

SUBDIVISION NAME: DORSEY INDUSTRIES		SECTION: 112	PARCEL #:
PROPERTY BLOCK #:		ZONE: M-1	PERMIT #:
LOT #:		SEWER CODE:	231000
STREET ADDRESS:		DATE:	
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS:		DATE:	
APPROVED FOR HOWARD COUNTY OFFICE OF PLANNING & ZONING:		DATE:	
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS:		DATE:	

SITE DATA

- Interior Landscape Required: 5% of 16,158 (parking S.F.) = 808 S.F.
- Provided: 936 S.F. = 5.8%
- S.F. of Parking Provided: 16,158 S.F.
- Number of Industrial Employees on major shift: 30, ±
- Industrial Space: 16,925 S.F.
- Number of Office Employees on major shift: 20 ±
- Office Space: 7,385 S.F.
- Area of Submittal: 14.3 Ac. ±
- Area Acquired for right-of-way: 1.24 Ac. ±
- Disturbed Area: 6.8 Ac. ±
- Vegetated Area: 12.05 Ac. ±
- Total Floor Area: 24,010 S.F.
- Floor area to site ratio: 3.85%
- Percentage of building coverage: 3.10%
- Percentage of Open Space: 89.86%
- Existing Land Use: Vacant.
- Zoning: M-1
- Parking Required: 1 space per 500 S.F. floor area = 24,010 / 500 = 49 spaces
- Parking Provided: 49 spaces (3 Handicapped spaces included)
- 3" db Plus Streetlights @ 20' O.C. = Total 8 trees
- 3" db Quercus Palustris @ 40' O.C. = Total 18 trees
- Fire Flow Data: Fire Hydrant - 6000 block of Dorsey Road, 100 p.s.i. static; 75 p.s.i. residual; 2 1/2" nozzle p.tometer reading 1300 G.P.M.; 10/17/85; Nick Artin.
- Survey coordinates referenced from Howard County Monument 2445002.
- The Warehouse is only for storage of food goods and does not include food.
- All pipe elevations shown are invert elevations.

GENERAL NOTES

- Maximum building height = 50 feet.
- All areas not being paved or receiving building coverage shall be stabilized in accordance with the plans approved by the Howard County Conservation District.
- Any damage to public rights-of-way and/or adjacent properties shall be repaired immediately at the contractor's expense.
- The contractor shall maintain at least a 2 foot level bench behind all curb and gutter in fill areas.
- The contractor shall verify all existing utilities to his own satisfaction before starting construction.
- All slope shall be 2% or flatter.
- All work shall be done in accordance with Howard County Standards and Specifications and details of Construction, or as shown on these plans.
- For details of ramps and signs for the handicapped see the Maryland Building Code for the Handicapped and Aged as shown herein.
- The contractor shall maintain a minimum of 3.5' cover over all proposed water lines.
- All rip-rap shall be placed on filter cloth.
- The contractor shall remove all existing paving, curb and gutter, etc. that may interfere with the proposed construction.
- All utilities installed shall receive full trench compaction.
- All water main tees, bends, caps, etc. shall be buttressed in accordance with Howard County Design requirements.
- The contractor shall test pit existing utilities, where directed by the engineer, a minimum of two weeks in advance of construction operations.
- Contractor to notify the following utilities or agencies at least five days before starting work shown on these drawings:
 - MISS UTILITY: 559-0100
 - C & P TELEPHONE COMPANY: 725-9976
 - HOWARD COUNTY BUREAU OF UTILITIES: 992-2366
 - AT & T CABLE LOCATION DIVISION: 393-3553
 - BALTIMORE GAS & ELECTRIC COMPANY: 685-0123
 - STATE HIGHWAY ADMINISTRATION: 531-5533
 - HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK): 797-7272
- All inlets shall be constructed in accordance with Howard County Standards, unless otherwise noted on the plan.
- All pipe elevations shown are invert elevations.

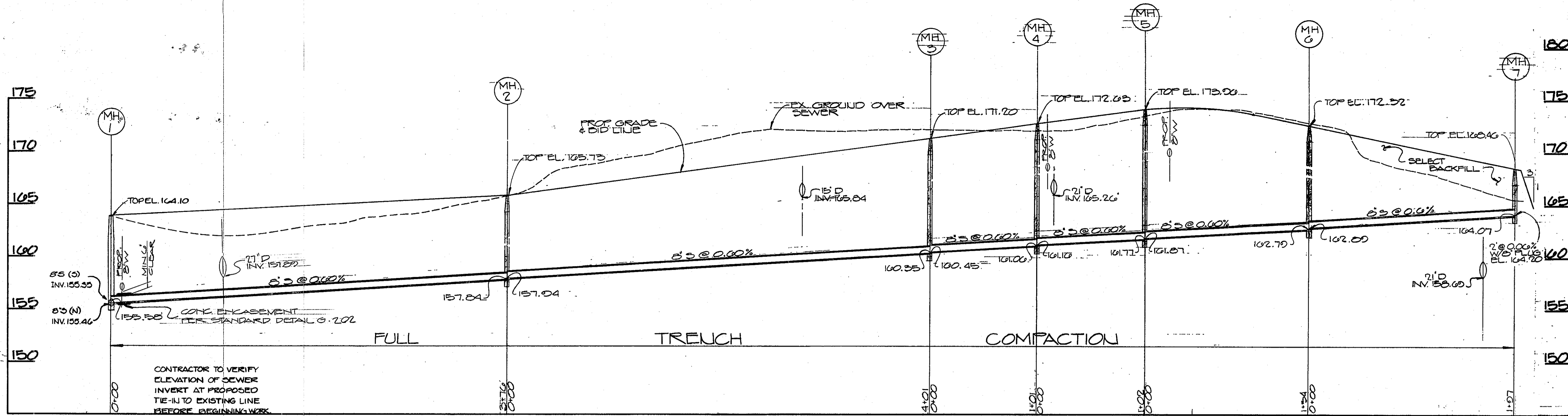
D.S. THALER & ASSOCIATES, INC.
 11 WARREN ROAD
 BALTIMORE MARYLAND 21208
 (301) 484-4100

ENGINEER
 I CERTIFY THAT THIS PLAN FOR ROAD CONSTRUCTION, GRADING AND SEWING...
 M. Seday
 13816
 3-20-86
 REG. NO. DATE

OWNER / DEVELOPER
 MR. ALBERT SAVAL
 110 SOUTH CENTRAL AVE.
 BALT. MD 21202
 (301) 675-7606

OWNER
 I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBILITY...
 Albert Saval
 President
 12/2/86
 DATE

SITE DEVELOPMENT PLAN
DORSEY INDUSTRIES
 1ST ELECTION DISTRICT
 SCALE: 1" = 50'
 OCTOBER 1, 1985
 HOWARD CO., MD
 SHEET 1 OF 7
 TAX MAPS #23/37
 PARCELS 413 & 373



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER DATE 10-2-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 DIRECTOR DATE 10-3-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR DATE 10-1-86
 CHIEF BUREAU OF ENGINEERING DATE 9-26-86

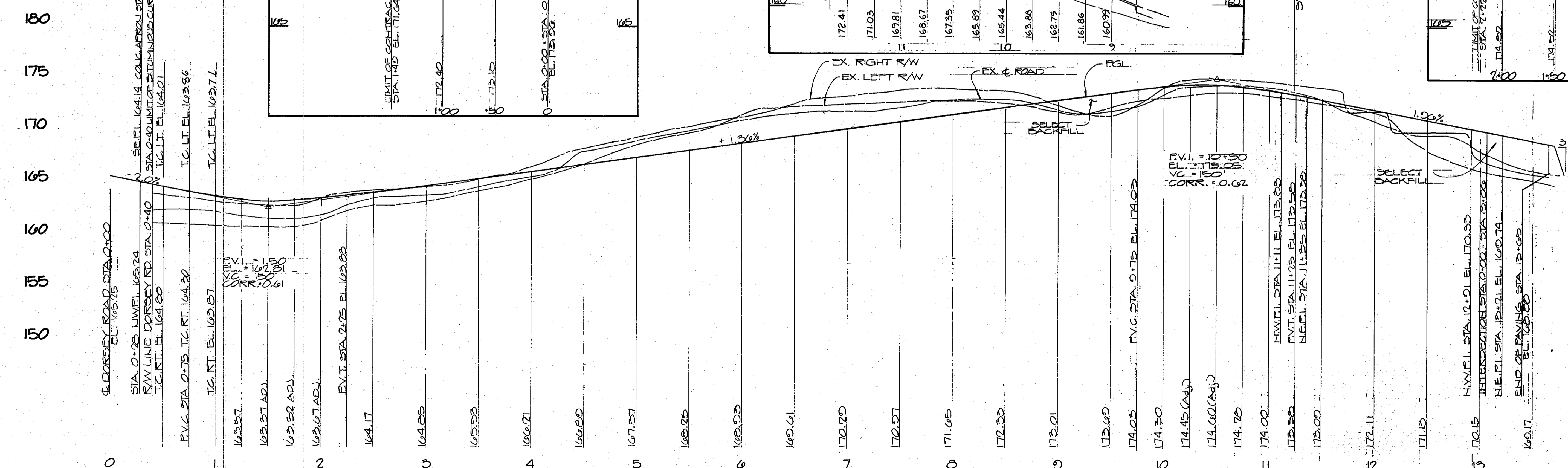
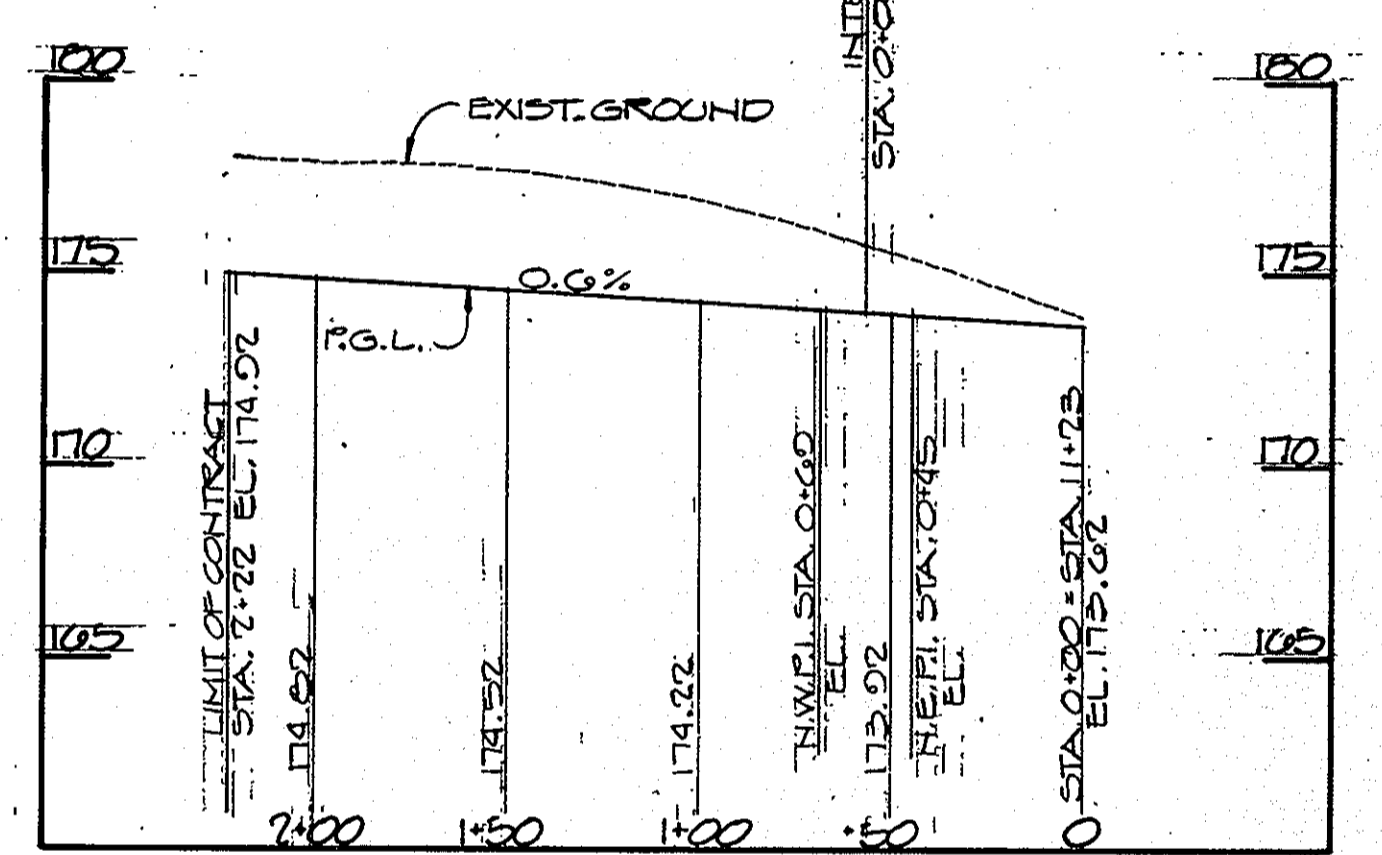
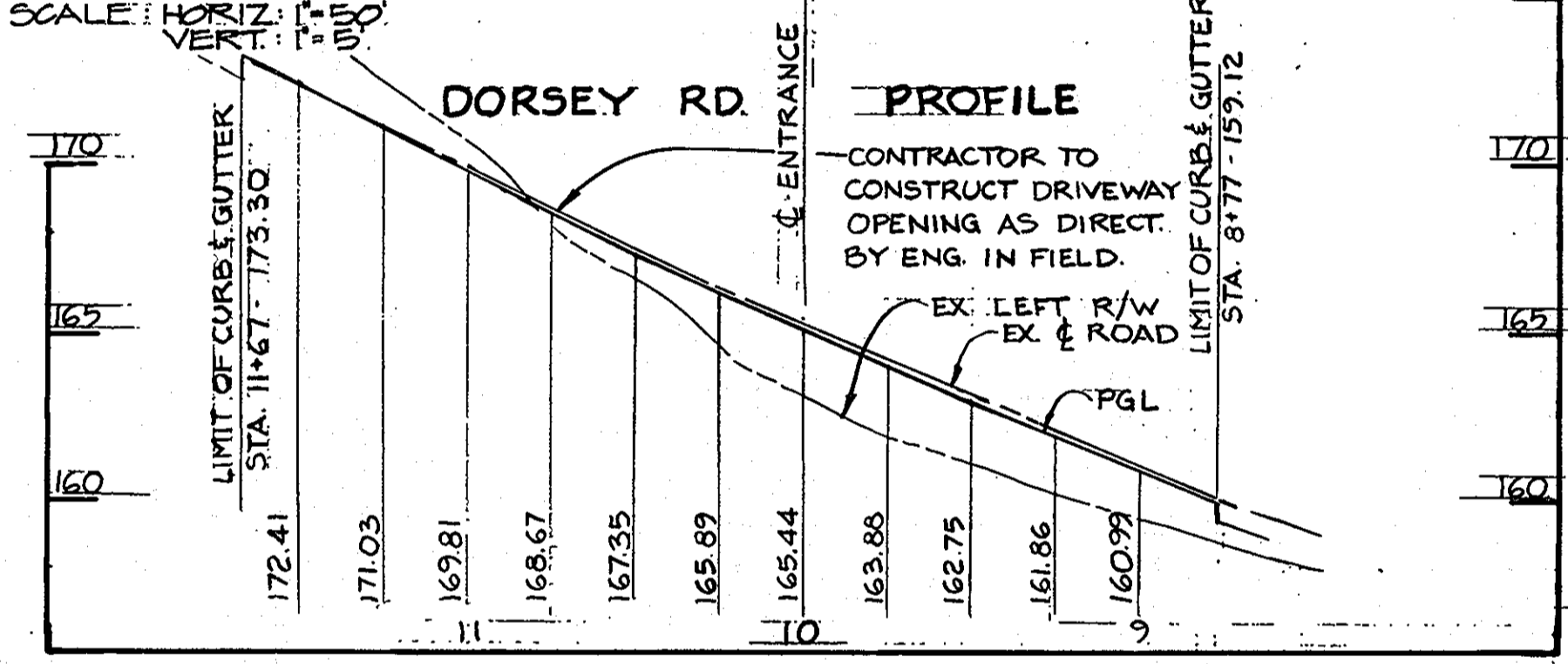
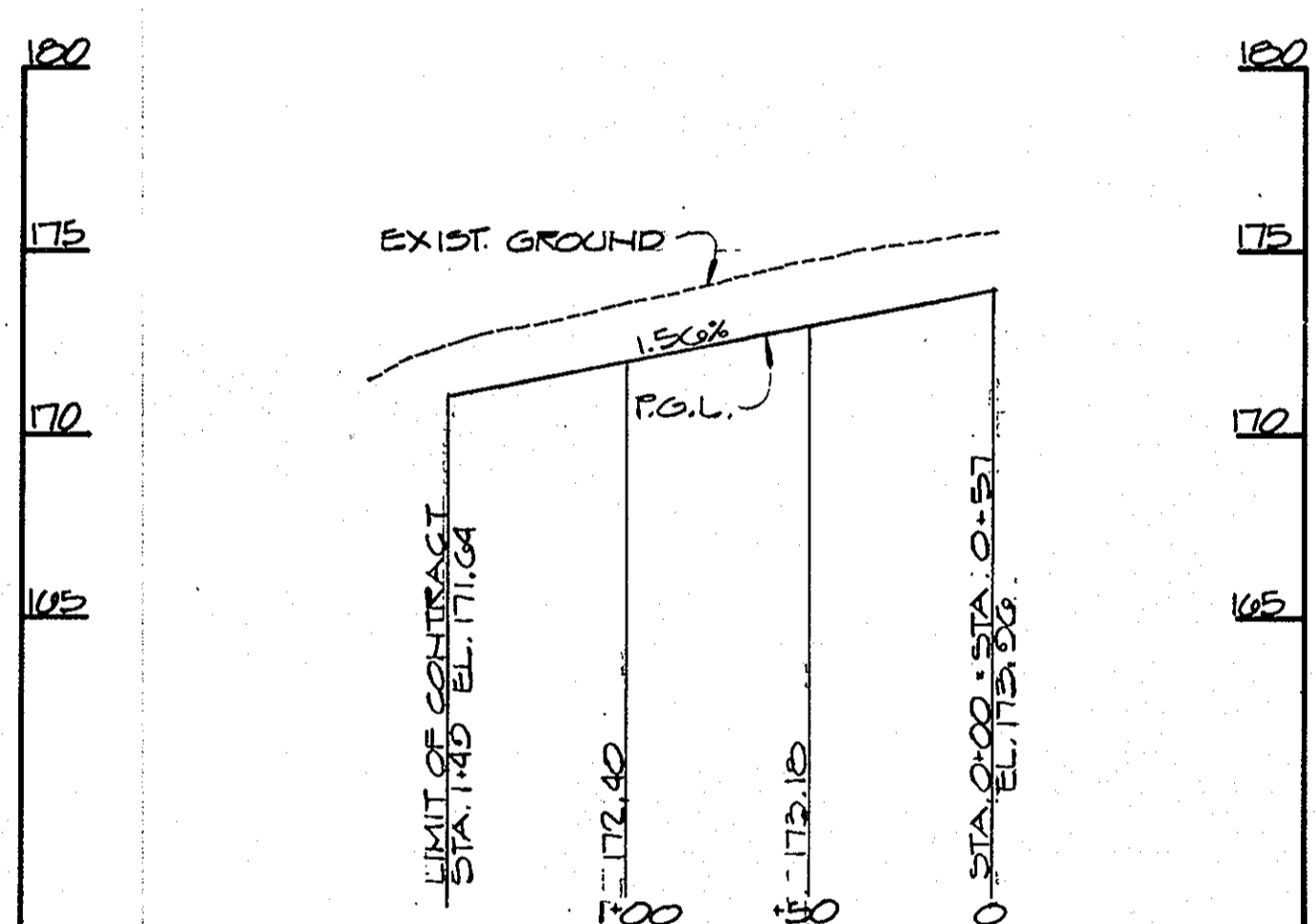
These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

DATE 9-23-86

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

DATE 9-23-86

SEWER PROFILE



REVISIONS	DATE
REVISED SEWER PROFILE	12-18-86

APPROVED
 DIVISION OF LAND DEVELOPMENT &
 ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE 8-20-86

D.S. THALER & ASSOC. INC.

