

Construction Notes

1. THE CONTRACTOR SHALL NOTIFY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST 24 HOURS PRIOR TO STARTING ANY OF THE WORK SHOWN HEREON.
2. ALL PLAN DIMENSIONS ARE GIVEN TO FACE OF CURB UNLESS OTHERWISE NOTED. SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS.
3. THE CONTRACTOR SHALL NOTE THAT IN CASE OF DISCREPANCY BETWEEN ANY SCALED DIMENSIONS AND THE FIGURED DIMENSIONS SHOWN ON THESE PLANS, THE FIGURED DIMENSIONS SHALL GOVERN.
4. CONTRACTOR SHALL MEET ALL EXISTING IMPROVEMENTS SMOOTHLY FOR LINE, GRADE AND FINISH.
5. ALL WORK SHOWN ON THESE PLANS SHALL BE COMPLETED IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS AND OF THE MARYLAND STATE HIGHWAY ADMINISTRATION AND THE HOWARD COUNTY PLUMBING CODE, UNLESS OTHERWISE NOTED.
6. IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NORMALLY BE REQUIRED TO COMPLETE THIS PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO PERFORM SUCH WORK. THE COST OF SUCH WORK SHALL BE INCLUDED IN THE BASE BID.
7. THE CONTRACTOR SHALL INSPECT THE SITE TO DETERMINE IF ANY TREES, PAVING, ETC. ARE TO BE REMOVED PRIOR TO PLACING A BID ON SUCH ITEMS.
8. THE LOCATIONS OF EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE ONLY AND ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE LOCATIONS ARE TAKEN FROM EXISTING RECORDS AND DO NOT REPRESENT FIELD-VERIFIED LOCATIONS. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 A MINIMUM OF 5 WORKING DAYS PRIOR TO DIGGING. THE CONTRACTOR SHALL CONFIRM TO HIS OWN SATISFACTION THE LOCATION OF ALL UTILITIES PRIOR TO ANY EXCAVATION OR PLACEMENT OF MATERIALS. IF ANY CONFLICT IS FOUND BETWEEN UNDERGROUND UTILITIES AND THE PROPOSED LOCATION OF ANY CONSTRUCTION, THE CONTRACTOR SHALL CONTACT G. W. STEPHENS AND THE OWNER OF THE UTILITY IMMEDIATELY. ANY DAMAGE OR DISRUPTION OF SERVICE SHALL BE AT THE EXPENSE OF THE CONTRACTOR. RELOCATION OF ANY EXISTING UTILITIES, IF NECESSARY, SHALL BE AT THE EXPENSE OF THE OWNER. THE CONTRACTOR SHALL COORDINATE RELOCATION OF THESE FACILITIES, IF NECESSARY.
9. CONTRACTOR SHALL PROTECT ALL EXISTING TREES OUTSIDE THE LIMIT OF DISTURBANCE AT ALL TIMES DURING CONSTRUCTION.
10. CONTRACTOR SHALL PROTECT ALL EXISTING IMPROVEMENTS NOT SCHEDULED FOR REMOVAL OR DEMOLITION. COST OF REPAIR TO EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE BASE BID. ALL EXISTING SITE FEATURES NOT BEING RETAINED SHALL BE REMOVED AND DISPOSED OF AT AN APPROVED LOCATION. ANY DAMAGE TO OFFSITE ROADS, RIGHTS OF WAY, OR ADJACENT PROPERTY SHALL BE REPAIRED IMMEDIATELY AT THE EXPENSE OF THE CONTRACTOR.
11. THE CONTRACTOR SHALL CLEAR THE PROJECT SITE OF ALL TREES, PAVING, STRUCTURES, ETC. WITHIN THE CONSTRUCTION AREA UNLESS OTHERWISE NOTED ON THE PLAN.
12. ONLY SUITABLE MATERIAL SHALL BE USED AS FILL AND ALL FILL SHALL BE PLACED AND COMPACTED AS SPECIFIED IN THE SOILS REPORT PREPARED FOR THIS SITE OR AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER. ALL 2:1 SLOPES SHOWN HEREON, EXCEPTING THOSE ASSOCIATED WITH LANDSCAPE BERMING, ALL GRADING UNDER PROPOSED PAVING, AND ALL FILL AND COMPACTION SHALL BE APPROVED BY A GEOTECHNICAL ENGINEER.
13. CONTRACTOR SHALL PROVIDE MINIMUM 4 FOOT BENCH AT EDGE OF PAVING IN FILL AREAS. MAXIMUM SLOPE OF BENCH SHALL BE 4% (1/4 IN PER FOOT).
14. MAXIMUM SLOPE SHALL BE 2 HORIZONTALLY TO 1 VERTICALLY.
15. CONTRACTOR SHALL PLACE 4" MINIMUM TOPSOIL IN LANDSCAPE AREAS. TOPSOIL SHALL BE APPROVED BY LANDSCAPE ARCHITECT.
16. CONTRACTOR SHALL PLACE A WITNESS POST AT THE TERMINUS OF ALL UTILITY STUBS.
17. ALL UTILITIES INSTALLED SHALL RECEIVE FULL TRENCH COMPACTION.
18. CONTRACTOR SHALL PROVIDE A MINIMUM OF 1 FOOT OF PROTECTIVE FILL OVER STORM DRAIN PIPES DURING CONSTRUCTION.
19. CONTRACTOR SHALL PROVIDE ALL PAVEMENT MARKINGS AND SIGNAGE FOR HANDICAP PARKING SPACES INDICATED HEREON IN ACCORDANCE WITH ALL APPLICABLE CODES. ALL PAVEMENT MARKINGS TO BE TRAFFIC WHITE.
20. ALL HANDICAPPED FACILITIES TO BE CONSTRUCTED IN ACCORDANCE WITH THE "DESIGN OF BARRIER FREE FACILITIES" AND THE MARYLAND BUILDING CODE FOR THE HANDICAPPED AND AGED, LATEST EDITION.
21. ALL TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNAGE SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES". ALL STREET AND REGULATORY SIGNS SHALL BE INSTALLED PRIOR TO INSTALLATION OF FINISHED PAVING.
22. THE CONTRACTOR SHALL REPLACE ANY EXISTING BITUMINOUS PAVING OR SUB-BASE WHICH IS DAMAGED OR REMOVED DURING CONSTRUCTION. ALL EXCAVATED AREAS SHALL BE BACKFILLED AND IN ACCORDANCE WITH THE SOILS REPORT AND/OR AS DIRECTED BY GEOTECHNICAL ENGINEER. ANY AREAS TO BE PAVED WHICH EXHIBIT UNSTABLE SUBGRADE CONDITIONS SHALL BE EXCAVATED TO BEARING SOIL, REFILLED AND COMPACTED.
23. THE CONTRACTOR SHALL PLACE PROPOSED SURFACE COURSE OVERLAY 5 FEET BEYOND LIMITS OF REPLACEMENT PAVING, UNLESS DIRECTED OTHERWISE BY THE ENGINEER IN THE FIELD. ALL OVERLAYS SHALL HAVE SMOOTH, STRAIGHT EDGES. STRIP AND RESURFACE EXISTING PAVING AS NEEDED TO PROVIDE SMOOTH TRANSITION.
24. ALL AREAS NOT BEING PAVED OR RECEIVING BUILDING COVERAGE SHALL BE STABILIZED IN ACCORDANCE WITH THE PLANS APPROVED BY THE HOWARD SOIL CONSERVATION DISTRICT.
25. PREFORMED ELASTOMERIC COMPRESSION JOINT MATERIAL SHALL BE INSTALLED AT ALL MEETINGS OF EXISTING AND PROPOSED CONCRETE PAVING AND SIDEWALKS.
26. STORMCEPTORS SHALL BE AS MANUFACTURED BY THE STORMCEPTOR CORPORATION 600 E. JEFFERSON STREET, SUITE 304 ROCKVILLE, MARYLAND 20852 TELEPHONE: 301-762-8361
27. ALL STORMCEPTORS SHALL BE CONCRETE.
28. ALL WATERMAIN TEES, BENDS, CAPS, ETC. SHALL BE BUTTRESSED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN REQUIREMENTS.
29. ALL WATERMAINING SHALL HAVE 4" COVER UNLESS OTHERWISE NOTED.
30. ALL EXTERIOR LIGHTING SHALL CONFORM TO ZONING REGULATIONS, SECTION 134.
31. THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY GEORGE W. STEPHENS JR. AND ASSOCIATES DATED FEB. 01, 1998.
32. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY NUMBERS 2445004 AND 2445005 WERE USED FOR THIS PROJECT.
33. WATER IS PUBLIC. CONTRACT NO. 44 - 3691-D
34. SEWER IS PUBLIC.
35. STORMWATER MANAGEMENT CONTROL IS DRY / EXTENDED DETENTION. THE MAINTENANCE OF THIS FACILITY IS THE RESPONSIBILITY OF THE OWNER WHICH IS MANEKIN CORPORATION. THE STORMWATER MANAGEMENT POND IS PRIVATE.
36. THE FLOODPLAIN STUDY FOR THIS PROJECT WAS PREPARED BY VIKI DATED 1-30-91, AND WAS APPROVED ON DATE 1993.
37. THE WETLANDS FOR THIS PROJECT WAS PREPARED BY ESA, INC., DATED 1993, AND WAS APPROVED ON DATE JULY 21, 1993.
38. THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY INTEGRATED TRANSPORTATION SOLUTIONS, INC. DATED AUGUST OF 1992 AND WAS APPROVED ON DATE 1993.

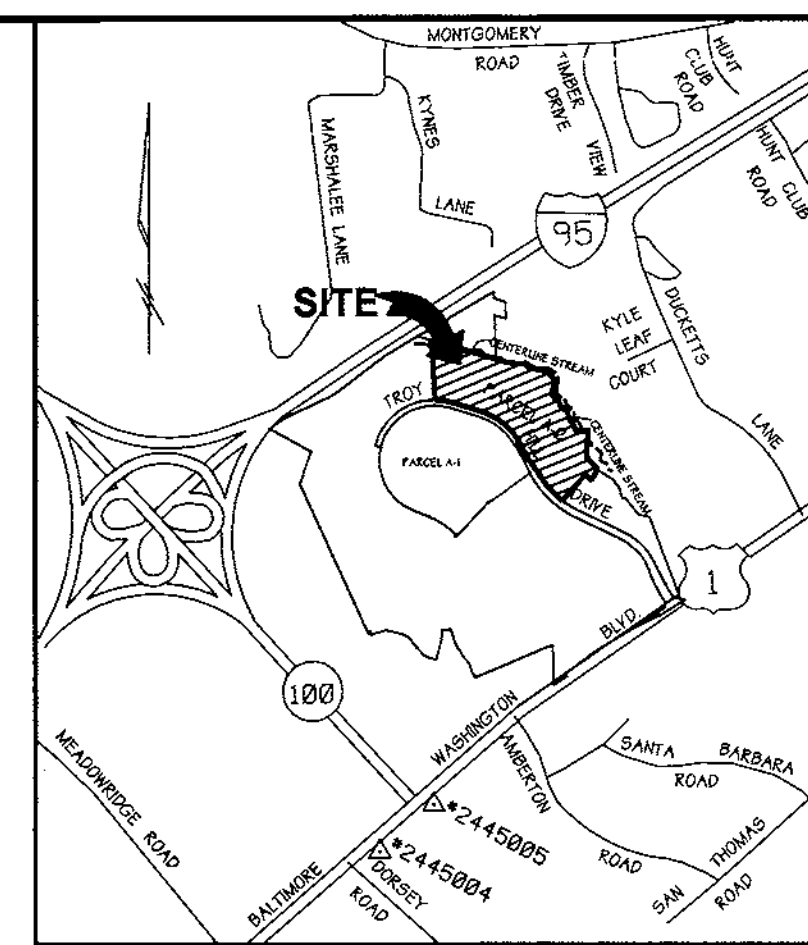
BENCHMARKS

BENCHMARK #1
IRON PIN @ TRAVERSE #1066
N 496,501.3597 E 869,134.4576
ELEVATION = 175.92'

BENCHMARK #2
IRON PIN @ TRAVERSE #1061
N 498,036.6945 E 868,791.1502
ELEVATION = 242.49'

BENCHMARK #3
IRON PIN @ TRAVERSE #1034
N 497,636.7437 E 869,835.6586
ELEVATION = 214.85'

COORDINATES BASED ON NAD 27, AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS #2445004 AND #2445005



Site Data

Vicinity Map

SCALE: 1" = 2000'

TOTAL PROJECT AREA -	1,251,194 SQ.FT. OR 28.74 Ac. +/-
EXISTING ZONING -	M-1
PROPERTY REFERENCE -	F 91-24 ; 1795/347 ; 1818/465 ; 2122/417 ; 2259/644 ; 1818/472 ; 2689/276
EXISTING USE -	VACANT
PROPOSED USE -	WAREHOUSE/DISTRIBUTION
BUILDING COVERAGE -	311,350 Sq.Ft.
% OF BUILDING COVERAGE -	24.87%
FLOOR AREA -	7.15 Ac.
FLOOR AREA RATIO -	24.87%
AREA TO BE PAVED PLUS BUILDING AREA -	14.11 Ac. +/-
OPEN SPACE -	7.48 Ac. +/-
TOTAL AREA OF PARKING LOT -	28%
% OF PARKING LOT COVERAGE -	247
NUMBER OF PARKING SPACES REQUIRED	311 INCLUDING
NUMBER OF PARKING SPACES PROVIDED	14 HANDICAPPED
AREA TO BE DISTURBED -	1,036,728 SQ.FT. OR 23.80 Ac. +/-
AREA TO BE VEGETATIVELY STABILIZED -	312,761 SQ.FT. OR 7.18 Ac. +/-
SKETCH PLAN NO. -	S 90-05
PRELIMINARY PLAN NO. -	P 90-25
FINAL PLAN NO. -	F 96-136
WAIVER PETITION :	WP-96-91

Site Development Plans

for

Parcel A-2

Troy Hill Corporate Center

Howard County, Maryland

S.D.P. 98 - 114

Parking Tabulations

Total Building Area 311,350 Sq. Ft.
Parking Required -
279,000 Sq.Ft. Warehouse Distribution @ 0.5 Spaces /1000 Sq. Ft. = 140 Spaces
32,350 Sq. Ft. Office @ 3.3 Spaces/1000 Sq. Ft. = 107 Spaces
Total Required = 247 Spaces
Parking Provided - 311 Spaces (Includes 14 Handicapped)

Index of Sheets

SHEET NO. 1 -	TITLE SHEET, GENERAL NOTES
SHEET NO. 2 -	PLAN VIEW
SHEET NO. 3 -	PLAN VIEW
SHEET NO. 4 -	DETAILS & SECTIONS
SHEET NO. 5 -	DETAILS & SECTIONS
SHEET NO. 6 -	DRAINAGE AREA MAP
SHEET NO. 7 -	STORM DRAIN PROFILES
SHEET NO. 8 -	PROFILES & DETAILS
SHEET NO. 9 -	STORMCEPTOR DETAILS
SHEET NO. 10,11,12 -	SEDIMENT CONTROL
SHEET NO. 13 & 14	SEDIMENT BASIN
SHEET NO. 15, 16 & 17	STORMWATER MANAGEMENT
SHEET NO. 18 & 19	LANDSCAPE PLANS

Legend

Ex. 2' Contours	-----
Ex. 10' Contours	-----
Prop. 2' Contours	----- 222
Prop. 10' Contours	----- 220
Ex. Curb & Gutter	-----
Prop. Curb & Gutter	-----
Bldg. Restriction Line	-----
Ex. Sanitary	-----
Ex. Storm Drain	-----
Ex. Water	-----
Prop. Sanitary	-----
Prop. Storm Drain	-----
Prop. Water	-----
Heavy Duty Paving (P-5)	-----
See Sheet 4 OF 19	-----
for Detail	-----
Light Duty Paving (P-3)	-----
See Sheet 4 of 19	-----
for Detail	-----
Proposed Sidewalk	-----

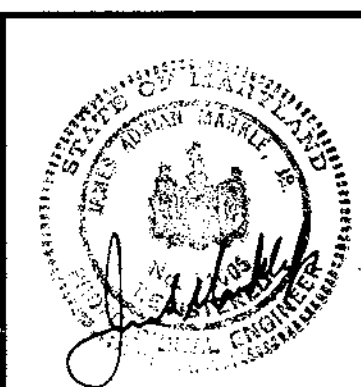
NOTE:
The owner shall provide a separate and independent sewer connection for each tenant or occupant of any building shown on this site development plan who will discharge non-domestic waste to the public sewerage system if each separate and independent sewer connection shall include a standard manhole and other waste pretreatment devices as required and approved by Howard County. Waste lines on the interior of the building shall be designed, constructed or modified such that non-domestic waste will be discharged to the separate and independent sewer connection. No tenant or occupant of any building shown on this site development plan shall discharge regulated non-domestic waste to the public sewerage system prior to installation of the separate and independent sewer connection and related interior waste lines. The above statement shall apply to all initial and future occupants or tenants.

MANEKIN

MANEKIN CORPORATION
7165 COLUMBIA GATEWAY DRIVE
COLUMBIA MARYLAND 21046
410-290-1400

PREPARED BY :

GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.
Civil Engineers and Land Surveyors
658 Kenilworth Drive, Suite 100
Towson, Maryland 21204
(410) 825-8120



OWNER/DEVELOPER
TROY HILL BUSINESS PARK PARTNERSHIP
c/o MANEKIN CORPORATION
7165 COLUMBIA GATEWAY DRIVE
COLUMBIA, MARYLAND
21046
410-290-1400

COVER SHEET
FOR
TROY HILL CORPORATE CENTER
PHASE 1 PARCEL A-2
PREVIOUS FILE #S 990-05, P90-25, F91-24, WP 96-91, P96-136

HOWARD COUNTY, MARYLAND
1st ELECTION DISTRICT

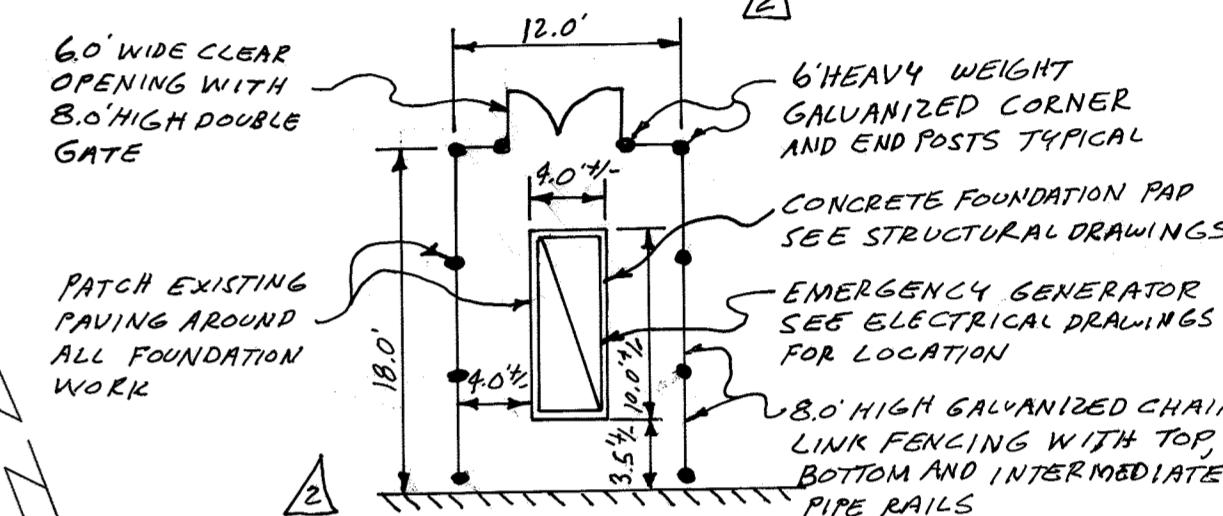
SCALE: AS SHOWN
JUNE 03, 1998

SHEET 1 of 19

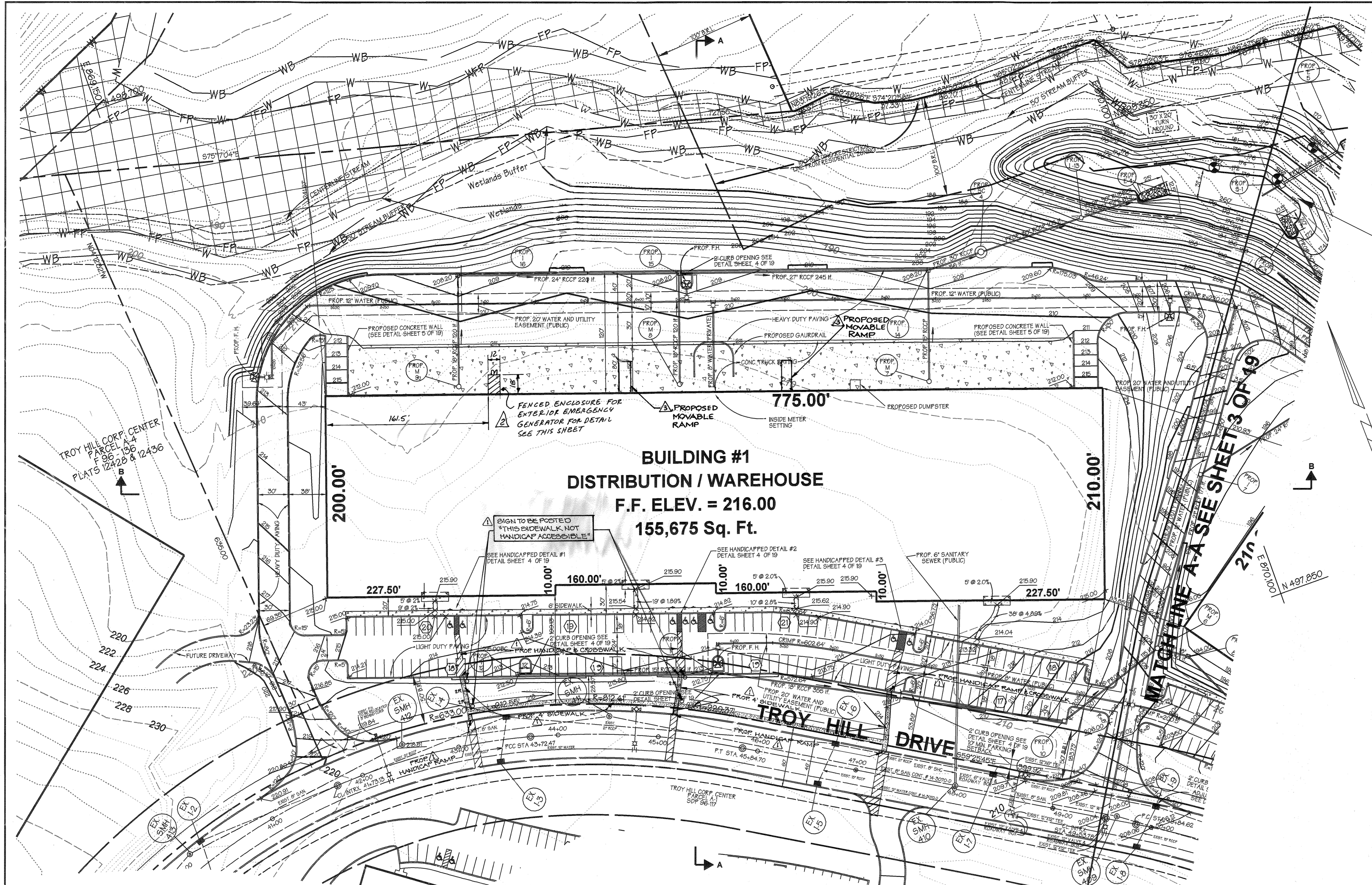
Legend

Ex. 2' Contours	-----
Ex. 10' Contours	-----
Prop. 2' Contours	-----
Prop. 10' Contours	-----
Ex. Curb & Gutter	-----
Prop. Curb & Gutter	-----
Ex. Restriction Line	-----
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Heavy Duty Paving (P-5)	-----
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NOTE: FOR STORMWATER MANAGEMENT POND DESIGN AND DETAILS SEE SHEET 16 OF 19.



