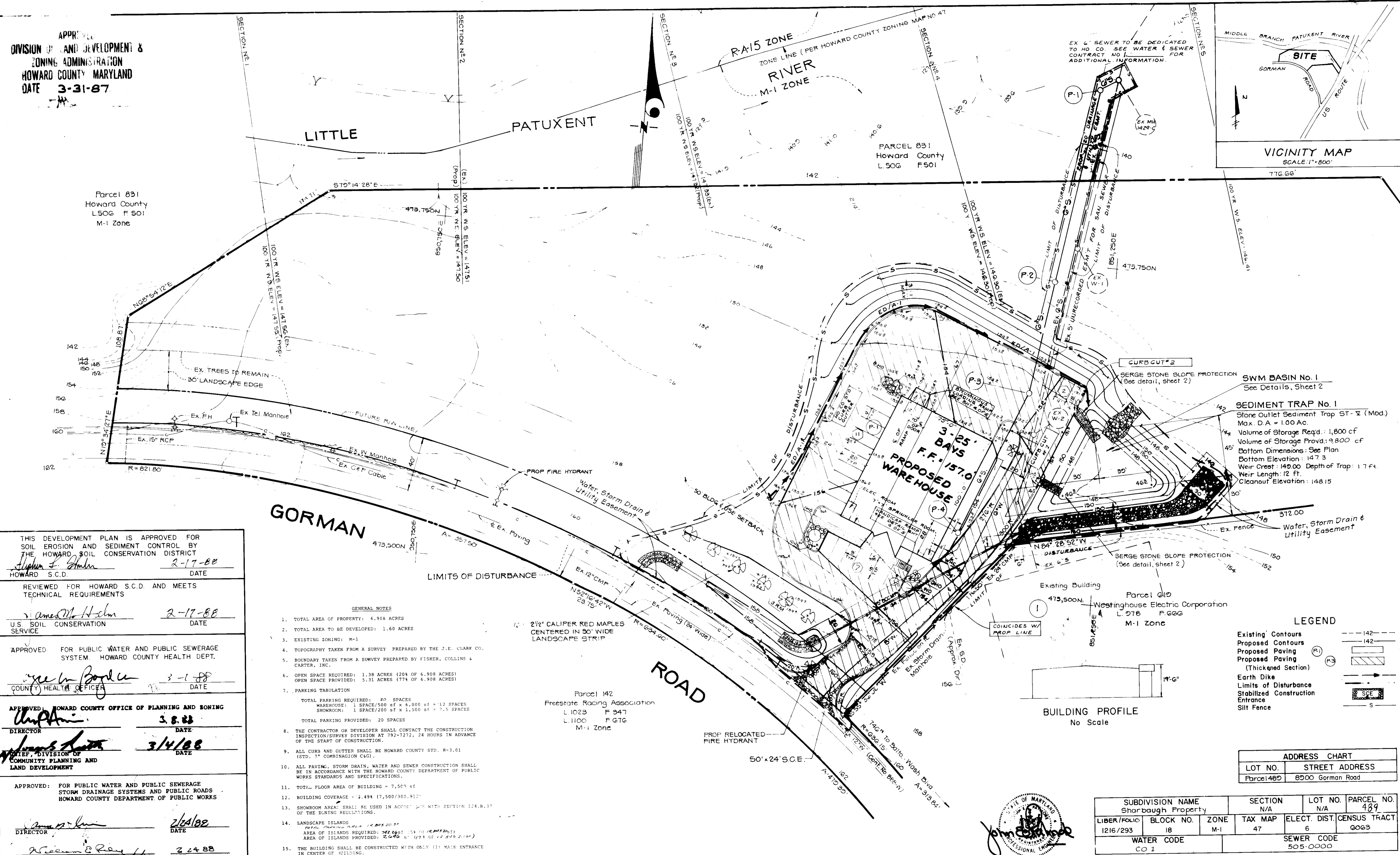
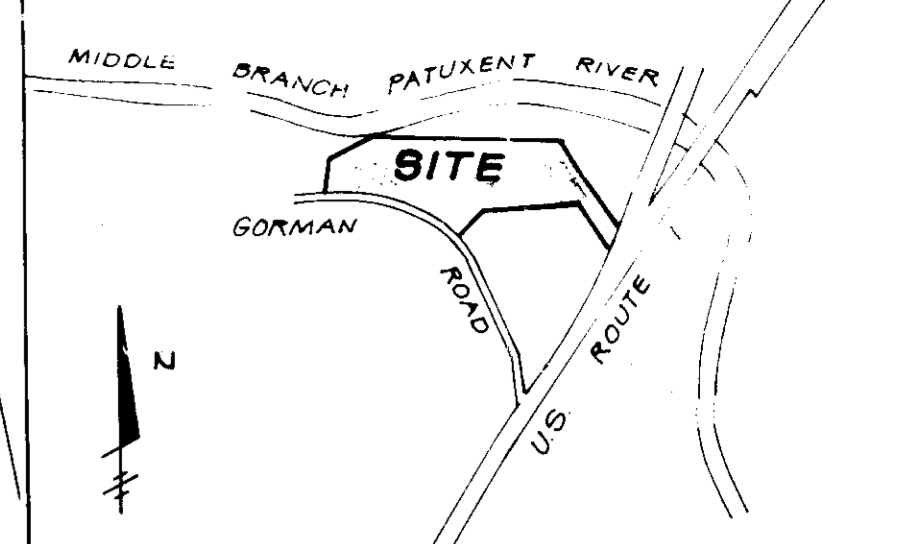


APPROVED
 DIVISION OF PLANNING AND DEVELOPMENT &
 ZONING ADMINISTRATION
 HOWARD COUNTY MARYLAND
 DATE 3-31-87



THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
Stephen F. Shuler 2-17-88
 HOWARD S.C.D. DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS
James M. Helm 2-17-88
 U.S. SOIL CONSERVATION SERVICE DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEM HOWARD COUNTY HEALTH DEPT.
John W. Boyce 3-1-88
 COUNTY HEALTH OFFICER DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING
John A. ... 3.8.88
 DIRECTOR DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William E. Ray 2/24/88
 CHIEF BUREAU OF ENGINEERING DATE

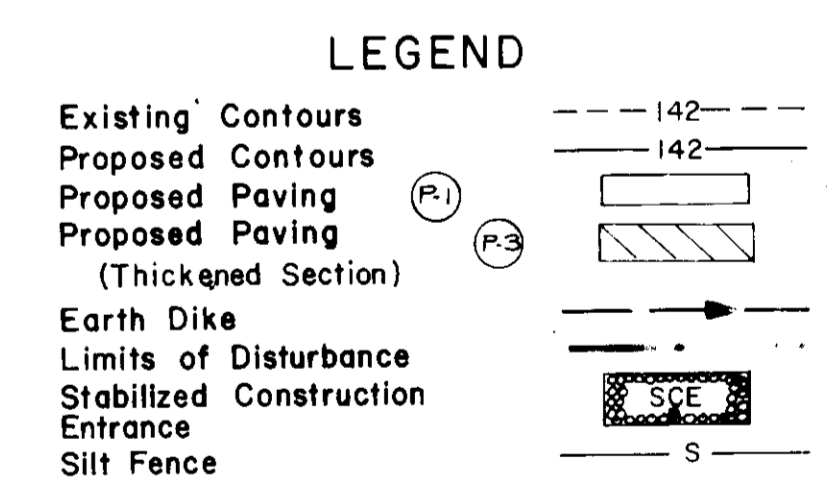
By	Date	REVISIONS

- GENERAL NOTES**
- TOTAL AREA OF PROPERTY: 6.908 ACRES
 - TOTAL AREA TO BE DEVELOPED: 1.60 ACRES
 - EXISTING ZONING: M-1
 - TOPOGRAPHY TAKEN FROM A SURVEY PREPARED BY THE J.E. CLARK CO.
 - BOUNDARY TAKEN FROM A SURVEY PREPARED BY FISHER, COLLINS & CARTER, INC.
 - OPEN SPACE REQUIRED: 1.38 ACRES (20% OF 6.908 ACRES)
 OPEN SPACE PROVIDED: 5.31 ACRES (77% OF 6.908 ACRES)
 - PARKING TABULATION
 WAREHOUSE: 1 SPACE/500 SF x 6,000 SF = 12 SPACES
 SHOWROOM: 1 SPACE/200 SF x 1,500 SF = 7.5 SPACES
 TOTAL PARKING PROVIDED: 20 SPACES
 - THE CONTRACTOR OR DEVELOPER SHALL CONTACT THE CONSTRUCTION INSPECTION/SURVEY DIVISION AT 792-7272, 24 HOURS IN ADVANCE OF THE START OF CONSTRUCTION.
 - ALL CURBS AND GUTTER SHALL BE HOWARD COUNTY STD. R-3.01 (STD. 7" COMBINATION C&G).
 - ALL PAVING, STORM DRAIN, WATER AND SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS STANDARDS AND SPECIFICATIONS.
 - TOTAL FLOOR AREA OF BUILDING = 7,500 SF
 - BUILDING COVERAGE = 2.49% (7,500/300,912)
 - SHOWROOM AREA SHALL BE USED IN ACCORDANCE WITH SECTION 124.B.37 OF THE ZONING REGULATIONS.
 - LANDSCAPE ISLANDS
 TOTAL PROPOSED AREA: 12,000 SF
 AREA OF ISLANDS REQUIRED: 12,160 SF (59% OF 20,760 SF)
 AREA OF ISLANDS PROVIDED: 2,696 SF (12% OF 20,760 SF)
 - THE BUILDING SHALL BE CONSTRUCTED WITH ONLY (1) MAIN ENTRANCE IN CENTER OF BUILDING.
 - REFER TO SHEET 50FS FOR LANDSCAPE AND PAVING DETAILS

Parcel 142
 Freestate Racing Association
 L 1023 F 947
 L 1100 F 676
 M-1 Zone

SWM BASIN No. 1
 See Details, Sheet 2

SEDIMENT TRAP No. 1
 Stone Outlet Sediment Trap ST-V (Mod.)
 Max. D.A. = 1.00 Ac.
 Volume of Storage Req'd: 1,800 cf
 Volume of Storage Prov'd: 9,800 cf
 Bottom Dimensions: See Plan
 Bottom Elevation: 147.3
 Weir Crest: 149.00 Depth of Trap: 1.7 ft
 Weir Length: 12 ft
 Cleanout Elevation: 148.15