11 WARREN ROAD
 BALTIMORE, MARYLAND 21208
 (301) 484-4100

ENGINEER
 I 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: M. Sedgwick
 Date: 9-20-86
 MIHE SEDGWICK



ROAD PROFILE

SCALE: HORIZ. 1"=50' VERT. 1"=5'
OWNER/DEVELOPER
 MR. ALBERT SAVAL
 110 SOUTH CENTRAL AVE.
 BALTO. MD 21202
 (301) 675-7000

"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 Department of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project."
 Signature of Developer: Albert Saval
 Date: 8/21/86

**ROAD & SEWER PROFILE
 DORSEY INDUSTRIES**

1ST ELECTION DISTRICT
 SCALE HORIZ. 1"=50' VERT. 1"=5'
 OCTOBER 1, 1987

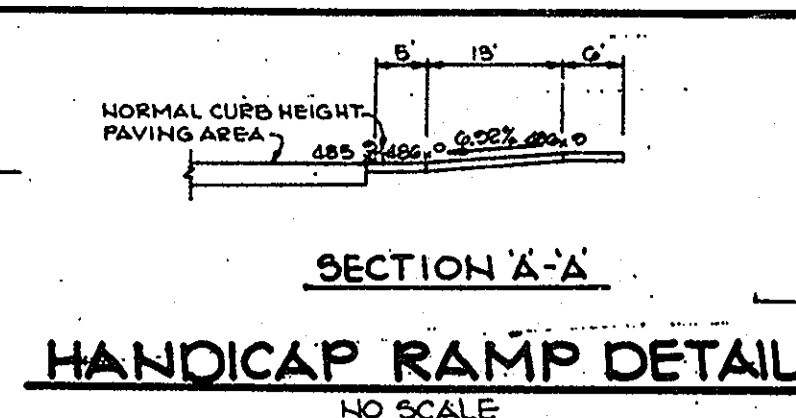
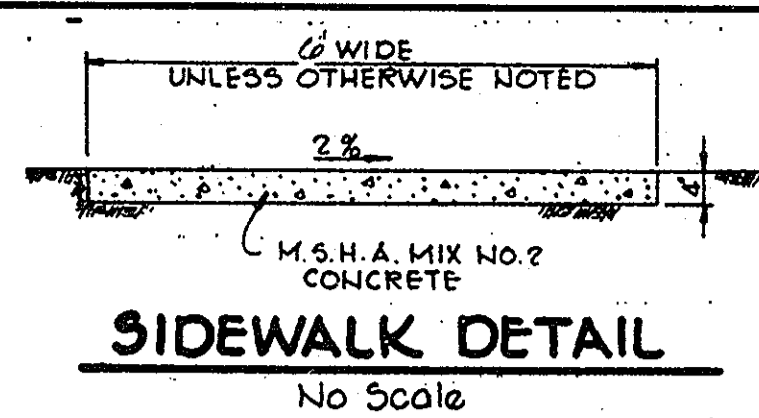
HOWARD CO., MD.
 SHEET 2 OF 7
 TAX MAPS 43+37
 PARCEL 412373

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT
DATE 10-2-86
COUNTY HEALTH OFFICER

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DATE 10-3-86
DIRECTOR

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE 10-1-86
DIRECTOR

CHIEF BUREAU OF ENGINEERING

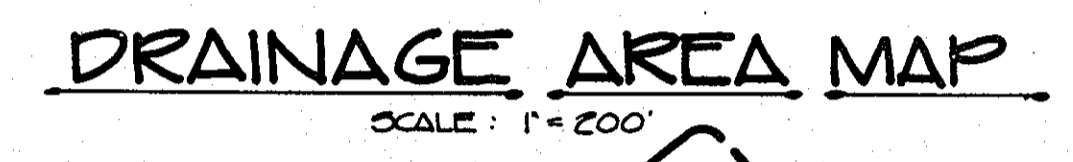
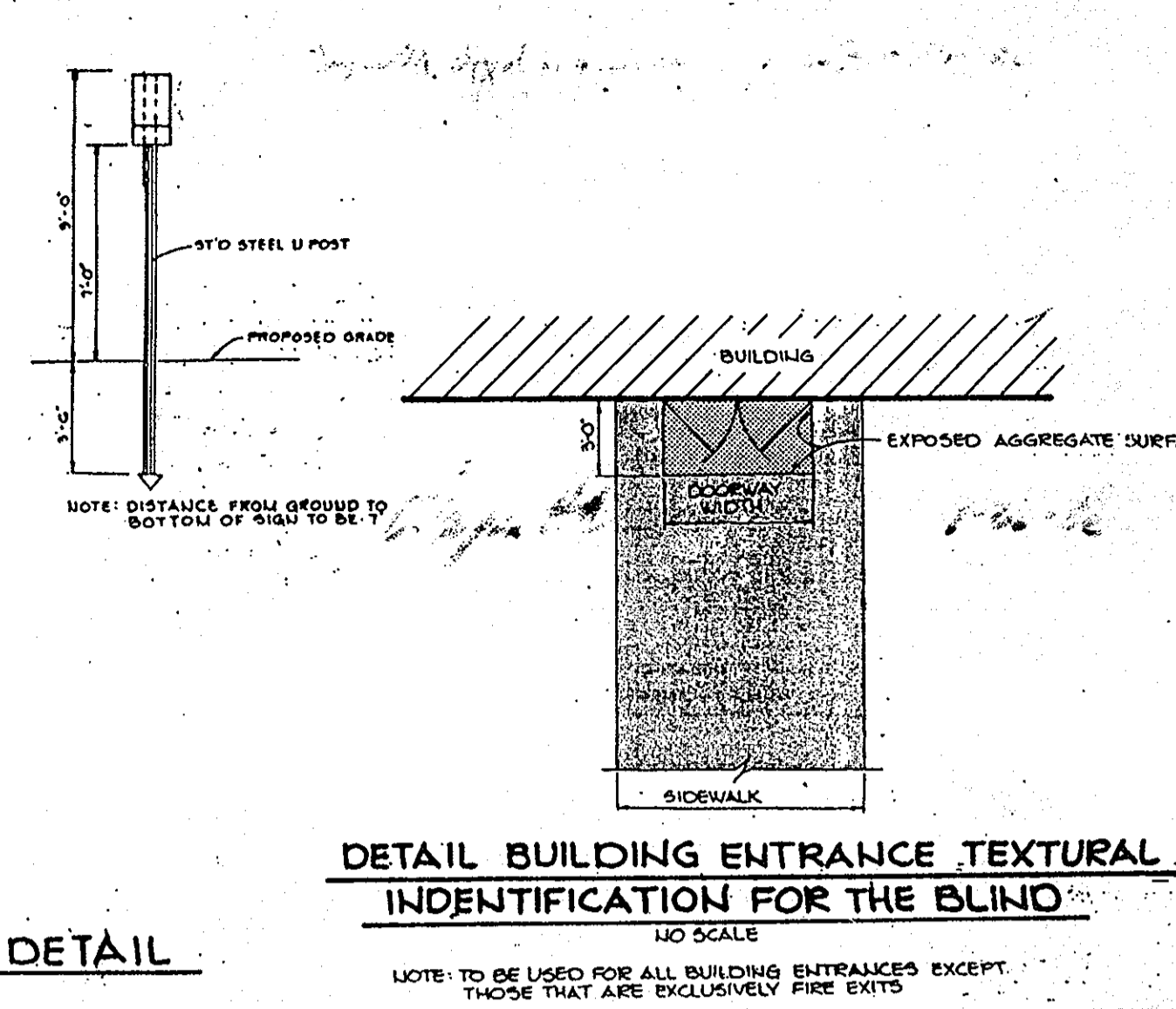
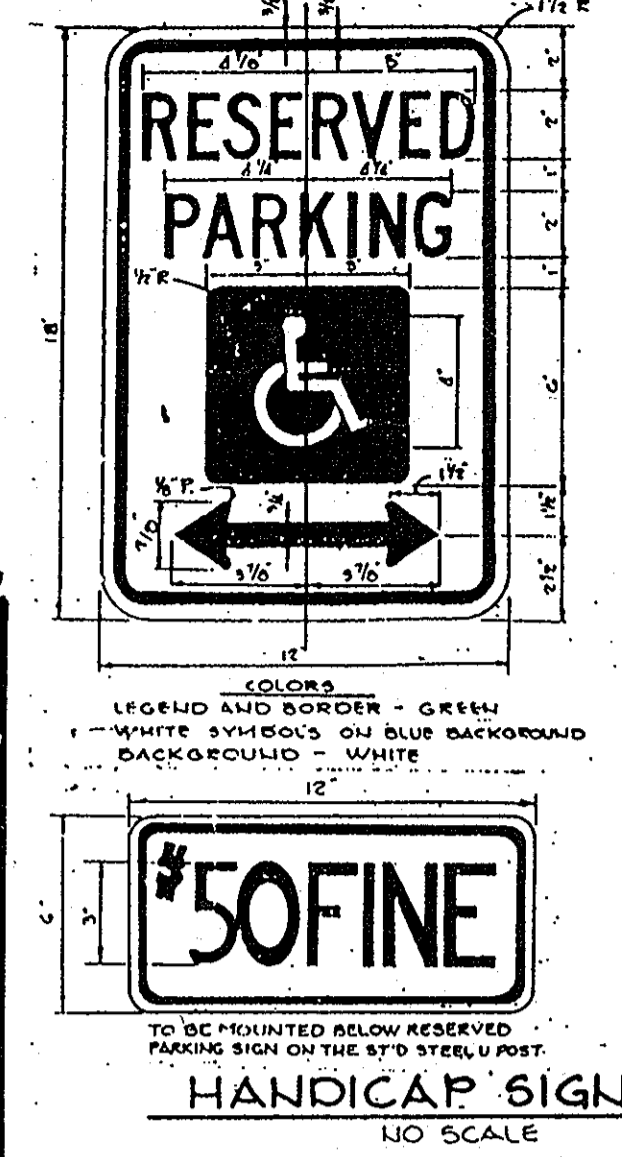
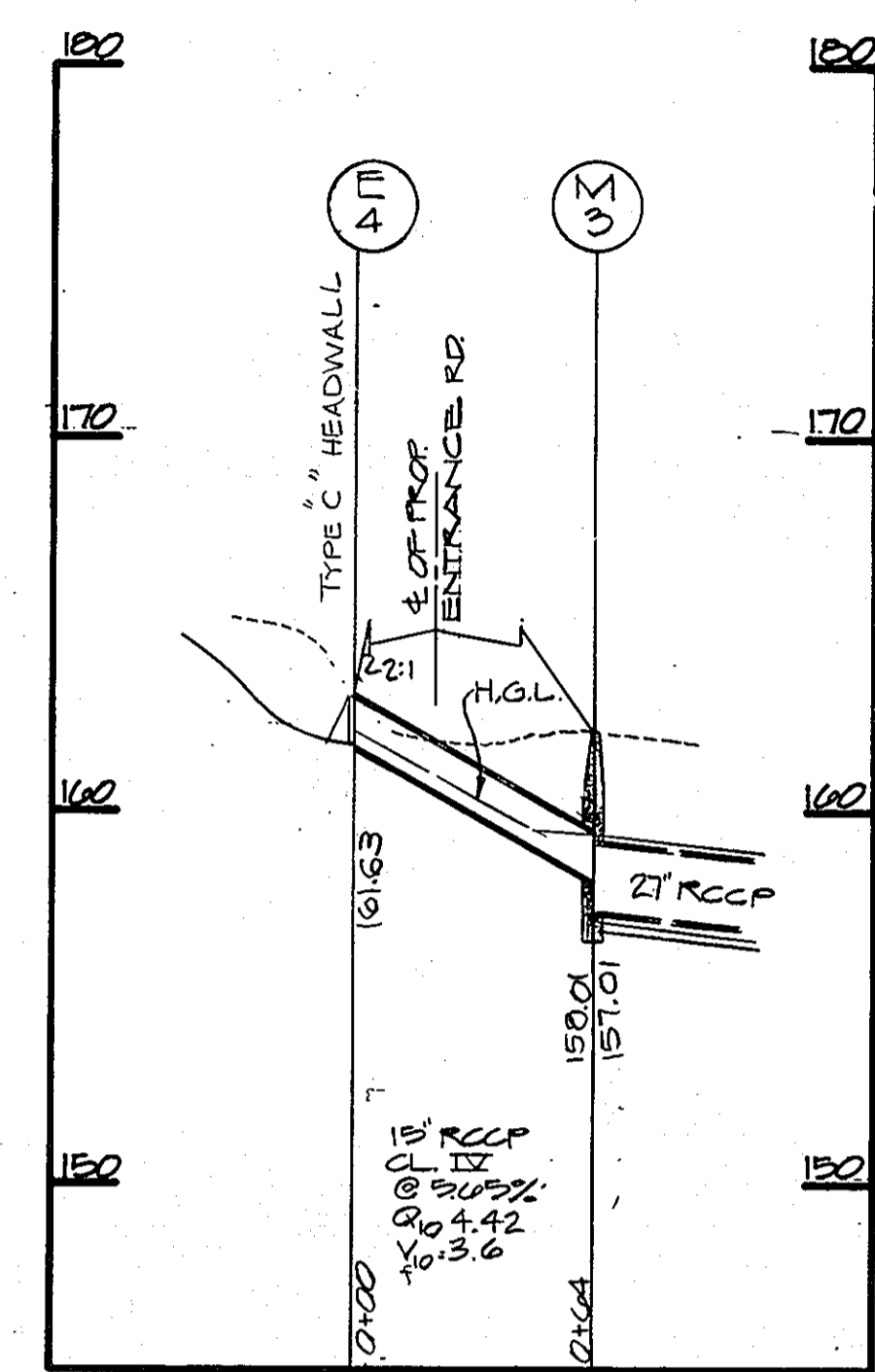
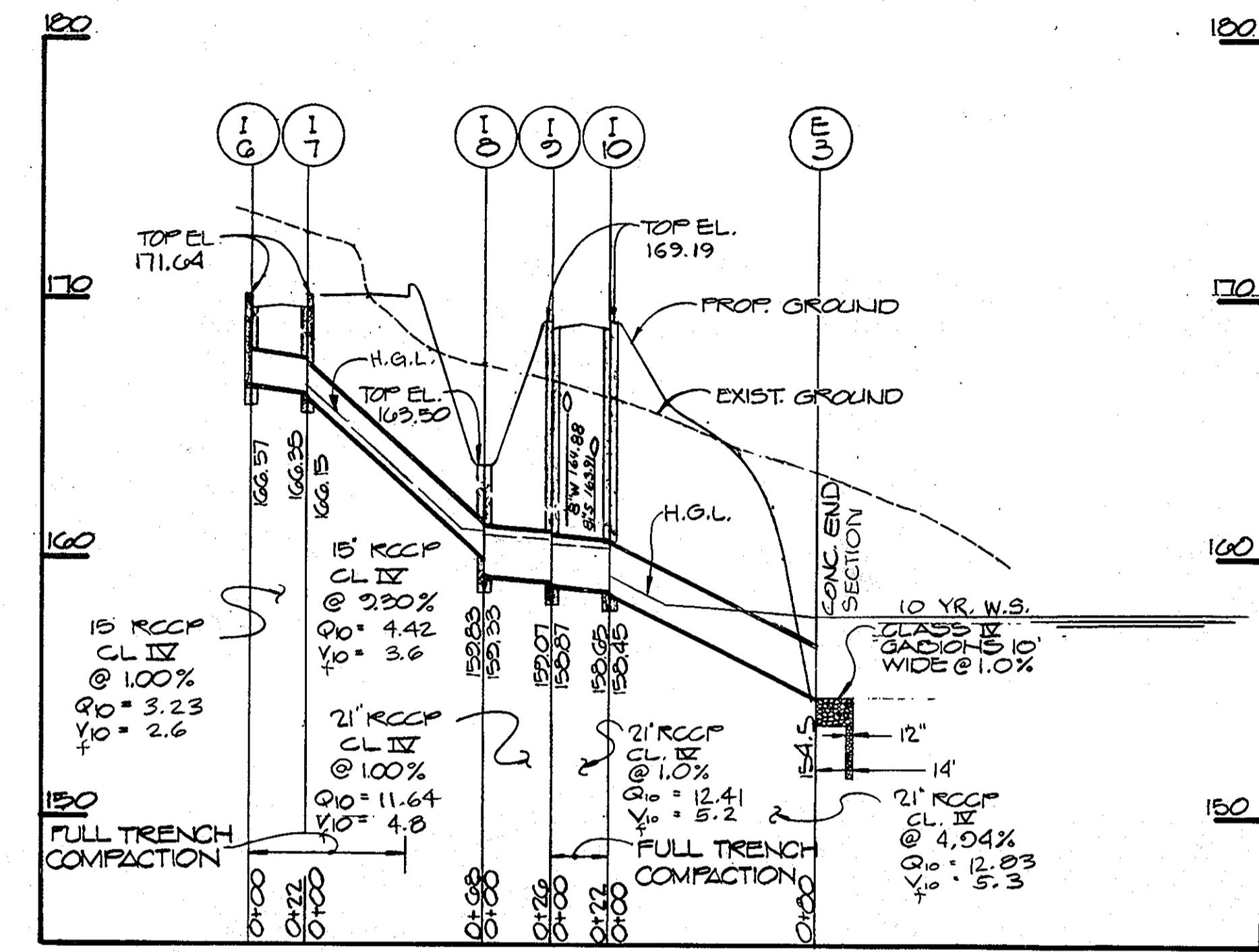
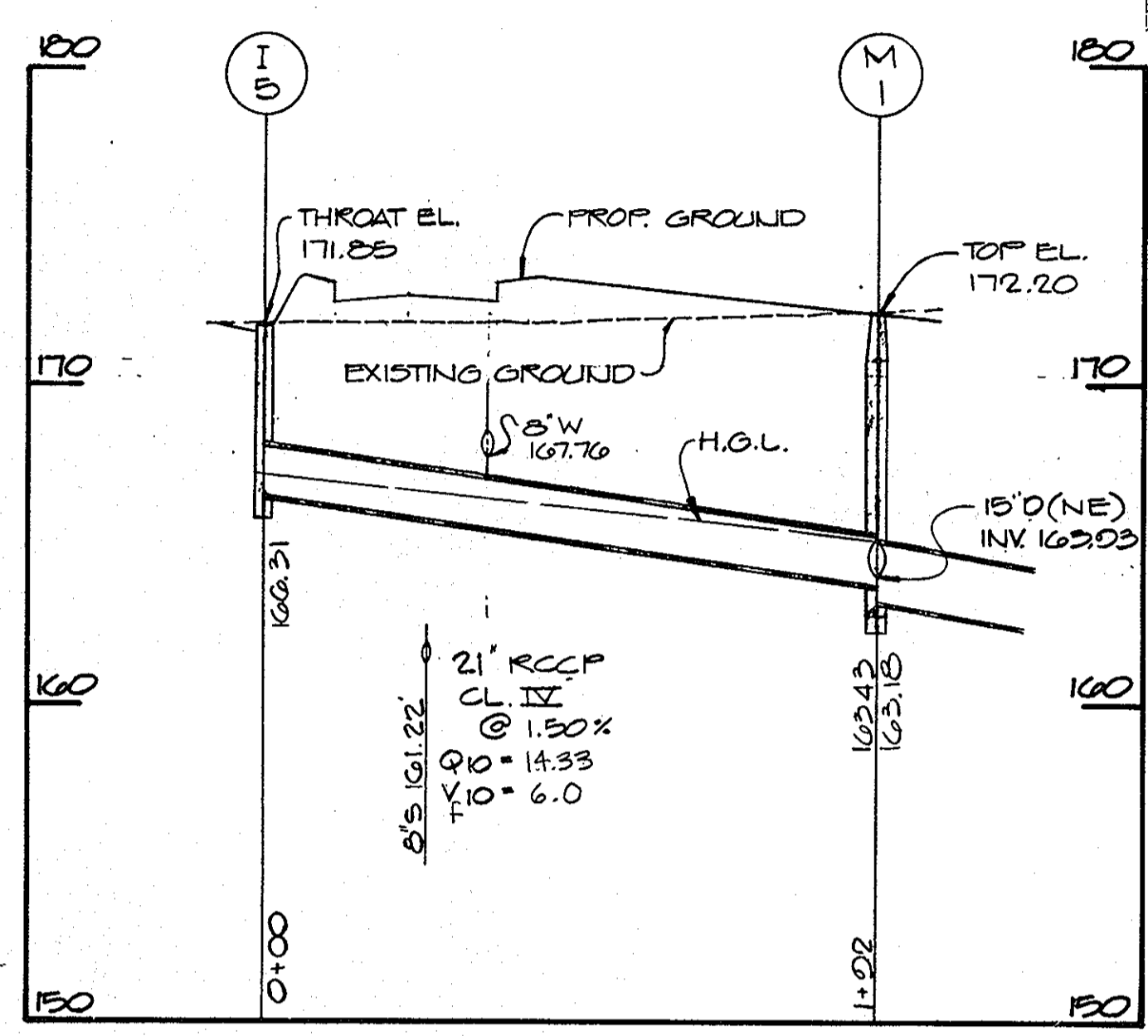