EMERGENCY GENERATOR ENCLOSURE DETAIL
SCALE: 1"=10'



**BUILDING #1
DISTRIBUTION / WAREHOUSE**
F.F. ELEV. = 216.00
155,675 Sq. Ft.

NOTE: CROSSWALKS SHOWN CROSSING TROY HILL DRIVE REVISED 8/22/06 AND SHOWN ON THE DRAWING OF TROY HILL CORPORATE CENTER, PHASE I, SHEET G OF 28 (P-36-156)

PLAN Scale: 1"=50'

NOTE: The owner shall provide a separate and independent sewer connection for each tenant or occupant of any building shown on this site development plan who will discharge non-domestic waste to the public sewerage system if each separate and independent sewer connection shall include a standard manhole and other waste pretreatment devices as required and approved by Howard County. Waste lines on the interior of the building shall be designed, constructed or modified such that non-domestic waste will be discharged to the separate and independent sewer connection. No tenant or occupant of any building shown on this site development plan shall discharge regulated non-domestic waste to the public sewerage system prior to installation of the separate and independent sewer connection and related interior waste lines. The above statement shall apply to all initial and future occupants or tenants.

I, PAUL W. TAYLOR, CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 14751 EXP. DATE: 12-08-2021 FOR REVISION #3 ONLY

NOTE: A BUILDING PERMIT FOR THE PROPOSED EMERGENCY GENERATOR ENCLOSURE SHALL BE APPLIED FOR WITHIN 1 YEAR MEASURED FROM THE DED APPROVAL DATE FOR RED LINE REVISION NO.2 (JULY 16, 2006)

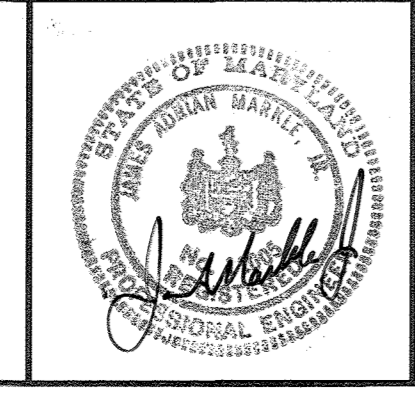
These plans for S.W.M. construction, soil erosion and sediment control meet the requirements of Howard Soil Conservation District.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT	DATE
PLAN NUMBER	DATE
Reviewed for the Howard Conservation District and meets technical requirements.	
NATURAL RESOURCES CONSERVATION SERVICE	DATE
APPROVED: Howard County Department of Planning and Zoning	DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION	9/16/06
CHIEF, DIVISION OF LAND DEVELOPMENT	7/23/06
DIRECTOR	10/16/06

ADDRESS SHEET				
PARCEL NO.	STREET ADDRESS			
Building #1	7055 Troy Hill Drive			
Building #2	7045 Troy Hill Drive			
SUBDIVISION NAME SECTION NAME PARCEL #				
TROY HILL CORPORATE CENTER	1	A-2		
PLAT #	BLOCK #	ZONE	ELECT. DIST.	CENSUS TRACT
12428		M-1	1st	6011.02
WATER CODE C04		SEWER CODE 4020000		

PREPARED BY:

GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.
Civil Engineers and Land Surveyors
658 Kenilworth Drive, Suite 100
Towson, Maryland 21204
(410) 825-8120



PROFESSIONAL CERTIFICATION FOR REVISION NO. 2
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 11005, EXPIRATION DATE 7/7/10

OWNER/DEVELOPER
TROY HILL BUSINESS PARK PARTNERSHIP
c/o MANEKIN COPORATION
7165 COLUMBIA GATEWAY DRIVE
COLUMBIA, MARYLAND
21046
410-290-1400

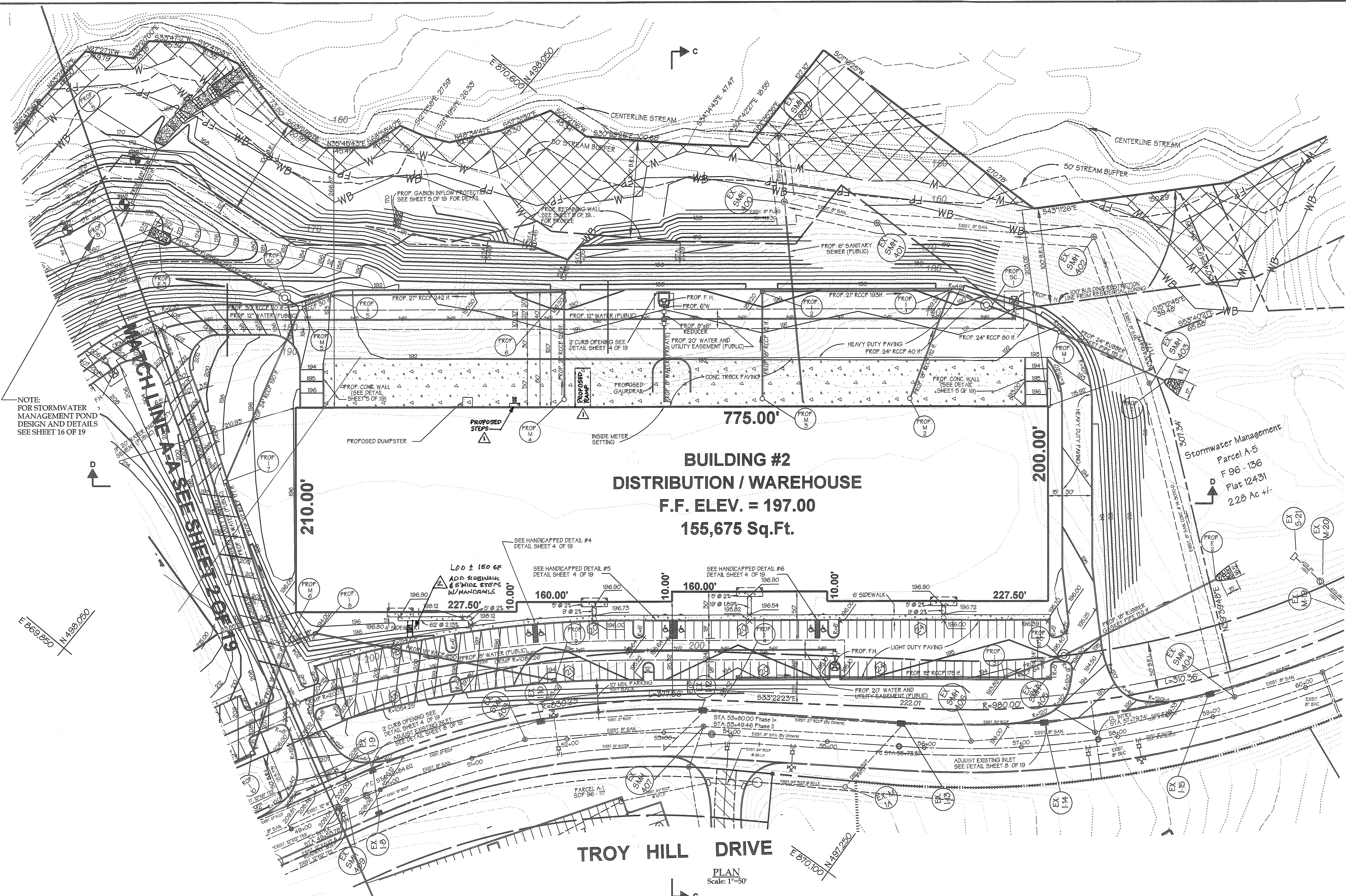
NO.	DATE	REVISION	BY
1	6/22/21	ADDED MOVABLE RAMPS TO PROVIDE ACCESS SO VEHICLES CAN BE BROUGHT INSIDE THE FACILITY	PWT

REVISION
ADDED 4" CONCRETE SIDEWALKS ALONG TROY HILL DRIVE RIGHT OF WAY LINE & CROSSWALKS TO BUILDING #1
BY: GWS DATED 12/8/06
ADDED EMERGENCY GENERATOR WITH FENCED ENCLOSURE TO REAR OF BLDG. NO.1. PROVIDED DETAIL OF EMERGENCY GENERATOR ENCLOSURE BY GWS DATED 7/23/06

SITE PLAN FOR TROY HILL CORPORATE CENTER PHASE 1 PARCEL A-2
PREVIOUS FILE #S 590-05, P90-25, P91-24, WP 96-91, P96-136
HOWARD COUNTY, MARYLAND SHEET 2 of 19 SCALE: AS SHOWN
1st ELECTION DISTRICT
SDP 98-114 P/N: 8190 KE
NAME: 8190stplan.s01 08-24-96

Legend

- Ex. 2' Contours
- Ex. 10' Contours
- Prop. 2' Contours
- Prop. 10' Contours
- Ex. Curb & Gutter
- Prop. Curb & Gutter
- Bldg. Restriction Line
- Ex. Sanitary
- Ex. Storm Drain
- Ex. Water
- Prop. Sanitary
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- Heavy Duty Paving (P-5)
See Sheet 4 OF 19
for Detail
- Light Duty Paving (P-3)
See Sheet 4 of 19
for Detail
- Proposed Sidewalk



NOTE:
FOR STORMWATER
MANAGEMENT POND
DESIGN AND DETAILS
SEE SHEET 16 OF 19

NOTE:
The owner shall provide a separate and independent sewer connection for each tenant or occupant of any building shown on this site development plan who will discharge non-domestic waste to the public sewerage system if each separate and independent sewer connection shall include a standard manhole and other waste pretreatment devices as required and approved by Howard County. Waste lines on the interior of the building shall be designed, constructed or modified such that non-domestic waste will be discharged to the separate and independent sewer connection. No tenant or occupant of any building shown on this site development plan shall discharge regulated non-domestic waste to the public sewerage system prior to installation of the separate and independent sewer connection and related interior waste lines. The above statement shall apply to all initial and future occupants or tenants.

These plans for S.W.M. construction, soil erosion and sediment control meet the requirements of Howard Soil Conservation District.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT

PLAN NUMBER _____ DATE _____

Reviewed for the Howard Conservation District and meets technical requirements.

NATURAL RESOURCES CONSERVATION SERVICE _____ DATE _____

APPROVED: Howard County Department of Planning and Zoning

CHIEF, DEVELOPMENT ENGINEERING DIVISION *9/16/19* DATE

CHIEF, DIVISION OF LAND DEVELOPMENT *10/16/19* DATE

DIRECTOR *10/14/19* DATE

ADDRESS CHART	
PARCEL NO.	STREET ADDRESS
Building #1	7055 Troy Hill Drive
Building #2	7045 Troy Hill Drive
SUBDIVISION NAME	SECTION NAME
TROY HILL CORPORATE CENTER	1
PARCEL #	PARCEL #
12428	A-2
PLAT #	BLOCK #
7045	M-1
WATER CODE C04	ELECT. DIST.
	1st
	CENSUS TRACT
	6011.02
	SEWER CODE 4020000

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7165 COLUMBIA GATEWAY DRIVE
COLUMBIA, MARYLAND
21046
410-290-1400

BOARD OF ARCHITECTS
10177
STATE OF MARYLAND
11/5/2019 PAR. REV. 2 ONLY

PROFESSIONAL ENGINEER
STATE OF MARYLAND
11/5/2019 ONLY

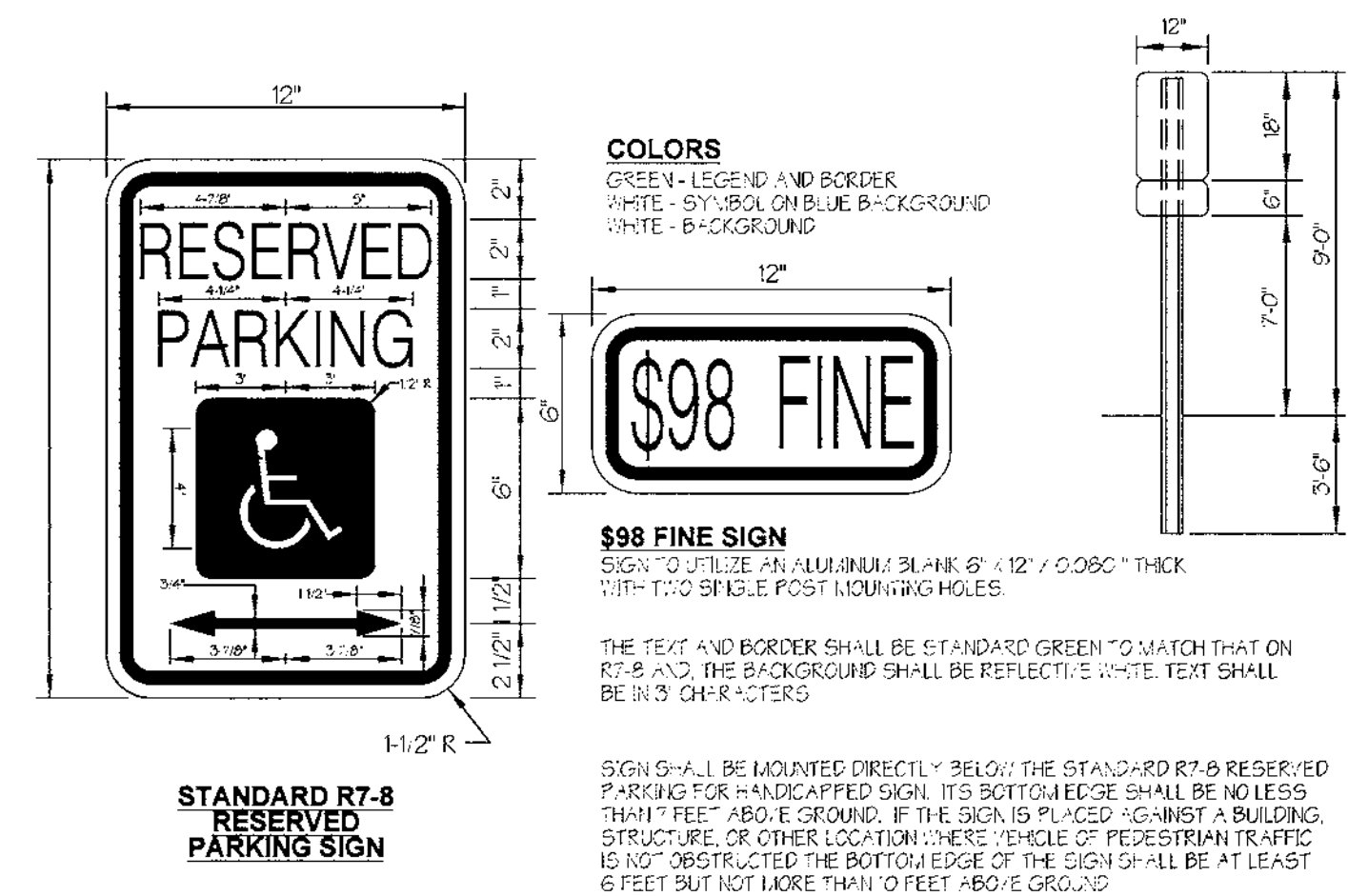
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1	REVISION <td>5/19/11 <td>CND</td> </td>	5/19/11 <td>CND</td>	CND
2	ADD WALK & STAIRS W/HANDRAIL	11/5/2019	M.C.

SITE PLAN FOR TROY HILL CORPORATE CENTER PHASE 1 PARCEL A-2

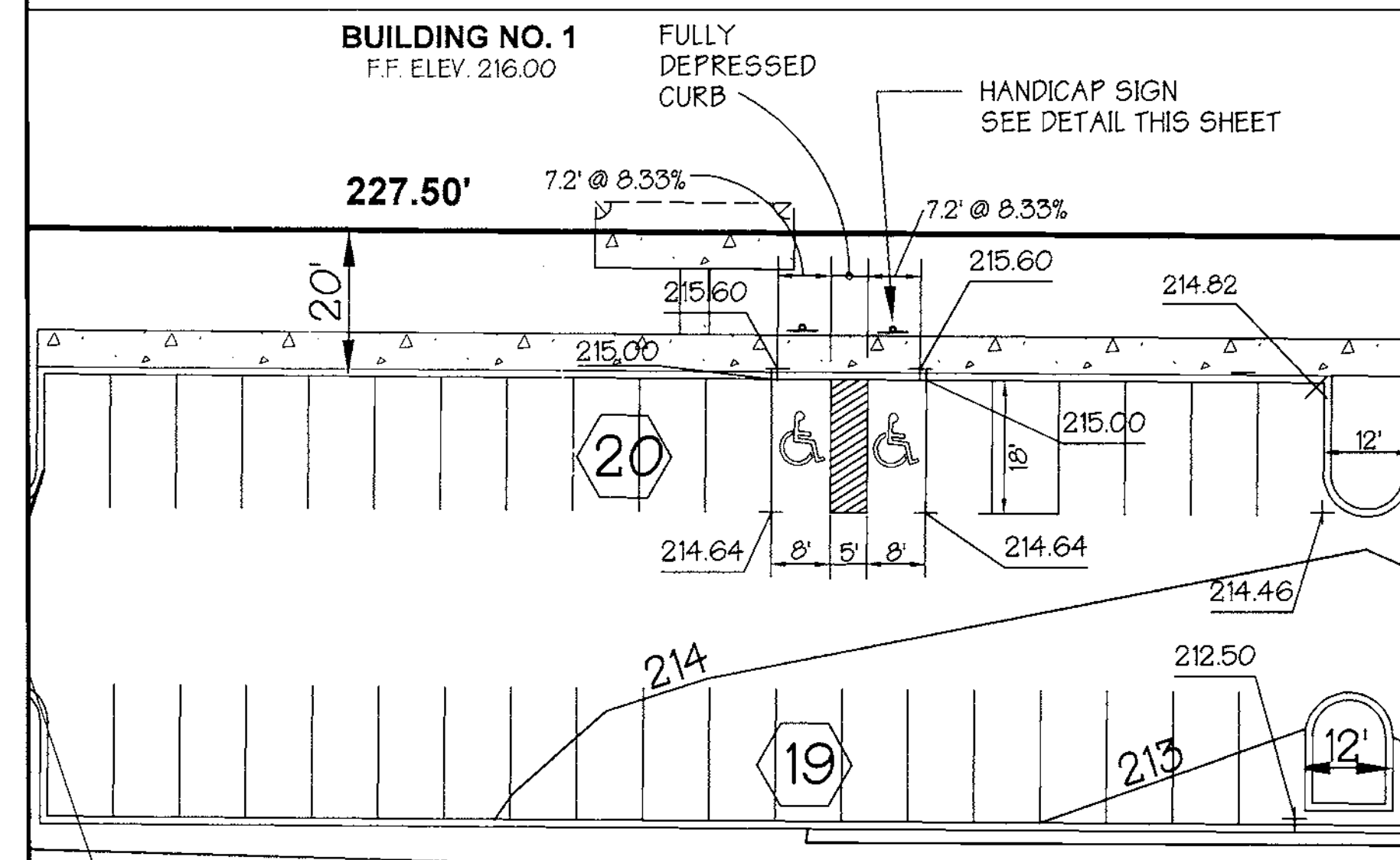
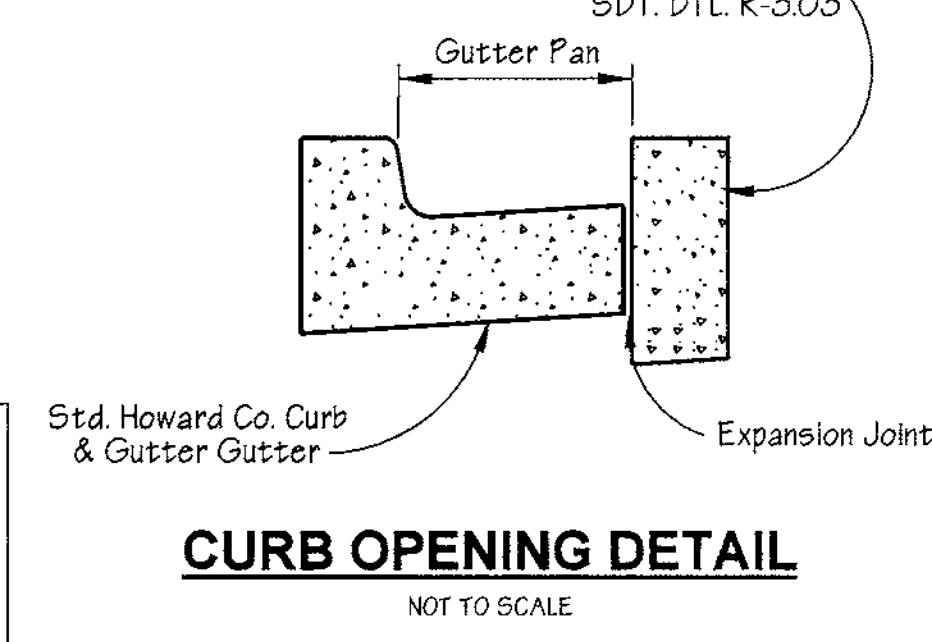
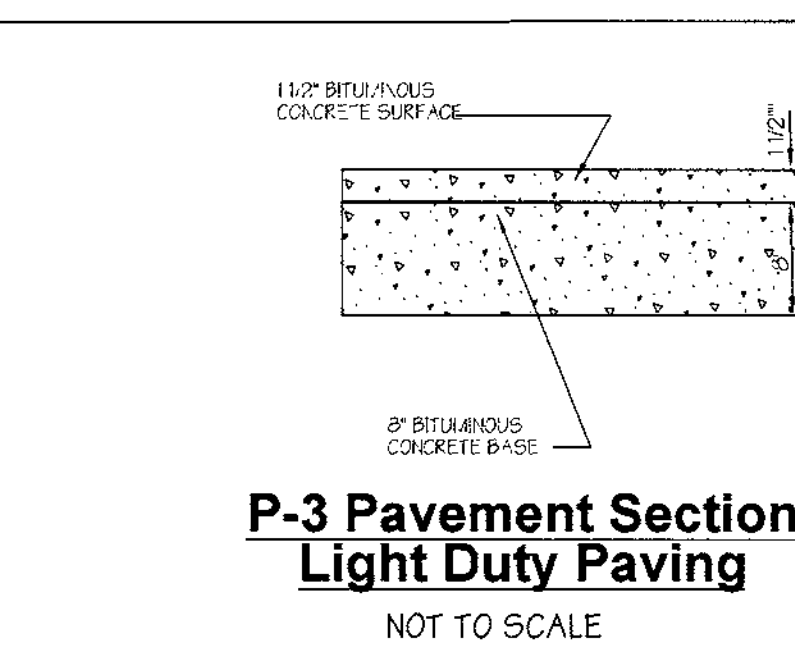
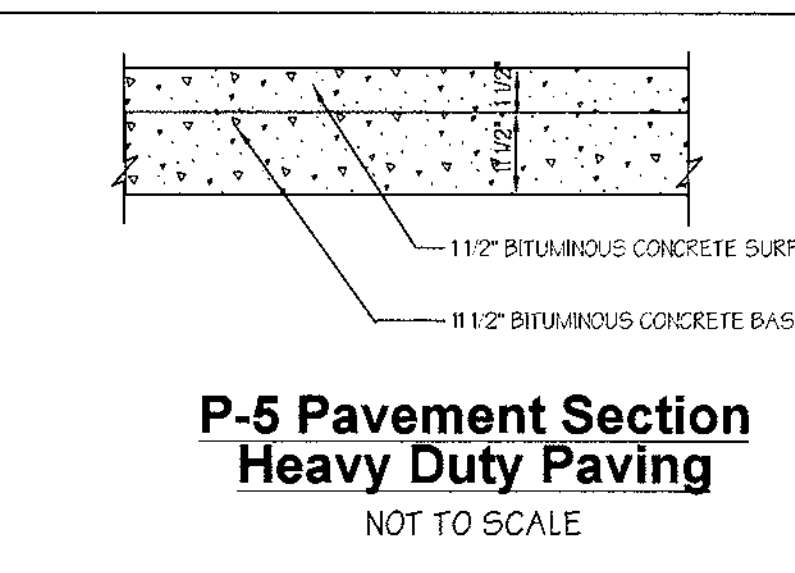
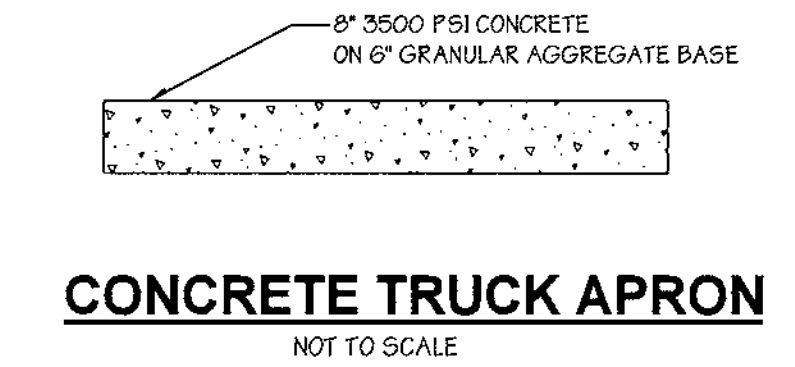
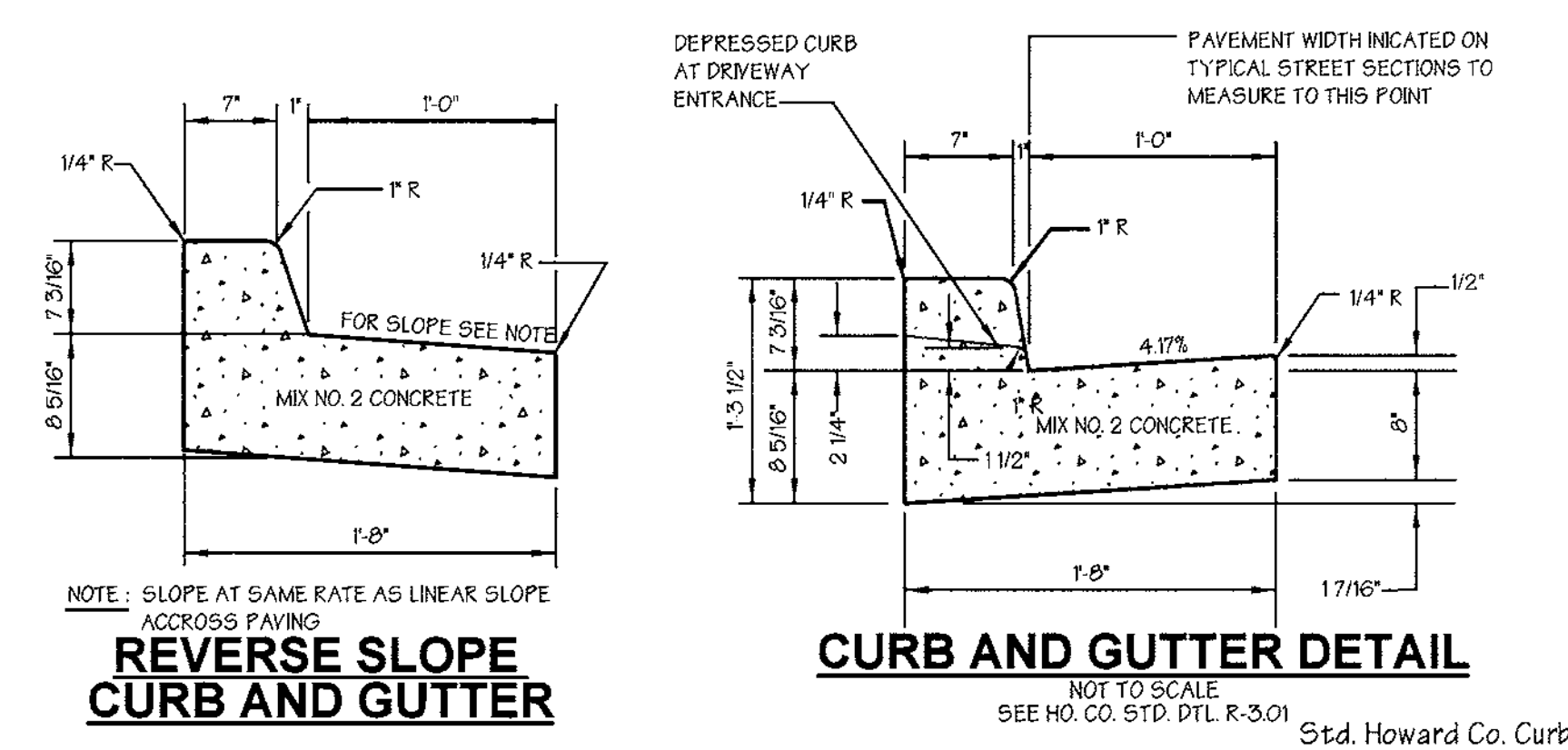
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HOWARD COUNTY, MARYLAND 1st ELECTION DISTRICT SHEET 3 of 19 SCALE: AS SHOWN JUNE 03, 1998