ADDRESS CHART

LOT NO.	STREET ADDRESS
Parcel 482	8900 Gorman Road

SUBDIVISION NAME	SECTION	LOT NO.	PARCEL NO.
Sharbaugh Property	N/A	N/A	489
LIBER/POLIC	BLOCK NO.	ZONE	TAX MAP
1216/293	18	M-1	47
WATER CODE		SEWER CODE	
CO 1		505-0000	

BY THE DEVELOPER:
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 THIS PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."
Ray Sharbaugh 3-28-88
 DATE

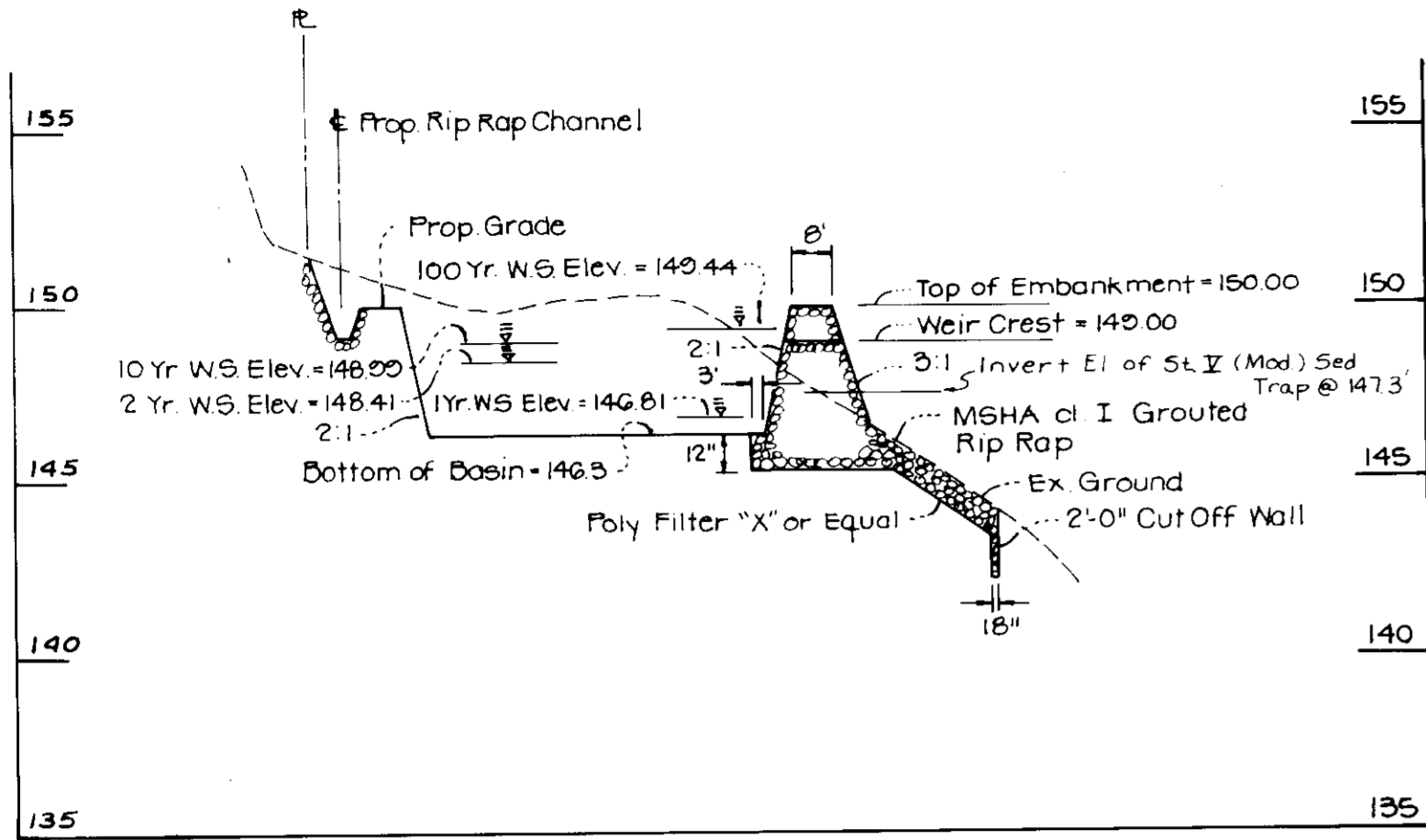
BY THE ENGINEER:
 "I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the Developer that he must provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion."
John E.C. Patmore 2/11/88
 JOHN E.C. PATMORE MD PE #8378 DATE

KIDDE CONSULTANTS, INC.
 ENGINEERS • PLANNERS • SURVEYORS

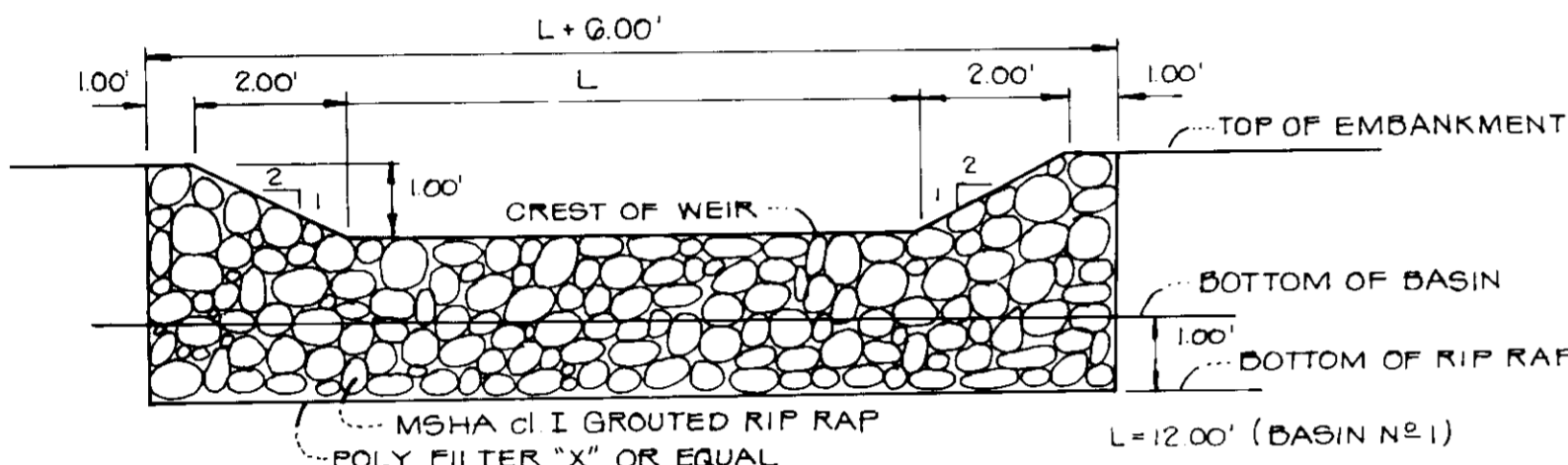
SITE DEVELOPMENT PLAN
SHARBAUGH PROPERTY
 PARCEL 489 TAX MAP NO. 47
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

OWNER: Ray Sharbaugh
 8424 Oak Stream Drive
 Laurel, Md. 20811
 (301) 654-2022

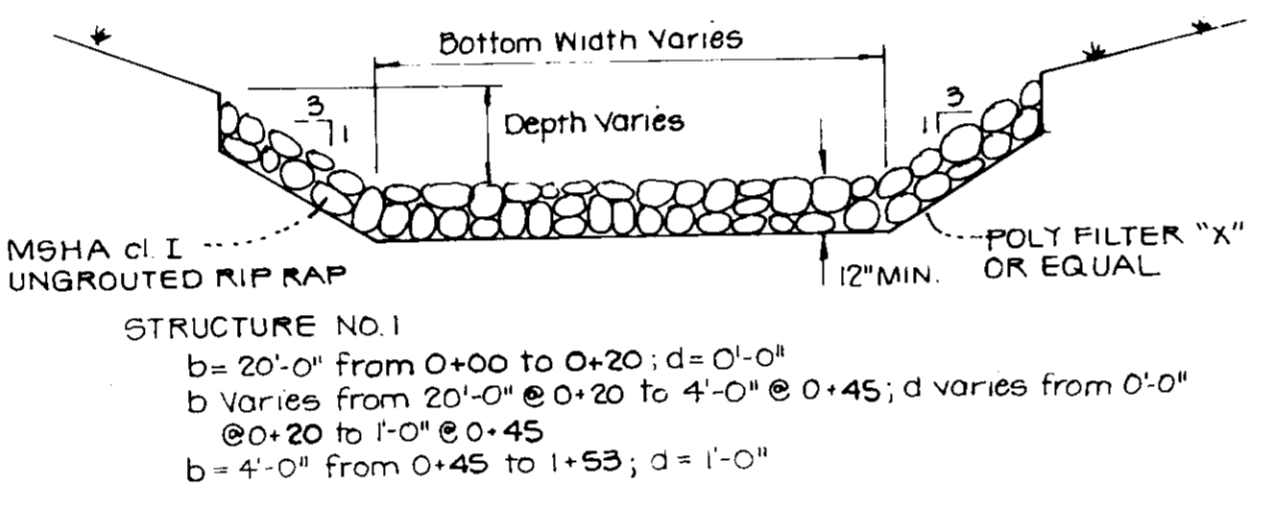
Design: bm Sheet 1 of 5
 Draft: M.W.G. Date: 4/85 Job: 1686133
 Appr. D.C.W. Scale: 1"=30' File: SDP 85-209
SDP-85-209



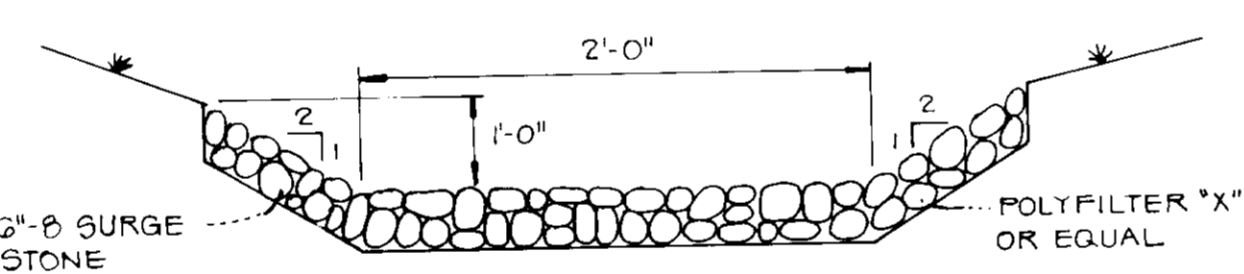
**PROFILE
STORMWATER MANAGEMENT BASIN**
Scale: 1" = 30' Horiz.
1" = 5' Vert.