These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

U.S. Soil Conservation Service

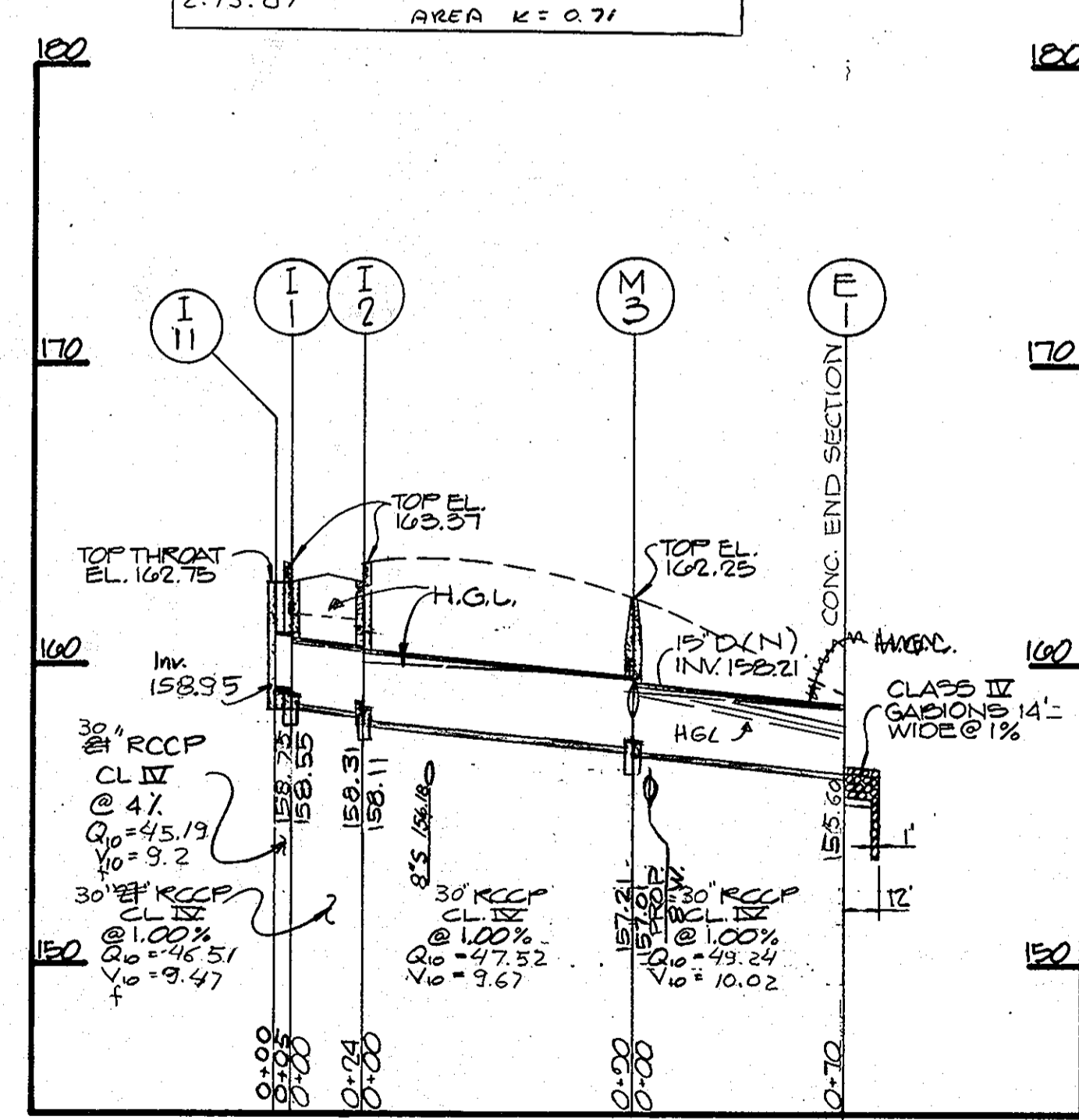
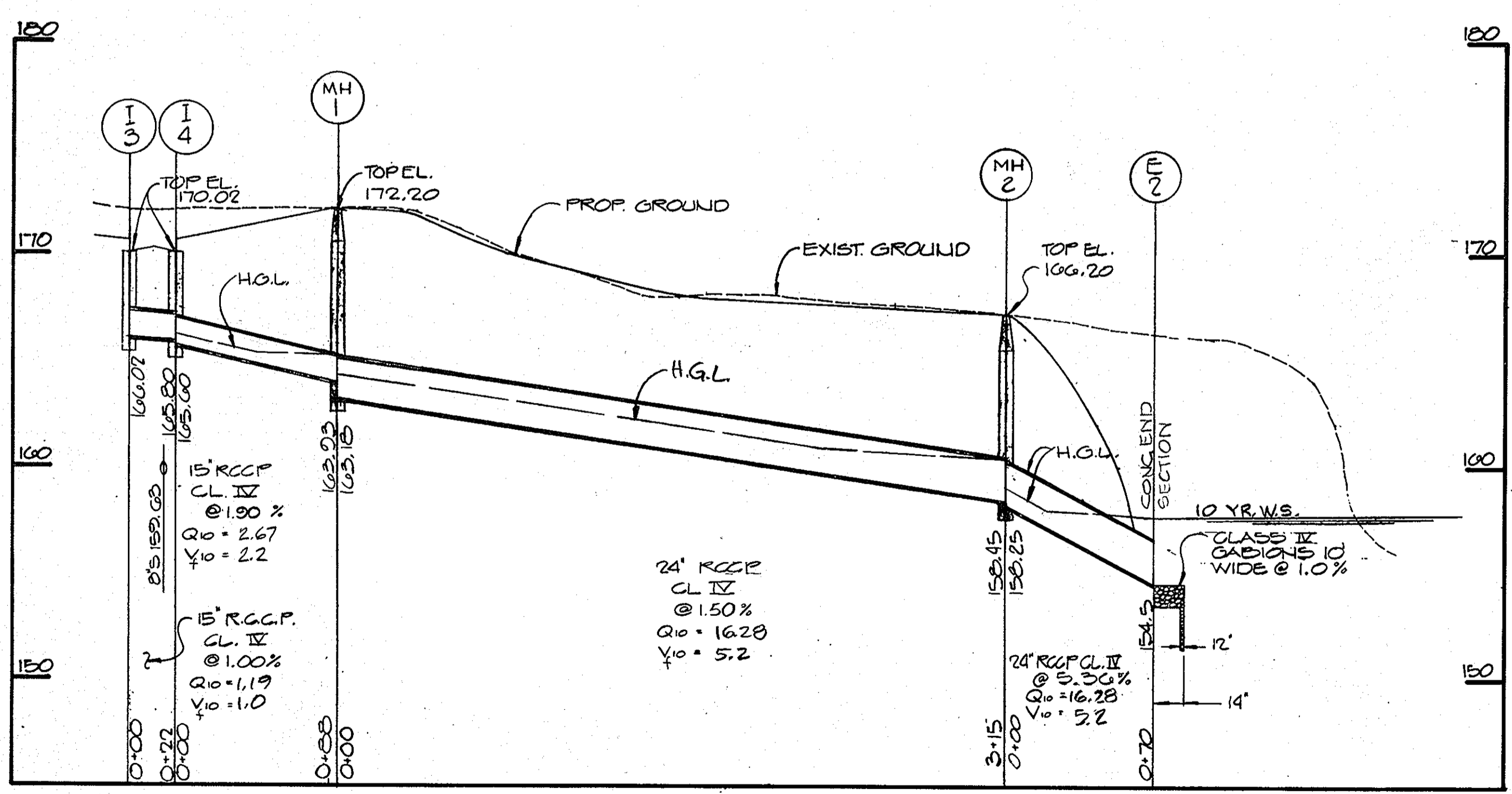
These plans for small pond construction, will erosion and sediment control meet the requirements of the Howard Soil Conservation District.

Howard Soil Conservation District



AREA	ACRES	"C"
A	0.38	0.78
B	0.30	0.78
C	0.26	0.53
D	0.20	0.90
E	5.40	0.33
F	0.62	0.62
G	0.15	0.90
H	2.12	0.37
I	0.19	0.78
J	0.11	0.78
K	14.47	0.71
L	0.38	0.53
M	0.58	0.95
N	0.43	0.95

DATE	DESCRIPTION
2.13.87	REVISE SD. PROFILE I-11 TO E-1
2.13.87	REVISE TBL "C" VAL AREA K = 0.71



APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 8-20-86

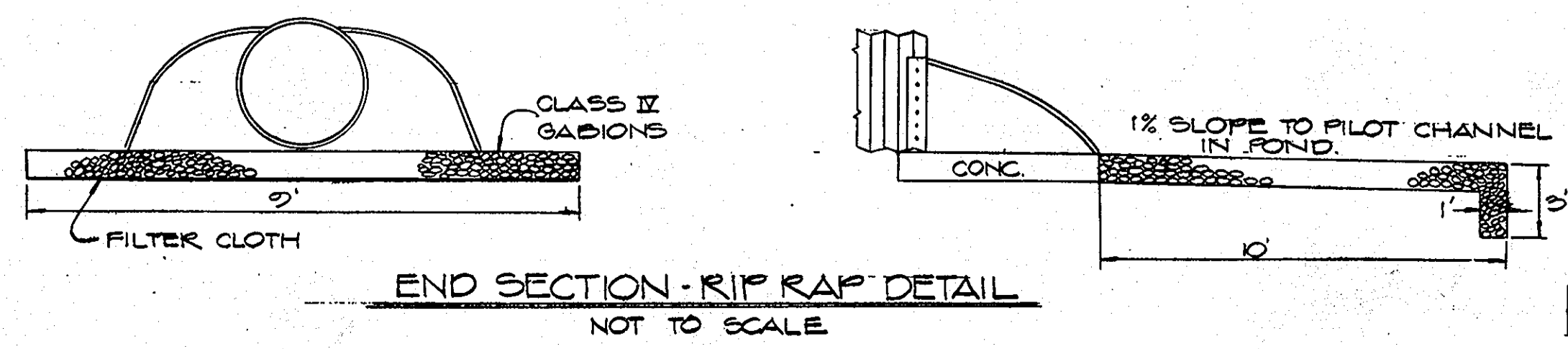
OWNER / DEVELOPER
MR. ALBERT SAVAL
110 SOUTH CENTRAL AVE
BALTIMORE, MD 21202
(301) 679-1600

OWNER
I 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 the project.

Signature of Developer
ALBERT SAVAL

ENGINEERS
I 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.