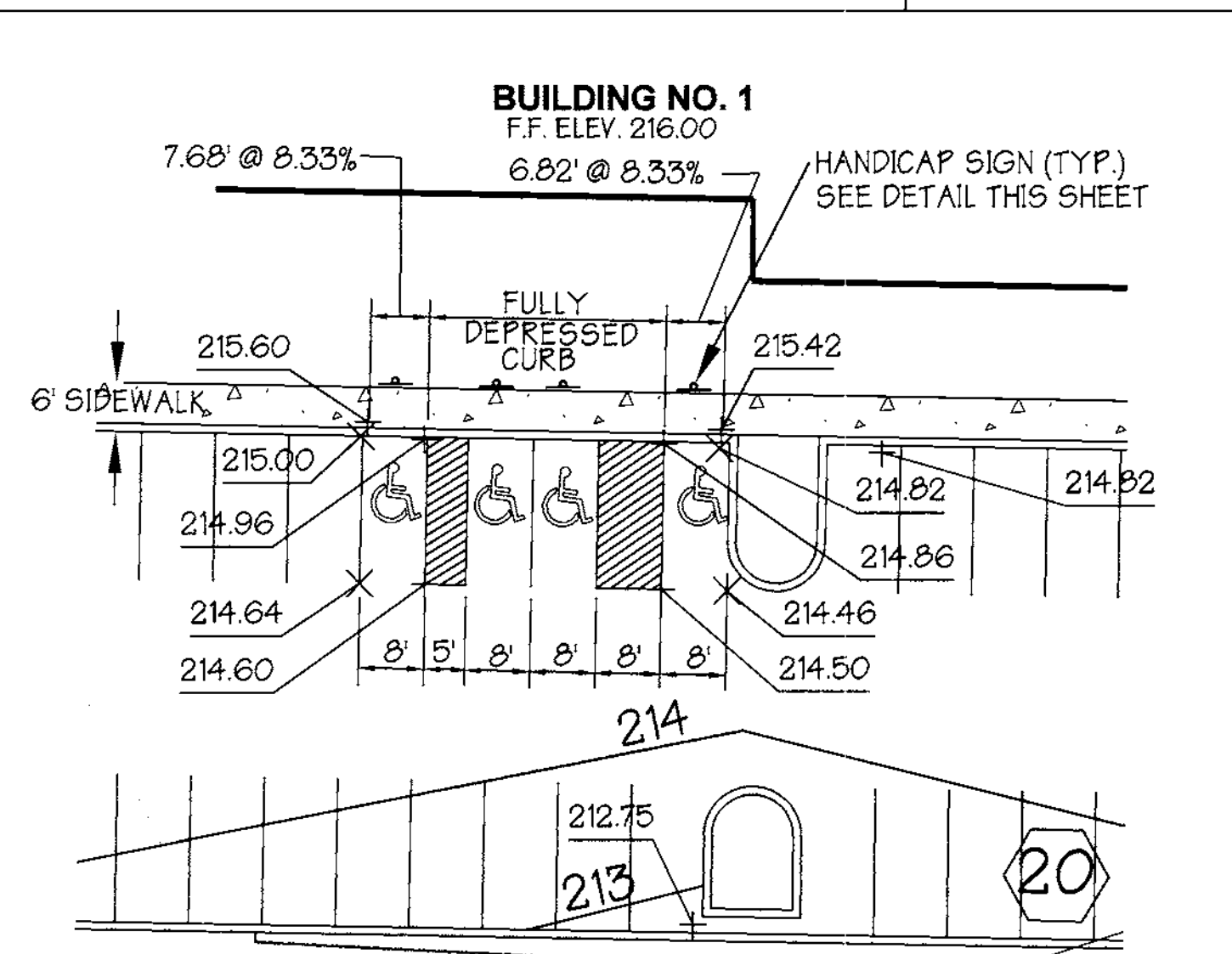
SDP 98-114 P.N.: 8130 K.E. NAME: 0150siteplan2.s01 08-24-98



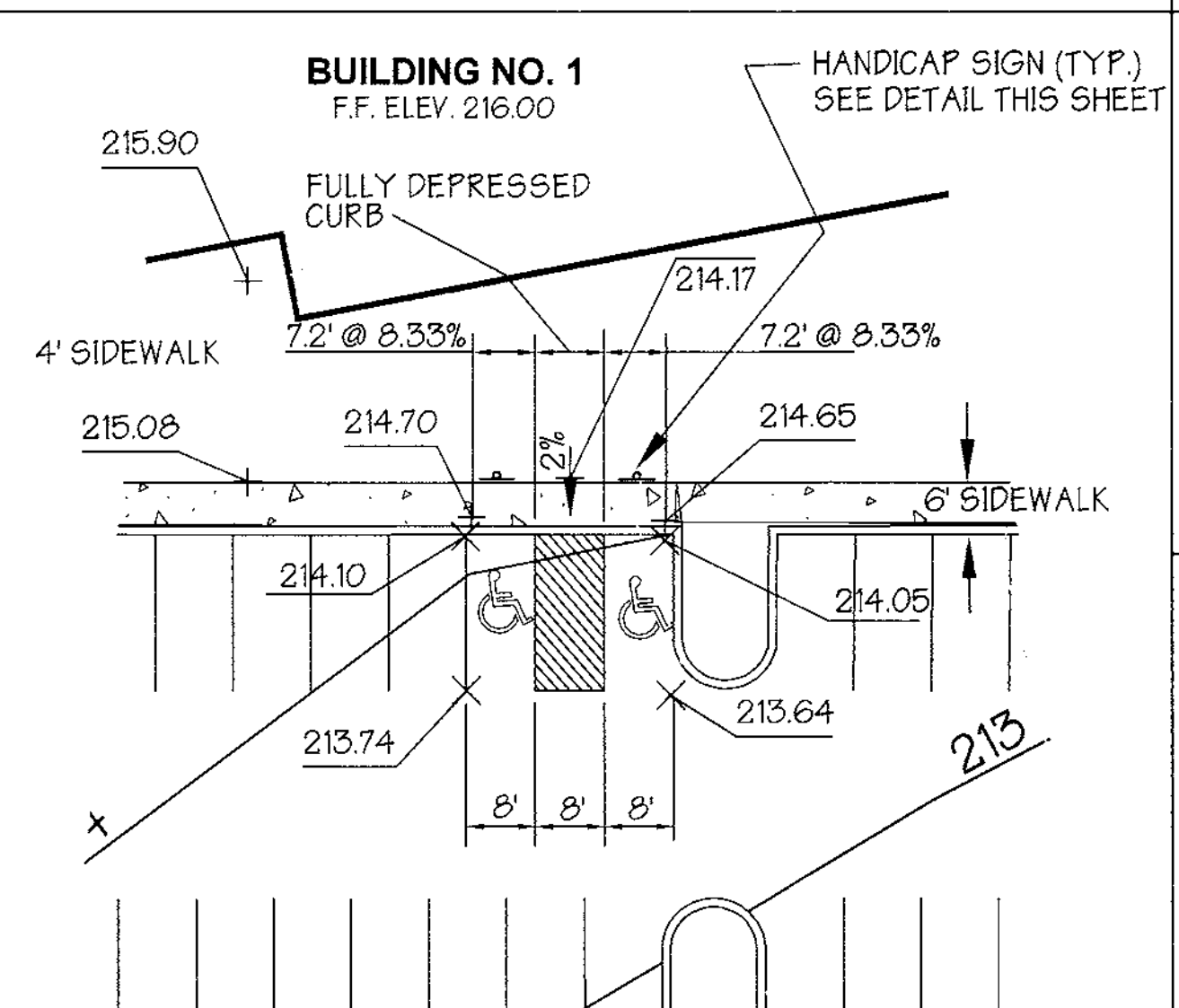
Handicapped Parking Sign Detail
NOT TO SCALE



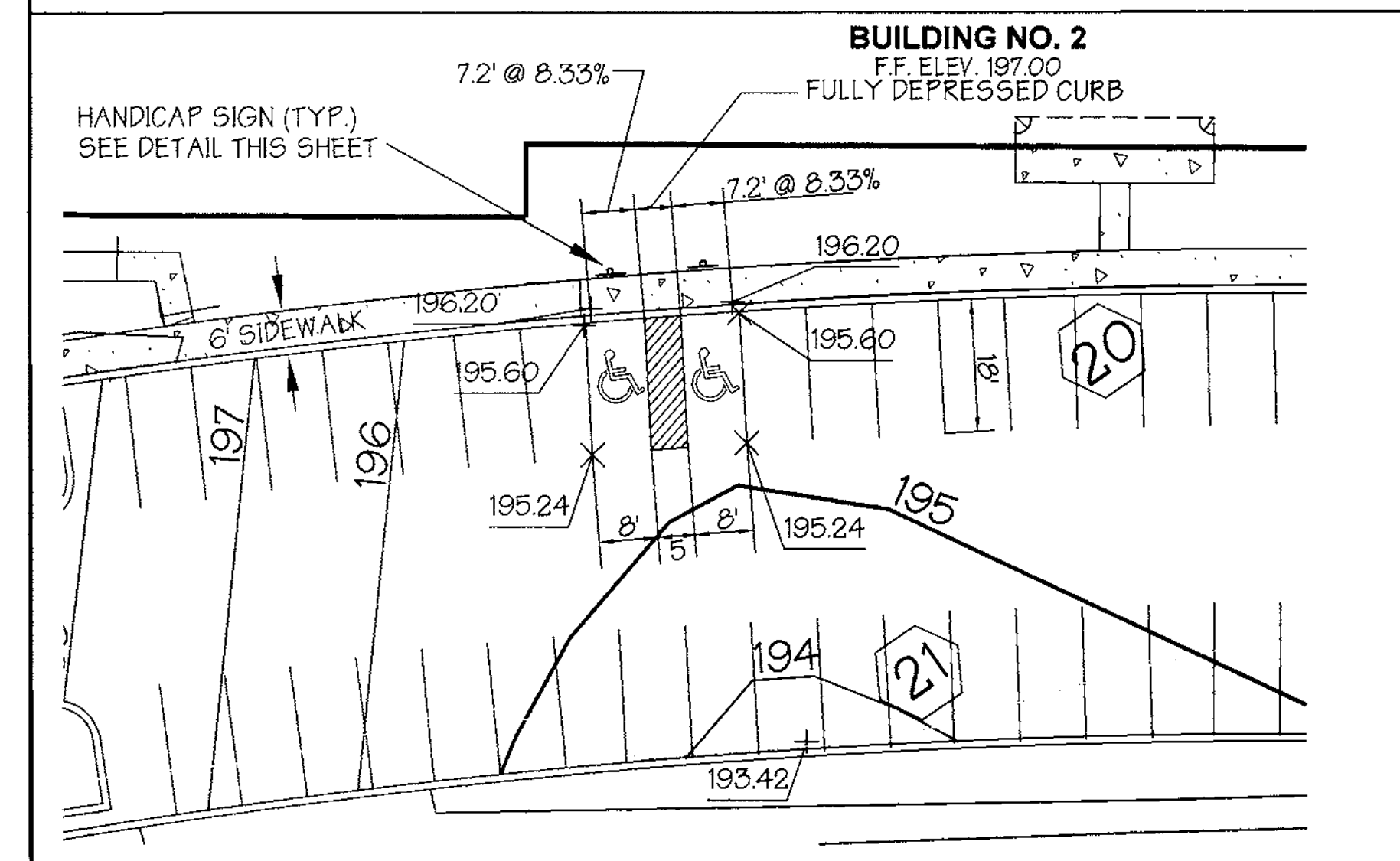
Handicapped Detail #1
SCALE: 1"=20'



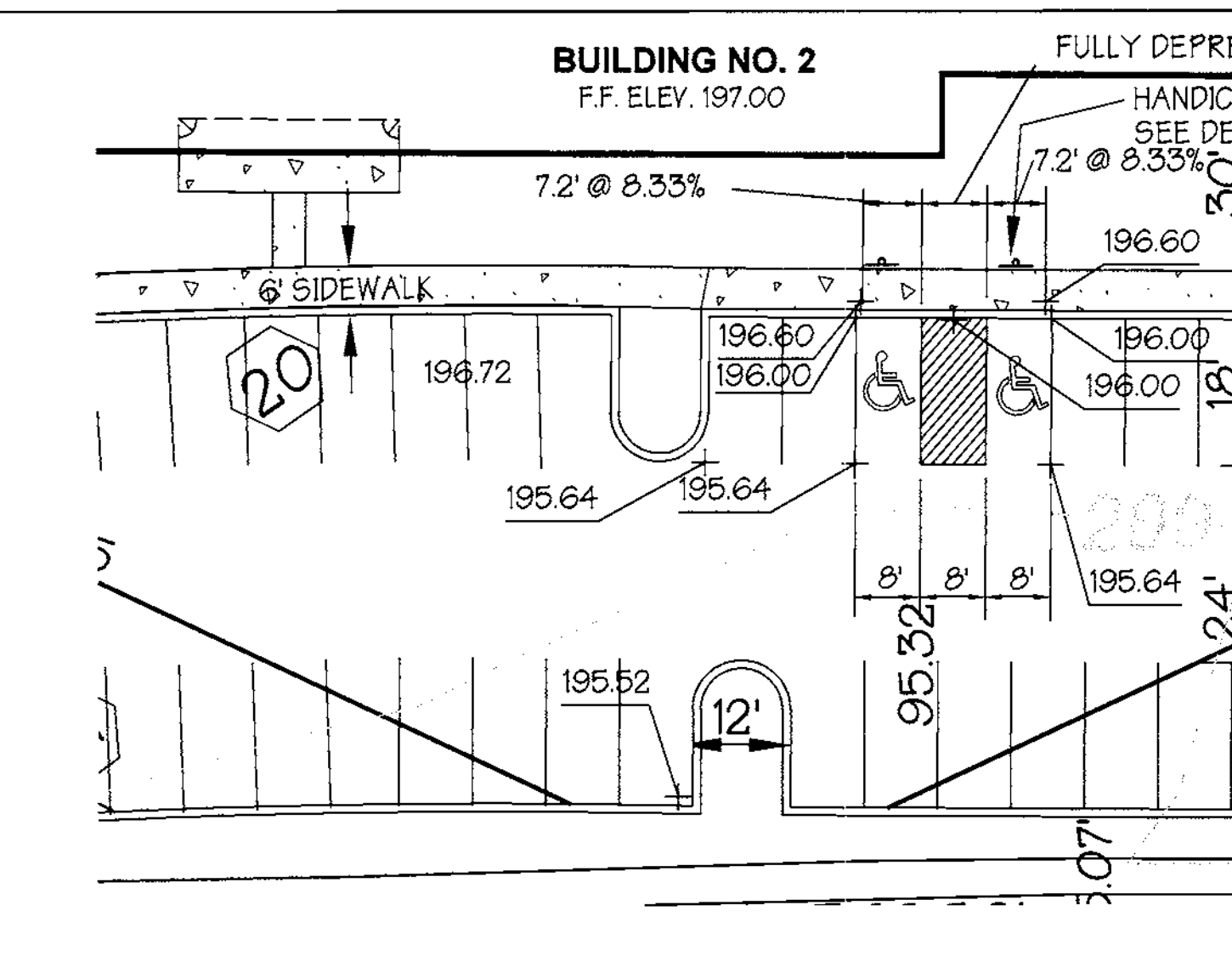
Handicapped Detail #2
SCALE: 1"=20'



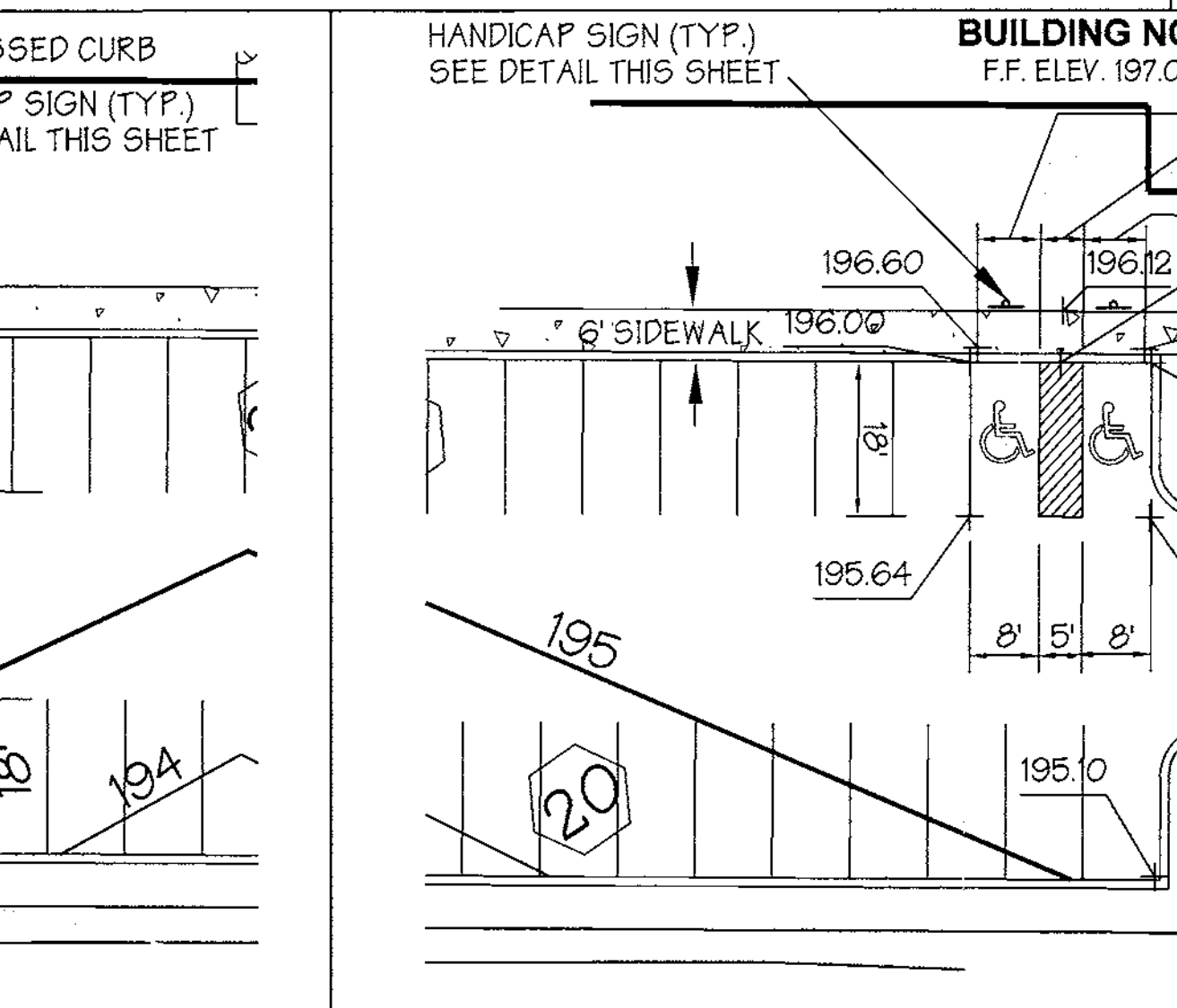
Handicapped Detail #3
SCALE: 1"=20'



Handicapped Detail #4
SCALE: 1"=20'



Handicapped Detail #5
SCALE: 1"=20'



Handicapped Detail #6
SCALE: 1"=20'

These plans for S.W.M. construction, soil erosion and sediment control meet the requirements of Howard Soil Conservation District.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT

PLAN NUMBER _____ DATE _____

Reviewed for the Howard Conservation District and meets technical requirements.