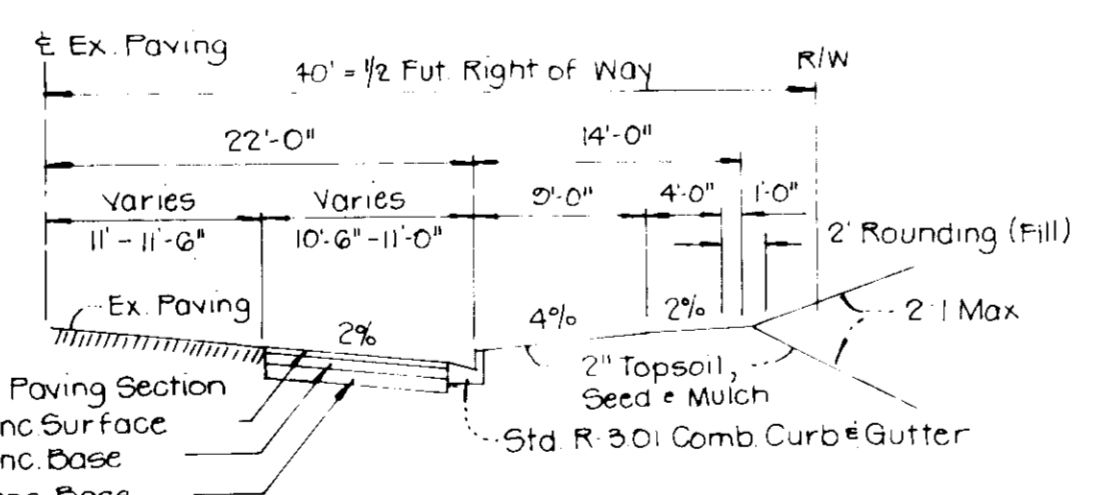
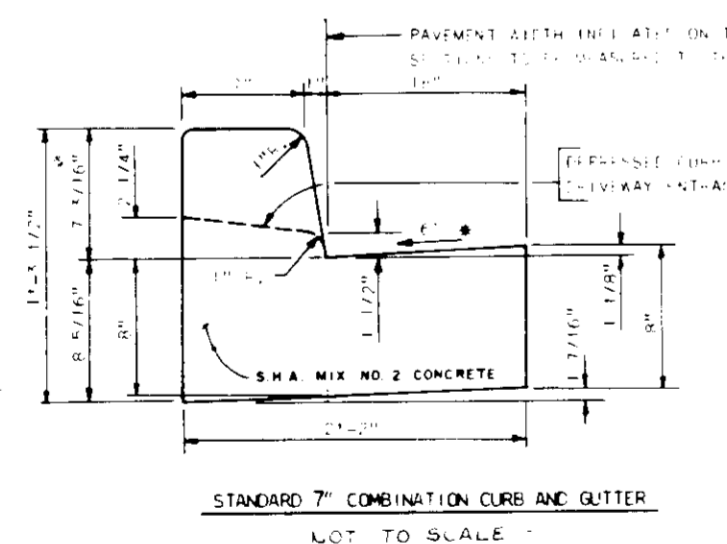
**SECTION B-B
TYPICAL SECTION
RIP RAP WEIR**
No Scale



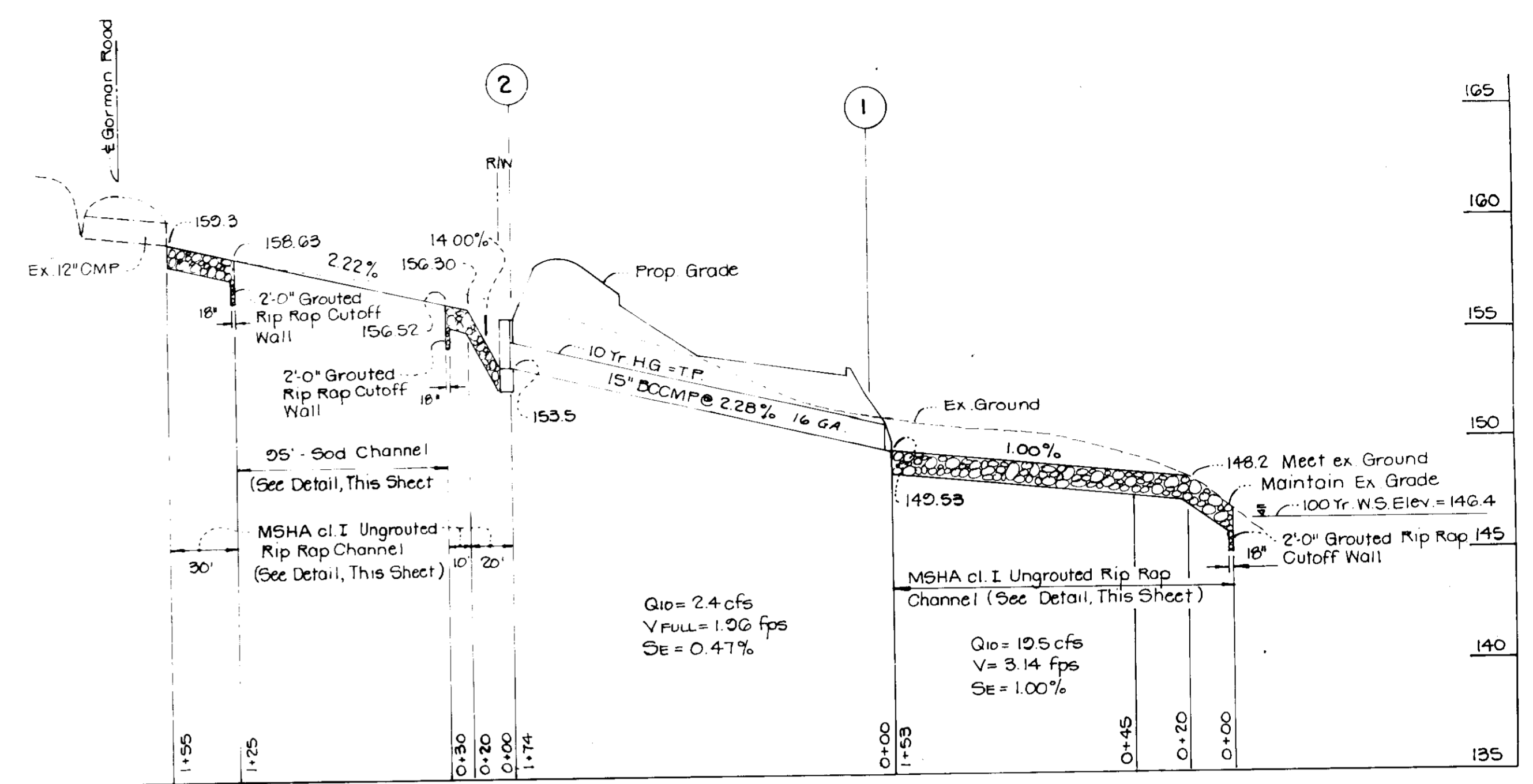
**DETAIL
RIP RAP CHANNEL**
No Scale



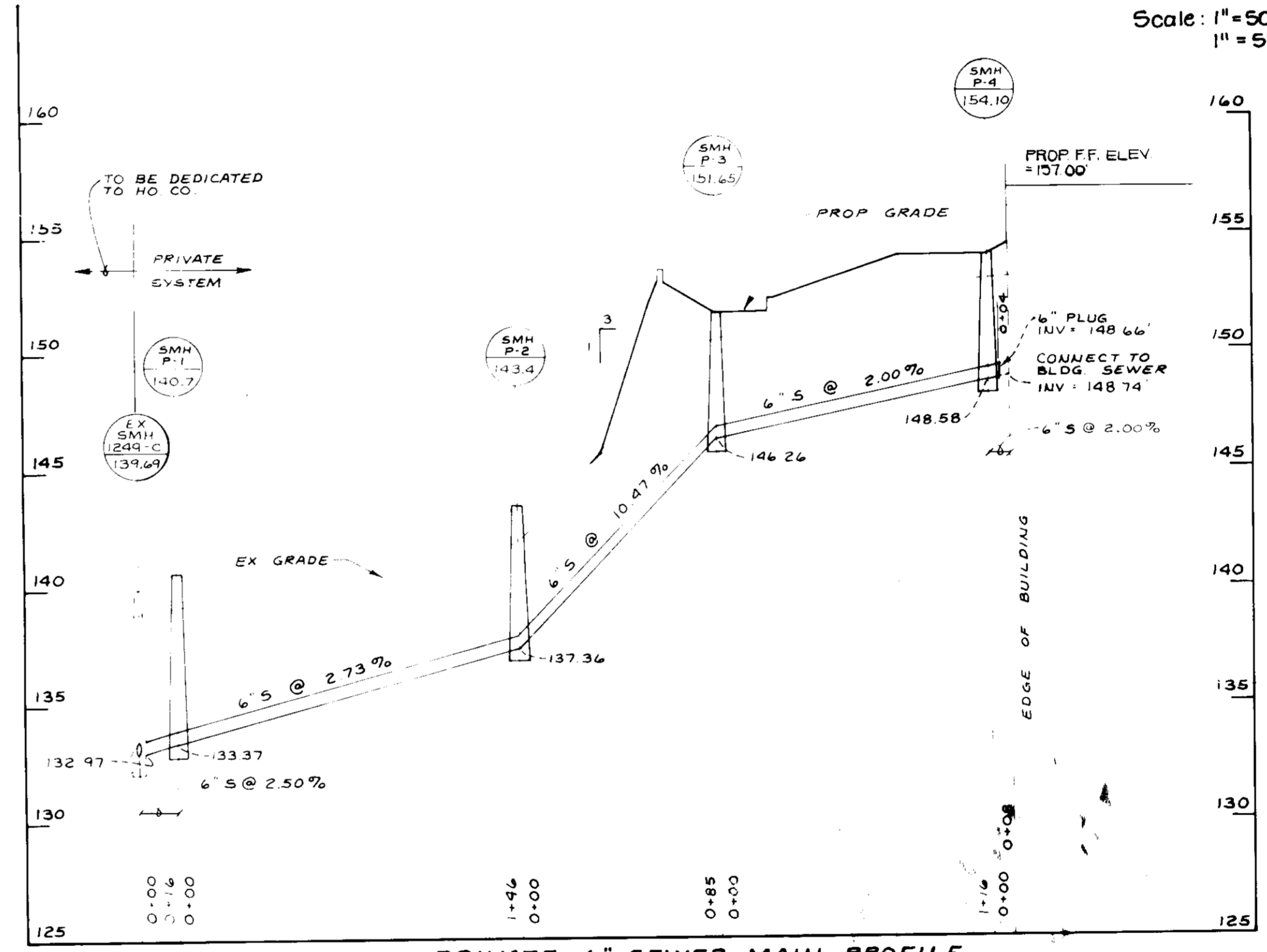
**DETAIL
SURGE STONE SLOPE PROTECTION**
No Scale