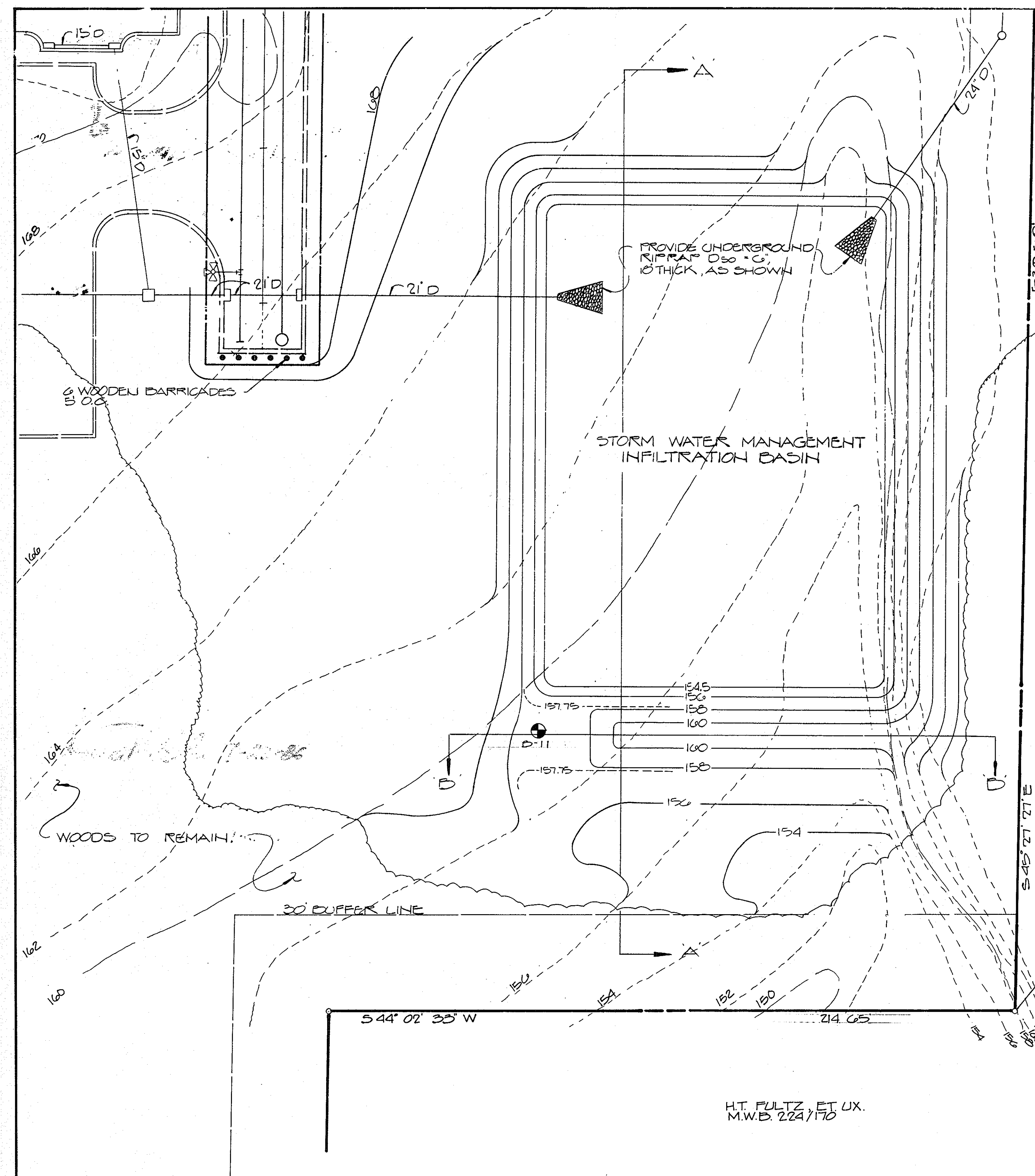
Signature of Engineer
MIKE SEDGH



D.S. THALER & ASSOC. INC.
11 WARREN ROAD
BALTIMORE, MARYLAND 21208
(301) 484-4100

DORSEY INDUSTRIES
1ST ELECTION DISTRICT
SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'
DATE 10-1-85

HOWARD CO. MTD.
SHEET 3 OF 7
TAX MAPS #23137
PARCEL # 412373

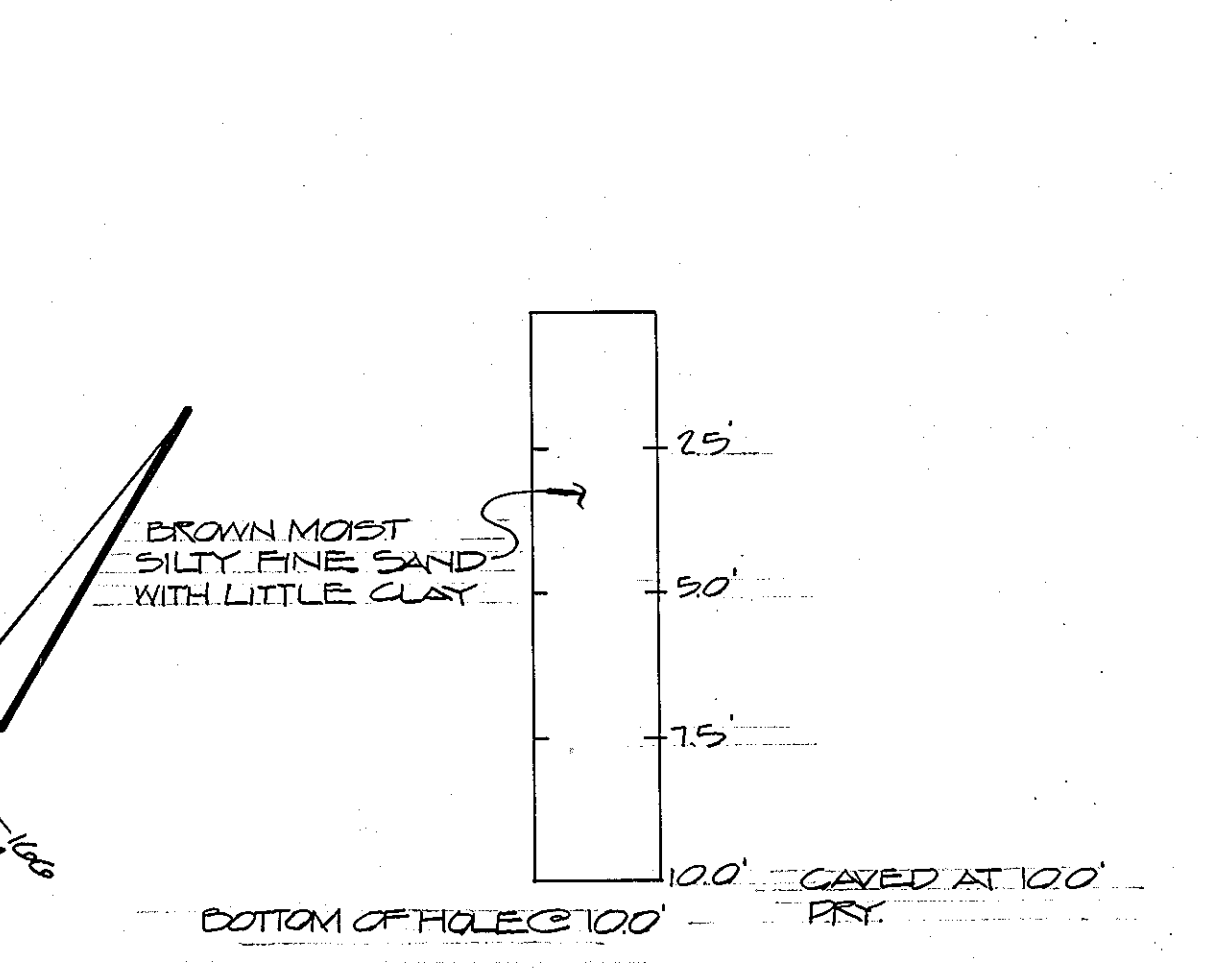


CONSTRUCTION SPECIFICATIONS

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 deeper than 1:1.
 Areas to be covered by the pond or reservoir will 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. 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, oversize 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 porous borrow 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 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. Compact to 95% of AASHTO T-99 density.
 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.
CORE TRENCH:
 Where specified, a core 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 core trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability. Compact to 95% of AASHTO T-99 density.

NOTE:
 THIS STORMWATER MANAGEMENT POND WAS DESIGNED TO CONFORM TO CLASS A DAM DESIGN CRITERIA. ANY SUDDEN MAJOR BREACH OF THE EARTHEN EMBANKMENT WILL NOT DAMAGE THE ADJACENT PROPERTIES



SOIL BORING LOG
 TAKEN FROM A REPORT BY THE HARDIN GROUP DATED 6-16-86 (NO SCALE)

H.T. FULTZ, ET UX.
 M.W.B. 224170

THE CONTRACTOR SHALL MAINTAIN, REPAIR AND/OR REPLACE ANY EXISTING SEDIMENT CONTROL DEVICES DISRUPTED OR DISTURBED DURING THE COURSE OF HIS WORK EACH DAY.

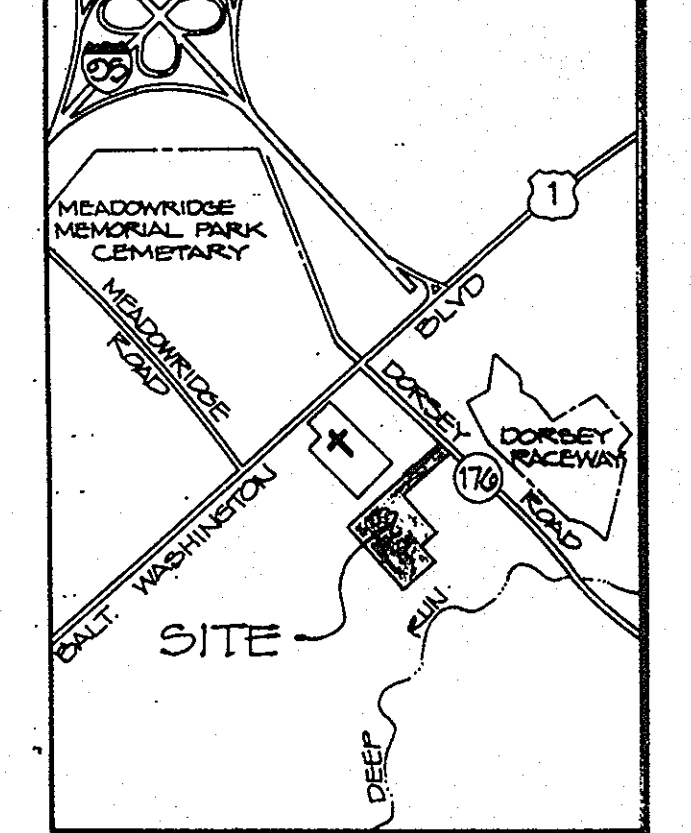
III. STRUCTURAL BACKFILL
 Backfill material shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time 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. BACKFILL MATERIAL SHALL CONFORM TO UNIFIED SOIL (CLASS SC OR CL).

IV. PIPE CONDUITS
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 AASHTO 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.
 2. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around. Watertight coupling bands 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 gaskets are NOT ALLOWED ON WATER TIGHT JOINTS.
 3. 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.
 4. Laying pipe - The pipe shall be placed with inside circumferential laps pointing downstream and with the longitudinal laps at the sides.
 5. Backfilling shall conform to structural backfill as shown above.
 6. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.
B. REINFORCED CONCRETE PIPE
 1. Materials - Reinforced concrete pipe shall have a rubber gasket joint and shall equal or exceed ASTM Specification C-361. An approved equivalent is AWWA Specification C-301.
 2. Bedding - All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 10% of its outside diameter with a minimum thickness of 3", or as shown on the drawings.
 3. Laying pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. All joints are sealed for the entire length. The bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and the grade of the pipe.
 4. Backfilling shall conform to structural backfill as shown above.
 5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.
V. CONCRETE STRUCTURES
 Concrete structures shall meet minimum requirements set forth in the latest Maryland State Highway Administration Standard Specifications for Construction and Materials, 1982. As amended.
A. CONCRETE
 Section 600 (Cement Concrete Structures)
 Section 910 (Portland Cement Concrete Mixtures), Mix No. 3.
B. REINFORCEMENT
 Section 610 (Reinforcement for Concrete Structures)
 Section 911 (Reinforcing Steel (ASTM A616), Wire Rope and Wire Fabric).
 Section 912 (Coil for Miscellaneous U.S.).
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, mulching or sodding in accordance with the specifications shown hereon.
B. PERMANENT SEEDING
 All disturbed areas shall be stabilized as follows:
 1. Seeded Preparation - Loosen upper 3 inches of soil by raking, discing or other acceptable means before seeding.
 2. Soil Amendments - Apply 2 tons per acre dolomitic limestone (185 lbs./1000 sq. ft.) and 600 lbs. per acre 0-20-20 fertilizer (14 lbs./1000 sq. ft.). Harrow or disc lime and fertilizer into upper three inches of soil. At time of seeding, apply 400 lbs. per acre (9.2 lbs./1000 sq. ft.) of 38-0-0 ureaform fertilizer and 500 lbs. per acre (11.5 lbs./1000 sq. ft.) of 10-20-20 fertilizer.
 3. Seeding - For the periods March 1, thru April 30, and August 1 thru October 15, seed with 87 lbs. per acre Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 87 lbs. per acre Kentucky 31 Tall Fescue and 2 lbs. per acre 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 87 lbs. per acre Kentucky 31 Tall Fescue and mulch with 2 tons per acre well anchored straw. All Kentucky 31 Tall Fescue shall be inoculated with Crown Vetch at 22.22 lbs. per acre.

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 of Engineer: *John M. Sedghi* 9-23-86
 Signature of Owner: *Albert E. Sayal* 9-23-86
 Howard Soil Conservation District

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *James M. Good* 10-2-86
 DATE
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 DIRECTOR: *Thomas J. Harris* 10-3-86
 DATE
 CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION
 APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE,
 STORMWATER MANAGEMENT AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *John J. E. Nimmey* 10-1-86
 DATE
 CHIEF BUREAU OF ENGINEERING: *John J. Nimmey* 9-26-86
 DATE

4. Mulching - Apply 1.5 to 2 tons per acre of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using 300 gallons per acre of emulsified asphalt on flat areas. On slope 8 feet or higher, use 348 gallons per acre for anchoring.
 5. Maintenance - Inspect all seeded areas and make needed repairs, replacements and reseeding.
C. TEMPORARY SEEDING
 1. Seeded Preparation - Loosen upper 3 inches of soil by discing, raking or other acceptable means before seeding.
 2. Soil Amendments - Apply 600 lbs. per acre of 10-20-10 fertilizer.
 3. Seeding - For periods March 1 thru April 30, and from August 15 thru November 15, seed with 2.5 bushels per acre annual rye. For the period May 1 thru August 15, seed with 3 lbs. per acre of weeping lovegrass. NOV 16 THRU FEB 28, PROTECT SITE BY APPLYING 2 TONS OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.
 4. MULCHING - SAME AS PERMANENT SEEDING
VII. EROSION & SEDIMENT CONTROL
 Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized, as shown on these plans and as set forth in the latest "Standards & Specifications for Soil Erosion and Sediment Control in Developing Areas" of the Soil Conservation Service of Maryland, Baltimore County Soil Conservation District, as amended.
VIII. FENCING
 Fencing shall be 42" high chain link fence constructed in accordance with the latest Maryland State Highway Administration Standard Details 690.01 and 690.02. The specifications for a 6'-0" fence shall be used, substituting fabric & 6" line posts. Gate shall be constructed in accordance with SMA Standard Detail 690.01 with 4" fabric fabric for force & gate shall conform to ASHTO Specification M181.14.
IX. INSPECTION
 Contractor shall notify the engineer a minimum of 5 working days prior to starting any work shown on these plans.
X. GENERAL
 Unless otherwise noted, all materials and construction practices shall conform to the following:
 1. "Standard Specifications and Details for Construction" of the Howard County, Maryland Department of Public Works, as amended.
 2. "Standard Specifications for Construction and Materials, 1982," of the Maryland State Highway Administration, as amended.
 3. "Standard Specifications for Ponds" of the Soil Conservation Service of Maryland (MD-378), July, 1981 and as amended.



APPROVED
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE: 8-20-86
 Signature: *John J. Nimmey*

D.S. THALER & ASSOCIATES, INC.
 11 WARREN ROAD
 BALTIMORE MARYLAND 21208
 (301) 484-4100



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 a 'pre-built' plan of the pond within 30 days of completion."
 Signature of Engineer: *John M. Sedghi* 9-20-86
 Print name below signature: MIKE SEDGHI