NATURAL RESOURCES CONSERVATION SERVICE DATE _____

APPROVED: Howard County Department of Planning and Zoning

CHIEF, DEVELOPMENT ENGINEERING DIVISION *[Signature]* 9/16/98 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT *[Signature]* 10/16/98 DATE

DIRECTOR *[Signature]* 10/16/98 DATE

ADDRESS CHART	
PARCEL NO.	STREET ADDRESS
Building #1	7055 Troy Hill Drive
Building #2	7045 Troy Hill Drive

SUBDIVISION NAME	SECTION NAME	PARCEL #
TROY HILL CORPORATE CENTER	1	A-2
PLAT #	BLOCK #	ZONE
12428		M-1
TAX MAP	ELECT. DIST.	CENSUS TRACT
37	1st	6011.02
WATER CODE	SEWER CODE	
C04	4020000	

PREPARED BY:

GWS

GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.
 Civil Engineers and Land Surveyors
 658 Kenilworth Drive, Suite 100
 Towson, Maryland 21204
 (410) 825-8120

OWNER/DEVELOPER

TROY HILL BUSINESS PARK PARTNERSHIP
 c/o MANEKIN CORPORATION
 7165 COLUMBIA GATEWAY DRIVE
 COLUMBIA, MARYLAND
 21046
 410-290-1400

DETAILS AND SECTIONS FOR TROY HILL CORPORATE CENTER

PHASE 1 PARCEL A-2

PREVIOUS FILE #S 590-05, P90-25, P91-24, WP 96-91, P96-136

HOWARD COUNTY, MARYLAND

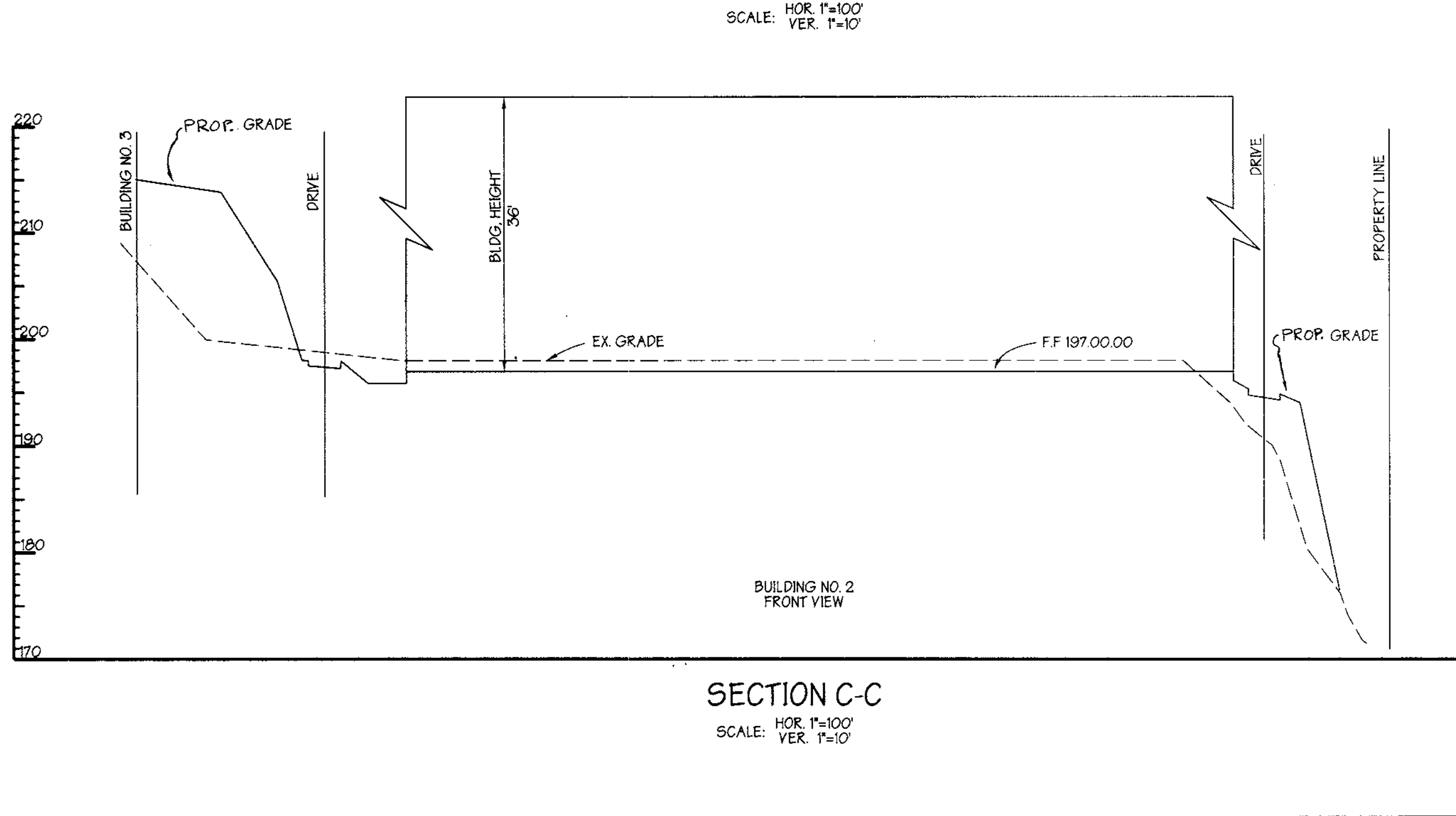
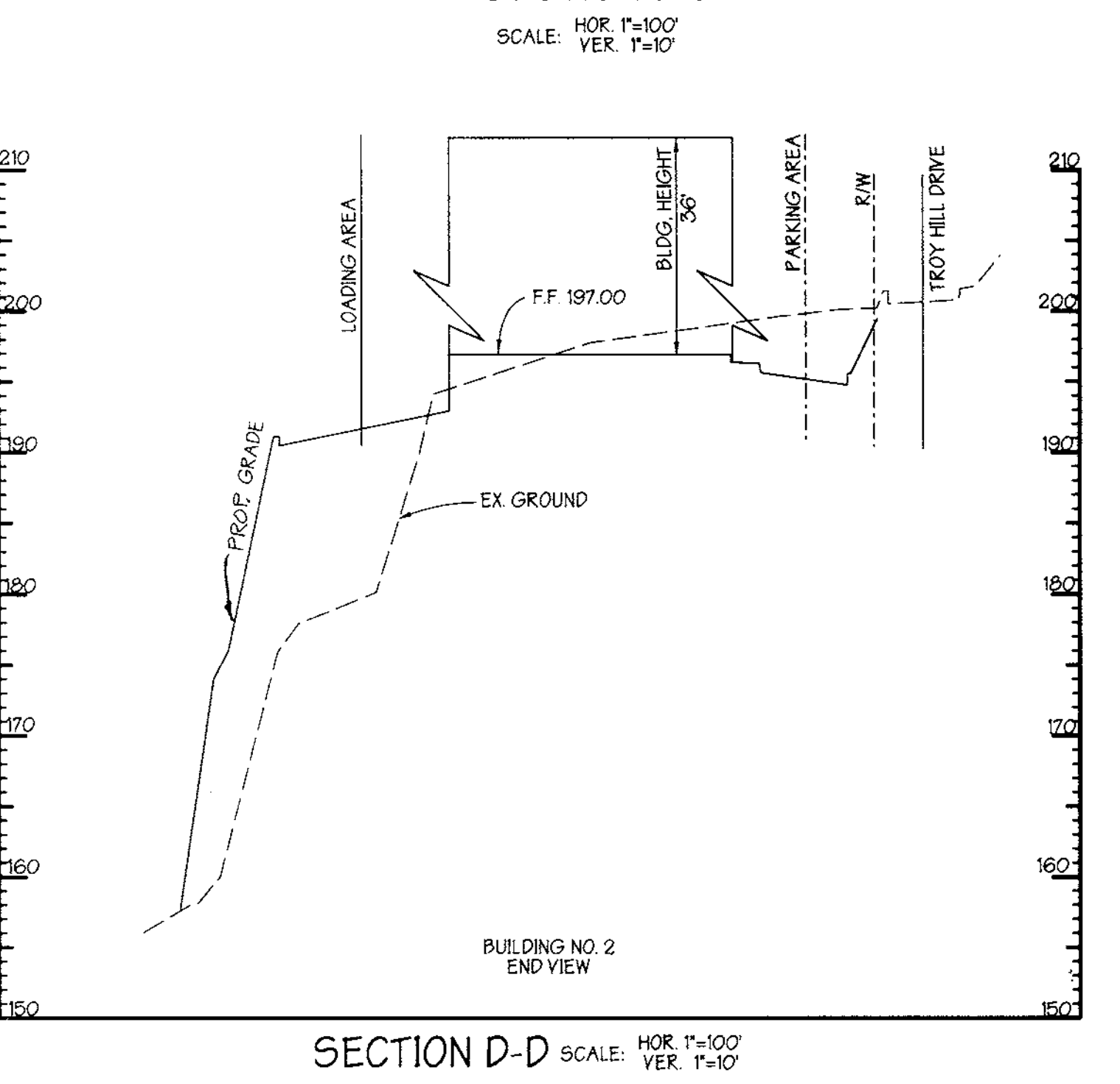
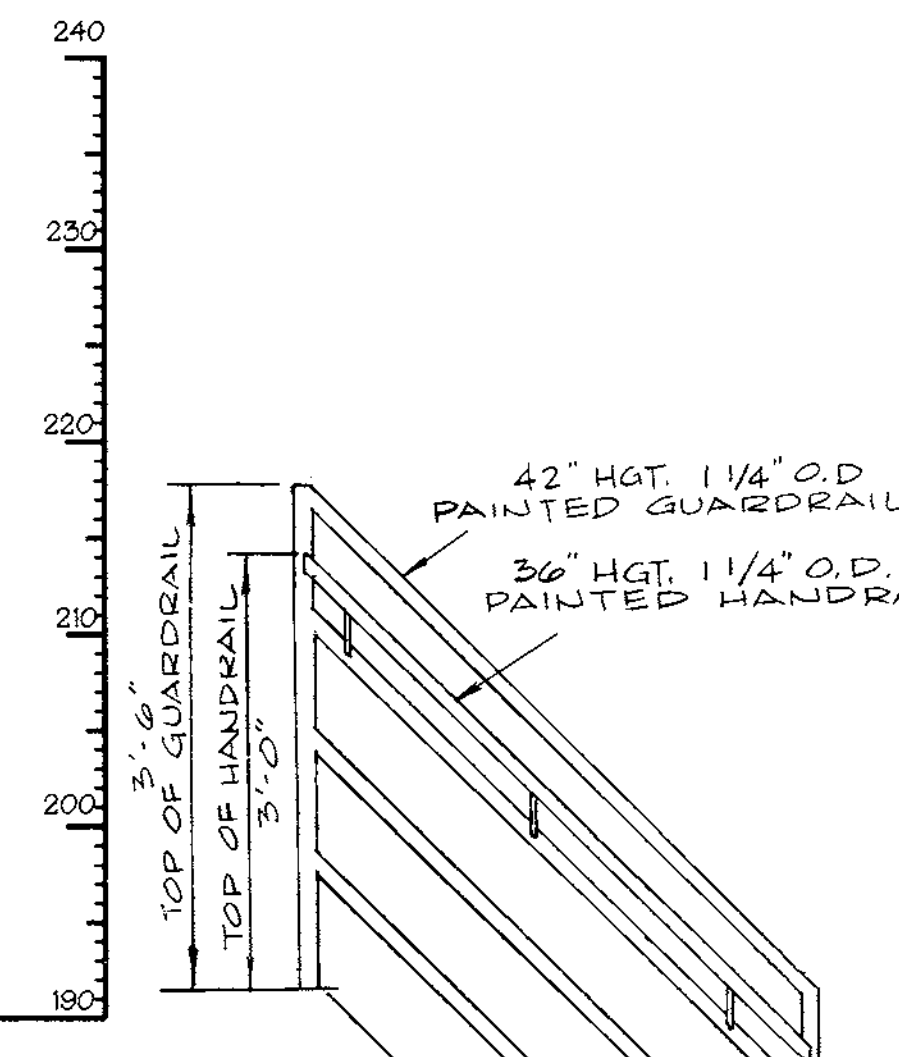
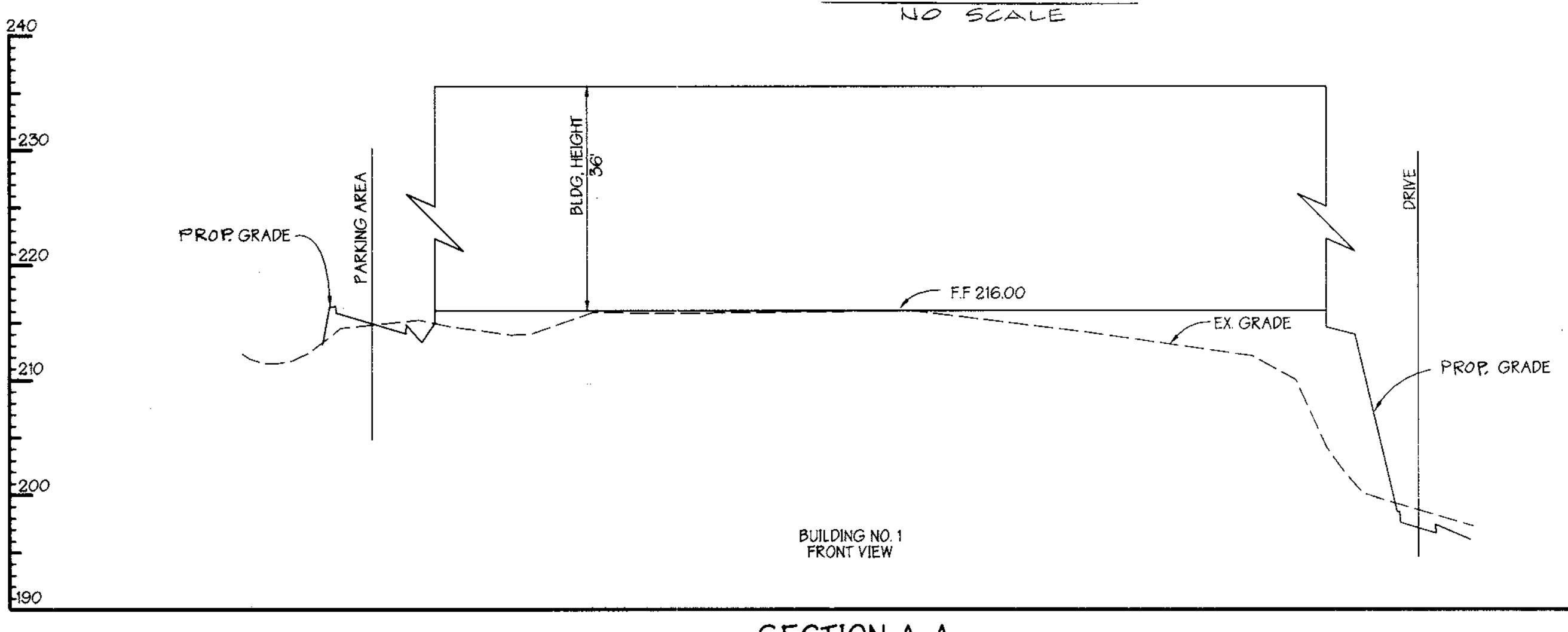
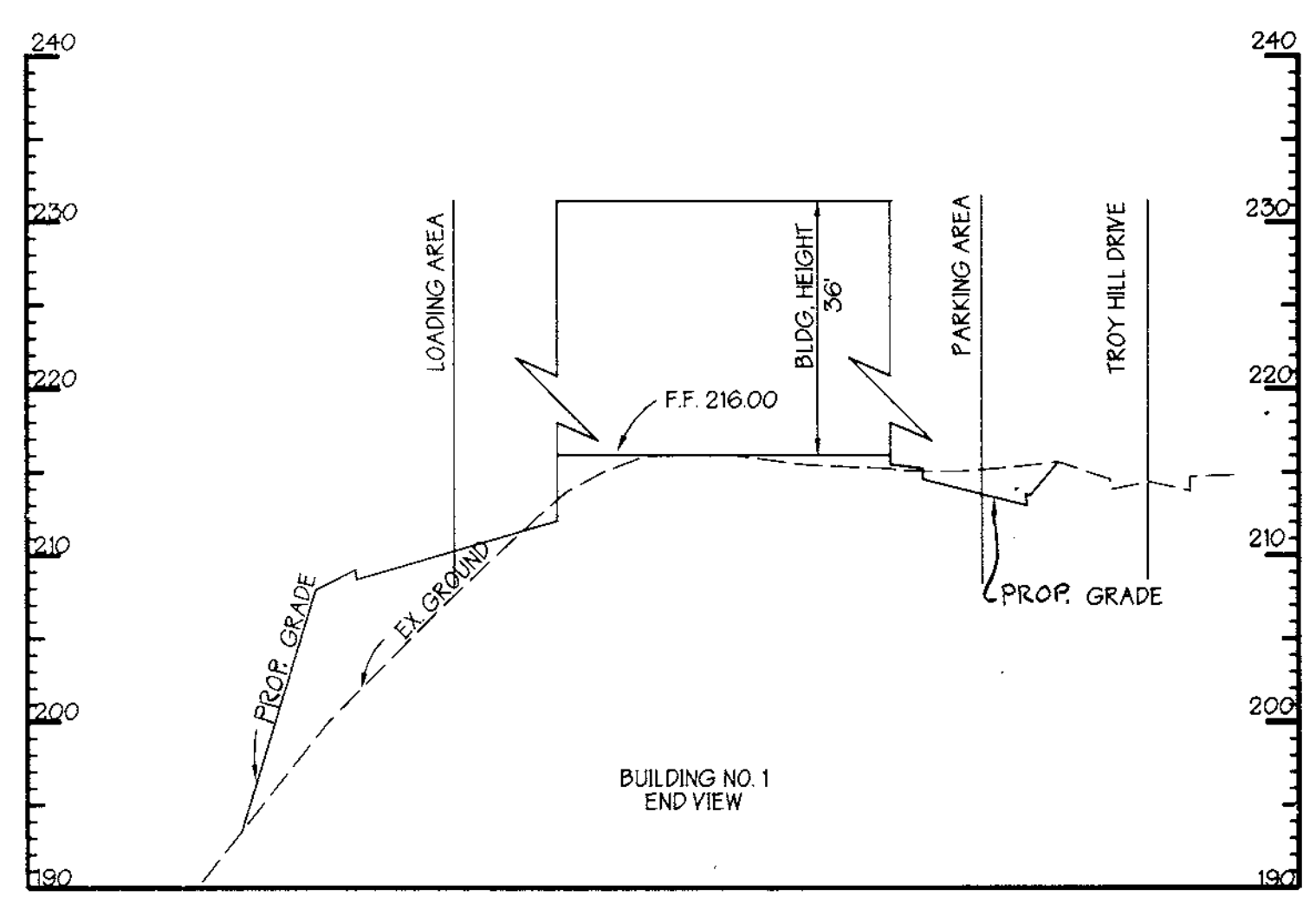
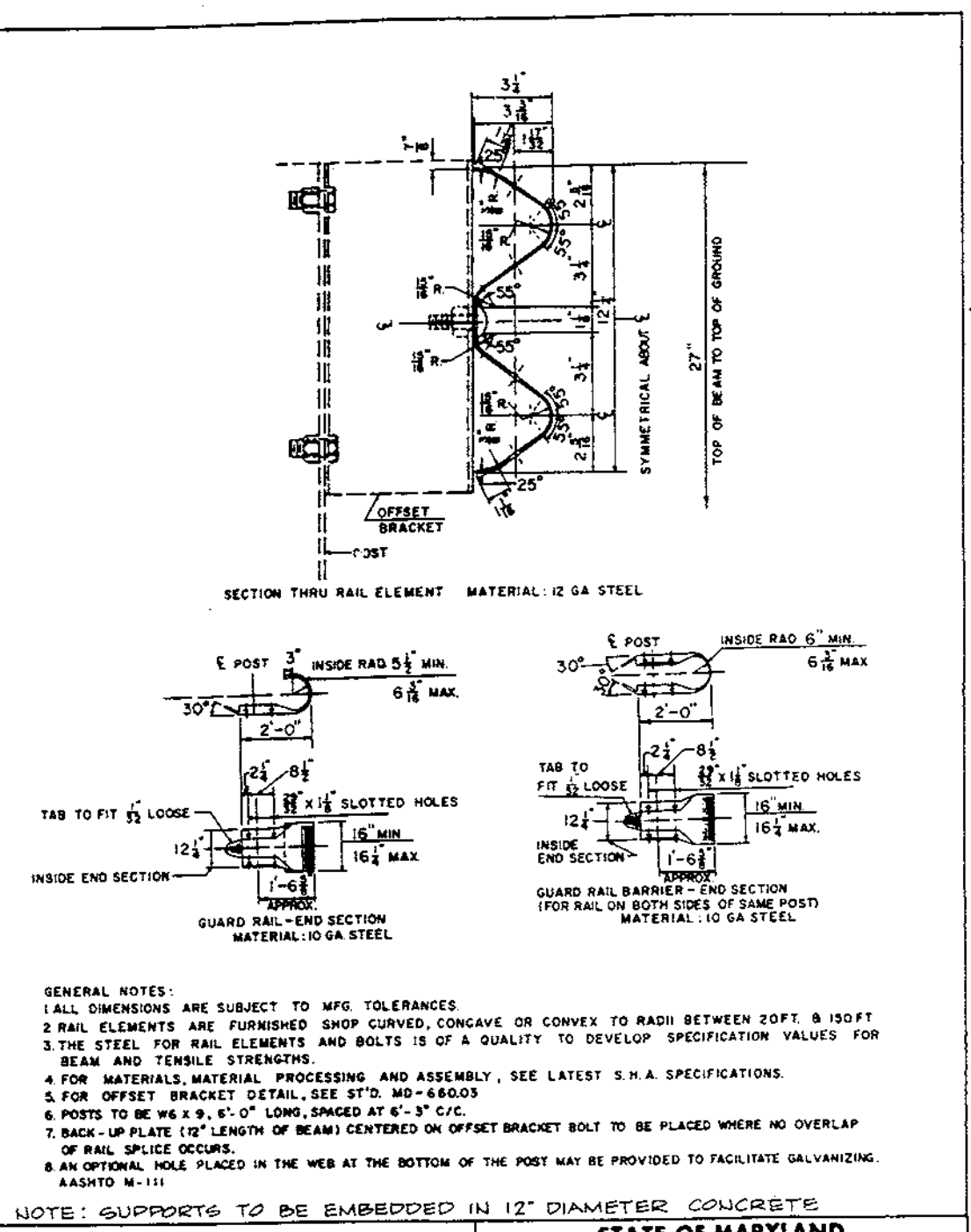
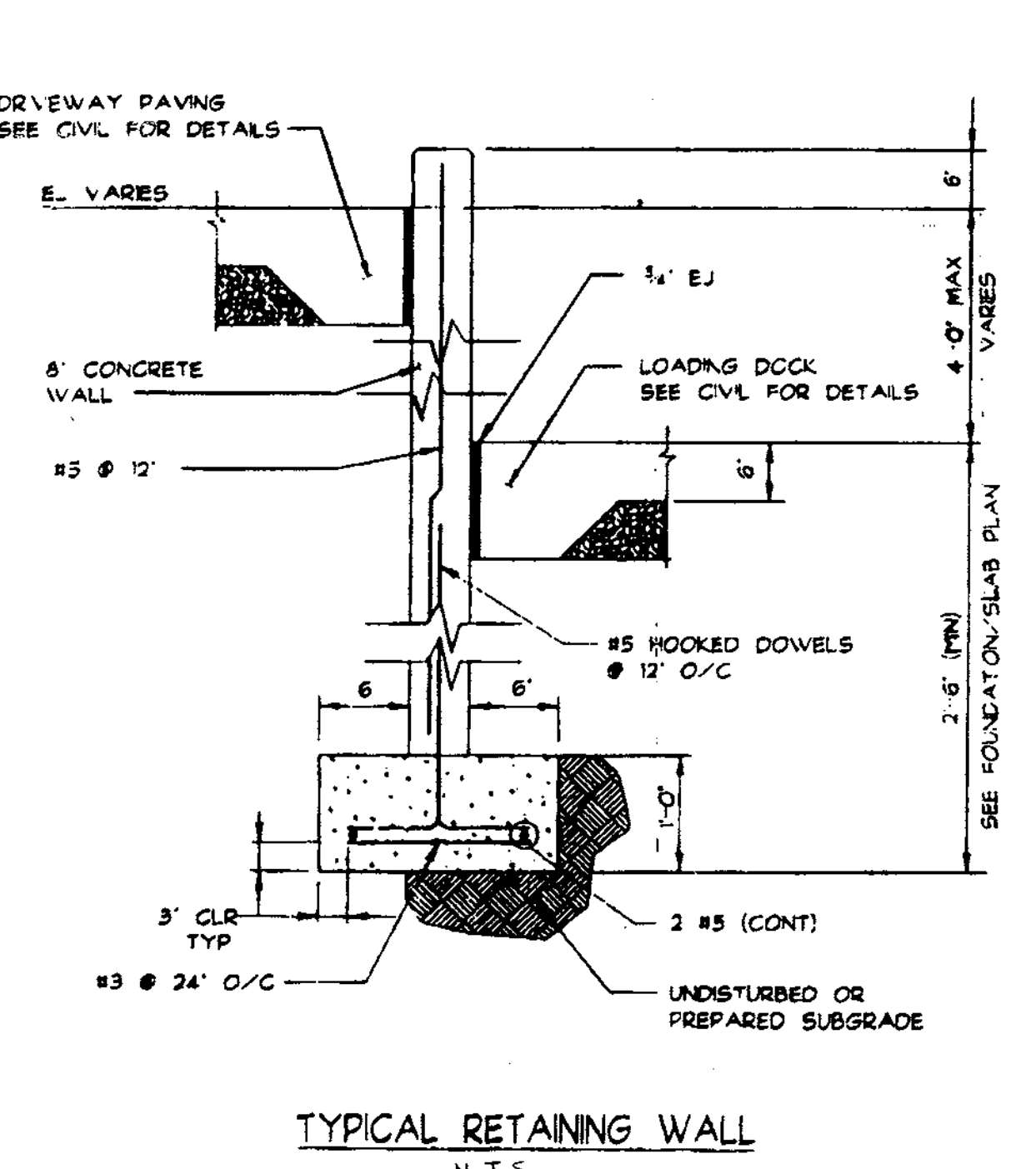
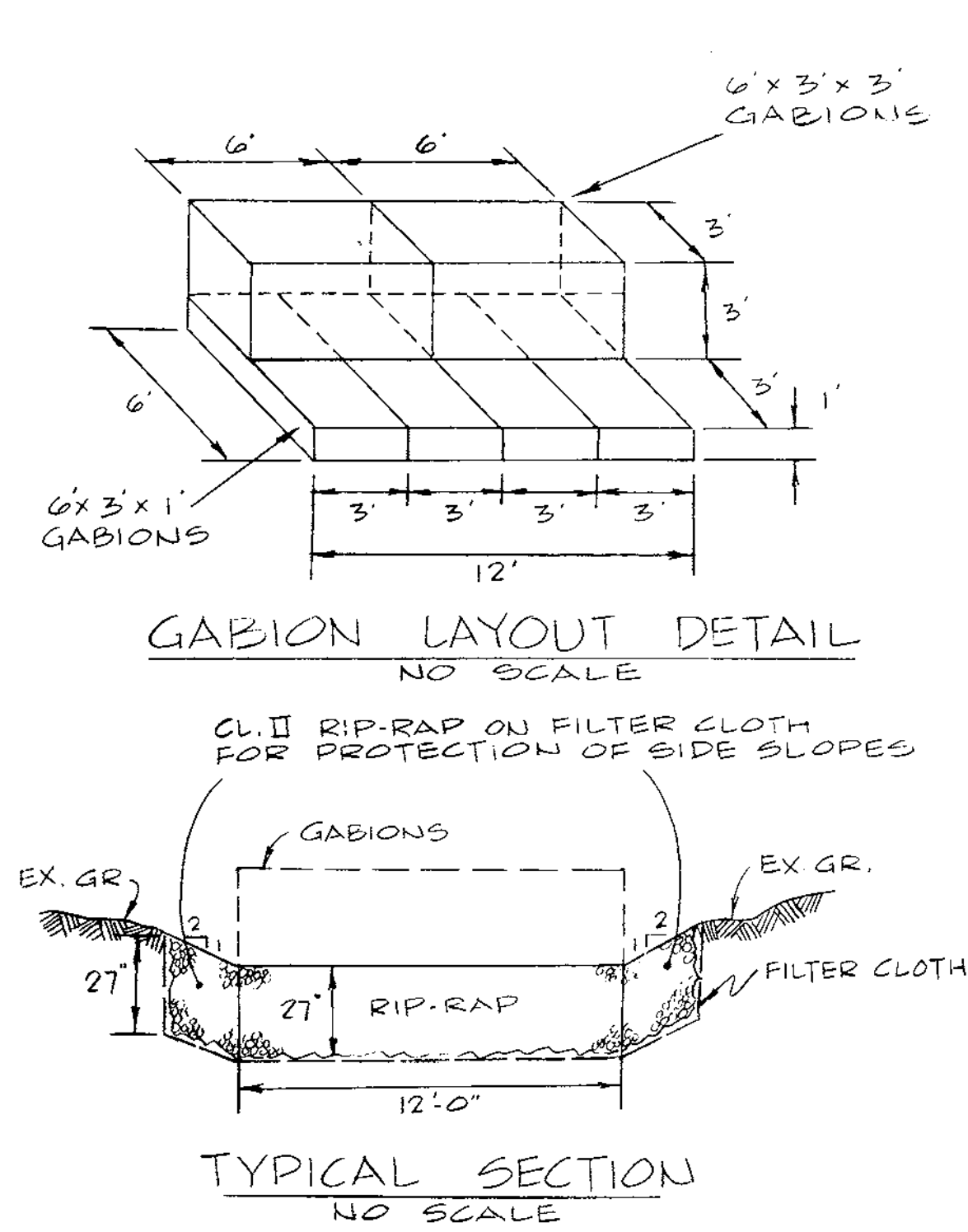
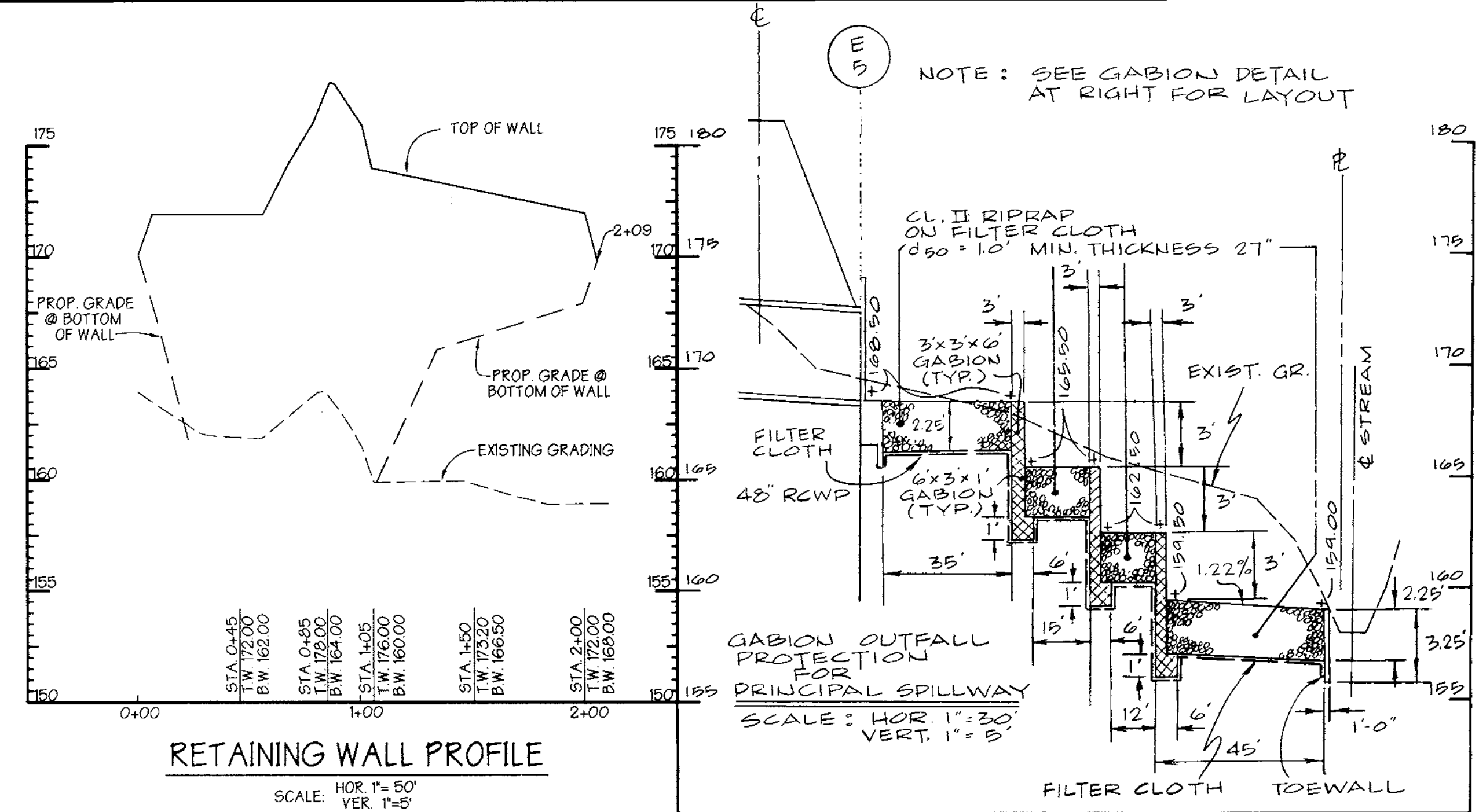
1st ELECTION DISTRICT