**TYPICAL SECTION
(ROAD WIDENING)
GORMAN ROAD**
No Scale



STORM DRAIN PROFILE
Scale: 1" = 50' Horiz.
1" = 5' Vert.



PRIVATE 6" SEWER MAIN PROFILE
Scale: 1" = 50' Horiz.
1" = 5' Vert.

STORM DRAIN STRUCTURE SCHEDULE			
NO.	TYPE	TOP ELEVATION	REMARKS
1	METAL END SECTION	HO CO STD S.D. S.31 D=15"	
2	"E" HEADWALL	HO CO STD S.D. S.31 D=15"	

STORM DRAIN PIPE SCHEDULE		
SIZE	TYPE	LENGTH
15"	CCMP 16GG	174'

SEWER STRUCTURE SCHEDULE			
NO.	TYPE	TOP ELEVATION	REMARKS
P-1	TYPE "B" DROP MANHOLE	EX GROUND + 18"	HO CO STD S 132 48" DIA
P-2	PRECAST MANHOLE	HO CO STD G S 12	" " " " " "
P-3	" " "	151.65	" " " " " "
P-4	" " "	154.10	" " " " " "

SAN SEWER PIPE SCHEDULE		
SIZE	TYPE	LENGTH
6"	PVC	371'

Slope varies per plan
1 1/2" Bit Conc Surface
5" Bit Conc Base
Compacted Subgrade

REGULAR SECTION
(SECTION NO. P.2)

Slope varies per plan
1 1/2" Bit Conc Surface
5" Bit Conc Base
Compacted Surface

THICKENED SECTION
(SECTION NO. P.5)

TYPICAL PAVEMENT SECTIONS
No Scale

NOTE:
Granular Base Alternates May be Substituted

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
Stephen J. Shuman 2/17/88
HOWARD S.C.D. DATE

REVIEWED FOR HOWARD S.C.D AND MEETS TECHNICAL REQUIREMENTS
James W. Helms 2-17-88
U.S. SOIL CONSERVATION SERVICE DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
Walter J. Zedler 2-1-88
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Walter J. Zedler 3-8-88
DIRECTOR DATE

James E. Smith 2/4/88
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 E. Smith 2/4/88
DIRECTOR DATE

William E. R. O'Neil 2-24-88
CHIEF BUREAU OF ENGINEERING DATE

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 3-31-87

By	Date	REVISIONS

BY THE DEVELOPER:
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 THIS PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."
Ray Shambaugh 2-2-88
RAY SHAMBAUGH DATE

BY THE ENGINEER
"I certify that this plan for pond construction, erosion and sediment control represents a practical 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 that he must provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion."
John E.C. Patmore 2/11/88
JOHN E.C. PATMORE MD PE #8376 DATE