OWNER / DEVELOPER
 MR. ALBERT SAYAL
 110 SOUTH CENTRAL AVE
 BALT. MD 21202
 (301) 675-1000

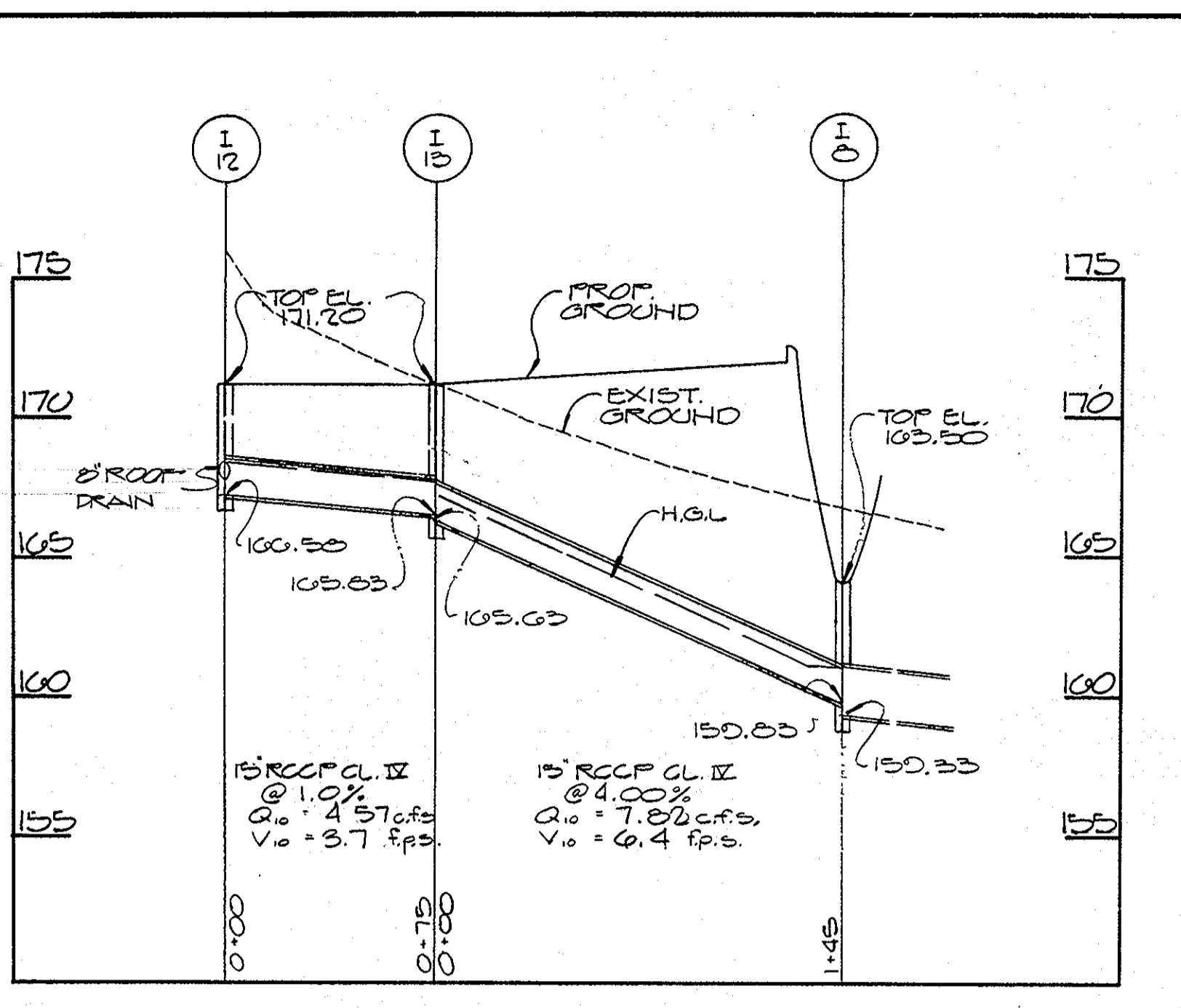
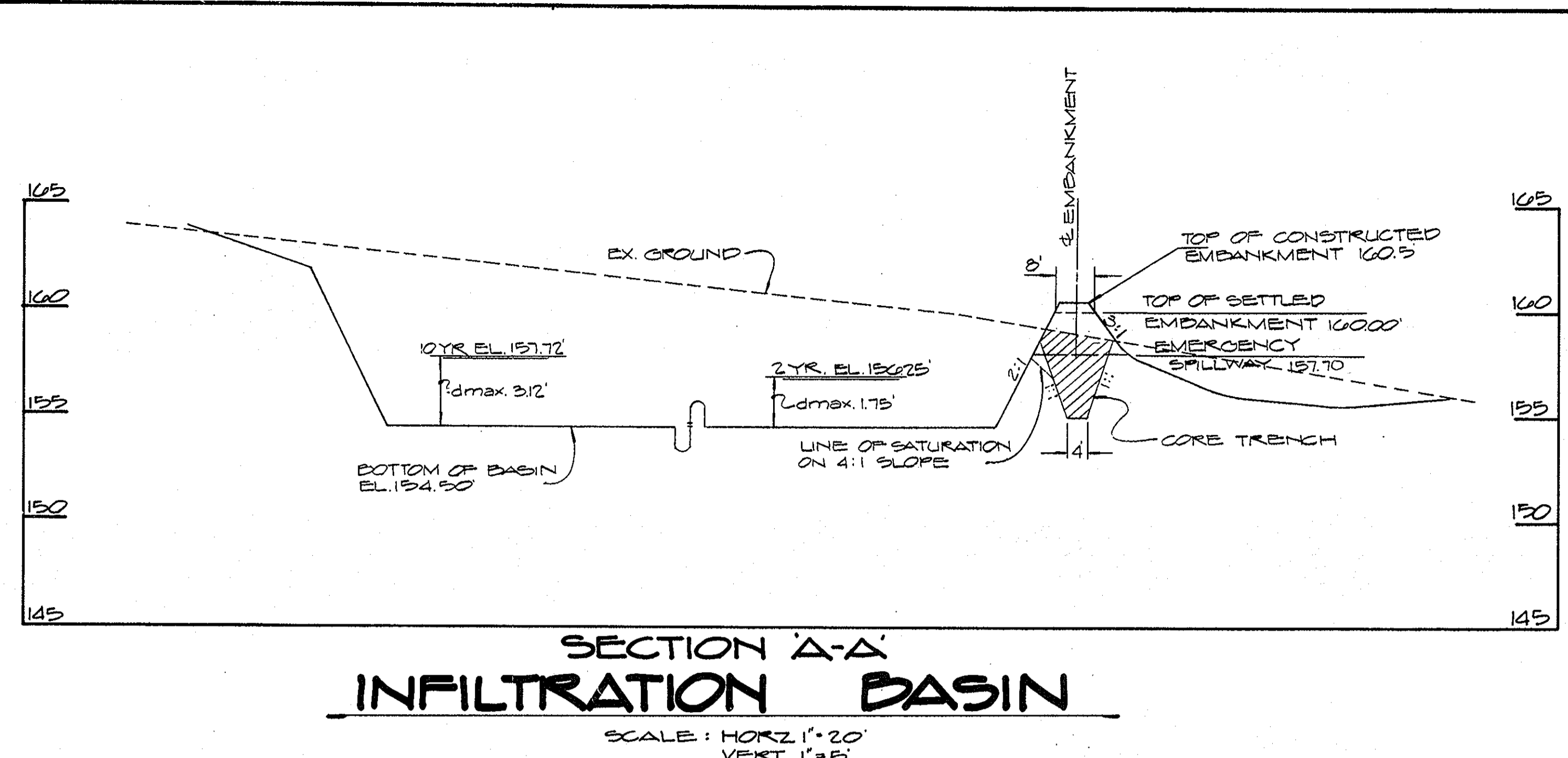
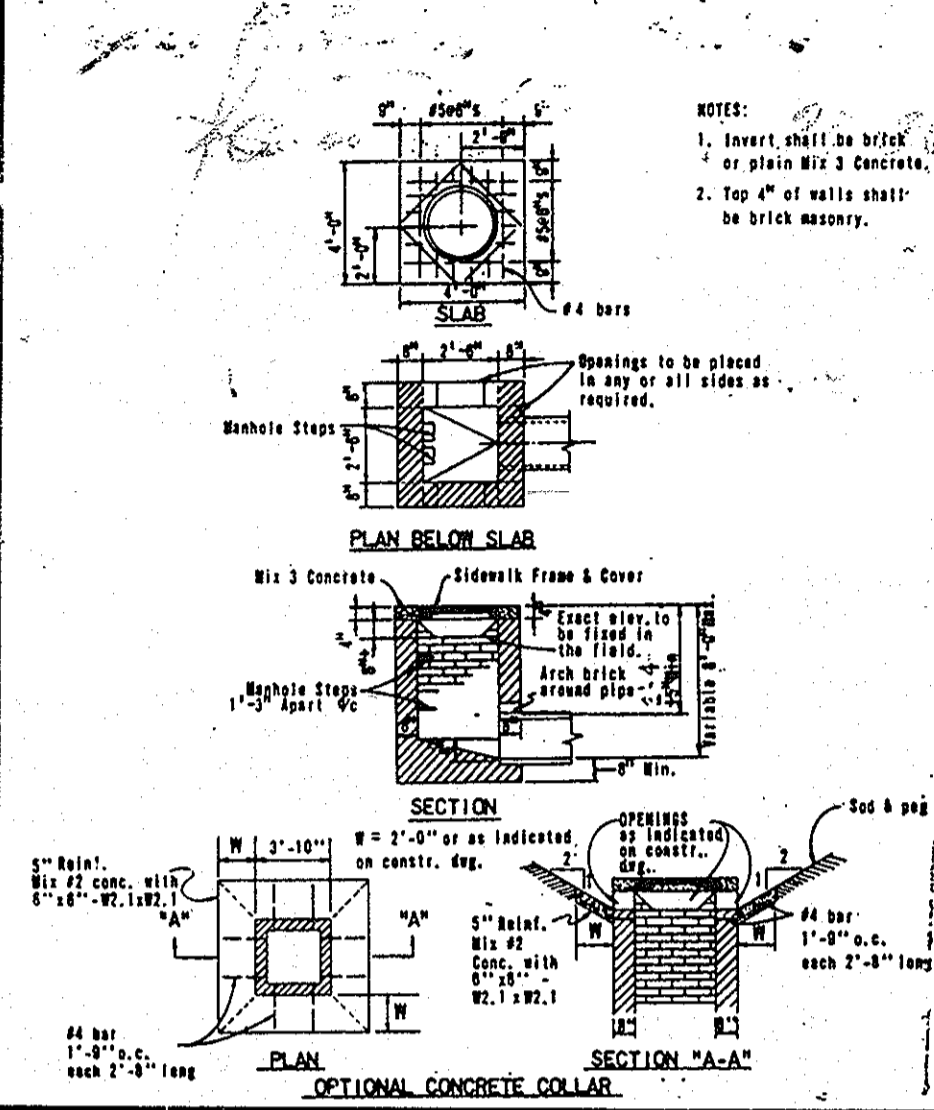
OWNER
 "I certify that all development and/or construction will be done according to these plans, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Program for the Control of Sediment and Erosion before beginning the project. I will provide the Howard Soil Conservation District with an 'as-built' plan of the pond within 30 days of completion."
 Signature of Owner: *Albert E. Sayal*
 Print name below signature: ALBERT E. SAYAL

DES: THM
 DWG: DJL
 CHK: THM

STORM WATER MANAGEMENT POND
DORSEY INDUSTRIES
 ELECTION DISTRICT
 SCALE: 1" = 20'
 SHEET 4 OF 7
 HOWARD CO., MD
 OCTOBER 1, 1988
 TAX MAPS: 43637
 PARCEL: 413-373

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER DATE 10-2-86
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 DATE 10-3-86
 APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE
 STORM DRAINAGE SYSTEMS AND PUBLIC WORKS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DATE 10-1-86
 CHIEF BUREAU OF ENGINEERING DATE 9-26-86

STRUCTURE SCHEDULE						
Nº	TYPE	INV. IN	INV. OUT	TOP EL.	REMARKS	
I-1	5' COMB	159.05	158.55	169.27	SD 4.34	
I-2	5' COMB	158.31	158.11	168.27	SD 4.34	
I-3	5' COMB	166.02	170.02	SD 4.32		
I-4	5' COMB	165.00	170.02	SD 4.32		
I-5	Y-1	166.21	171.25	SHT 3.0F7		
I-6	24" RIBLES	166.57	171.04	SD 4.22		
I-7	S	166.25	166.15	171.04	SD 4.22	
I-8	Y-1	159.83	159.23	169.50	SHT 3.0F7	
I-9	5' COMB	159.07	158.27	169.19	SD 4.32	
I-10	5' COMB	158.05	158.45	169.19	SD 4.32	
I-11	Y-1	159.25	162.75	162.75	SHT 3.0F7	
I-12	S	166.58	171.20	SD 4.22		
I-13	S	165.83	165.63	171.20	SD 4.22	
M-1	STD	162.23	162.13	172.20	G 5.11	
M-2	STD	158.45	158.25	166.20	G 5.11	
M-3	SHALLOW	158.01	157.01	162.25	G 3.03	
E-1	END WALL	156.21	156.21	---	SHT 3.0F7	
E-2	END WALL	154.50	154.50	---	SHT 3.0F7	
E-3	END WALL	154.50	154.50	---	SHT 3.0F7	
E-4	HEADWALL	---	161.63	---	SD 3.21	