SCALE: AS SHOWN

JUNE 03, 1998

SHEET 4 of 19

SDP 98-114 P.M. BSC KE I.H.K.E. (c) 1998



APPROVAL		STATE OF MARYLAND	
DEPARTMENT OF TRANSPORTATION		DEPARTMENT OF TRANSPORTATION	
STATE HIGHWAY ADMINISTRATION		STATE HIGHWAY ADMINISTRATION	
STANDARD NO. MD-660.01		STANDARD NO. MD-660.01	

PREPARED BY:

GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.
Civil Engineers and Land Surveyors
658 Kenilworth Drive, Suite 100
Towson, Maryland 21204
(410) 825-8120

ENGINEER CERTIFICATION:

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.

Engineer: James A. Markle Jr. Date: 9/11/98
Name: JAMES A. MARKLE JR. PE # 11005

OWNER/DEVELOPER

TROY HILL BUSINESS PARK PARTNERSHIP
c/o MANEKIN COPORATION
7165 COLUMBIA GATEWAY DRIVE
COLUMBIA, MARYLAND
21046
410-290-1400

DEVELOPER CERTIFICATION:

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 the Environment 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.

Developer: David E. Meiners Date: 9/29/98
Name: DAVID E. MEINERS

DETAILS AND SECTIONS FOR TROY HILL CORPORATE CENTER PHASE 1 PARCEL A-2

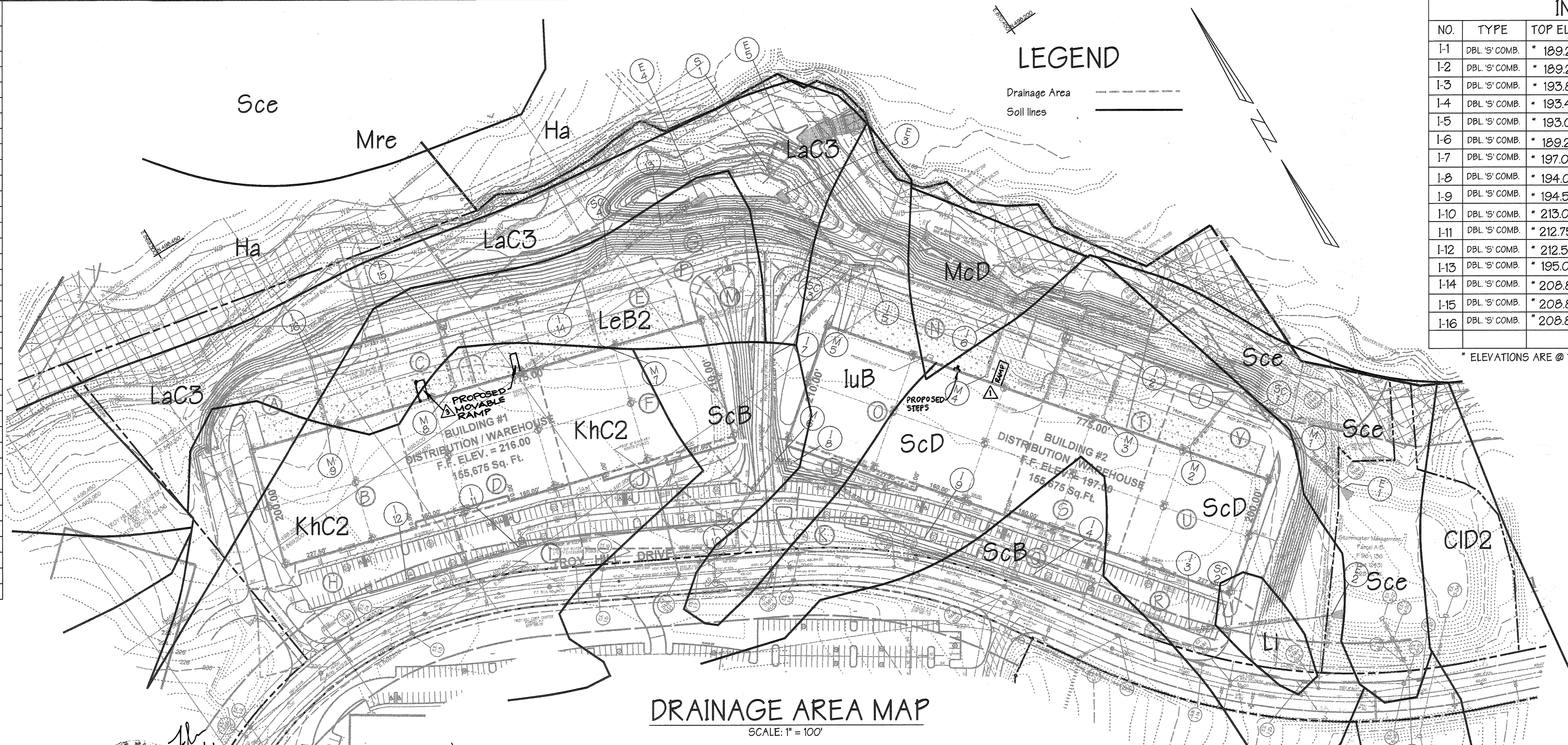
PREVIOUS FILE #S 590-05, P90-25, F91-24, WP 96-91, F96-136

HOWARD COUNTY, MARYLAND 1st ELECTION DISTRICT SHEET 5 of 19 JUNE 03, 1998

SCALE: AS SHOWN

SDP 98-114

COORDINATES		
STRUCT./ INLET NO.	NORTHING	EASTING
I-1	497495.26	870658.33
I-2	497652.31	870545.22
I-3	497217.85	870369.55
I-4	497441.89	870208.47
I-5	498012.13	870282.86
I-6	497818.20	870426.20
I-7	497988.48	870064.34
I-8	497822.45	869992.01
I-9	497594.56	870095.99
I-10	497803.55	869854.07
I-11	497968.06	869537.99
I-12	498030.76	869356.56
I-13	498237.22	870045.62
I-14	498270.49	869876.60
I-15	498351.76	869641.45
I-16	498423.61	869433.41
MH-1	497379.37	870689.50
MH-2	497464.67	870544.62
MH-3	497588.06	870455.91
MH-4	497753.84	870336.72
MH-5	498029.78	870254.79
MH-6	497840.15	869965.90
MH-7	498166.33	869840.60
MH-8	498247.60	869605.45
MH-9	498319.49	869397.43
SC-1	497456.63	870668.72
SC-2	497182.20	870422.46
SC-3	498048.76	870253.81
SC-4	498249.89	869974.40
E-1	497261.60	870712.50
E-2	497100.18	870577.27
E-3	498191.28	870230.23
E-4	498270.44	870137.82
E-5	498273.75	870288.94
S-1	498240.33	870234.64



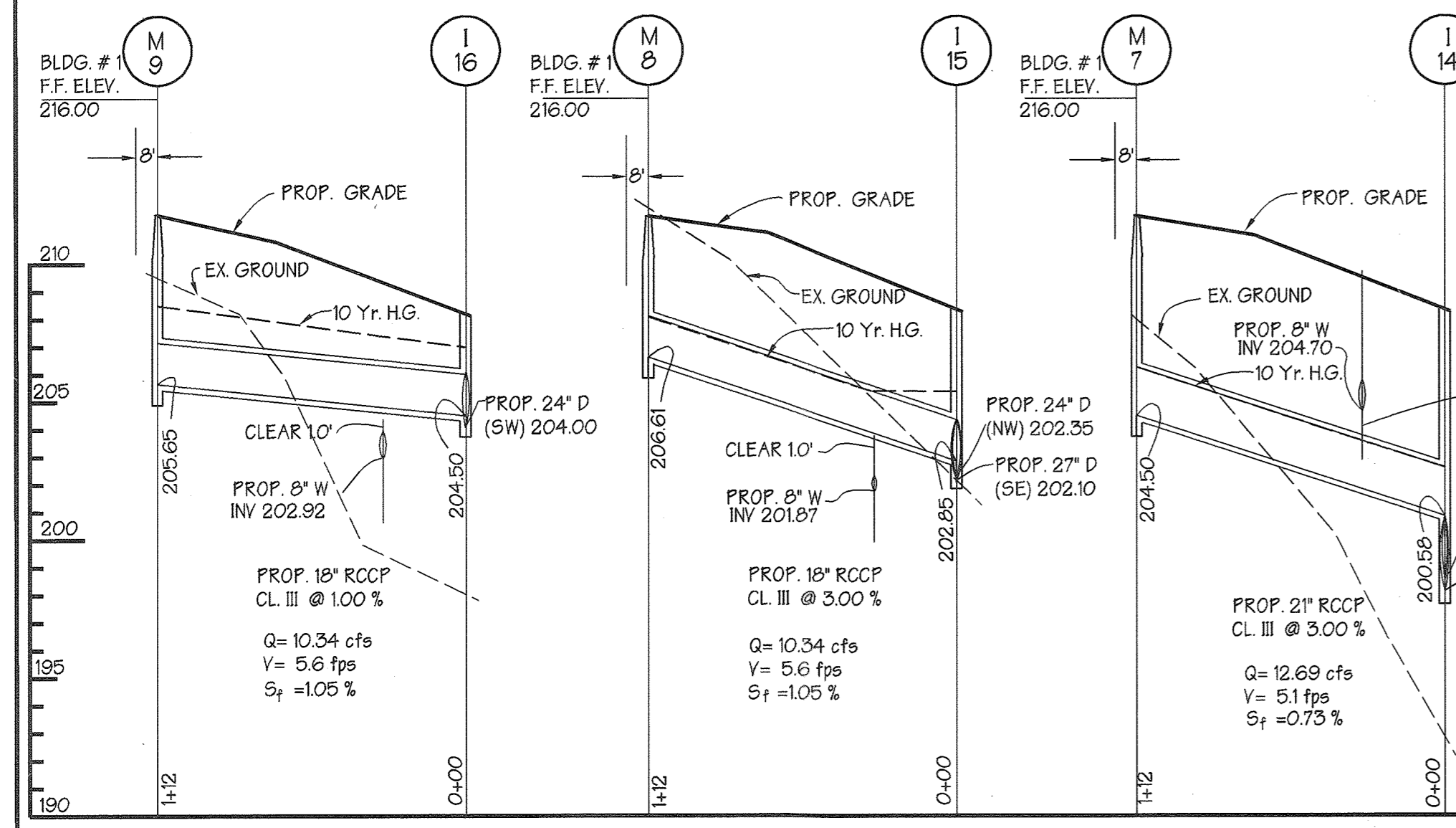
INLET SCHEDULE						
NO.	TYPE	TOP ELEV.	INV. IN	INV. OUT	Qc.f.s.	HO. CO. DTL.
I-1	DBL. 'S' COMB.	* 189.20	184.09	183.84	23.86	SD 4.34
I-2	DBL. 'S' COMB.	* 189.20	185.50	185.25	12.37	SD 4.34
I-3	DBL. 'S' COMB.	* 193.82	187.85	187.60	5.66	SD 4.34
I-4	DBL. 'S' COMB.	* 193.42	N/A	189.50	2.84	SD 4.11
I-5	DBL. 'S' COMB.	* 193.00	182.94	182.84	20.56	SD 4.34
I-6	DBL. 'S' COMB.	* 189.20	N/A	185.00	19.44	SD 4.11
I-7	DBL. 'S' COMB.	* 197.00	187.56	187.31	19.38	SD 4.34
I-8	DBL. 'S' COMB.	* 194.00	189.00	188.90	7.03	SD 4.34
I-9	DBL. 'S' COMB.	* 194.50	N/A	109.50	6.91	SD 4.34
I-10	DBL. 'S' COMB.	* 213.00	203.00	202.50	10.96	SD 4.34
I-11	DBL. 'S' COMB.	* 212.75	207.27	207.02	8.11	SD 4.34
I-12	DBL. 'S' COMB.	* 212.50	N/A	209.00	5.76	SD 4.34
I-13	DBL. 'S' COMB.	* 195.00	179.66	177.16	43.38	SD 4.34
I-14	DBL. 'S' COMB.	* 208.80	198.33	198.08	43.38	SD 4.34
I-15	DBL. 'S' COMB.	* 208.80	202.35	202.10	29.44	SD 4.34
I-16	DBL. 'S' COMB.	* 208.80	N/A	204.00	17.31	SD 4.34

* ELEVATIONS ARE @ TOP OF GRATE

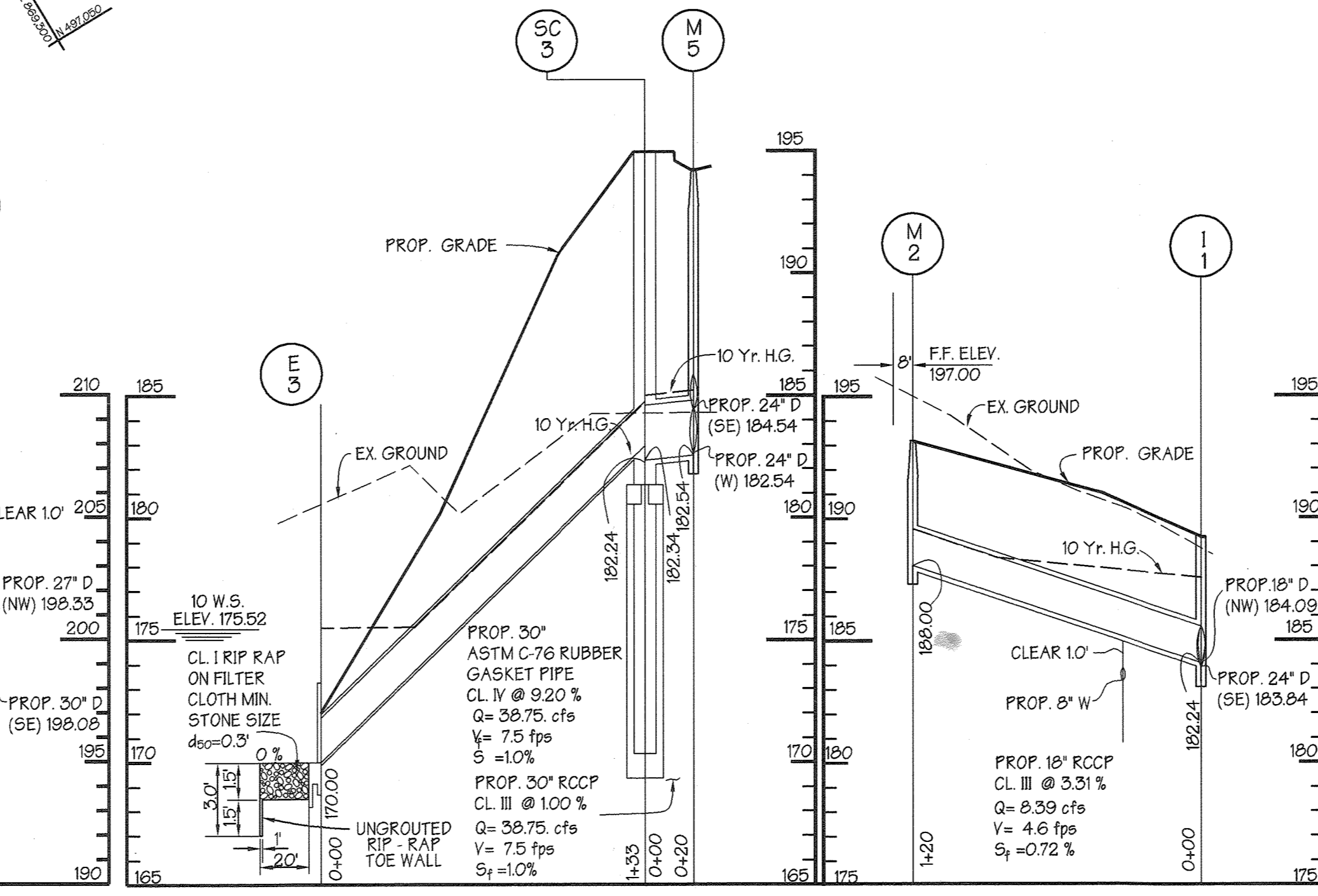
AREA	ACREAGE	'C'	% IMP.
A	1.26 AC +/-	0.87	87%
B	1.10 AC +/-	0.96	100%
C	0.66 AC +/-	0.96	100%
D	1.10 AC +/-	0.96	100%
E	0.71 AC +/-	0.96	100%
F	1.35 AC +/-	0.96	100%
G	0.09 AC +/-	0.24	00%
H	1.03 AC +/-	0.63	54%
I	0.54 AC +/-	0.63	54%
J	0.85 AC +/-	0.57	46%
K	1.20 AC +/-	0.65	58%
L	0.20 AC +/-	0.30	0%
M	0.82 AC +/-	0.35	33%
N	1.52 AC +/-	0.74	69%
O	1.75 AC +/-	0.96	100%
P	0.29 AC +/-	0.90	90%
Q	0.43 AC +/-	0.74	67%
R	0.55 AC +/-	0.71	64%
S	0.92 AC +/-	0.96	100%
T	0.55 AC +/-	0.96	100%
U	0.90 AC +/-	0.96	100%
V	0.78 AC +/-	0.87	88%