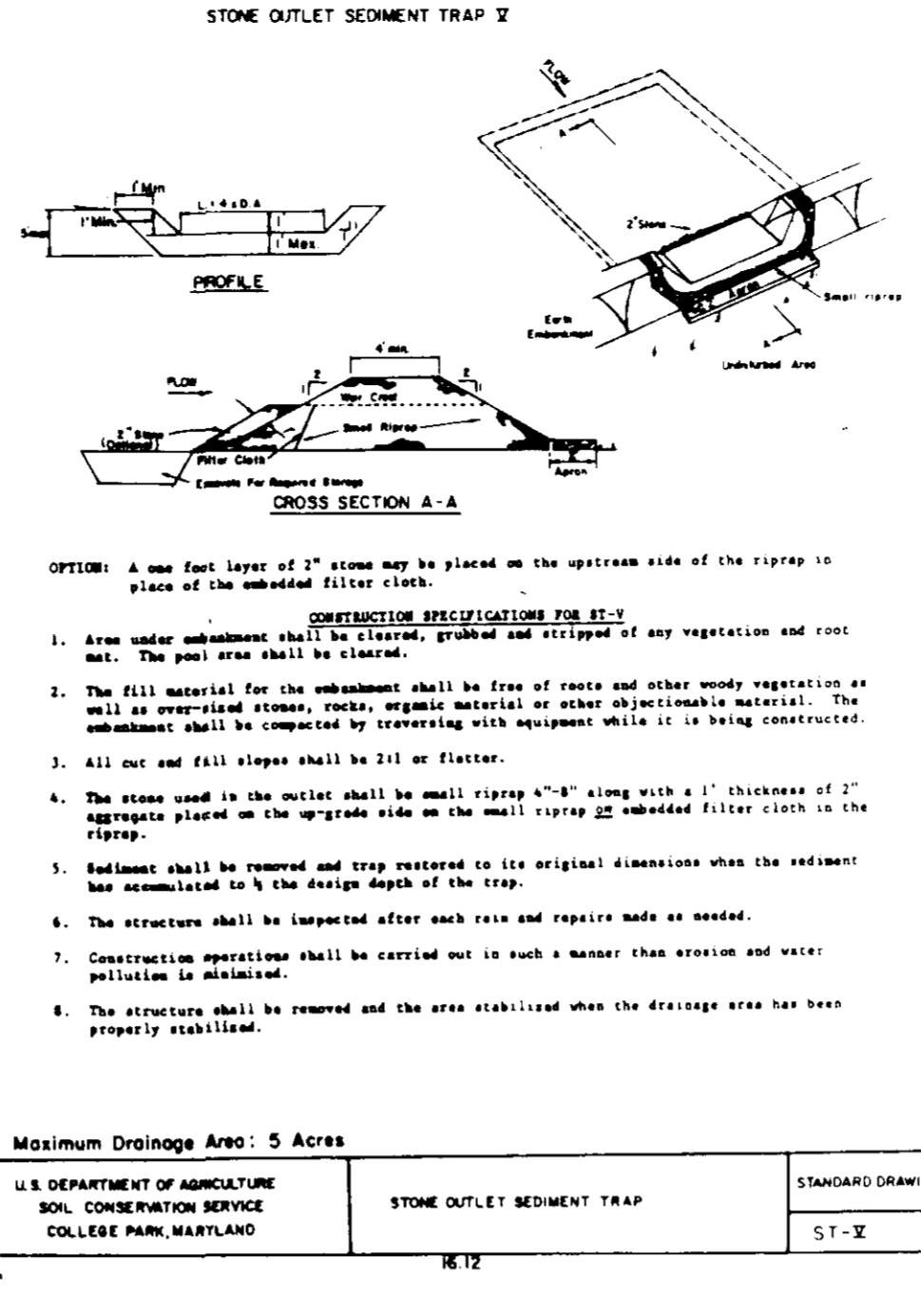
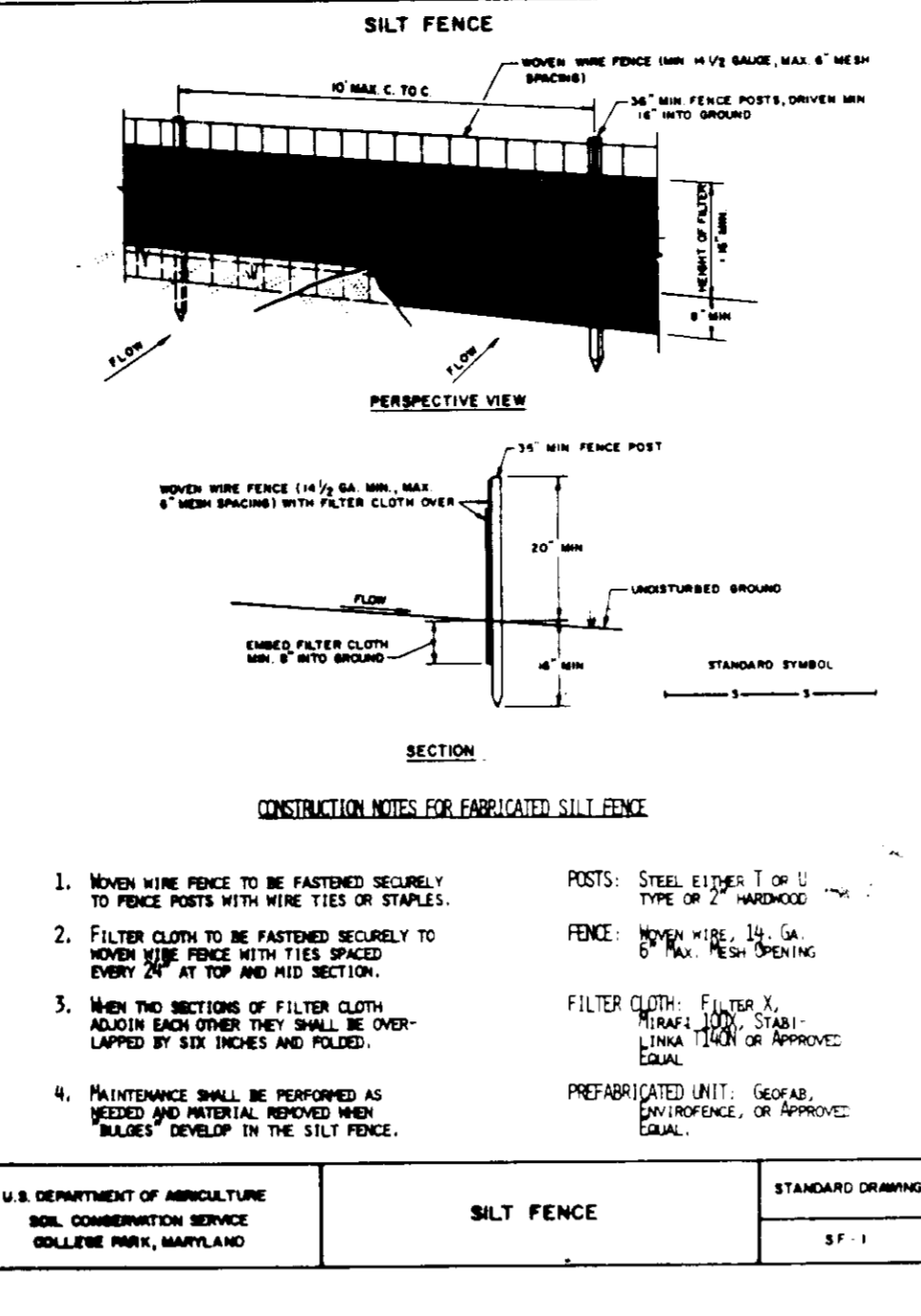
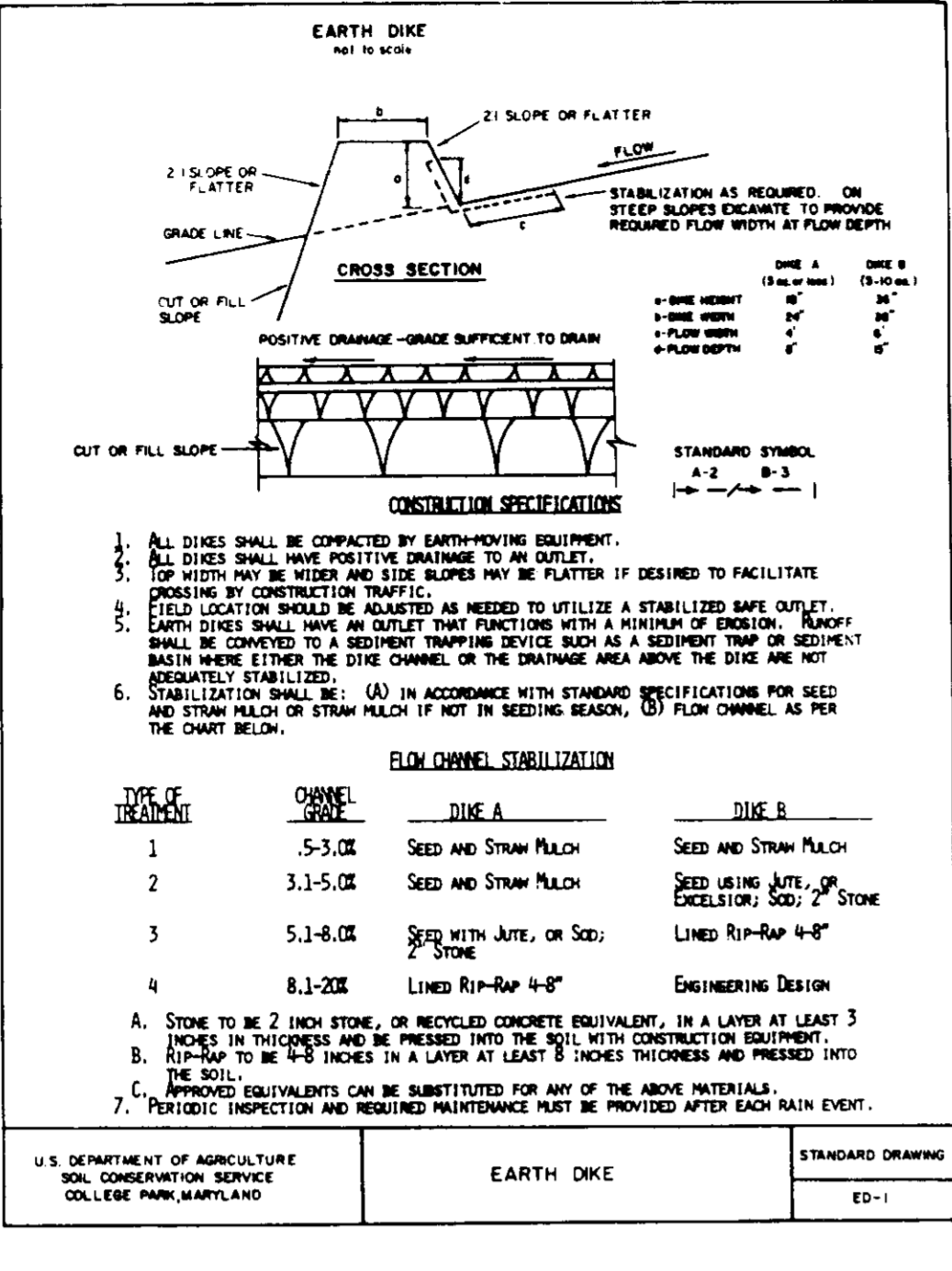
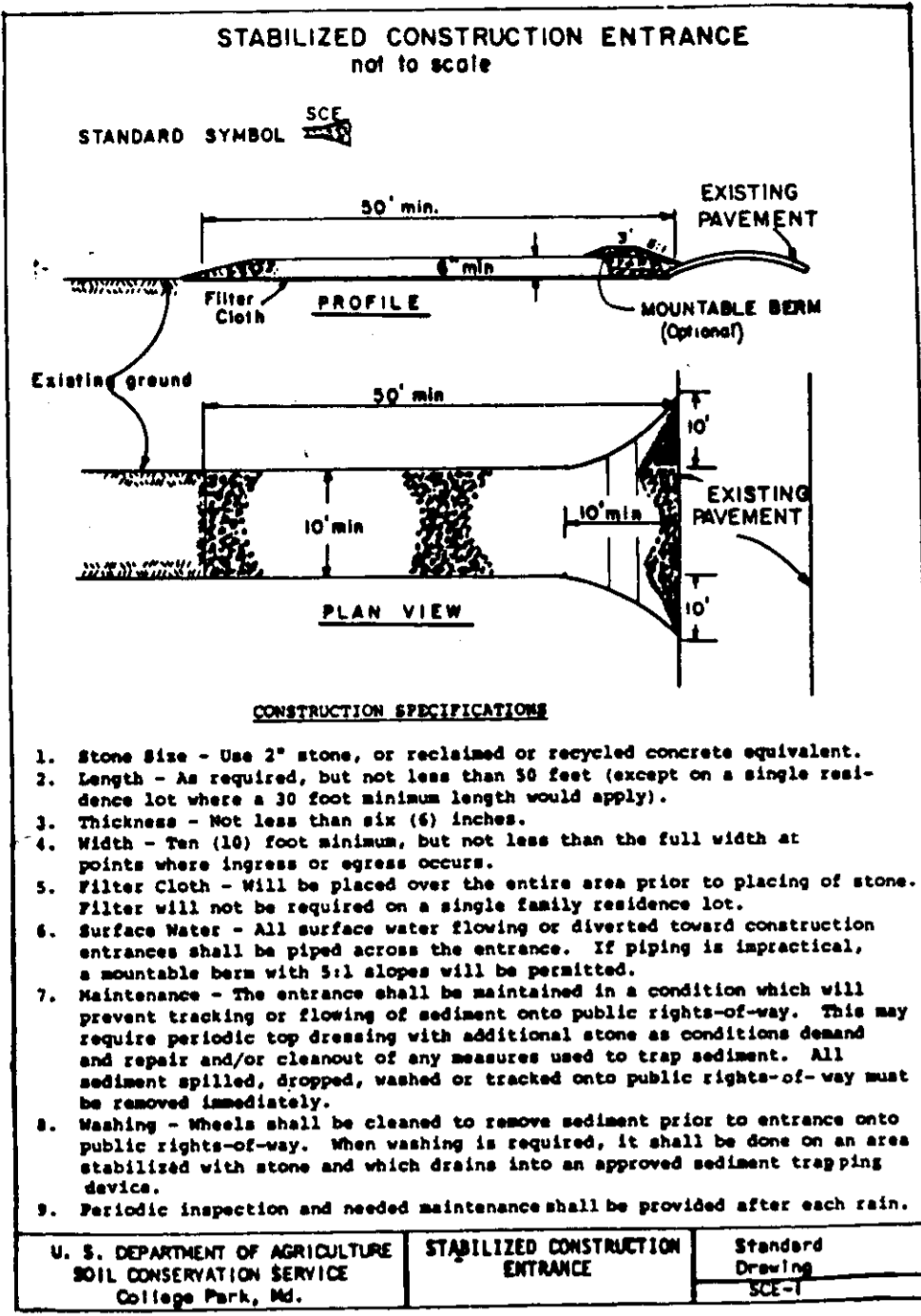
KIDDE CONSULTANTS, INC.
ENGINEERS • PLANNERS • SURVEYORS
1100 WEST STREET / SUITE 100 / LAUREL, MD 20707
(Wash.) (301) 953-1821 / 792-8086 (Balt.)