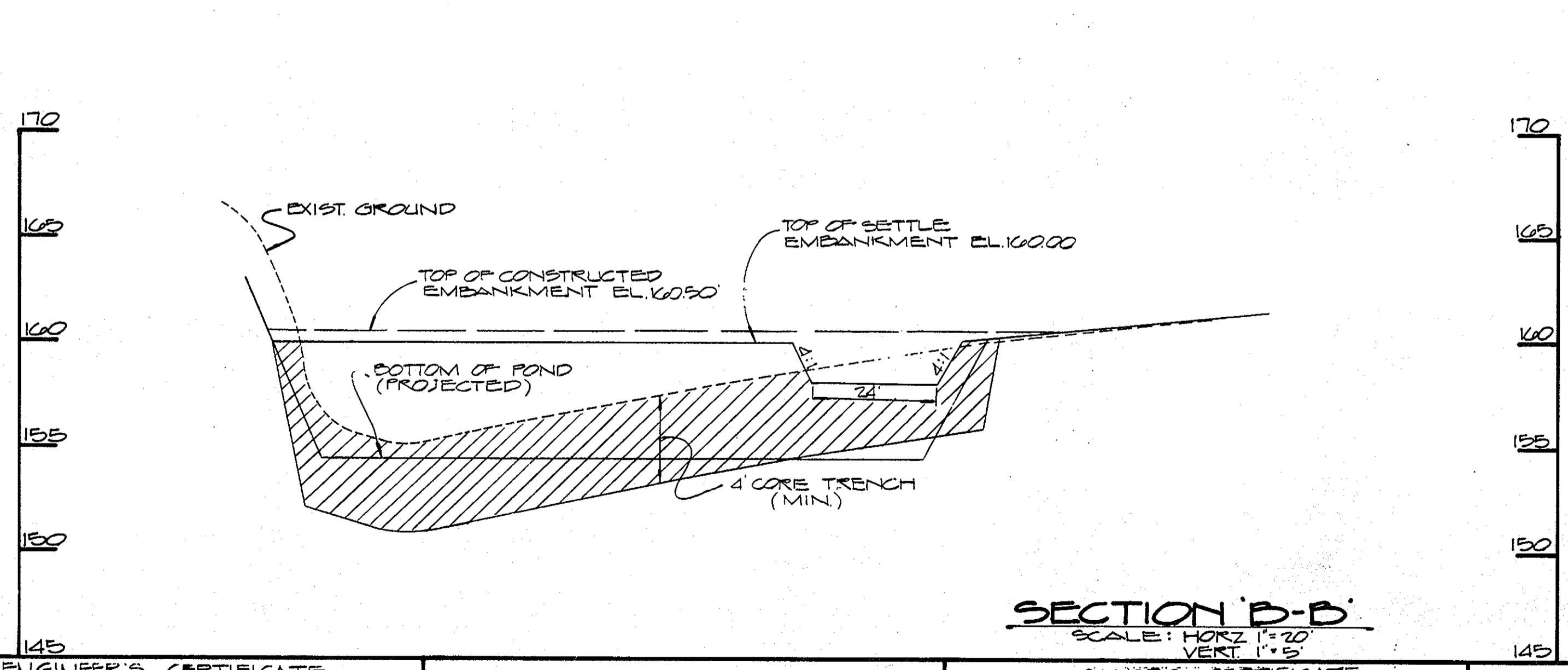
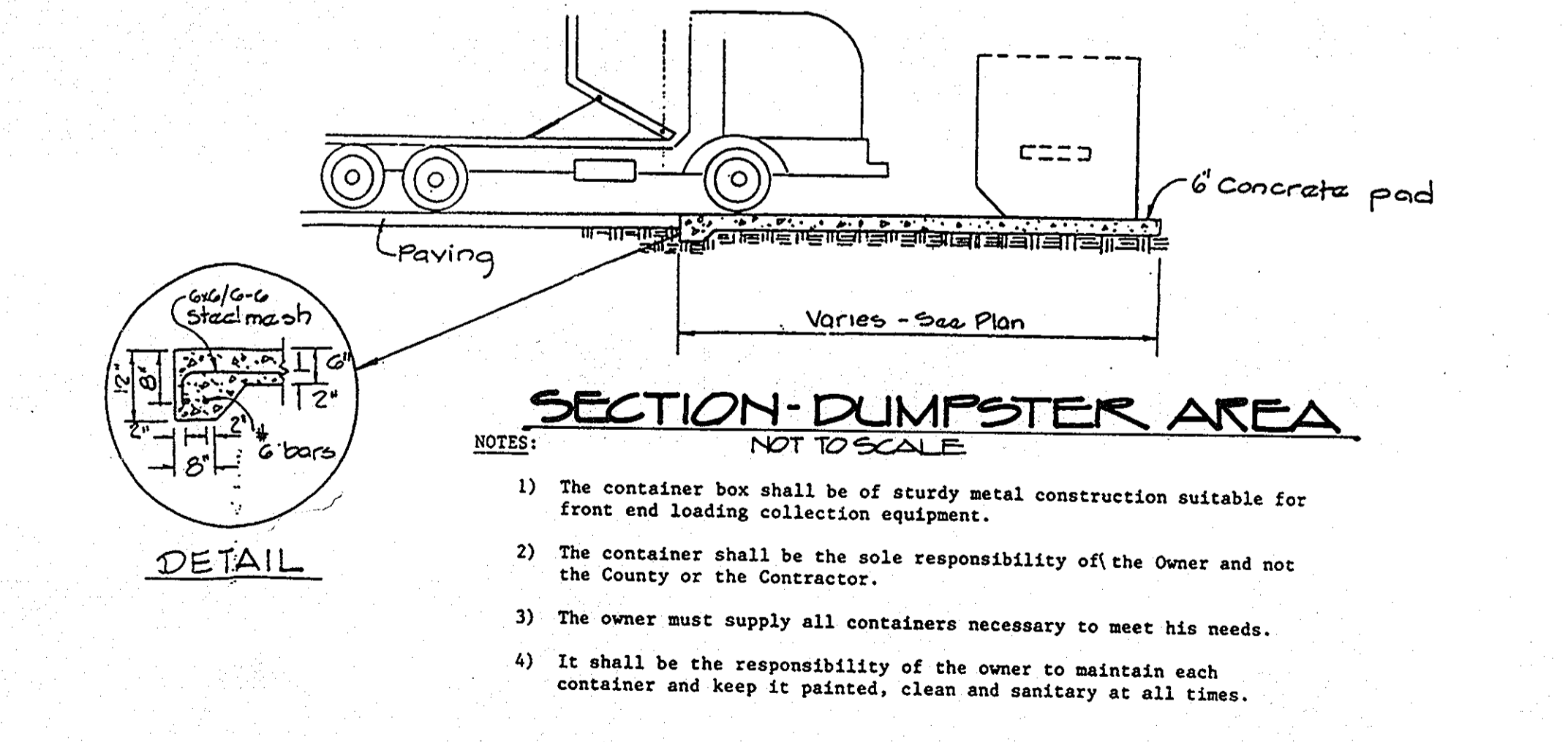
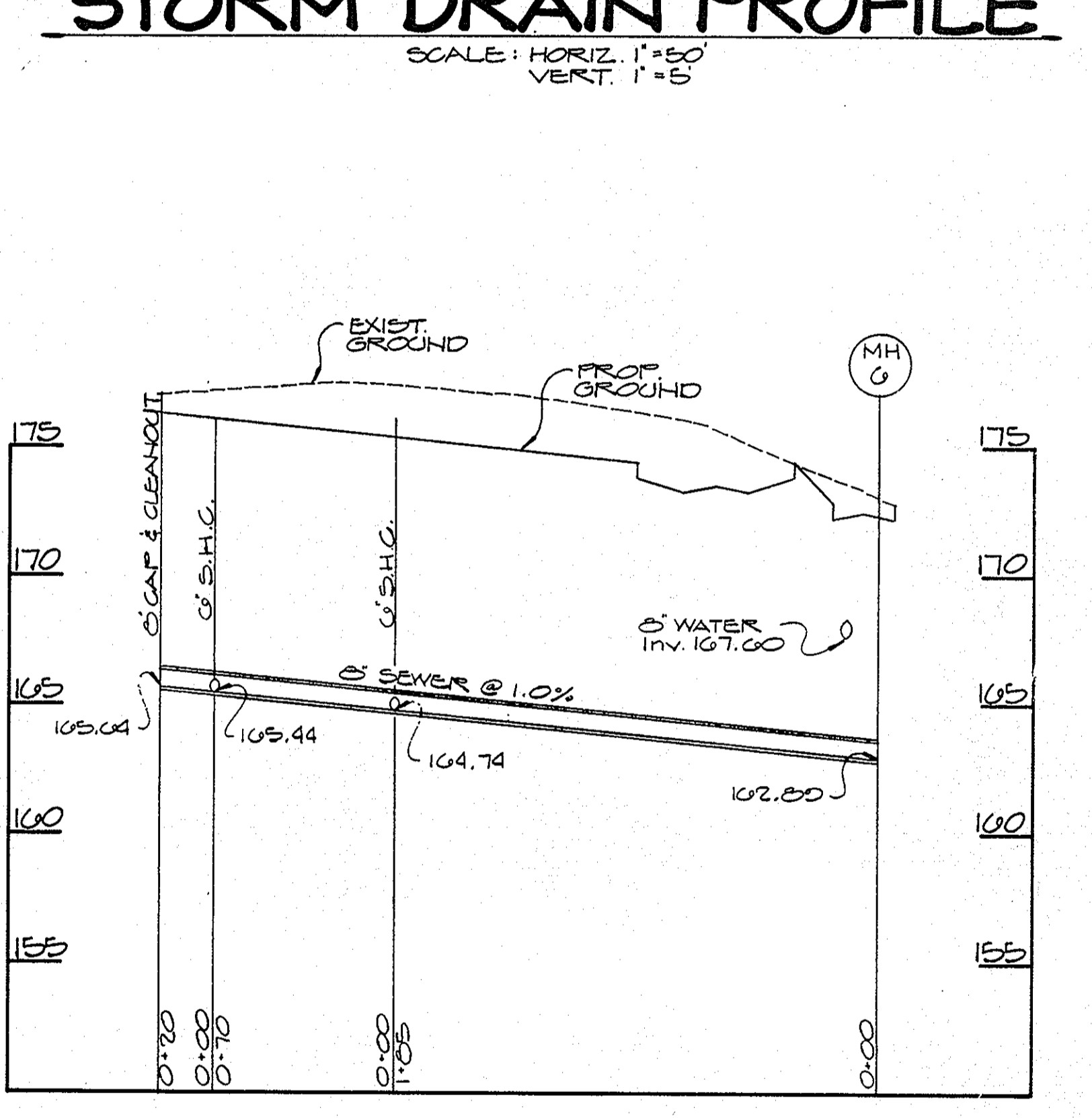
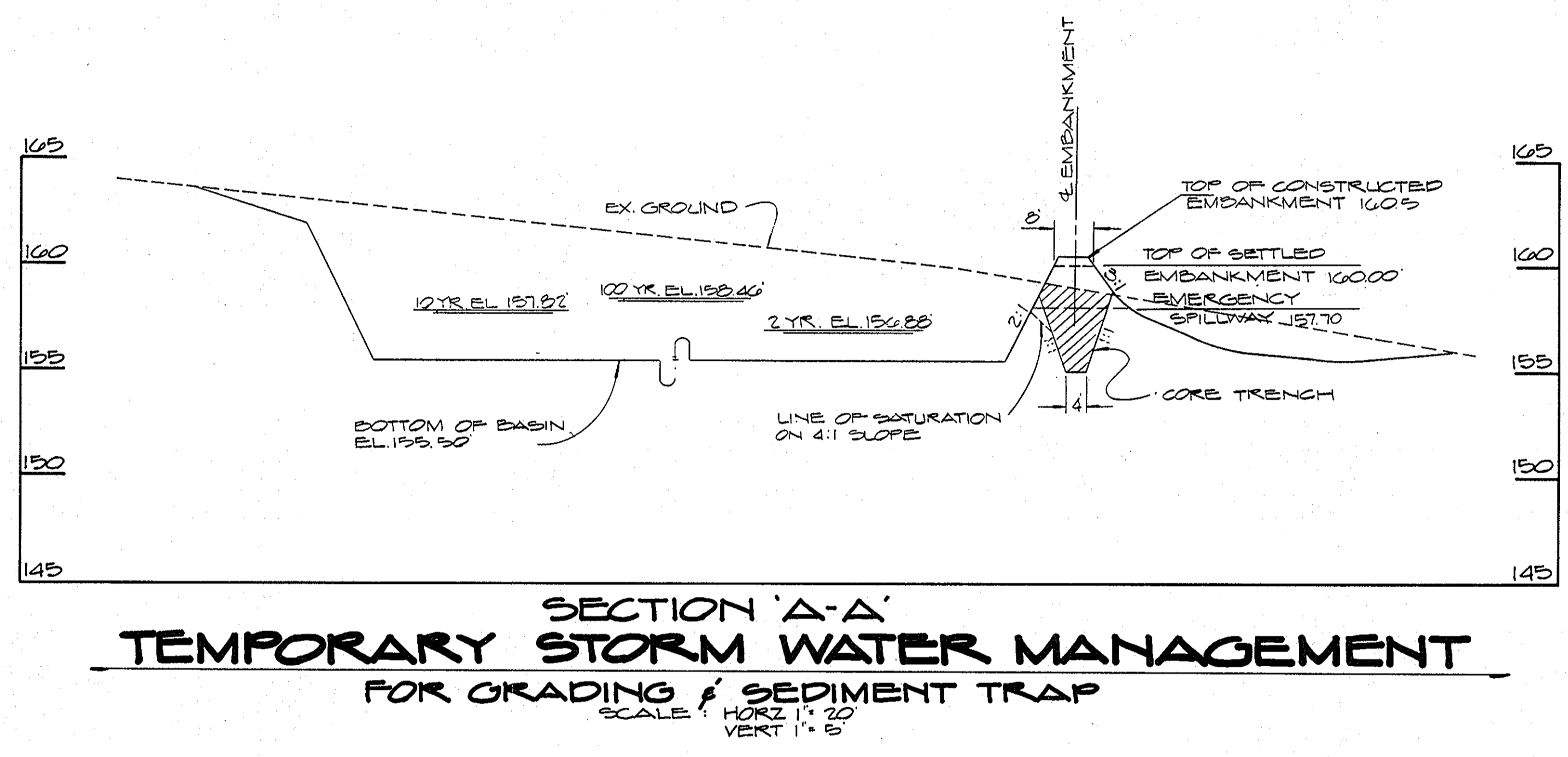
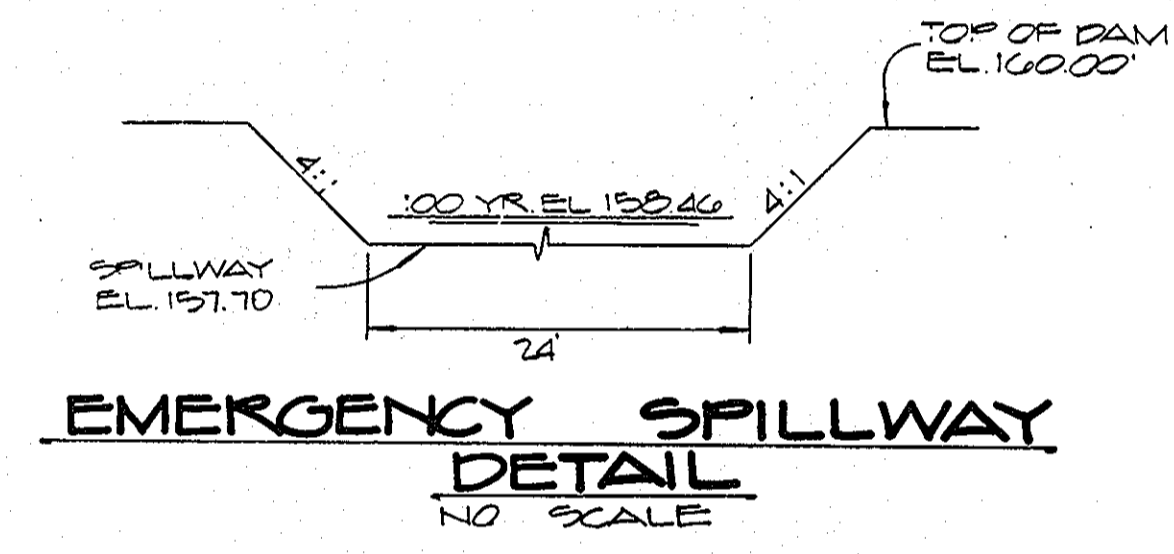
INLET DETAIL
 NO SCALE

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.

Robert M. Nelson 9-23-86
 Howard Soil Conservation Service

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

Robert W. Ziem 9-23-86
 Howard Soil Conservation District



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

APPROVED
 DIVISION OF LAND DEVELOPMENT &
 ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE 8-20-86

REVISIONS
 REVISION NO. DESCRIPTION DATE
 1 1018-86

NOTE: THE DEPTH OF EXCAVATION FOR THE CORE TRENCH WILL BE A MINIMUM OF 4' OR DEEPER AS DETERMINED BY REG. SOILS ENGINEER AT TIME OF CONSTRUCTION.

D.S. THALER & ASSOC. INC.
 11 WARREN ROAD
 BALTIMORE, MD 21202
 (301) 464-4100

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 M. S. Thaler

ENGINEER'S CERTIFICATE
 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.

M. S. Thaler 9-20-86
 Signature of Engineer Date
 Print name below signature MIKE SE

OWNER & DEVELOPER
 MR. ALBERT SAVAL
 110 SOUTH CENTRAL AVE
 BALT. MD 21202
 (301) 675-7000

OWNER'S CERTIFICATE
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Albert Saval 8/23/86
 Signature of Developer Date
 Print name below signature ALBERT E. SAVAL

DES. J.H.M.
 DWG. M.L.T.
 CHK. M.S.

DORSEY INDUSTRIES
 1ST ELECTION DISTRICT
 SCALE: AS SHOWN
 DATE
 PARCEL # 413-373

HOWARD CO., MD
 SHEET 5 OF 7
 TAX MAPS # 43 & 37

SDP-86-121

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

10-2-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
10-3-86

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

10-1-86

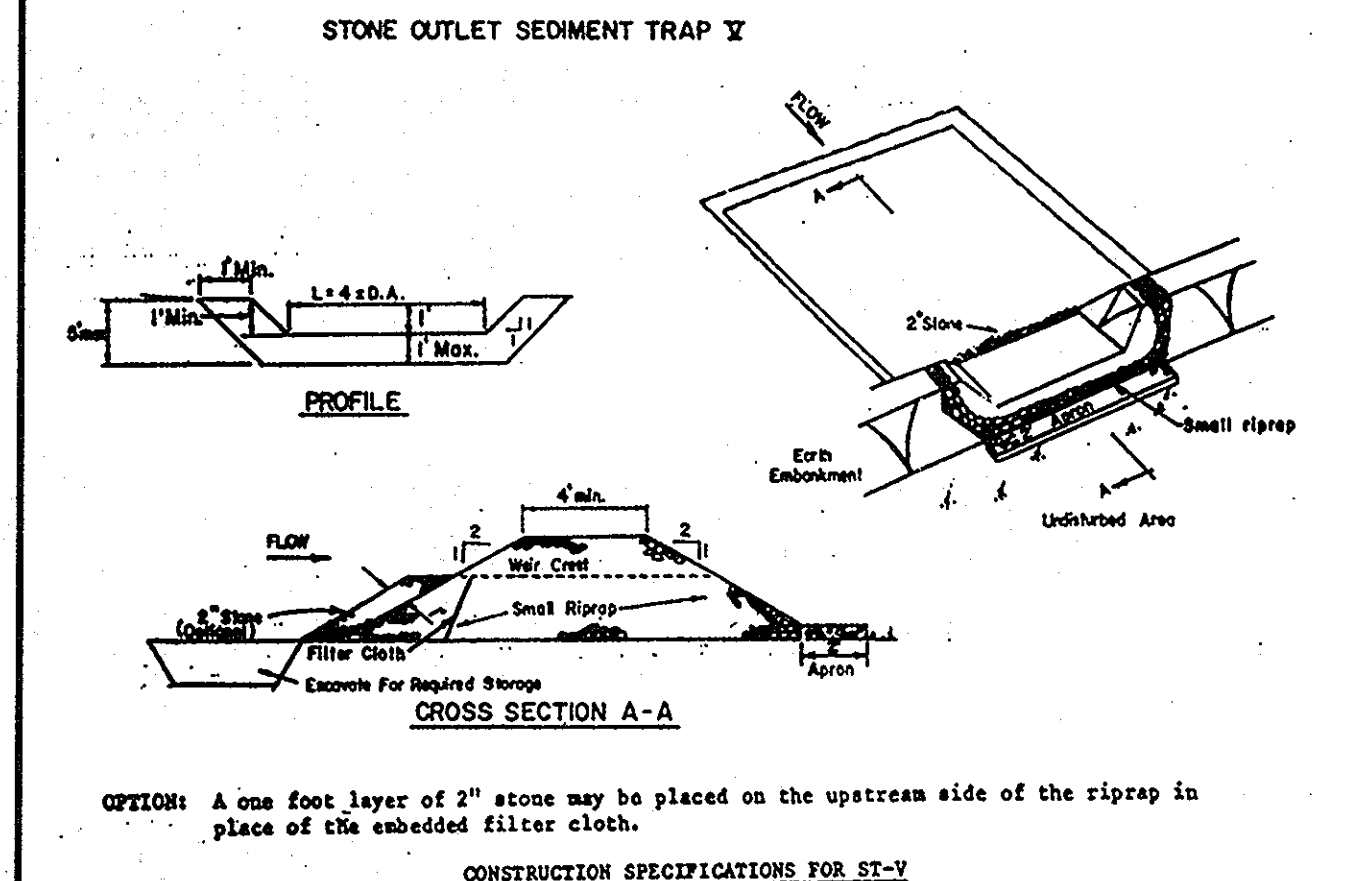
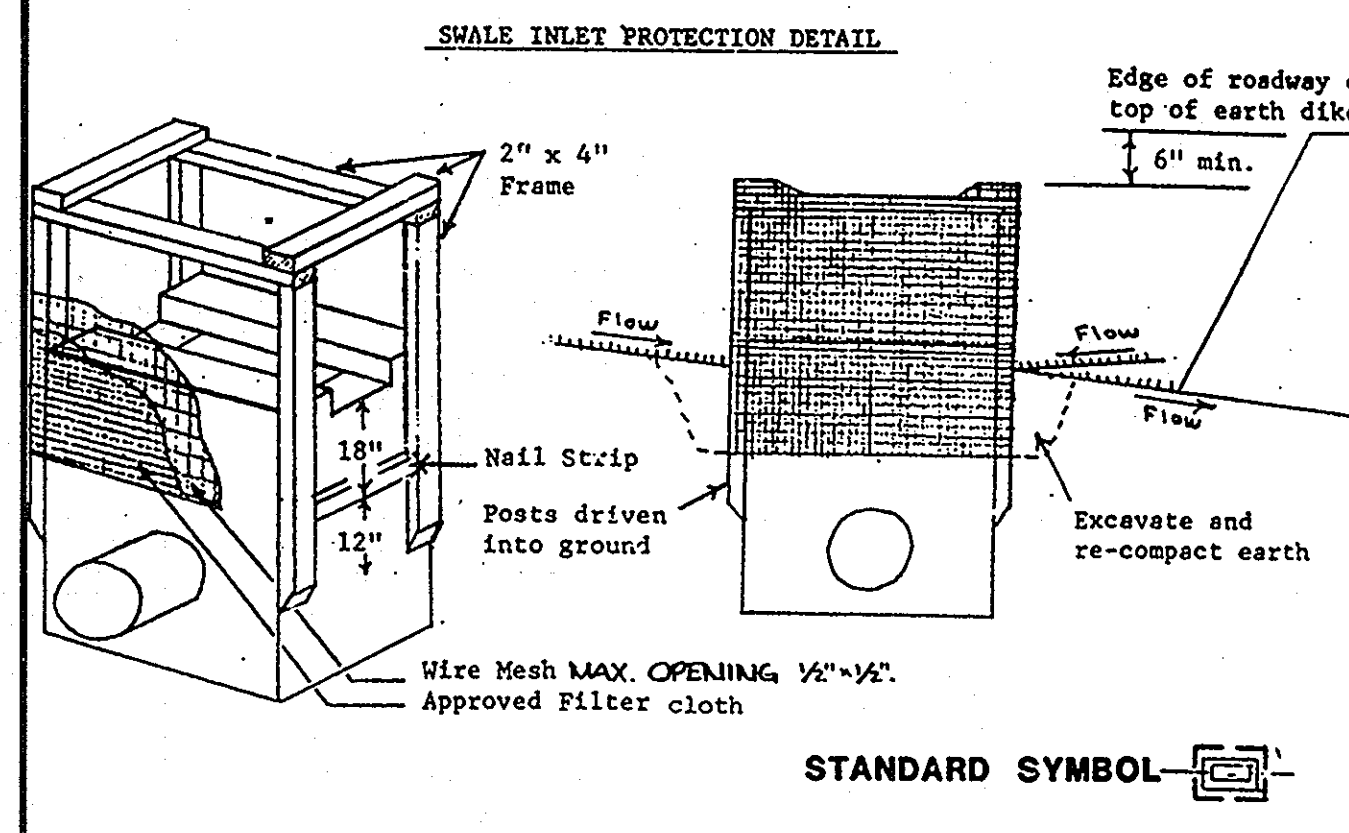
2-22-86

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.