DRAINAGE AREA MAP
SCALE: 1" = 100'

I, PAUL W. TAYLOR, CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 13741 EXP. DATE 12/08/2021 FOR REVISION #3 ONLY

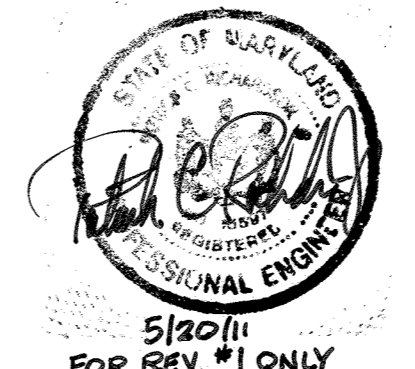


STORM DRAIN PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'



STORM DRAIN PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'

STRUCTURE SCHEDULE					
NO.	TYPE	TOP ELEV.	INV. IN	INV. OUT	HO. CO. DTL.
MH-1	STD.	192.10	178.45	176.54	G5.12
MH-2	STD.	193.00	190.22	188.00	G5.12
MH-3	STD.	193.00	-	187.50	G5.12
MH-4	STD.	193.00	N/A	187.00	G5.12
MH-5	STD.	193.70	184.54	182.54	G5.12
MH-6	STD.	204.00	190.22	188.62	G5.12
MH-7	STD.	212.00	-	204.50	G5.12
MH-8	STD.	212.00	-	206.61	G5.12
MH-9	STD.	212.00	-	205.65	G5.12
SC-1	STC. 3600	190.45	183.60	183.50	
SC-2	STC. 900	195.15	187.21	187.13	
SC-3	STC. 6000	195.50	182.34	182.24	
SC-4	STC. 7200	208.00	196.96	196.88	
E-1	TYPE A 24"	-	164.50	-	S.D. 5.11
E-2	TYPE A 18"	-	172.00	-	S.D. 5.11
E-3	TYPE A 30"	-	172.00	-	S.D. 5.11
E-4	TYPE A 30"	-	172.00	-	S.D. 5.11



These plans for S.W.M. construction, soil erosion and sediment control meet the requirements of Howard Soil Conservation District.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT
DATE: 9/11/98

PLAN NUMBER

Reviewed for the Howard Conservation District and meets technical requirements.
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
DATE: 9/11/98

CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 9/16/98

CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 10/16/98

DIRECTOR
DATE: 10/16/98

ADDRESS CHART

PARCEL NO.	STREET ADDRESS
Building #1	7055 Troy Hill Drive
Building #2	7045 Troy Hill Drive

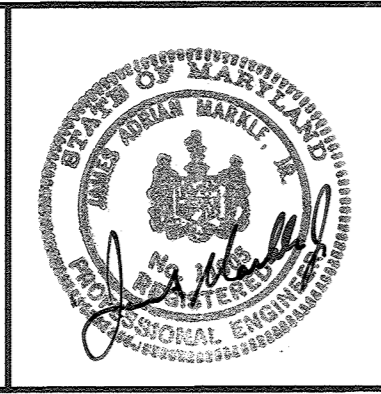
SUBDIVISION NAME: TROY HILL CORPORATE CENTER SECTION NAME: 1 PARCEL #: A-2

PLAT #	BLOCK #	ZONE	MAP	ELECT. DIST.	CENSUS TRACT
12428		M-1	37	1st	6011.02

WATER CODE C04 SEWER CODE 4020000

PREPARED BY:

GWS GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.
Civil Engineers and Land Surveyors
658 Kenilworth Drive, Suite 100
Towson, Maryland 21204
(410) 825-8120



OWNER/DEVELOPER

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c/o MANEKIN CORPORATION
7165 COLUMBIA GATEWAY DRIVE
COLUMBIA, MARYLAND
21046
410-290-1400

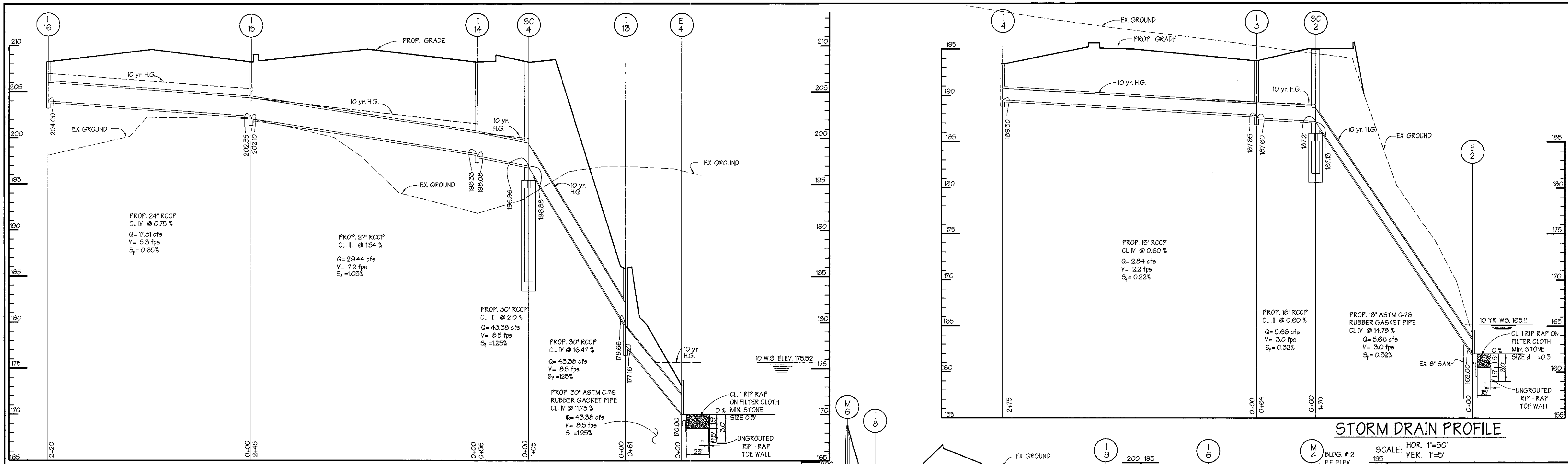
NO.	DATE	REVISION	BY
1	5/19/11	ADD LOADING RAMP & STAIR	CND
3	6/22/21	ADDED MOVABLE RAMP TO PROVIDE ACCESS SO VEHICLES CAN BE BROUGHT INSIDE THE FACILITY	PWT

DRAINAGE AREA MAP & PROFILES FOR TROY HILL CORPORATE CENTER PHASE 1 PARCEL A-2

PREVIOUS FILE #S 590-05, P90-25, P91-24, WP 96-91, P96-136

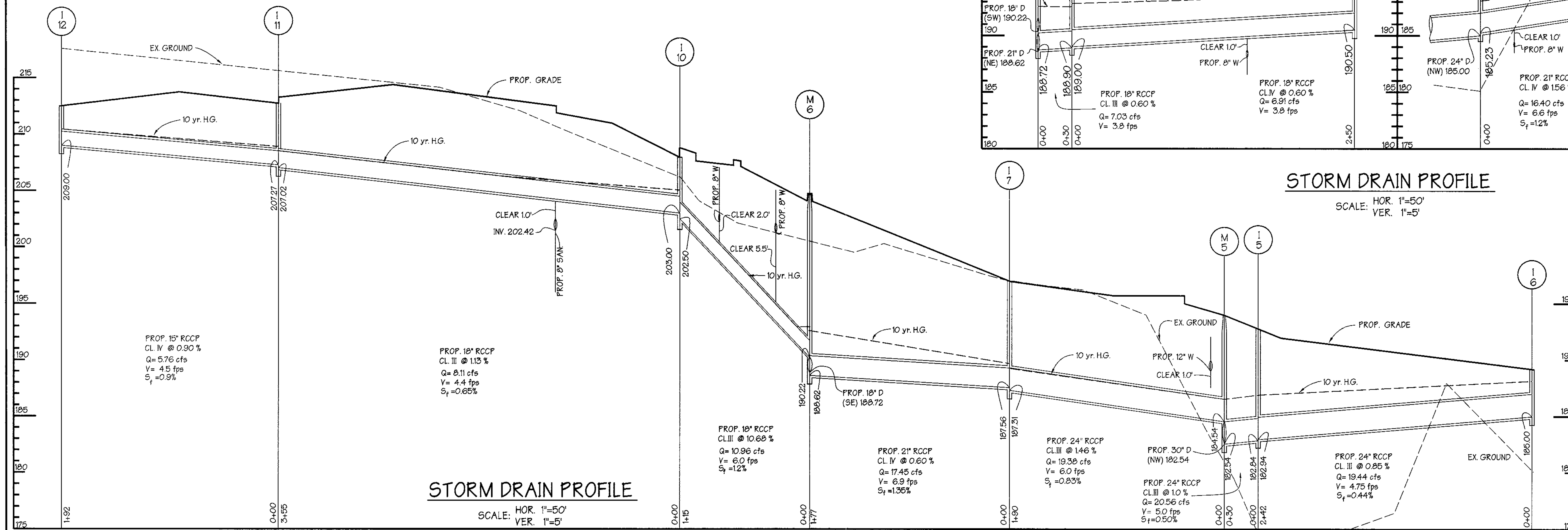
HOWARD COUNTY, MARYLAND 1st ELECTION DISTRICT SHEET 6 of 19 SCALE: AS SHOWN JUNE 03, 1998

SDP 98-114 P.N.: 8130 K.E. NAME: drainmaps01 08/22/98



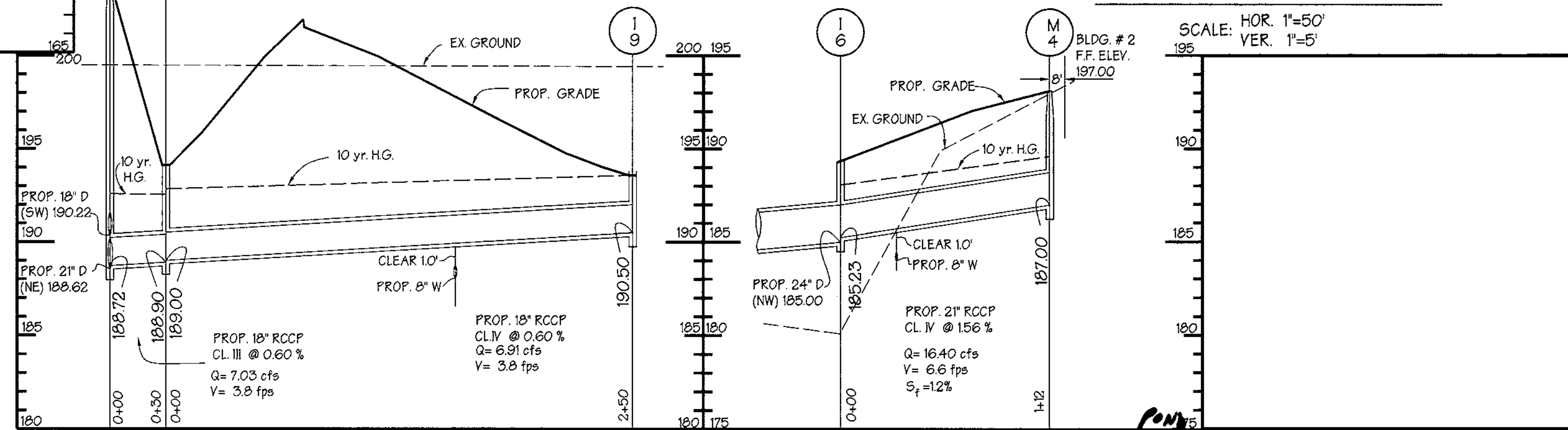
STORM DRAIN PROFILE

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



STORM DRAIN PROFILE

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



STORM DRAIN PROFILE

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

These plans for S.W.M. construction, soil erosion and sediment control meet the requirements of Howard Soil Conservation District.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT
 PLAN NUMBER
 DATE: 9/11/98

Reviewed for the Howard Conservation District and meets technical requirements.
 NATURAL RESOURCES CONSERVATION SERVICE
 DATE: 9/16/98

APPROVED: Howard County Department of Planning and Zoning
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 9/16/98

CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 10/6/98

DIRECTOR
 DATE: 10/16/98

ADDRESS CHART
 PARCEL NO. STREET ADDRESS
 Building #1 7055 Troy Hill Drive
 Building #2 7045 Troy Hill Drive

SUBDIVISION NAME SECTION NAME PARCEL #
 TROY HILL CORPORATE CENTER 1 A-2

PLAT # 12428 BLOCK # ZONE # TAX MAP ELECT. DIST. CENSUS TRACT
 1st 37 1st 6011.02

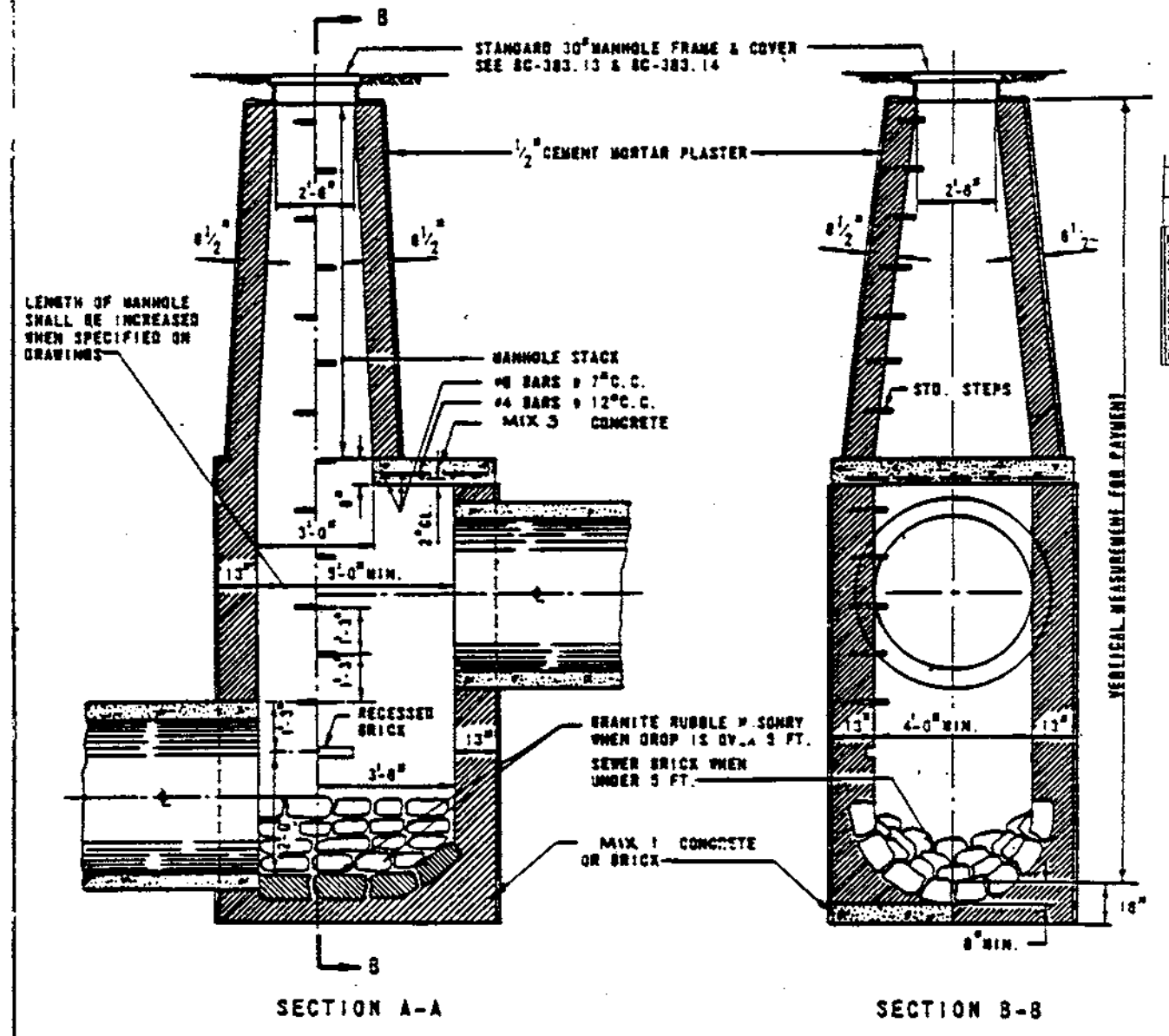
WATER CODE C04 SEWER CODE 4020000

PREPARED BY:
GWS
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 Civil Engineers and Land Surveyors
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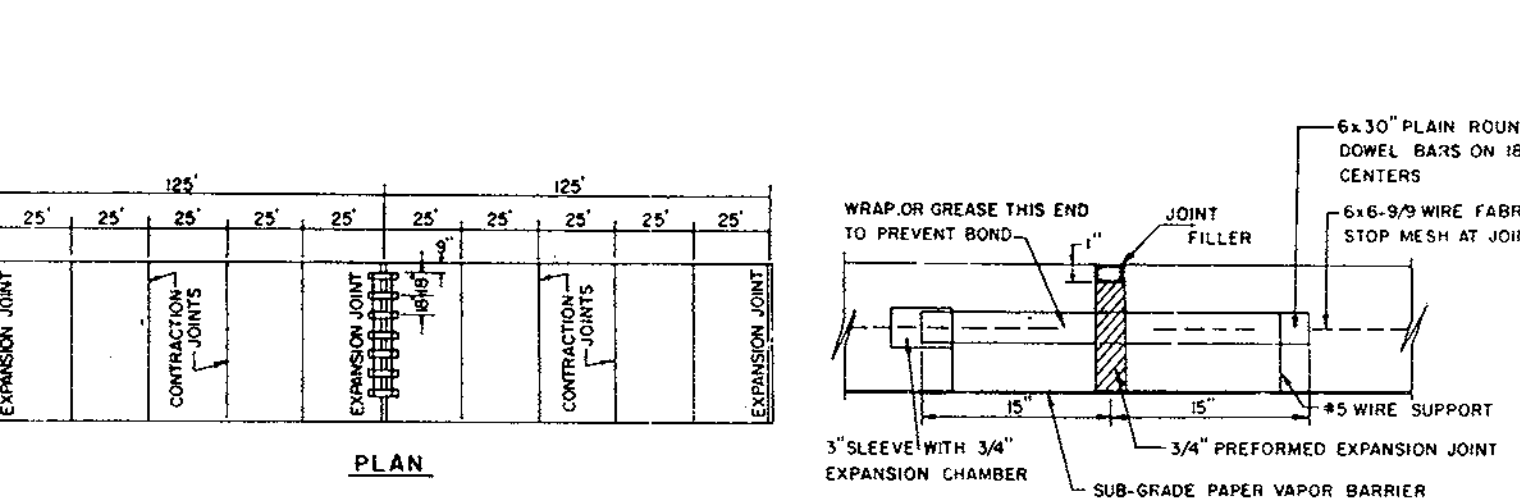
OWNER/DEVELOPER
TROY HILL BUSINESS PARK PARTNERSHIP
 c/o MANEKIN CORPORATION
 7165 COLUMBIA GATEWAY DRIVE
 COLUMBIA, MARYLAND
 21046
 410-290-1400

PROFILES FOR
TROY HILL CORPORATE CENTER
 PHASE 1 PARCEL A-2
 PREVIOUS FILE #S 590-05, P90-25, F91-24, WP 96-91, F96-136
 HOWARD COUNTY, MARYLAND SCALE: AS SHOWN
 1st ELECTION DISTRICT SHEET 7 of 19 JUNE 03, 1998

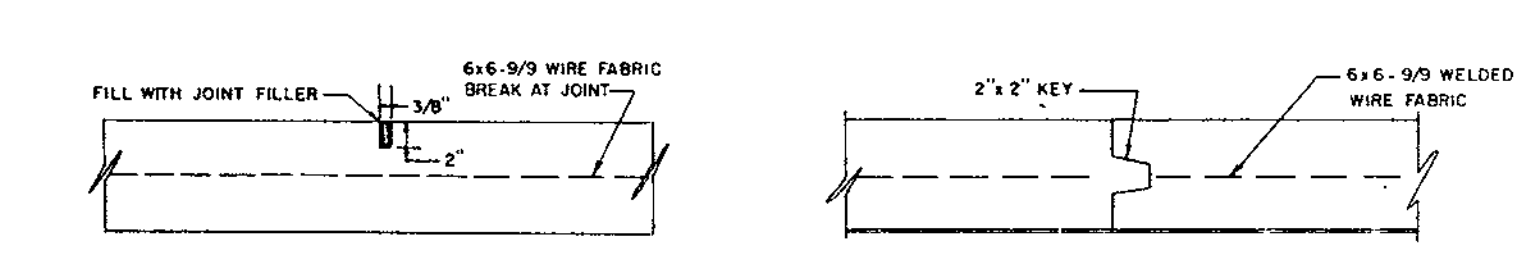


CITY OF BALTIMORE DEPARTMENT OF PUBLIC WORKS		F H W A WASHINGTON OFFICE		DROP MANHOLE	
APPROVED: <i>[Signature]</i>	ISSUED: 12-22-77	11-16-77	11-16-77	CATEGORY CODE	32312
STANDARD NO. BC-383.03	REVISED: 2-28-74	11-16-77	11-16-77	SCALE: NONE	SHEET 1 OF 1

NOTE: THIS DETAIL IS TO BE USED FOR PLACEMENT OF GRANITE RUBBLE MASONRY IN RELEASE STRUCTURE ONLY STORMWATER MANAGEMENT PLAN SHEET 16 OF 19

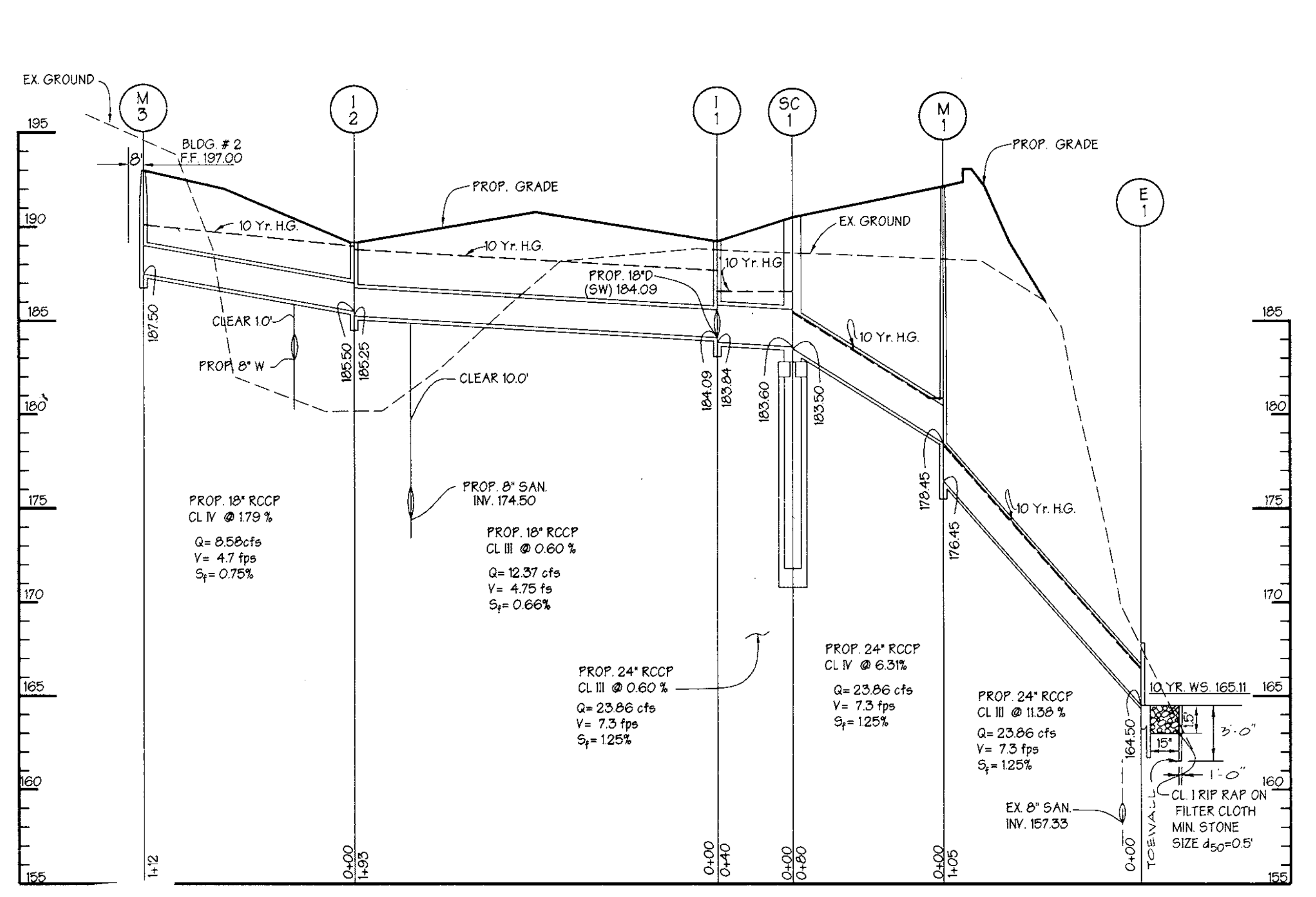


NOTE: WEEDHOLES ARE TO BE PROVIDED WHERE GROUND CONDITIONS AND THE GEOMETRIC SHAPE AT THE CHANNEL PAVING REQUIRE IT.