**SITE DEVELOPMENT PLAN
CONSTRUCTION DETAILS AND PROFILE
SHARBAUGH PROPERTY**
PARCEL 489 TAX MAP NO. 47
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

OWNER: Ray Shambaugh
8424 Oak Stream Drive
Laurel, Md. 20811
(301) 654-2022

Design: bm Sheet 2 of 5
Draft: M.W.G. Date: 4-1-87 Jot: J.P.C. 87
Appr: D.C.W. Scale: 1" = 5' File: 87-202

SDP-85-209



CONSTRUCTION SPECIFICATIONS

- Stone Base - Use 2" stone, or recycled or recycled concrete equivalent.
- Length - As required, but not less than 10 feet (except on a single residential lot where a 20 foot minimum length would apply).
- Thickness - Not less than six (6) inches.
- Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
- Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a simple family residence lot.
- Surface Water - All surface water flowing or diverted toward construction entrance shall be piped across the entrance. If piping is impractical, a mounded berm with 3:1 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 as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment applied, dropped, washed or tracked onto public rights-of-way must be removed immediately.
- Sealing - Seals 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.

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL SIZE	DIKE A	DIKE B
1	5-3.00	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.00	SEED AND STRAW MULCH	SEED USING LIME OR EXCELUTION; SOG; 2" STONE
3	5.1-8.00	SEED WITH LIME OR SOG; 2" STONE	LINED RIP-RAP 4-8"
4	8.1-200		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 3/4 INCHES IN A LAYER AT LEAST 3 INCHES 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.

CONSTRUCTION NOTES FOR PREPARED SILTY FENCE

- When wire fence is to be fastened securely to fence posts with wire ties or staples.
- Filter cloth to be fastened securely to wire fence with ties spaced every 20' at top and mid section.
- Mesh top sections of filter cloth shall be overlapped by 6 inches and secured with ties.
- Maintenance shall be performed as needed and material removed when 'bales' develop in the silty fence.

CONSTRUCTION SPECIFICATIONS FOR ST-2

- Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The post area shall be cleared.
- The fill material for the embankment shall be free of roots and other woody vegetation as well as oversized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by conventional means while it is being constructed.
- All out and fall slopes shall be 2:1 or flatter.
- The stone used in the outlet shall be well riprap 4-8" along with a 1" thickness of 2" aggregate placed on the up-grade side on the small trap at embedded filter cloth in the filter.
- Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap.
- 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.

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

Stephen R. Anderson 2/17/88 DATE
HOWARD SCD

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

James M. Helms 2/17/88 DATE
U.S. SOIL CONSERVATION SERVICE

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

John S. Sauer 1-88 DATE
COUNTY HEALTH OFFICER

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

W. B. Am... 3. 8. 88 DATE
DIRECTOR

James S. Smith 2/14/88 DATE
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

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

James S. Smith 2/24/88 DATE
DIRECTOR

William E. Quinn 2-24-88 DATE
CHIEF BUREAU OF ENGINEERING

APPROVED DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION

HOWARD COUNTY, MARYLAND

DATE 3-31-87

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 SQUARE FT.).

SEEDING: FOR PERIODS MARCH 1 THROUGH APRIL 30, AND FROM AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 2 1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQUARE FT.). FOR THE PERIOD MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQUARE FT.). FOR THE PERIOD NOVEMBER 16 THROUGH 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 SOG.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQUARE 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 SQUARE 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.

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS 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 SCHEDULES:

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

SEEDING: FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.4 LBS/1000 SQUARE FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (.05 LBS/1000 SQUARE FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH 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 SOG. OPTION (3) SEED WITH 60 LBS PER ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE WELL ANCHORED STRAW.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQUARE 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 SQUARE FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQUARE FT.) FOR ANCHORING.

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

CONSTRUCTION SPECIFICATIONS FOR STORMWATER MANAGEMENT BASINS

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 basin shall be cleared of all trees, brush, logs, fences, 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. A sufficient quantity of topsoil shall be stockpiled in a suitable location for use on the embankment and basin floor.

II. EARTH FILL

The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, oversized stones, frozen or other objectionable material. 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.

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 porous borrow material shall be placed in the downstream portions of the embankment.

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 sheepfoot, 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.

III. 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 shown on the plan. After removal of all accumulated sediment, the basin floor shall be brought to final grade. After final grading is completed, the basin floor shall be deeply tilled by means of rotary tillers or disc harrows to provide a well-aerated, highly porous surface texture. The floor shall then be seeded with K-31 tall fescue in accordance with the Permanent Seeding Notes, this sheet.

IV. EROSION AND SEDIMENT CONTROL

Construction operations will be carried out in such a manner that erosion 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.

SEDIMENT CONTROL NOTES

- 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)
- 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.
- 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.
- 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.
- 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), SOG (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- 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.
- SITE ANALYSIS:
 TOTAL AREA OF SITE 6,908 ACRES
 AREA DISTURBED 1.66 ACRES
 AREA TO BE ROOFED OR PAVED 0.77 ACRES
 AREA TO BE VEGETATIVELY STABILIZED 0.89 ACRES
 TOTAL CUT 534.33 CU. YDS
 TOTAL FILL 2804.47 CU. YDS
 OFFSITE WASTE/BORROW AREA LOCATION * TO BE DETERMINED BY OWNER
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.

SEQUENCE OF CONSTRUCTION

1. OBTAIN WRA PERMIT AND GRADING PERMIT	3 MONTHS
2. CLEAR AND GRUB FOR AND INSTALL EARTH DIKE STABILIZED CONSTRUCTION ENTRANCE, AND MOD. SEDIMENT TRAP	1 WEEK
3. CLEAR AND GRUB REMAINDER OF DISTURBED AREA	1 WEEK
4. ROUGH GRADE SITE. INSTALL EARTH DIKE AT TOP OF FILL (FINAL LOCATION)	4 WEEKS
5. INSTALL WATER, SEWER AND STORM DRAIN	4 WEEKS
6. CONSTRUCT BUILDING	2 MONTHS
7. FINE GRADE AND CONSTRUCT PARKING LOT	2 WEEKS
8. FINE GRADE AND STABILIZE REMAINING DISTURBED AREAS	1 WEEK
9. REMOVE ACCUMULATED SEDIMENT FROM SWM BASIN. BRING BOTTOM OF BASIN TO FINAL GRADE ONLY AFTER ALL CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED. SEED BOTTOM AND SIDES OF BASIN IN ACCORDANCE WITH THE STABILIZATION NOTES AND STORMWATER MANAGEMENT BASIN CONSTRUCTION SPECIFICATIONS	1 WEEK
10. MAINTENANCE	CONTINUAL

BY THE DEVELOPER:

*I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 THIS PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Ray Sharbaugh 2-23-88 DATE
RAY SHARBAUGH

ENGINEERS CERTIFICATION

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

John E. Patmore 2/11/88 DATE
JOHN E. PATMORE MD PE #8578

KIDDE CONSULTANTS, INC.

ENGINEERS • PLANNERS • SURVEYORS

1100 WEST STREET / SUITE 100 / LAUREL, MD 20707
(Wash.) (301) 953-1821 / 792-9086 (B&H)

SITE DEVELOPMENT PLAN

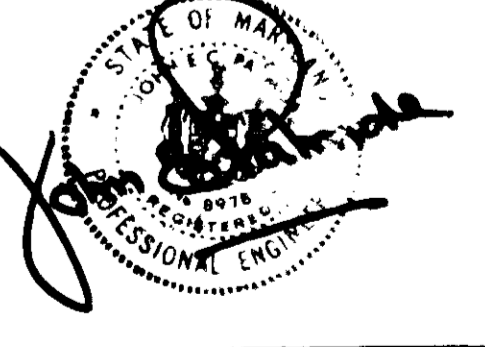
SEDIMENT CONTROL DETAIL SHEET

SHARBAUGH PROPERTY

PARCEL 489 TAX MAP NO. 47
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

OWNER: Ray Sharbaugh
8424 Oak Stream Drive
Laurel, Md. 20811
(301) 654-2022

Design: bm Sheet 3 of 5
Draft: M.W.G. Date: 4/88 Job: 168012
Appr: D.C.W. Scale: --- File: SDP-85-209



NOTE: IF NOT ALREADY DONE, DO BY THE NURSEYMAN OR SUPPLIER THE TREE TO THE NATURAL GROWTH HABIT.

NOTE: TREE SHALL BEAR SAME RELATIONSHIP TO FINISHED GRADE AS IT BORE TO PREVIOUS GRADE.

NOTE: IF TREE IS IN LEAF SPRAY WITH PREVENTION CHEMICALS ON PACKAGE.

NOTE: PRUNE AND SETTLE TRUNK AND BRANCHES WITH STAKES AND ROPES WITH STAKES PRIOR TO BACKFILLING.

3 #12 WIRES, SEE DETAIL P-1 FOR SPACING.

3 #2 1/2 HARDWOOD STAKES, LEAVE IN PER AT LEAST ONE GROWING SEASON.

3" SHROUDED HARDWOOD DARK CHIP MULCH.