9-23-86

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

9-23-86

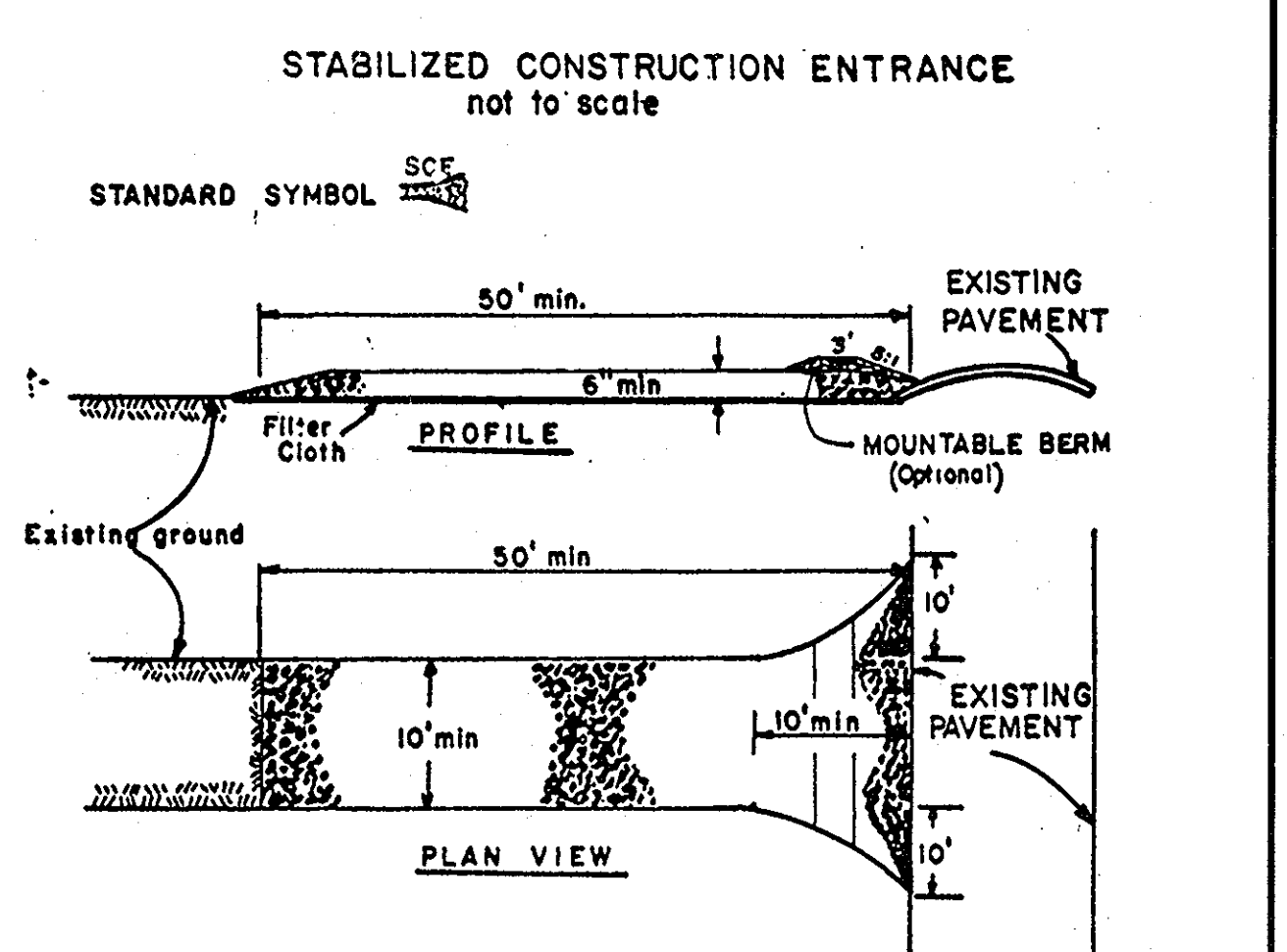


OPTION: A one foot layer of 2" stone may be placed on the upstream side of the riprap in place of the embedded filter cloth.

CONSTRUCTION SPECIFICATIONS FOR ST-Y

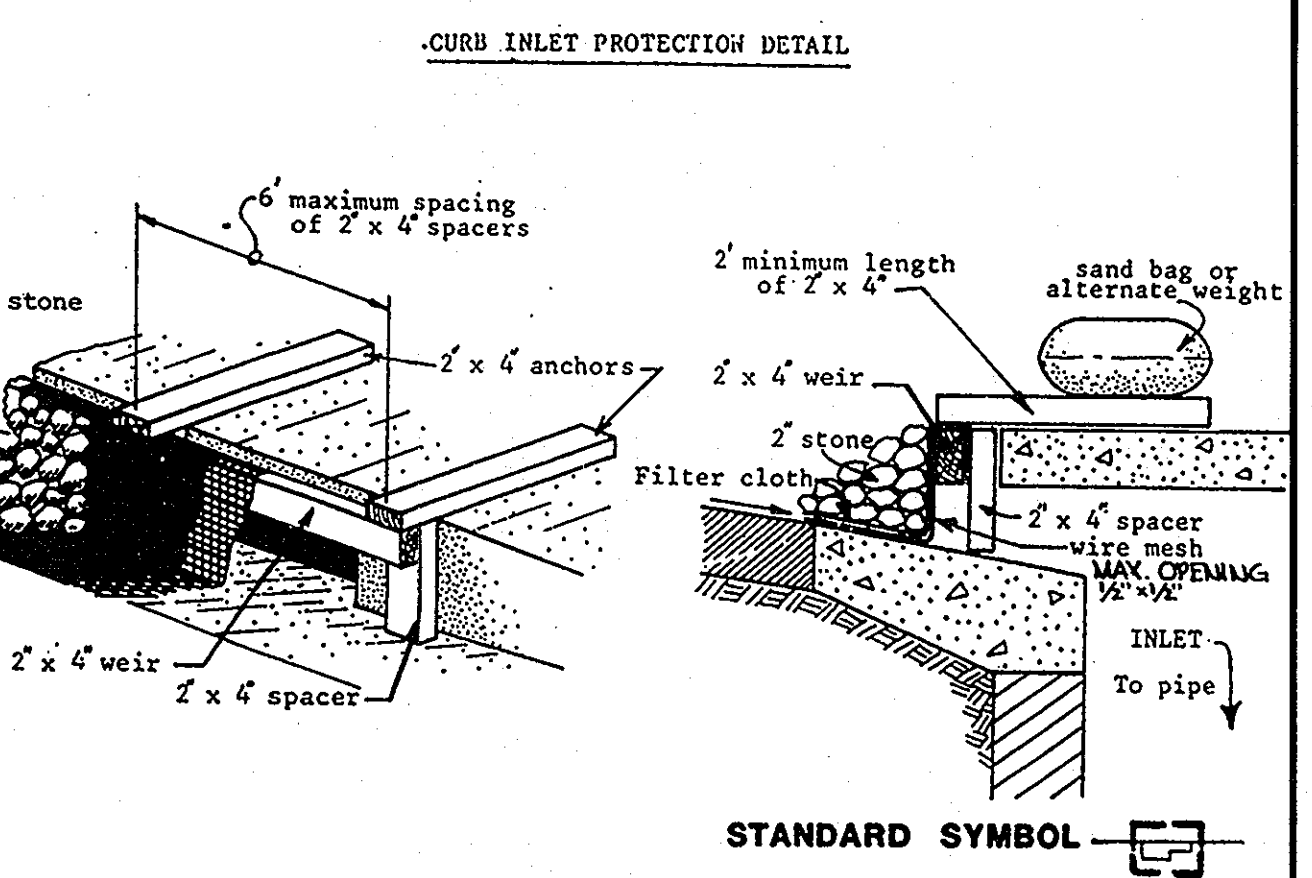
- Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
- The fill material for the embankment shall be free of roots and other woody vegetation as well as oversized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing 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 riprap 4"-8" along with a 1" thickness of 2" aggregate placed on the upgrade side on the small riprap and embedded filter cloth in the riprap.
- 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.

Maximum Drainage Area: .5 Acres



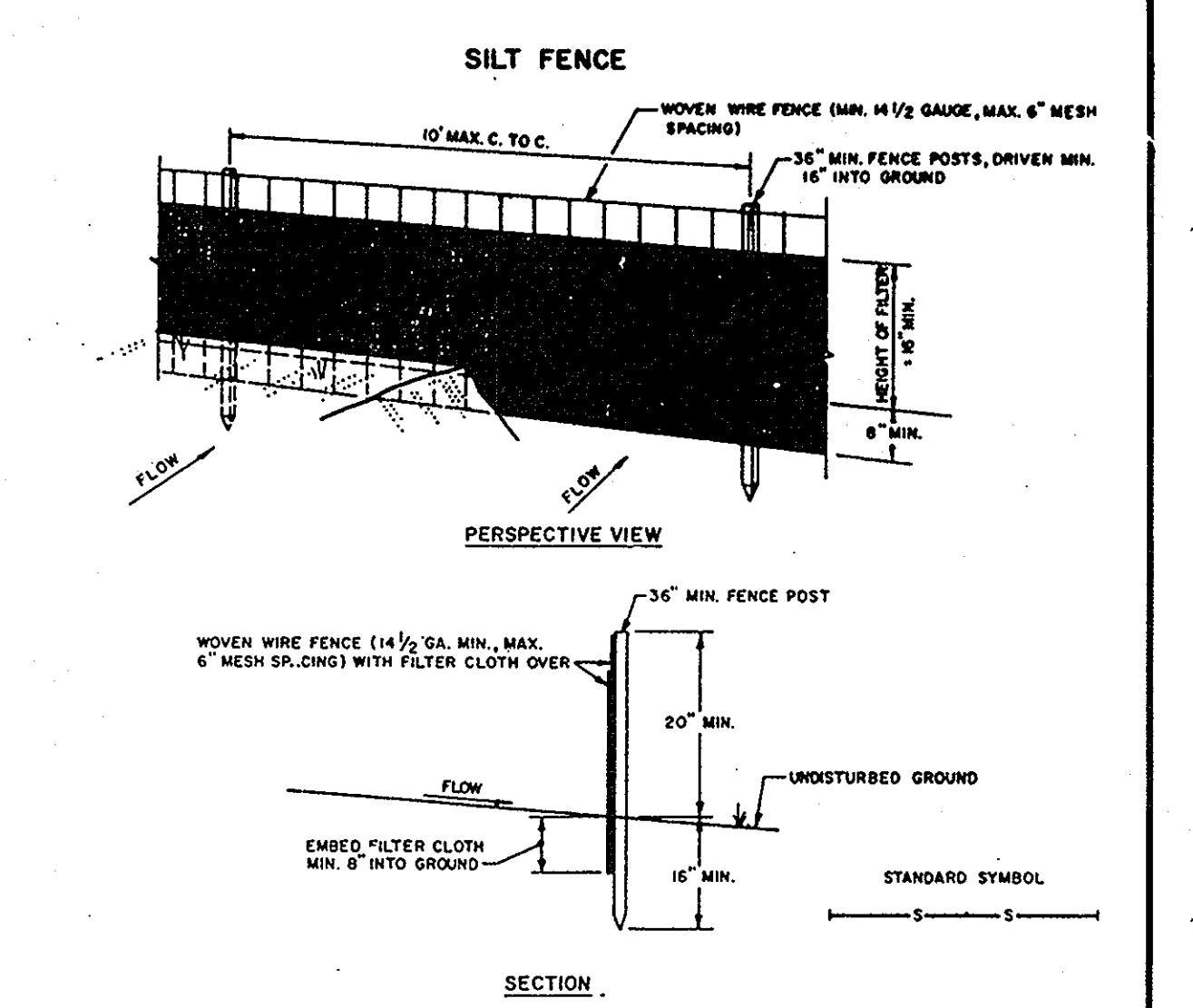
CONSTRUCTION SPECIFICATIONS

- Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
- Length - As required, but not less than 50 feet (except on a single residence lot where a 30 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 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 mountable berm with 5:1 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 spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
- 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.
- Periodic inspection and needed maintenance shall be provided after each rain.



GENERAL NOTES

- Refer to "1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control" for standard details and detailed specifications of each practice specified herein.
- With the approval of the sediment control inspector, minor field adjustments can and will be made to insure the control of any sediment. Changes in sediment control practices require prior approval of the sediment control inspector and the Howard County Soil Conservation District.
- At the end of each working day, all sediment control practices will be inspected and left in operational condition.
- Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a.) seven calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1) and b.) fourteen days as to all other disturbed or graded areas on the project site.
- Any change to the grading proposed on this plan requires re-submission to Howard County Soil Conservation District for approval.
- Dust control will be provided for all disturbed areas. Refer to 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control, pp 6201 and 62.02 for acceptable methods and specifications for dust control.
- Any variation from the sequence of operations stated on this plan requires the approval of the sediment control inspector and the Howard County Soil Conservation District prior to the initiation of the change.



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

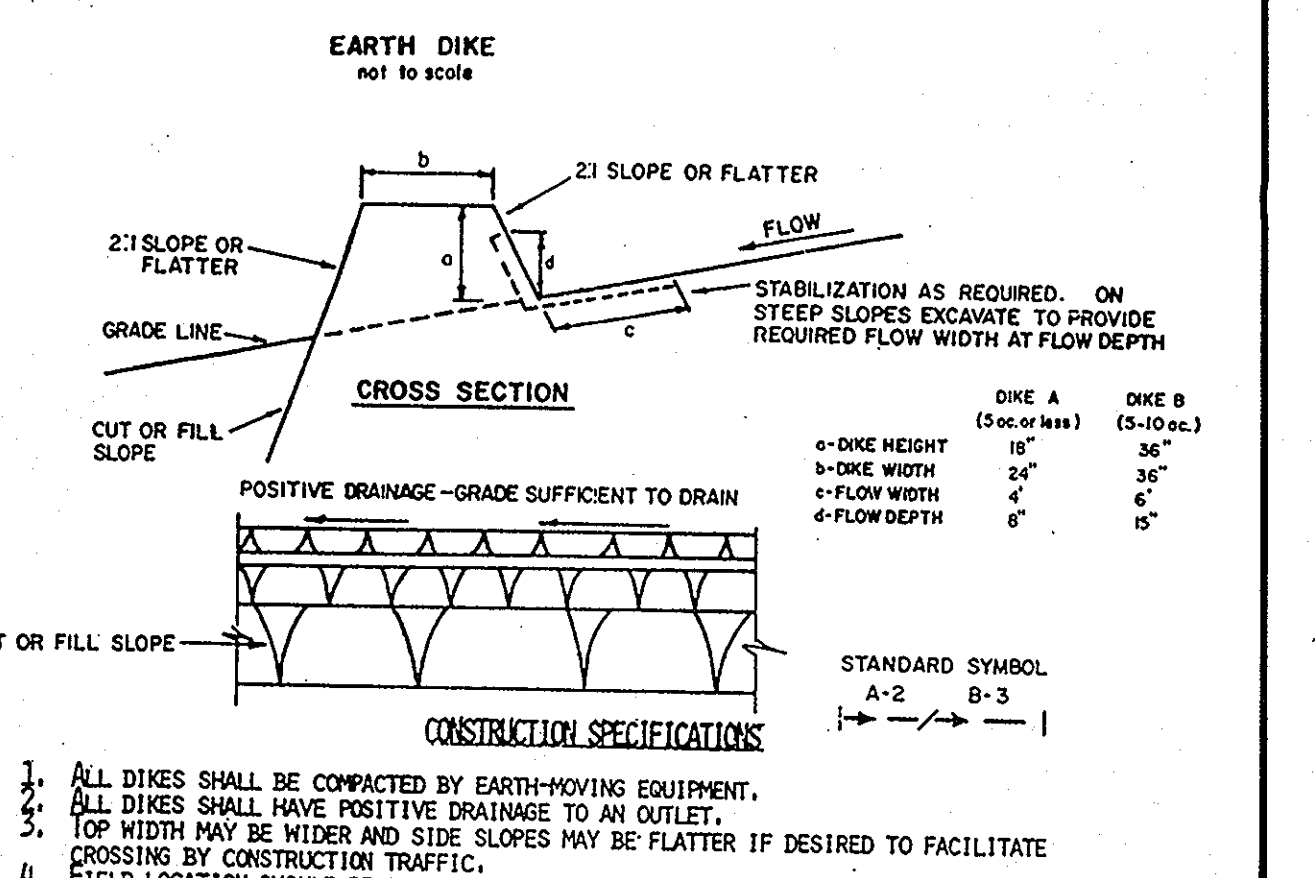
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 2' AT TOP AND MID SECTION.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
- 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, 1 1/2 GA. 6" MAX. MESH OPENING

FILTER CLOTH: FILTER Y, HIRSHI LOW STABILINKA LIGN OR APPROVED EQUAL

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL



CONSTRUCTION SPECIFICATIONS

- ALL DIKES SHALL BE COMPACTED 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 TRAFFIC.
- FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
- 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 SUBSEQUENTLY STABILIZED.
- STABILIZATION 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 THE CHART BELOW.