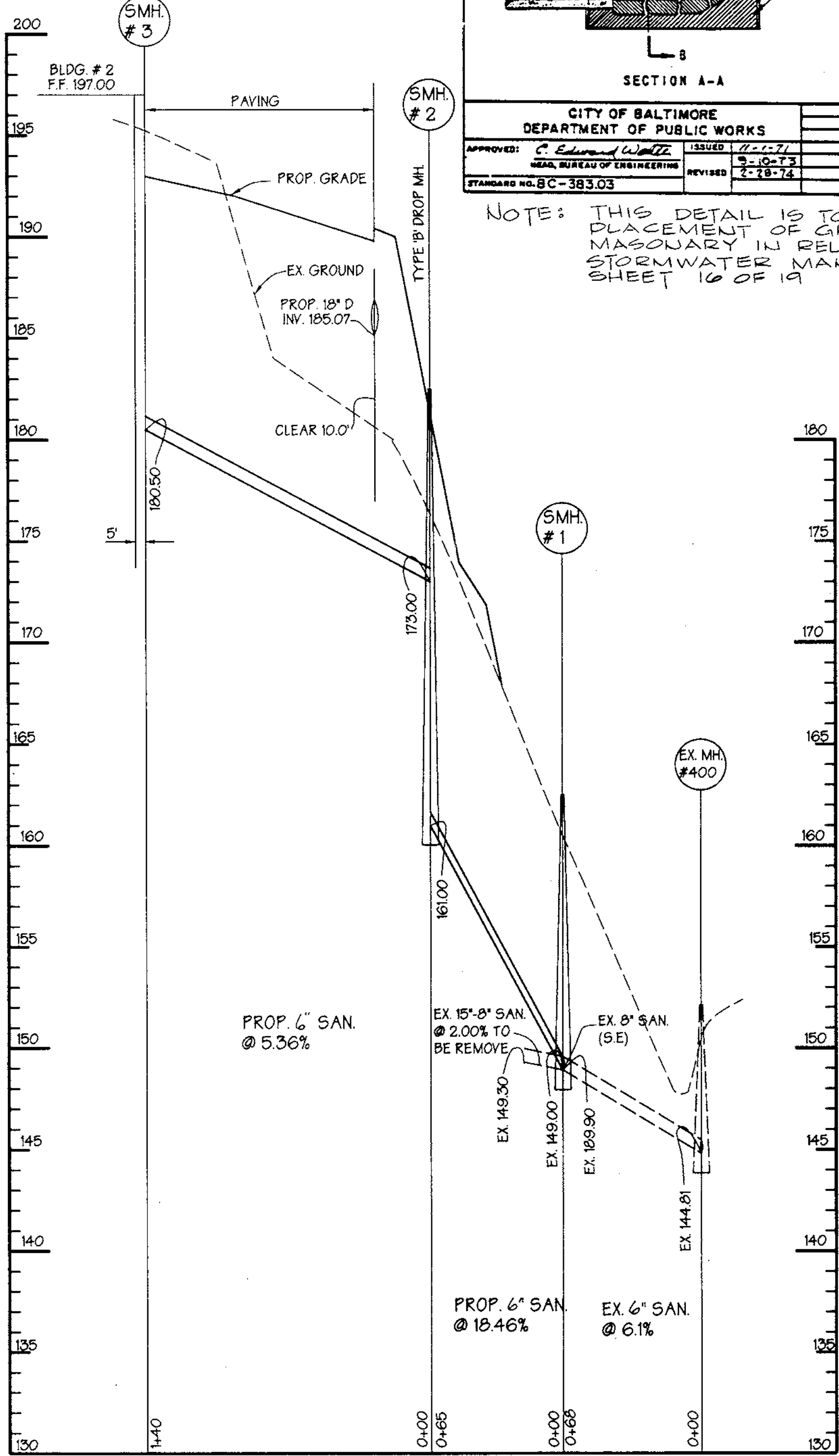


CONCRETE TRIANGULAR SECTION
DESIGN DEPTH 0.5'
SLOPE 2:1 MAX.
2" SOD ROUNDING
6x6-9/16 WELDED WIRE FABRIC

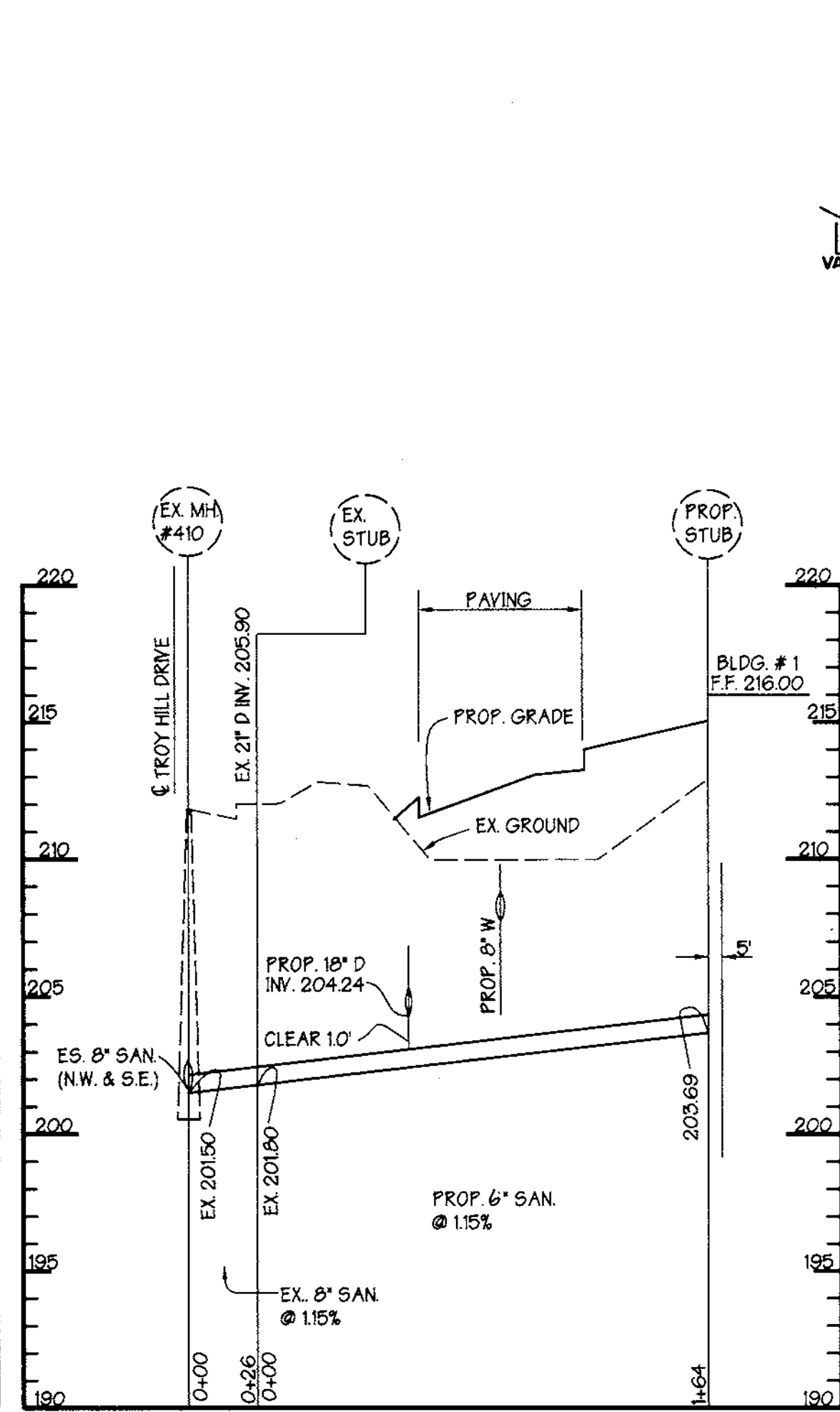
LOW FLOW CONCRETE CHANNEL
DETAILS FOR STORM WATER
MANAGEMENT POND
NO SCALE
SEE SHEET 16 OF 19



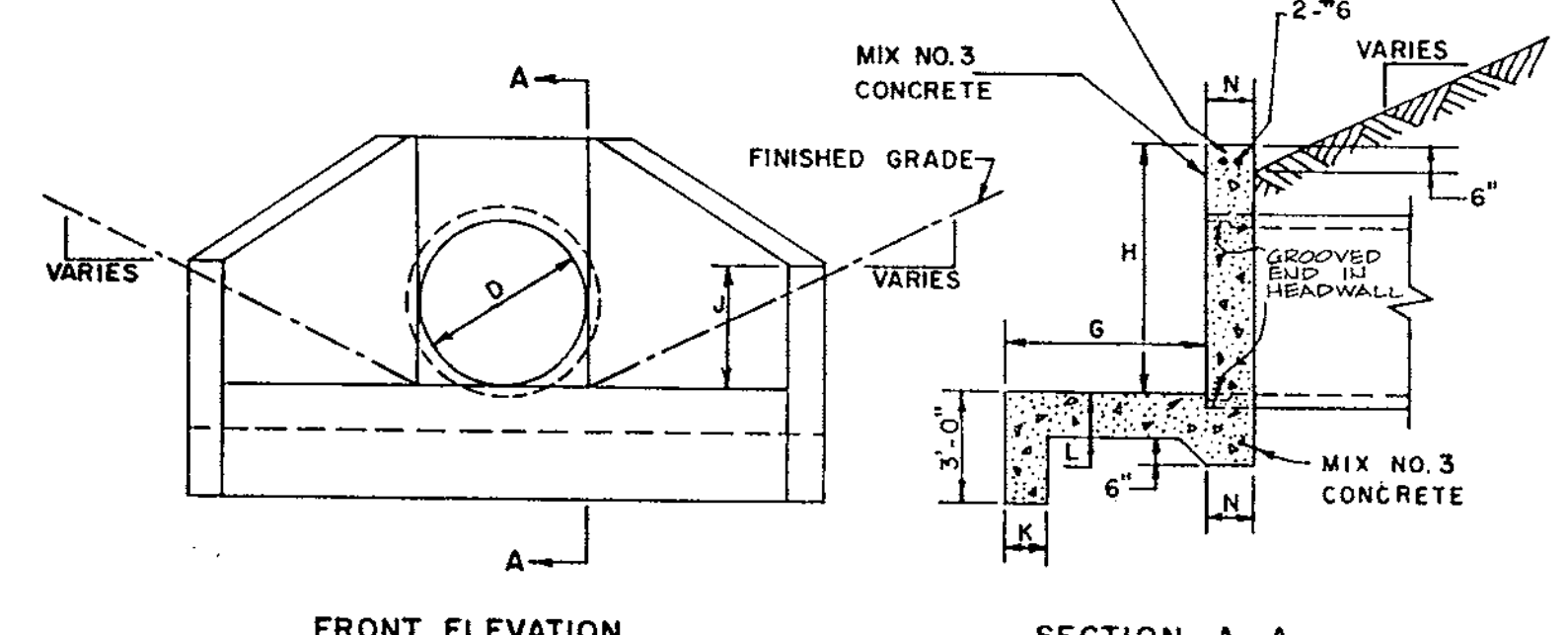
STORM DRAIN PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'



SANITARY SEWER PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'

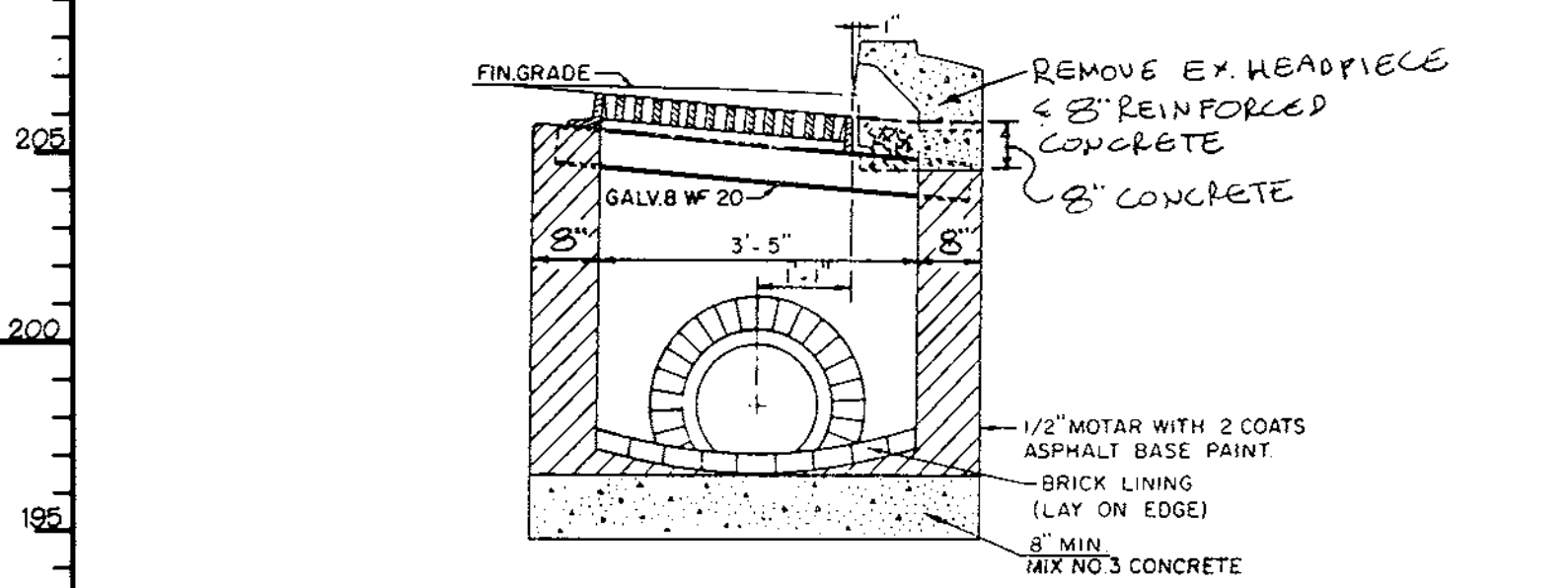


SANITARY SEWER PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'

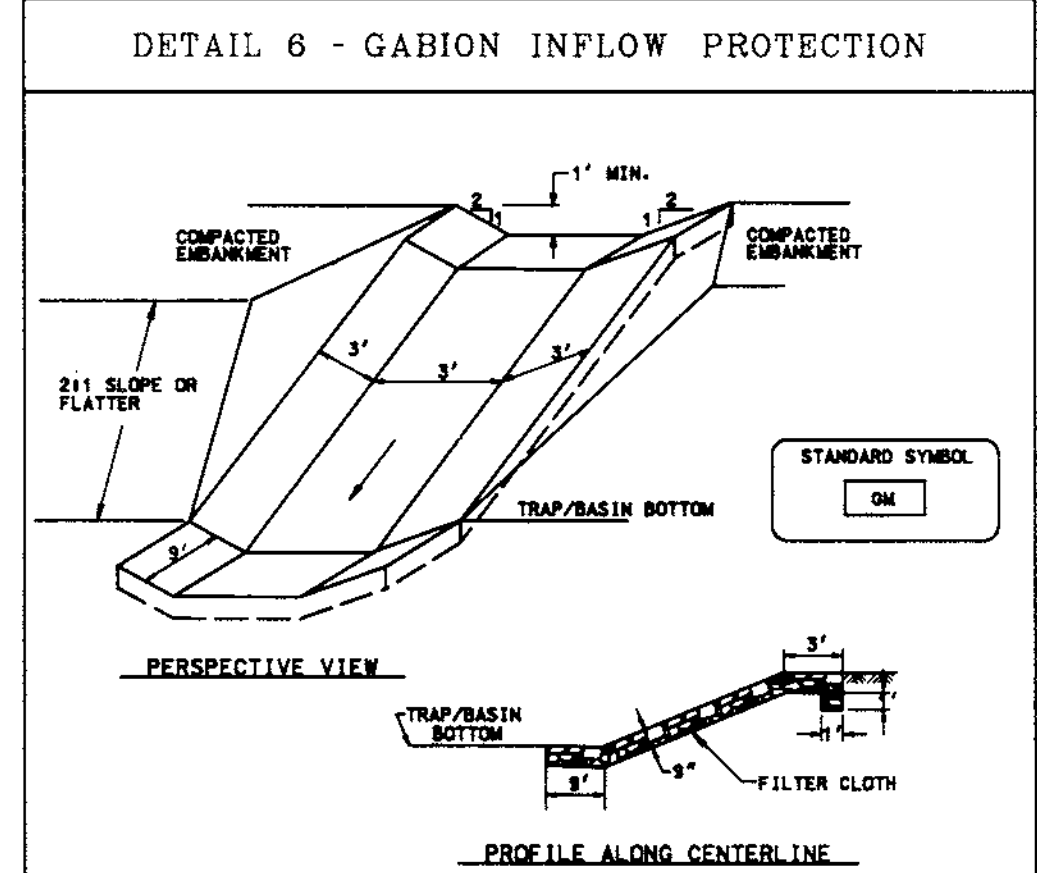


HEADWALL DETAIL
NO SCALE

NOTE: THIS IS TO BE USED FOR GROOVED END DETAIL ONLY. FOR MORE DETAILS AND REINFORCEMENT SEE HOWARD CO. STD. DETAIL SD 15.11. THIS ALSO APPLIES TO THE INFLOW END OF THE BARREL IN THE RELEASE STRUCTURE.



MODIFIED
DOUBLE TYPE S COMB. INLET
INLETS I-9 AND I-14
ON TROY HILL DRIVE
(STANDARD DETAIL
SD-434)



- Construction Specifications
- Gabion inflow protection shall be constructed of 3' x 3' x 5' gabion baskets forming a trapezoidal cross section 1' deep, with 2:1 side slopes, and a 3' bottom width.
 - Geotextile class C shall be installed under all gabion baskets.
 - The stone used to fill the gabion baskets shall be 4" - 7".
 - Gabions shall be installed in accordance with manufacturer's recommendations.
 - Gabion Inflow Protection shall be used where concentrated flow is present on slopes steeper than 4:1.

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

APPROVED: HOWARD SOIL CONSERVATION DISTRICT
DATE: 9/11/98

PLAN NUMBER: 9/11/98

Reviewed for the Howard Conservation District and meets technical requirements.
NATURAL RESOURCES CONSERVATION SERVICE
DATE: 9/4/98

APPROVED: Howard County Department of Planning and Zoning
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 9/16/98

CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 10/16/98

DIRECTOR
DATE: 10/14/98

ADDRESS CHART	
PARCEL NO.	STREET ADDRESS
Building #1	7055 Troy Hill Drive
Building #2	7045 Troy Hill Drive

SUBDIVISION NAME	SECTION NAME	PARCEL #
TROY HILL CORPORATE CENTER	1	A-2

PLAT #	BLOCK #	ZONE	TAX MAP	ELECT. DIST.	CENSUS TRACT
12428	M-1			1st	6011.02

WATER CODE C04 SEWER CODE 4020000

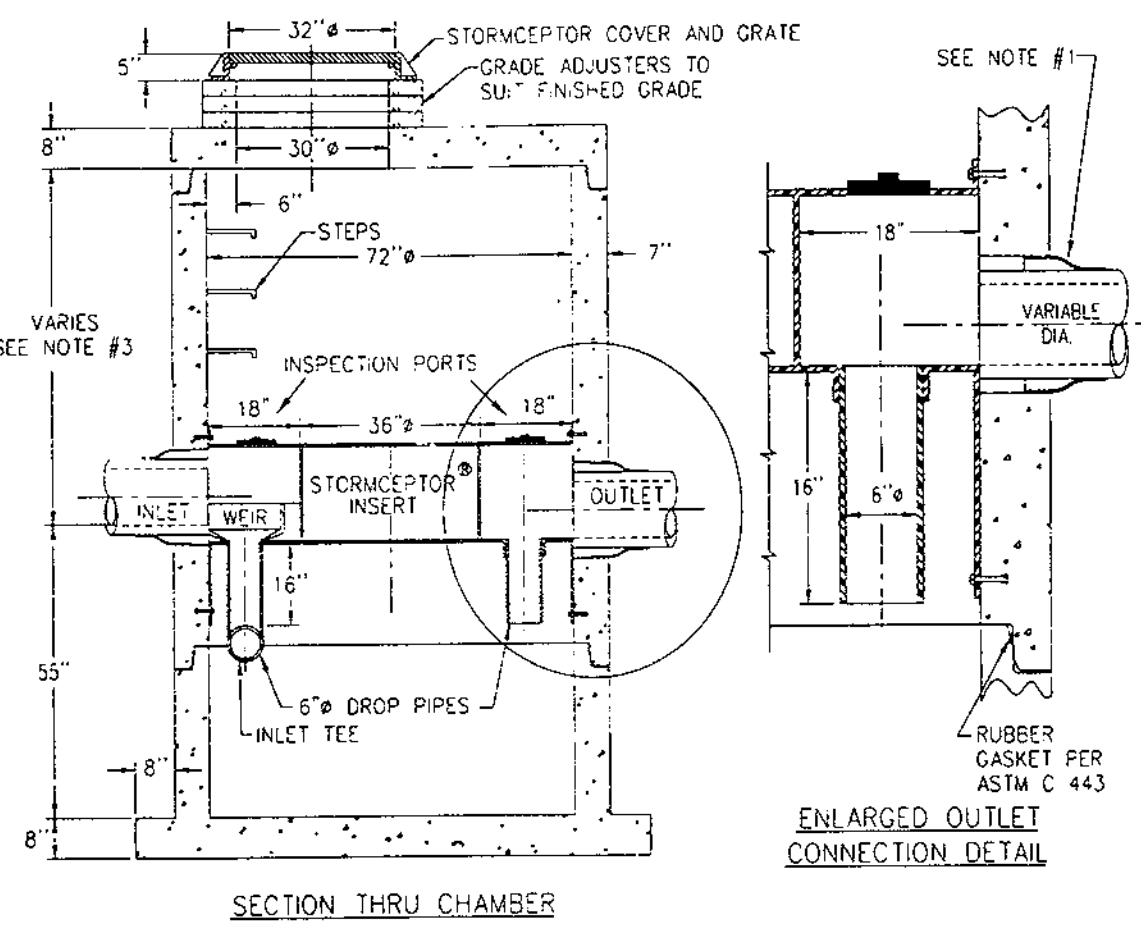
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PROFILES & DETAILS
FOR
TROY HILL CORPORATE CENTER
PHASE 1 PARCEL A-2
PREVIOUS FILE #S S90-05, P90-25, P91-24, WP 96-91, P96-136
HOWARD COUNTY, MARYLAND
1st ELECTION DISTRICT
SHEET 8 of 19
SCALE: AS SHOWN
JUNE 03, 1998