3" SAUCER

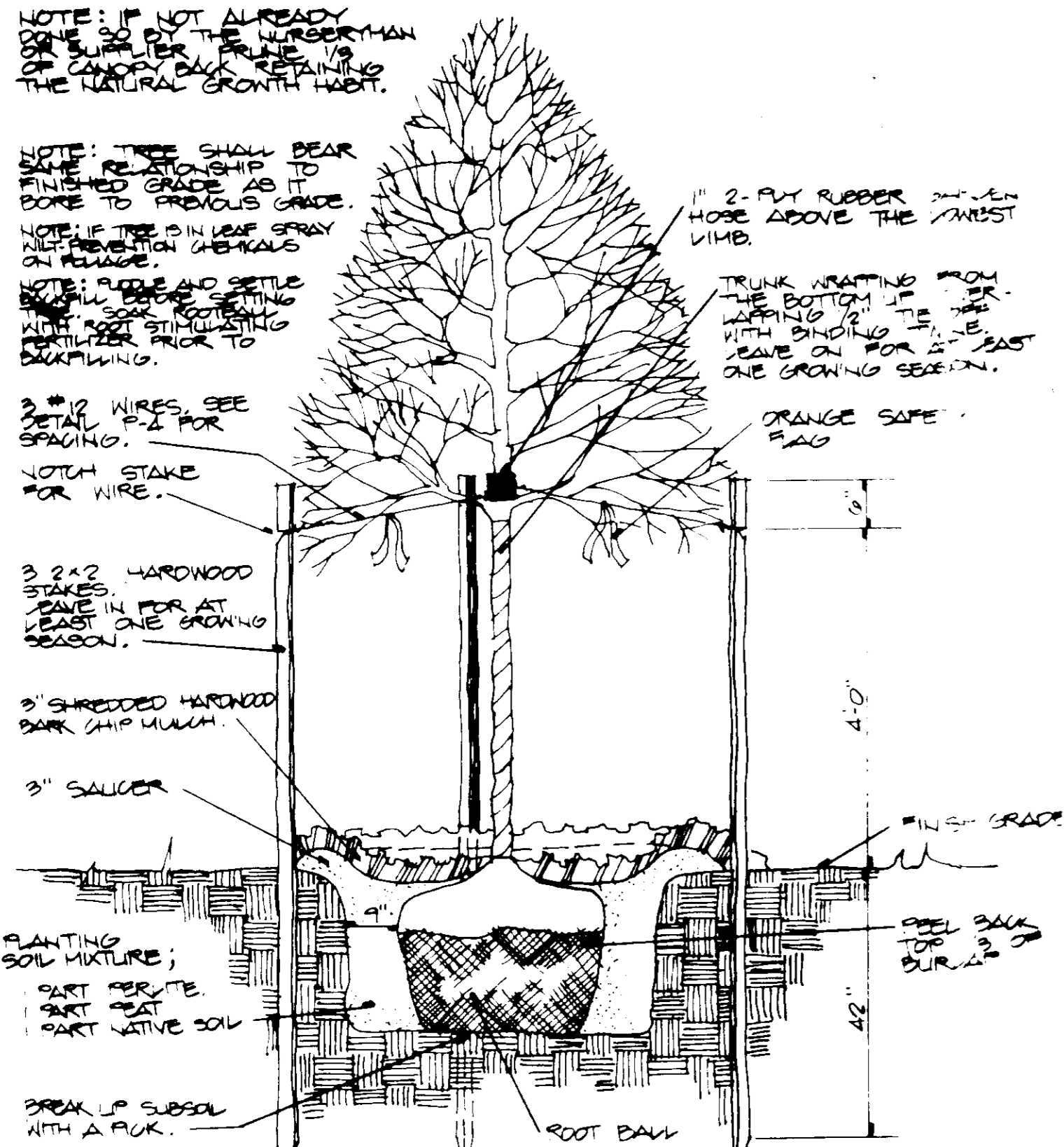
PAINTING SOIL MIXTURE; PART PERITE PART NATIVE SOIL

BREAK UP SUBSOIL WITH A PICK.

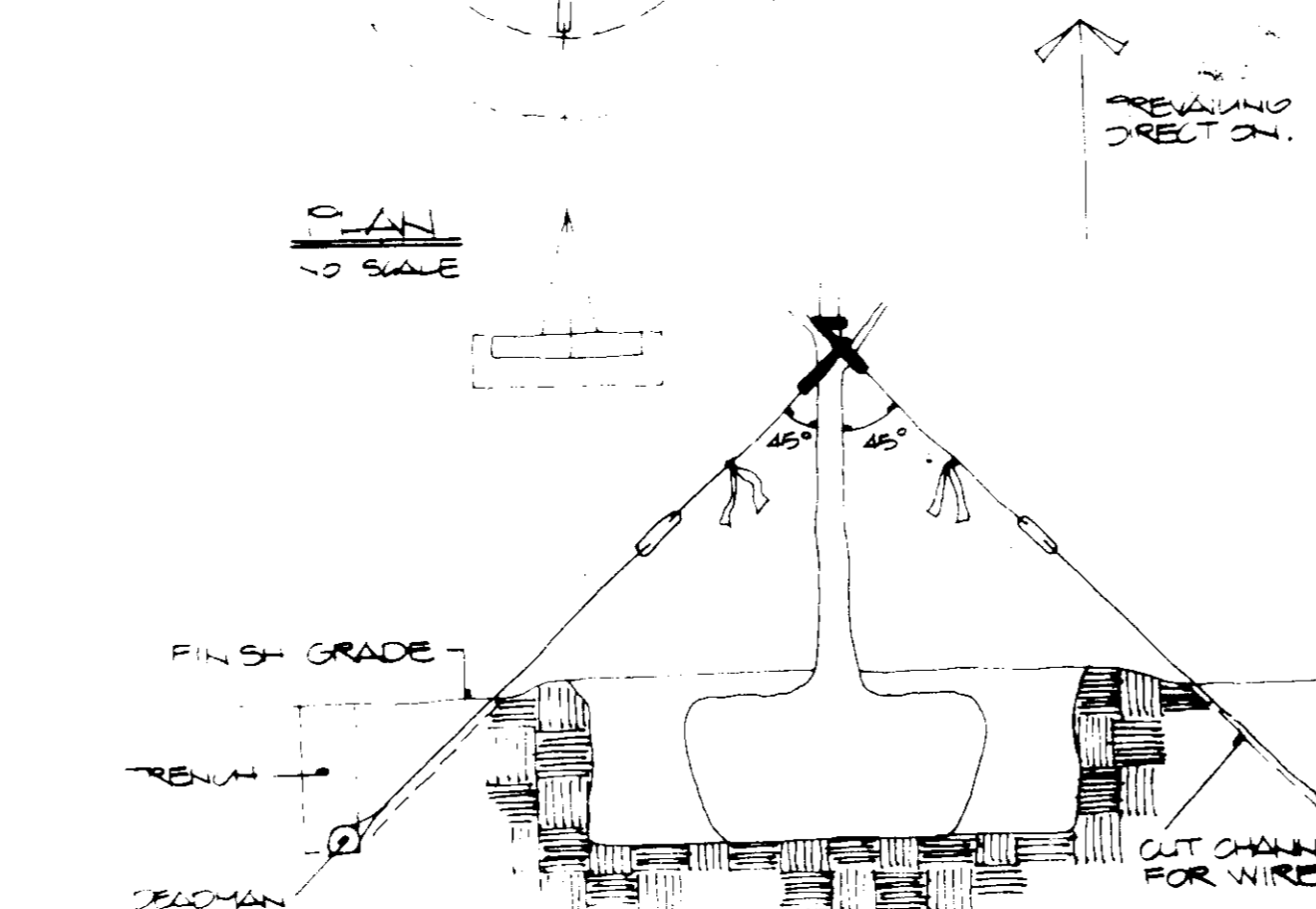
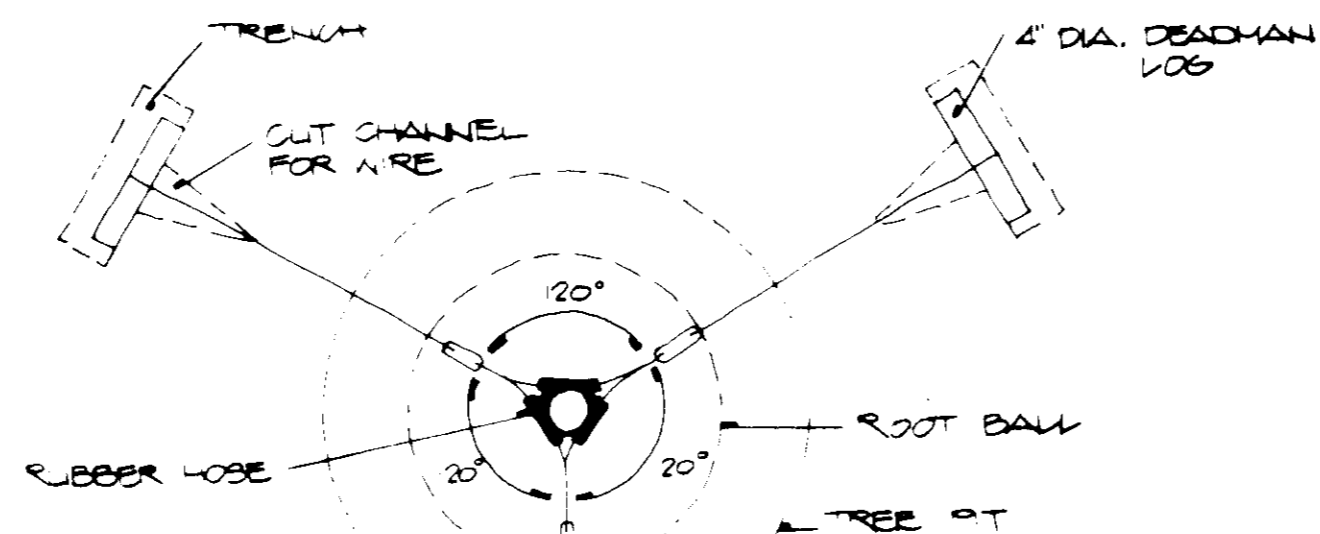
2" 2-PLY RUBBER HOSE ABOVE THE TRUNK VIBE.

TRUNK WRAPPING FROM THE BOTTOM OF THE TRUNK WITH SHROUDED MULCH. LEAVE ON FOR AT LEAST ONE GROWING SEASON.

ORANGE SAFETY FLAG



P 3 TYP. PLANTING - DEC. TREE 2'-6" CAL. B & B
NO SCALE



P 2 DETAIL - DEADMAN ANCHOR
NO SCALE

NOTE: IF NOT ALREADY DONE BY THE NURSEYMAN OR SUPPLIER THE TREE TO THE NATURAL GROWTH HABIT.

NOTE: TREE SHALL BEAR SAME RELATIONSHIP TO FINISHED GRADE AS IT BORE TO PREVIOUS GRADE.

NOTE: IF TREE IS IN LEAF SPRAY WITH PREVENTION CHEMICALS ON PACKAGE.

NOTE: PRUNE AND SETTLE TRUNK AND BRANCHES WITH STAKES AND ROPES WITH STAKES PRIOR TO BACKFILLING.