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELSTOR; SOB; 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOB; 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 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.

PERMANENT SEEDING NOTES

Seedbed Preparation: Loosen upper 3 inches of soil by raking, discing or other acceptable means before seeding.

Soil Amendments: 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 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 (91 lbs./1000 sq. ft.)
- 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 before seeding. 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 1 1/2 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

Seedbed Preparation: Loosen upper 3 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 2 1/2 lbs. 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 1 1/2 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.

D.S. THALER & ASSOC. INC.

11 WARREN ROAD
BALTIMORE, MD 21208
(301) 484-4100

ENGINEERS CERTIFICATE

"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 a 'as built' plan of the pond within 30 days of completion."

M. Sedghi
Signature of Engineer
MIKE SEDGHI

9-20-86
DATE

OWNER & DEVELOPER

MR. ALBERT JAVAL
110 SOUTH CENTRAL AVE
BALT. MD. 21202
(301) 675-7600

OWNERS CERTIFICATE

"I 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 Erosion 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."

Albert Javal
Signature of Developer
ALBERT JAVAL

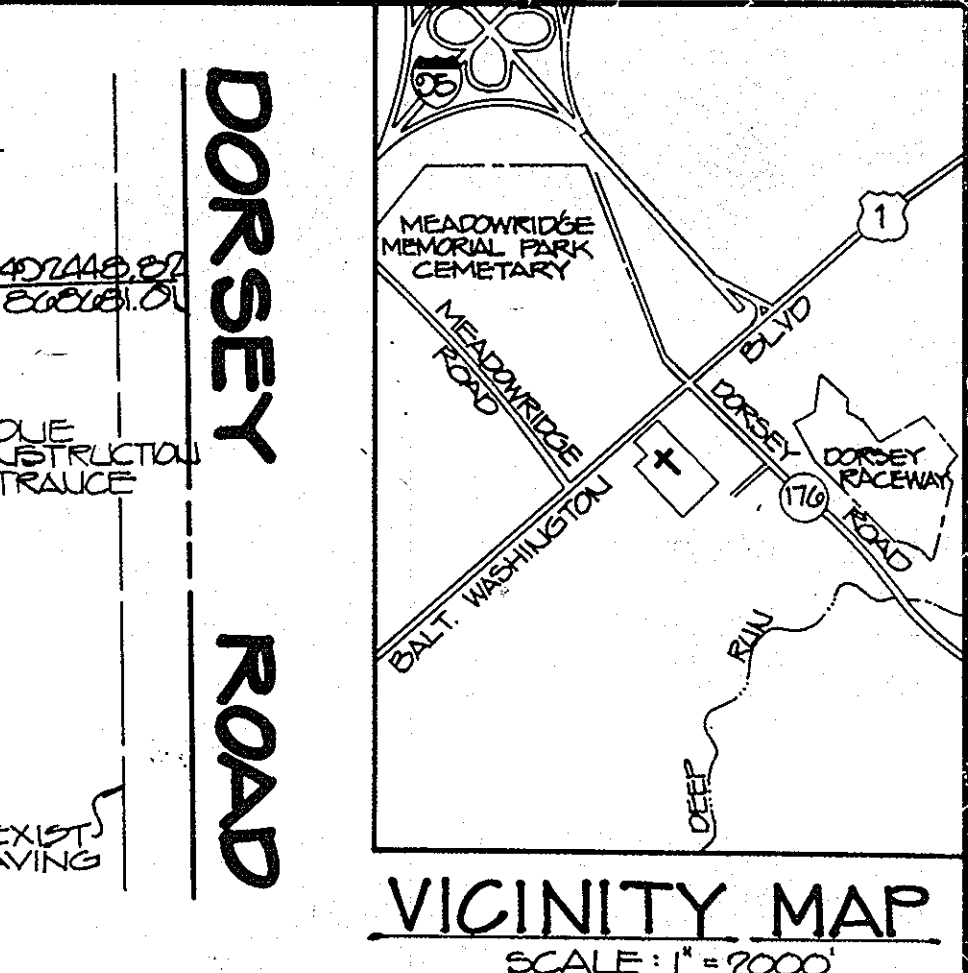
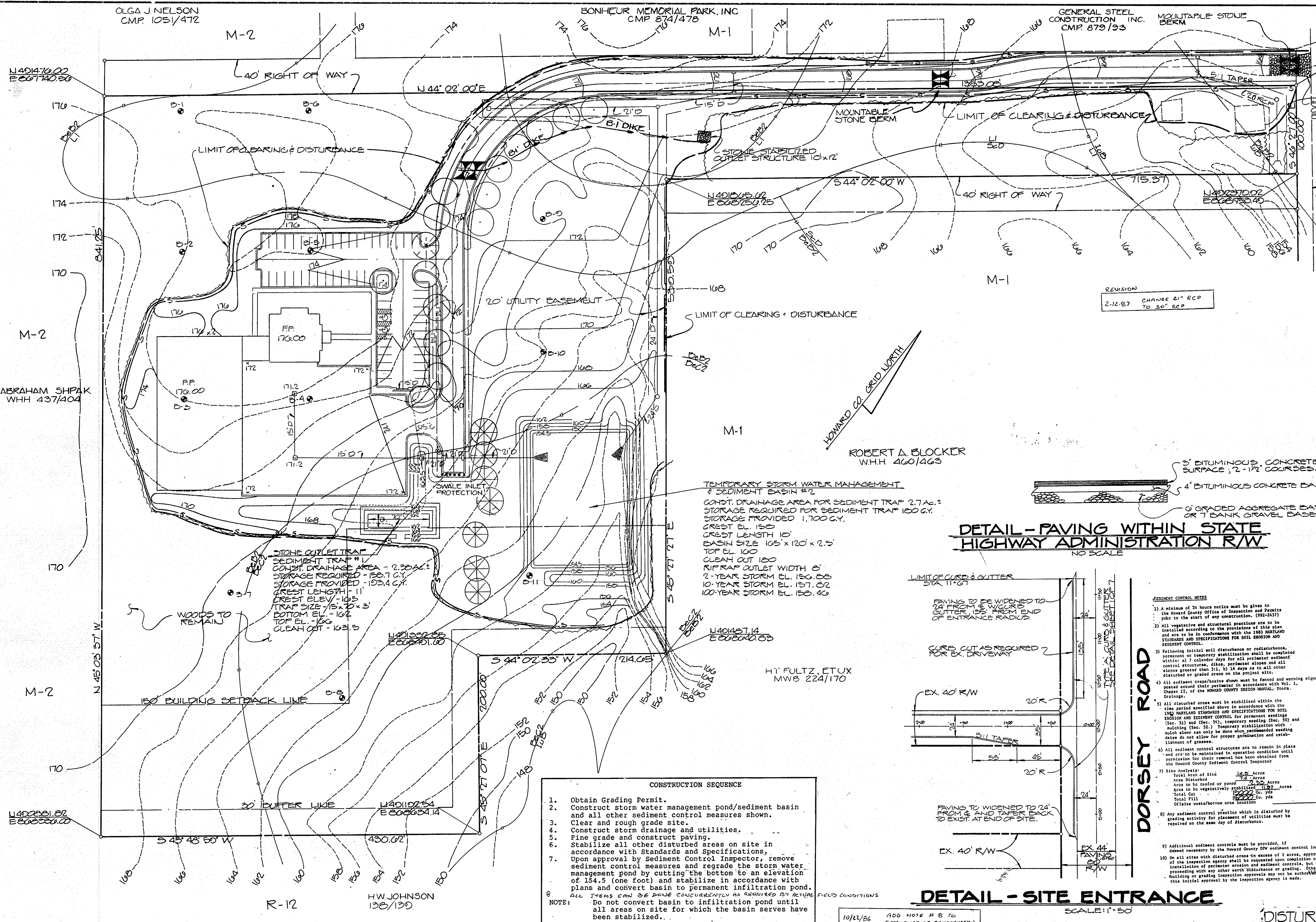
D.S. THALER
DVG, RAC
CHK, JHM

GRADING EROSION & SEDIMENT CONTROL PLAN

DORSEY INDUSTRIES

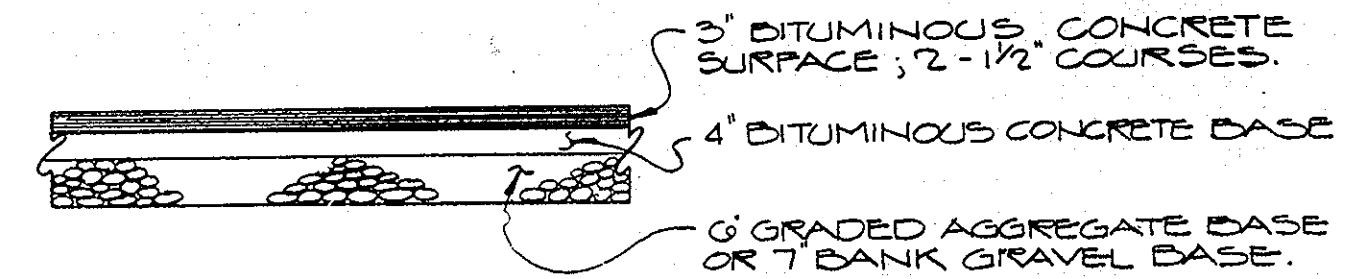
ELECTION DISTRICT NO. 1 HOWARD CO.
SCALE: AS SHOWN SHEET 6 OF 7
OCTOBER 1, 1985 TAX MAPS #42 & 37 PARCELS 412 & 273

SDP-86-121

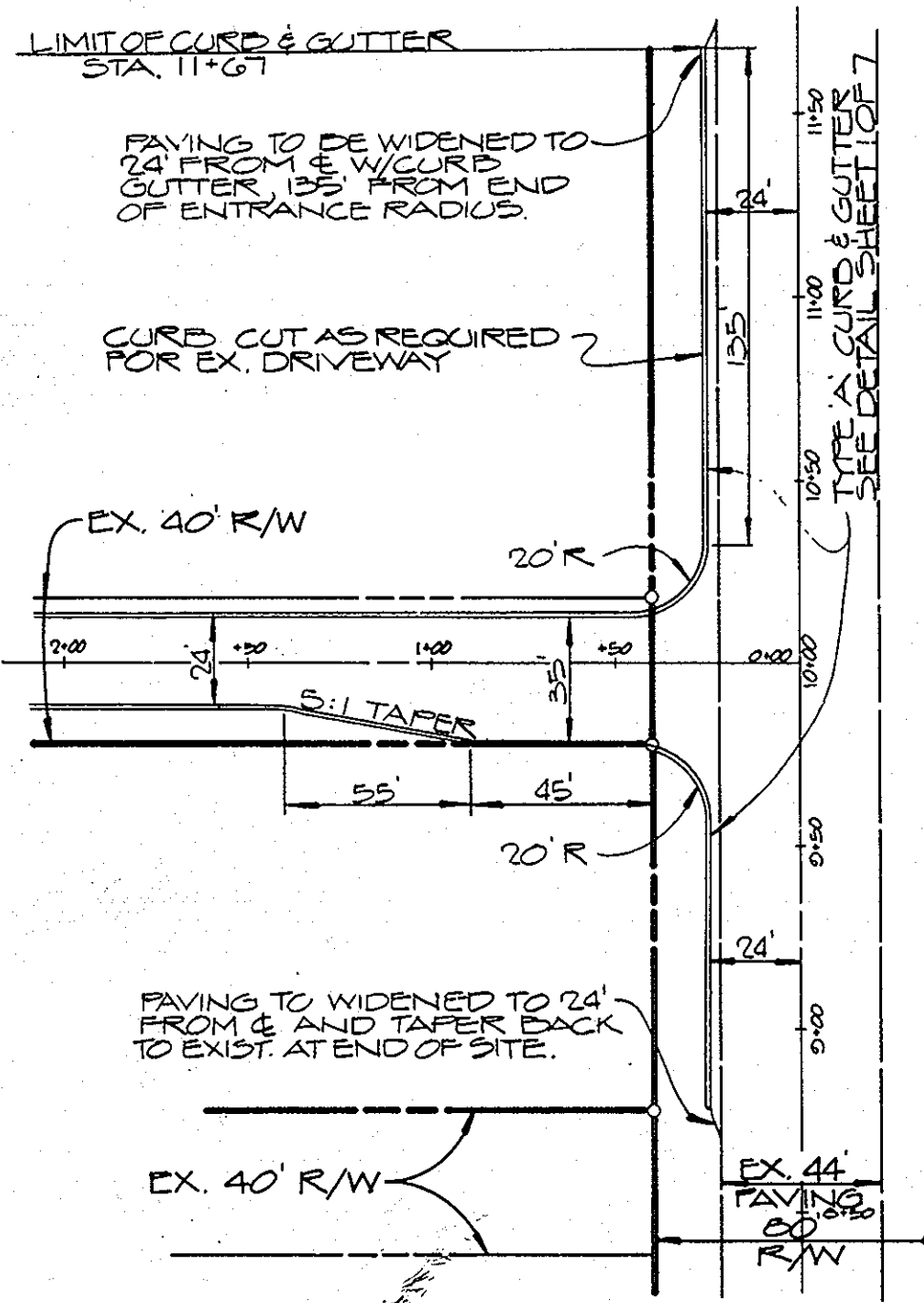


APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *[Signature]* DATE: 10-2-86
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 DIRECTOR: *[Signature]* DATE: 10-3-86
 CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION
 DATE: 10-2-86
 APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE.
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *[Signature]* DATE: 10-1-86
 CHIEF BUREAU OF ENGINEERING: *[Signature]* DATE: 9-26-86

REVISION
 2-12-87 CHANGE 2 1/2" RCP TO 3" RCP



DETAIL - PAVING WITHIN STATE HIGHWAY ADMINISTRATION R/W
 NO SCALE



- SEDIMENT CONTROL NOTES**
- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permitting prior to the start of any construction. (952-2437)
 - All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1985 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
 - Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within 7 calendar days for all perimeter sediment control structures, ditches, postmaster slopes and all control structures, ditches, postmaster slopes and all control structures on the project site.
 - All sediment traps/basins shall be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 17, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
 - All disturbed areas must be stabilized within the time period specified above in accordance with the 1985 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, for permanent seedings (Sec. 51) and (Sec. 54), temporary seedings (Sec. 52) and (Sec. 53) and (Sec. 54). Temporary stabilization with mulch alone can only be done when permanent seedings 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: 16.8 Acres
 Area Disturbed: 7.2 Acres
 Area to be roofed or paved: 2.2 Acres
 Area to be vegetatively stabilized: 1.8 Acres
 Total Cut: 122,000 Cu. Yds.
 Total Fill: 122,000 Cu. Yds.
 Off-site waste/borrow area location: _____
- All sediment control practices 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 details of grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.

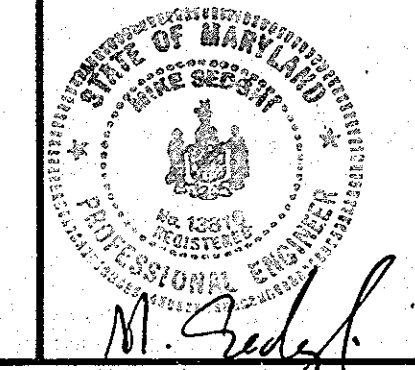
- CONSTRUCTION SEQUENCE**
- Obtain Grading Permit.
 - Construct storm water management pond/sediment basin and all other sediment control measures shown.
 - Clear and rough grade site.
 - Construct storm drainage and utilities.
 - Fine grade and construct paving.
 - Stabilize all other disturbed areas on site in accordance with Standards and Specifications.
 - Upon approval by Sediment Control Inspector, remove sediment control measures and regrade the storm water management pond by cutting the bottom to an elevation of 154.5 (one foot) and stabilize in accordance with plans and convert basin to permanent infiltration pond.
- NOTE: Do not convert basin to infiltration pond until all areas on site for which the basin serves have been stabilized.

10/22/86 ADD NOTE # 8 TO SEQUENCE OF CONSTRUCTION

APPROVED
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE: 8-20-86
[Signature]

DISTURBED AREA = 300,076 sq. ft.

D.S. THALER & ASSOC. INC.
 11 WARREN ROAD
 BALTIMORE, MD 21208
 (301) 484-4100



ENGINEER'S CERTIFICATE
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 M. Sedghi
 Signature of Engineer
 Print name below signature
 MIKE SEDGHI
 9-20-86
 Date

OWNER & DEVELOPER
 MR. ALBERT SAVAL
 110 SOUTH CENTRAL AVE
 BALT. MD. 21202
 (301) 675-1006

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[Signature]
 Signature of Developer
 Print name below signature
 ALBERT E. SAVAL
 Date: 9/22/86

DES: THM
 DWG: M.L.T.
 CHK: THM

GRADING, EROSION & SEDIMENT CONTROL PLAN
DORSEY INDUSTRIES
 ELECTION DISTRICT NO. 1
 SCALE: 1" = 50'
 OCTOBER 1, 1985
 HOWARD CO., MD
 SHEET 7 OF 7
 TAX MAPS #43 & 37
 PARCEL #13 & 373
 SDP-86-121