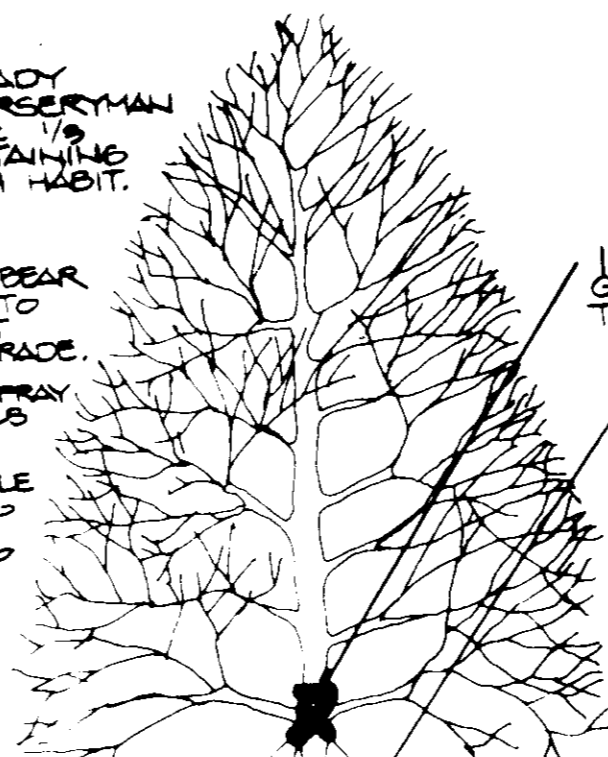
PEEL BACK TOP 1/3 OF BURLAP

3" SAUCER

FINISH GRADE

PLANTING SOIL MIXTURE; PART PERITE PART NATIVE SOIL

BREAK UP SUBSOIL WITH A PICK.



1" 2-PLY RUBBER GARDEN HOSE ABOVE THE LOWEST LIMB.

TRUNK WRAPPING FROM THE BOTTOM OF THE TRUNK WITH SHROUDED MULCH. LEAVE ON FOR AT LEAST ONE GROWING SEASON. TIE OFF WITH BINDING TWINE.

ORANGE SAFETY FLAG

4" GALVANIZED TURNBUCKLE

3 #10 DOUBLE STRENGTH GALVANIZED WIRES SPACED EVENLY AT 120° REFER TO DETAIL P-2

4" DEADMAN ANCHOR REFER TO DETAIL P-2

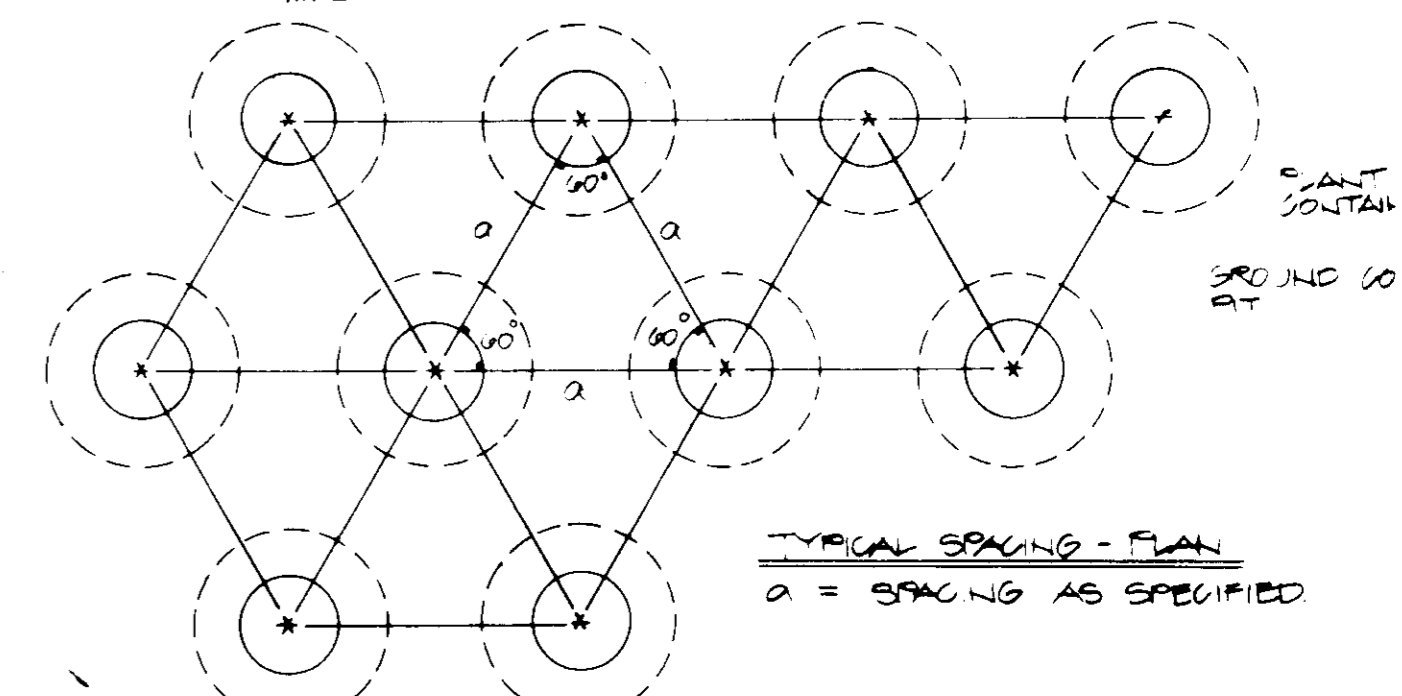
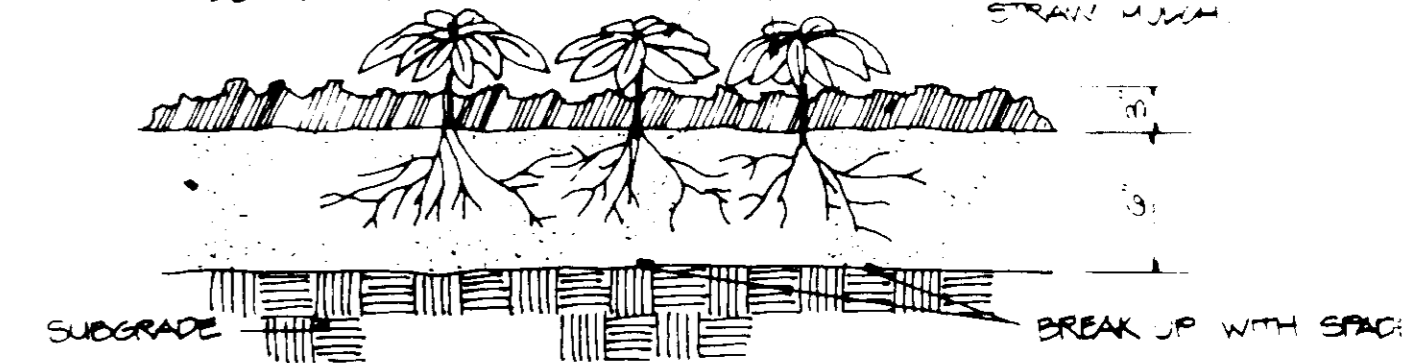
4" PVC DRAIN TILE IN 1/4" WAY SOIL ONLY.

P 1 TYPICAL PLANTING FOR DECIDUOUS TREES OVER 6" CALIFER B & B
1/10 SCALE

NOTE: REMOVE CONTAINER REFER TO DETAIL P-1

NOTE: SHRUBS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS IT BORE TO PREVIOUS CONTAINER GRADE.

SOIL MIXTURE SEE DETAIL P-1



P 7 GROUNDCOVER PLANTING
NO SCALE

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

Stephen L. Zander 2/17/88
HOWARD S.C.D. DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

James M. Hession 2-17-88
U.S. SOIL CONSERVATION SERVICE DATE

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

Robert Zide
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

John P. Anni 3.8.88
DIRECTOR DATE

James R. Burt 3/4/88
SHEAF, 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 P. Kelly 2/24/88
DIRECTOR DATE

William B. Kelly 2-24-88
CHIEF BUREAU OF ENGINEERING DATE

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 3-31-87

By	Date	REVISIONS

BY THE DEVELOPER:

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 THIS PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

Ray Sharbaugh 2-28-88
RAY SHARBAUGH DATE

ENGINEERS CERTIFICATION

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

John E.C. Patmore 2/11/88
JOHN E.C. PATMORE MD PE #8976 DATE

KIDDE CONSULTANTS, INC.
ENGINEERS • PLANNERS • SURVEYORS
1100 WEST STREET / SUITE 100 / LAUREL, MD 20707
(Wk H) (301) 963-1821 / 792-8086 (Eaft)

SITE DEVELOPMENT PLAN
LANDSCAPING
SHARBAUGH PROPERTY
PARCEL 489 TAX MAP NO 47
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

OWNER Ray Sharbaugh
8424 Oak Stream Drive
Laurel, Md. 20811
(301) 654-2022

Design: b.m. Sheet 5 of 5
Draft: M.W.G. Date: 4/85 Job: 1686133
Appr: D.C.W. Scale: --- File: 85-209

PLANT LIST

KEY	COMMON NAME	SCIENTIFIC NAME	SIZE	QUANTITY	REMARKS
HO	BURFORD HOLLY	ILEX CORNUTA "BURFORD"	18"-24"	24	2'-3' O.C.
WO	WILLOW OAK	QUERCUS PHELLOS	10'	2	
RM	BOWHALL RED MAPLE	ACER RUBRUM "BOWHALL"	10'	6	

- LANDSCAPE NOTES
1. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION OF ALL UTILITIES PRIOR TO PLANTING.
 2. ALL PLANT MATERIAL SHALL MEET THE MOST RECENT STANDARDS ESTABLISHED BY THE AMERICAN ASSOCIATION OF NURSEYMEN.
 3. ALL PLANTS, GROUND COVERS AND VINES EXCLUDED, SHALL BE MARKED WITH IDENTIFYING LABELS LISTING GENUS, SPECIES, AND VARIETY, IF APPLICABLE. THESE LABELS ARE NOT TO BE REMOVED UNTIL AFTER THE USE AND OCCUPANCY PERMIT IS CLOSED OUT.
 4. TREES AND SHRUBS SHALL BE SOUND, HEALTHY AND FREE FROM PLANT DISEASES AND INSECTS. ALL PLANTS SHALL HAVE HEALTHY ROOT SYSTEMS.
 5. ARTIFICIAL NON-LIVING FACSIMILES OF PLANT MATERIAL WILL NOT BE ACCEPTABLE.
 6. FOR PLANTING DETAILS, SEE SHEET 5 OF 5.