SC-2 IMPERVIOUS AREA 0.35 AC ±
STC 900 Precast Concrete Stormceptor®
(900 US Gallon Capacity)

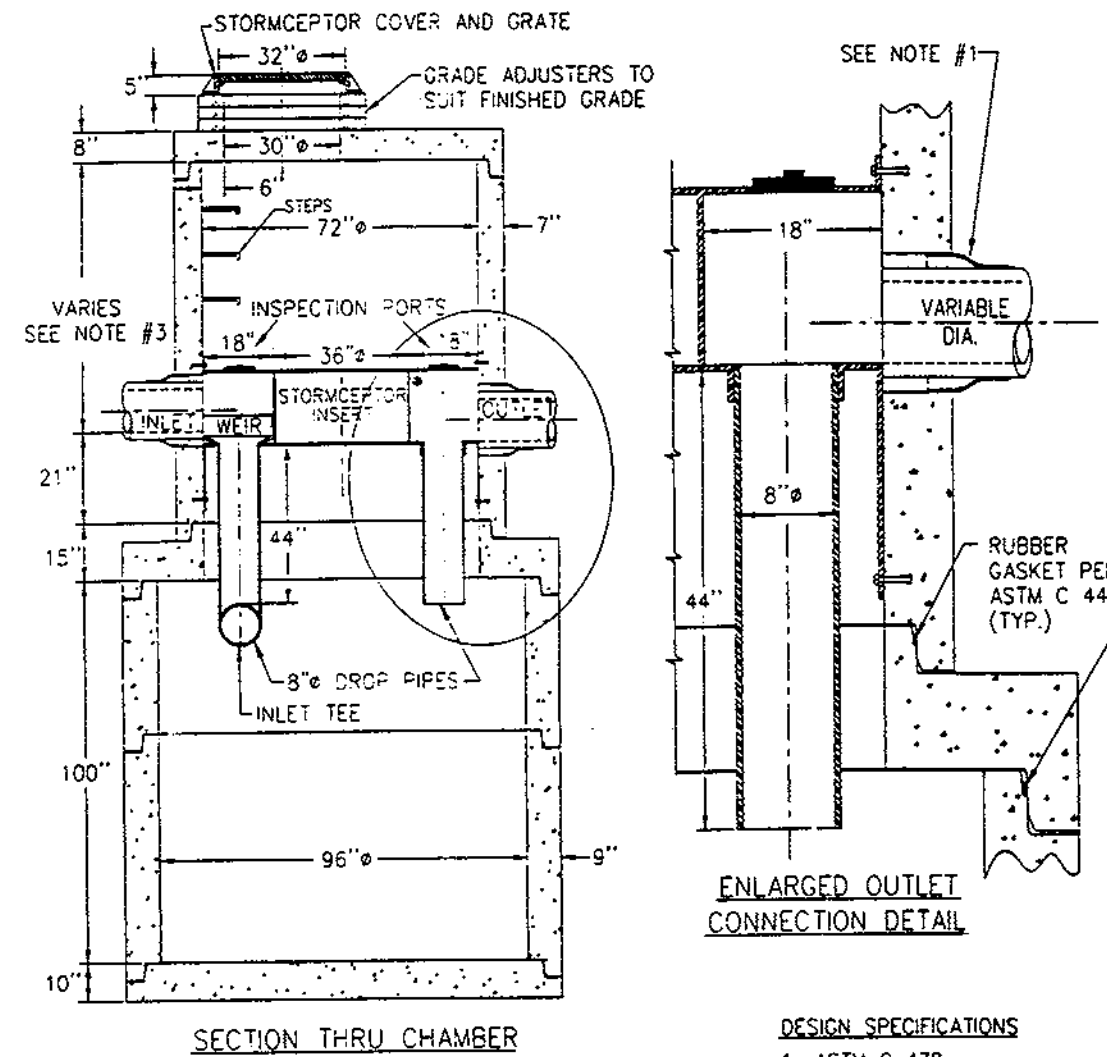


DESIGN SPECIFICATIONS
1. ASTM C 478
2. BASE WEIGHT = 6.46 TONS

NOTE:
1. CSR RECOMMENDS THE USE OF FLEXIBLE CONNECTIONS AT THE INLET AND OUTLET WHERE APPLICABLE.
2. COVER TO BE POSITIONED OVER INLET INSPECTION PORT.
3. THIS IS A GENERAL ARRANGEMENT DRAWING. CONSULT LOCAL REPRESENTATIVE FOR SPECIAL CONDITIONS.

STC-900
REVISED 5/96

SC-1 IMPERVIOUS AREA - 3.06 AC. ±
STC 3600 Precast Concrete Stormceptor®
(3600 US Gallon Capacity)

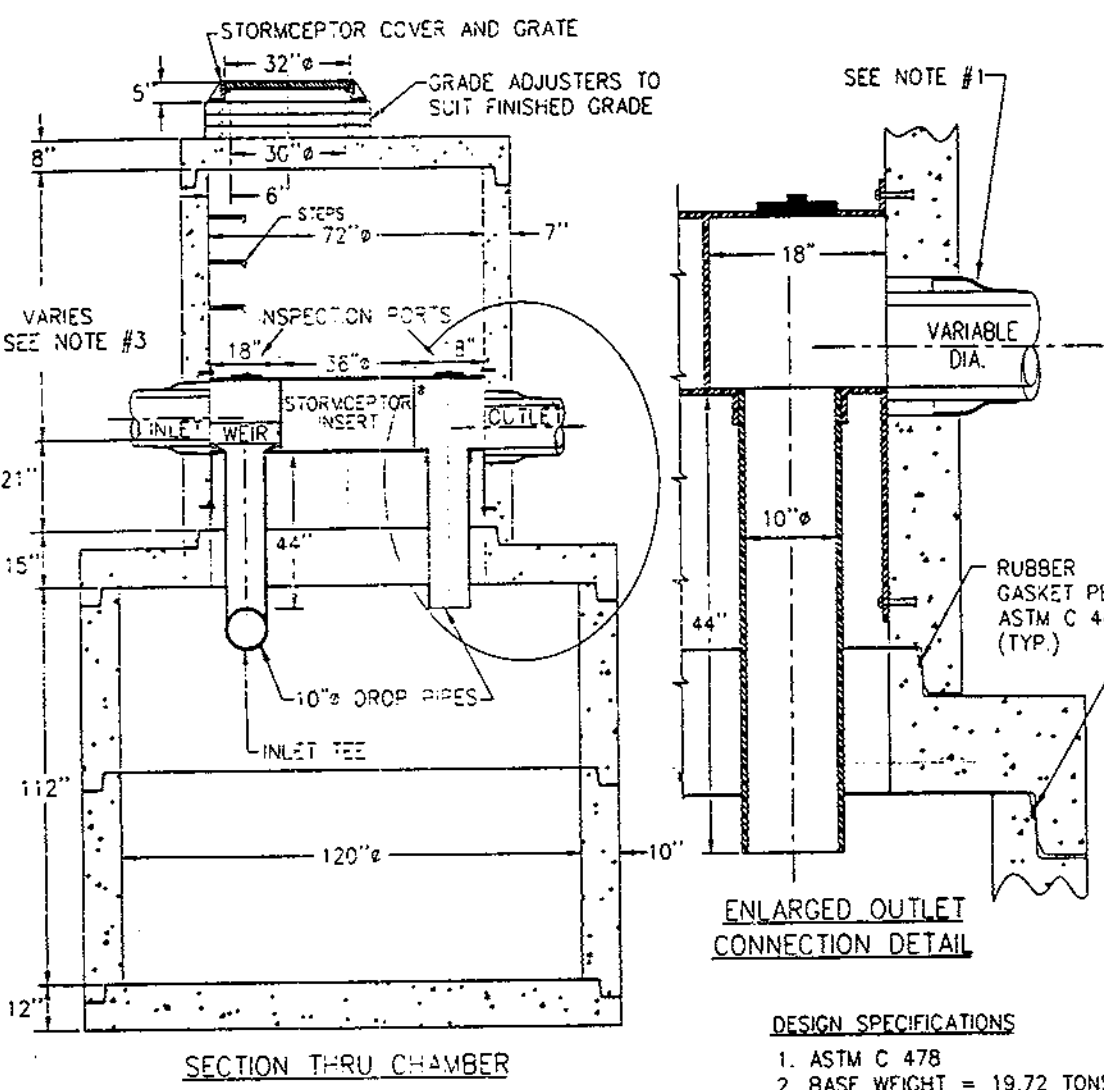


DESIGN SPECIFICATIONS
1. ASTM C 478
2. BASE WEIGHT = 11.28 TONS

NOTE:
1. CSR RECOMMENDS THE USE OF FLEXIBLE CONNECTIONS AT THE INLET AND OUTLET WHERE APPLICABLE.
2. COVER TO BE POSITIONED OVER INLET INSPECTION PORT.
3. THIS IS A GENERAL ARRANGEMENT DRAWING. CONSULT LOCAL REPRESENTATIVE FOR SPECIAL CONDITIONS.

STC-3600
REVISED 5/96

SC-3 IMPERVIOUS AREA - 4.92 AC. ±
STC 6000 Precast Concrete Stormceptor®
(6000 US Gallon Capacity)

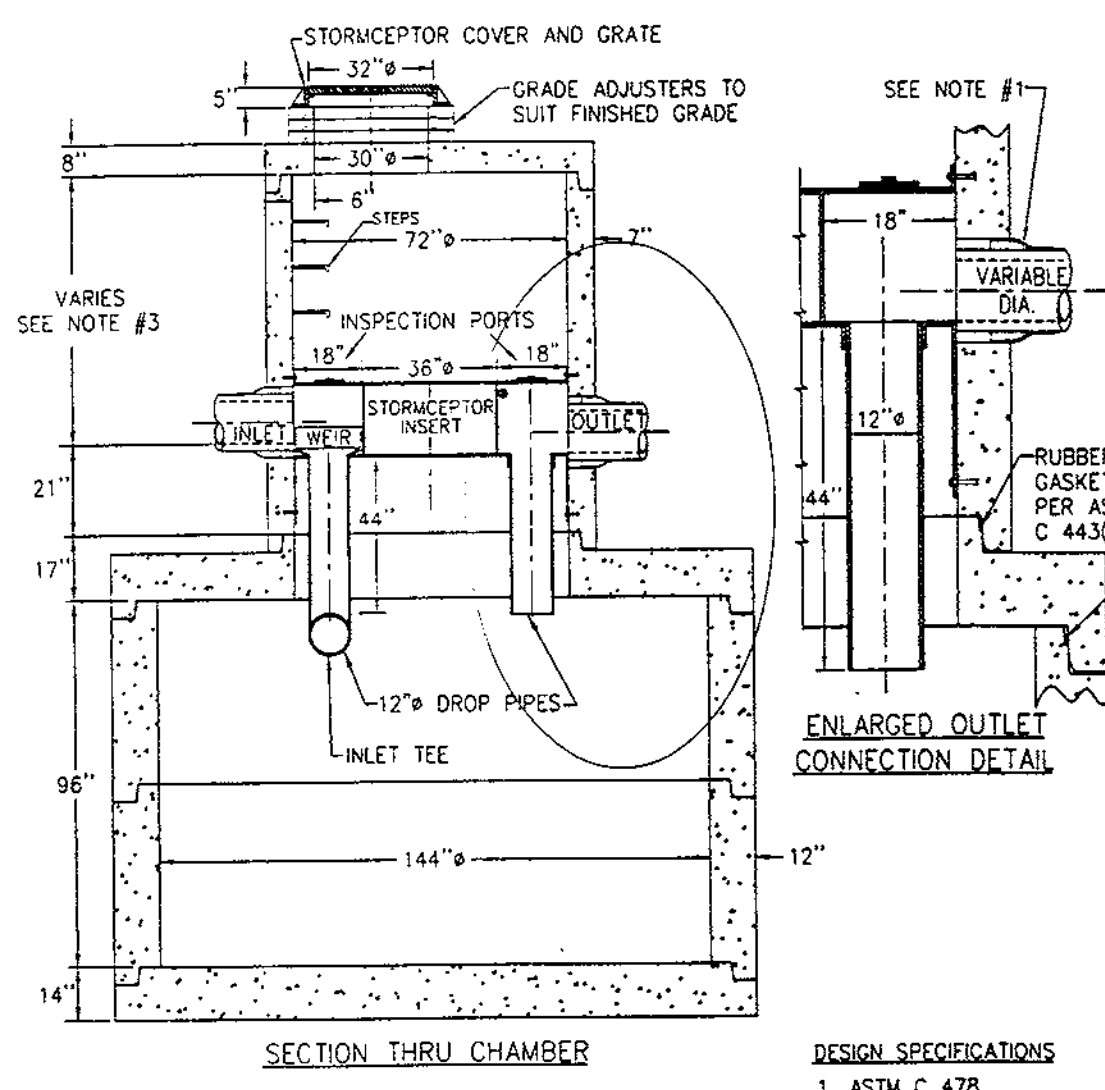


DESIGN SPECIFICATIONS
1. ASTM C 478
2. BASE WEIGHT = 19.72 TONS

NOTE:
1. CSR RECOMMENDS THE USE OF FLEXIBLE CONNECTIONS AT THE INLET AND OUTLET WHERE APPLICABLE.
2. COVER TO BE POSITIONED OVER INLET INSPECTION PORT.
3. THIS IS A GENERAL ARRANGEMENT DRAWING. CONSULT LOCAL REPRESENTATIVE FOR SPECIAL CONDITIONS.

STC-6000
REVISED 5/96

SC-4 IMPERVIOUS AREA 6.02 AC. ±
STC 7200 Precast Concrete Stormceptor®
(7200 US Gallon Capacity)



DESIGN SPECIFICATIONS
1. ASTM C 478
2. BASE WEIGHT = 27.25 TONS

NOTE:
1. CSR RECOMMENDS THE USE OF FLEXIBLE CONNECTIONS AT THE INLET AND OUTLET WHERE APPLICABLE.
2. COVER TO BE POSITIONED OVER INLET INSPECTION PORT.
3. THIS IS A GENERAL ARRANGEMENT DRAWING. CONSULT LOCAL REPRESENTATIVE FOR SPECIAL CONDITIONS.

STC-7200
REVISED 5/96

OPERATIONS AND MAINTENANCE SCHEDULE FOR STORMCEPTOR WATER QUALITY DEVICE

- The stormceptor water quality structure shall be periodically inspected and cleaned to maintain operation and function. The owner shall inspect the stormceptor unit yearly at a minimum, utilizing the stormceptor inspection/monitoring form. Inspection shall be done by using a clear plexiglass tube ("sludge judge") to extract a water column sample. When the sediment depth exceeds the level specified in Table 6 of the Stormceptor Technical Manual, the unit must be cleaned.
- The Stormceptor water quality structure shall be checked and cleaned immediately after petroleum spills. The owner shall contact the appropriate regulatory agencies.
- The maintenance of the Stormceptor unit shall be done using a vacuum truck which will remove the water, sediment, debris, floating hydrocarbons and other materials in the unit. Proper cleaning and disposal of the removed materials and liquid must be followed by the owner.
- The inlet and outlet pipes shall be checked for any obstructions at least once every six months. If obstructions are found the owner shall have them removed. Structural parts of the Stormceptor unit shall be repaired as needed.
- The owner shall retain and make the Stormceptor Inspection/Monitoring Forms available for the Howard County officials upon their request.

Concrete Stormceptor® Order Request Form *

Contractor Information
Name _____
Address _____
City _____ State _____ Zip Code _____
Contact _____ Phone _____ Fax _____

Office Use Only
Order # _____
Date _____
Internal Sale _____

Owner Information
Name TROY HILL BUSINESS PARK
Phone 410-290-1400
Fax _____

Please draw orientation of inlet and outlet pipes on diagram along with pipe inside diameter (in.) and invert elevation (ft). Clearly mark inlet pipes with an I and outlet pipes with an O and provide the inlet/outlet pipe angle in degrees.

Stormceptor Model	Insert Size	Manhole Number
900 <input checked="" type="checkbox"/> 3600 <input type="checkbox"/>	22" <input type="checkbox"/>	Top Elevation (ft) 187.21
1200 <input type="checkbox"/> 4800 <input type="checkbox"/>	32" <input type="checkbox"/>	Inlet Pipe Invert (ft) 187.21
1800 <input type="checkbox"/> 6000 <input type="checkbox"/>	44" <input type="checkbox"/>	Outlet Pipe Invert (ft) 187.13
2400 <input type="checkbox"/> 7200 <input type="checkbox"/>	Custom _____	Pipe Type: RCCP
		Pipe Inside Diameter (in) [ID] 18"
		Pipe Outside Diameter (in) [OD] 18"

Project Name TROY HILL CORPORATE CENTER PARCEL A-2
Approximate time frame until required delivery (weeks) _____
Delivery Address: Street _____
City _____ State _____ Zip Code _____
Designer Company GEORGE W. STEPHENS, JR. & ASSOC.
Designer Contact PAT CIARLO Phone 410-825-8120 Fax 410-825-0288

Please fax this order to Stormceptor at (301) 762-4190
For Technical Assistance Please Call Stormceptor Corporation at (301) 762-8361 or toll free at 1 (800) 762-4705

ALL LIFTING APPARATUS TO BE PROVIDED BY THE INSTALLATION CONTRACTOR

Concrete Stormceptor® Order Request Form *

Contractor Information
Name _____
Address _____
City _____ State _____ Zip Code _____
Contact _____ Phone _____ Fax _____

Office Use Only
Order # _____
Date _____
Internal Sale _____

Owner Information
Name TROY HILL BUSINESS PARK
Phone 410-290-1400
Fax _____

Please draw orientation of inlet and outlet pipes on diagram along with pipe inside diameter (in.) and invert elevation (ft). Clearly mark inlet pipes with an I and outlet pipes with an O and provide the inlet/outlet pipe angle in degrees.

Stormceptor Model	Insert Size	Manhole Number
900 <input type="checkbox"/> 3600 <input checked="" type="checkbox"/>	22" <input type="checkbox"/>	Top Elevation (ft) 183.50
1200 <input type="checkbox"/> 4800 <input type="checkbox"/>	32" <input type="checkbox"/>	Inlet Pipe Invert (ft) 183.50
1800 <input type="checkbox"/> 6000 <input type="checkbox"/>	44" <input type="checkbox"/>	Outlet Pipe Invert (ft) 183.50
2400 <input type="checkbox"/> 7200 <input type="checkbox"/>	Custom _____	Pipe Type: RCCP
		Pipe Inside Diameter (in) [ID] 24"
		Pipe Outside Diameter (in) [OD] 24"

Project Name TROY HILL CORPORATE CENTER PARCEL A-2
Approximate time frame until required delivery (weeks) _____
Delivery Address: Street _____
City _____ State _____ Zip Code _____
Designer Company GEORGE W. STEPHENS, JR. & ASSOC.
Designer Contact PAT CIARLO Phone 410-825-8120 Fax 410-825-0288

Please fax this order to Stormceptor at (301) 762-4190
For Technical Assistance Please Call Stormceptor Corporation at (301) 762-8361 or toll free at 1 (800) 762-4705

ALL LIFTING APPARATUS TO BE PROVIDED BY THE INSTALLATION CONTRACTOR

Concrete Stormceptor® Order Request Form *

Contractor Information
Name _____
Address _____
City _____ State _____ Zip Code _____
Contact _____ Phone _____ Fax _____

Office Use Only
Order # _____
Date _____
Internal Sale _____

Owner Information
Name TROY HILL BUSINESS PARK
Phone 410-290-1400
Fax _____

Please draw orientation of inlet and outlet pipes on diagram along with pipe inside diameter (in.) and invert elevation (ft). Clearly mark inlet pipes with an I and outlet pipes with an O and provide the inlet/outlet pipe angle in degrees.

Stormceptor Model	Insert Size	Manhole Number
900 <input type="checkbox"/> 3600 <input type="checkbox"/>	22" <input type="checkbox"/>	Top Elevation (ft) 182.24
1200 <input type="checkbox"/> 4800 <input type="checkbox"/>	32" <input type="checkbox"/>	Inlet Pipe Invert (ft) 182.24
1800 <input type="checkbox"/> 6000 <input checked="" type="checkbox"/>	44" <input type="checkbox"/>	Outlet Pipe Invert (ft) 182.24
2400 <input type="checkbox"/> 7200 <input type="checkbox"/>	Custom _____	Pipe Type: RCCP
		Pipe Inside Diameter (in) [ID] 30"
		Pipe Outside Diameter (in) [OD] 30"

Project Name TROY HILL CORPORATE CENTER PARCEL A-2
Approximate time frame until required delivery (weeks) _____
Delivery Address: Street _____
City _____ State _____ Zip Code _____
Designer Company GEORGE W. STEPHENS, JR. & ASSOC.
Designer Contact PAT CIARLO Phone 410-825-8120 Fax 410-825-0288

Please fax this order to Stormceptor at (301) 762-4190
For Technical Assistance Please Call Stormceptor Corporation at (301) 762-8361 or toll free at 1 (800) 762-4705

ALL LIFTING APPARATUS TO BE PROVIDED BY THE INSTALLATION CONTRACTOR

Concrete Stormceptor® Order Request Form *

Contractor Information
Name _____
Address _____
City _____ State _____ Zip Code _____
Contact _____ Phone _____ Fax _____

Office Use Only
Order # _____
Date _____
Internal Sale _____

Owner Information
Name TROY HILL BUSINESS PARK
Phone 410-290-1400
Fax _____

Please draw orientation of inlet and outlet pipes on diagram along with pipe inside diameter (in.) and invert elevation (ft). Clearly mark inlet pipes with an I and outlet pipes with an O and provide the inlet/outlet pipe angle in degrees.

Stormceptor Model	Insert Size	Manhole Number
900 <input type="checkbox"/> 3600 <input type="checkbox"/>	22" <input type="checkbox"/>	Top Elevation (ft) 190.00
1200 <input type="checkbox"/> 4800 <input type="checkbox"/>	32" <input type="checkbox"/>	Inlet Pipe Invert (ft) 190.00
1800 <input type="checkbox"/> 6000 <input type="checkbox"/>	44" <input type="checkbox"/>	Outlet Pipe Invert (ft) 190.00
2400 <input type="checkbox"/> 7200 <input checked="" type="checkbox"/>	Custom _____	Pipe Type: RCCP
		Pipe Inside Diameter (in) [ID] 30"
		Pipe Outside Diameter (in) [OD] 30"

Project Name TROY HILL CORPORATE CENTER PARCEL A-2
Approximate time frame until required delivery (weeks) _____
Delivery Address: Street _____
City _____ State _____ Zip Code _____
Designer Company GEORGE W. STEPHENS, JR. & ASSOC.
Designer Contact PAT CIARLO Phone 410-825-8120 Fax 410-825-0288

Please fax this order to Stormceptor at (301) 762-4190
For Technical Assistance Please Call Stormceptor Corporation at (301) 762-8361 or toll free at 1 (800) 762-4705

ALL LIFTING APPARATUS TO BE PROVIDED BY THE INSTALLATION CONTRACTOR

These plans for S.W.M. construction soil erosion and sediment control meet the requirements of Howard Soil Conservation District.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT
PLAN NUMBER _____ DATE _____
Reviewed for the Howard Conservation District and meets technical requirements.
NATIONAL RESOURCES CONSERVATION SERVICE DATE _____
APPROVED: Howard County Department of Planning and Zoning
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 9/16/98
CHIEF, DIVISION OF LAND DEVELOPMENT DATE 10/16/98
DIRECTOR DATE 10/16/98

ADDRESS CHART
PARCEL NO. TREET ADDRESS
Building # 1 7055 Troy Hill Drive
Building # 2 7095 Troy Hill Drive

SUBDIVISION NAME	SECTION NAME	PARCEL #
TROY HILL CORPORATE CENTER	1	A-2
PLAT # 12428	BLOCK # M-1	ZONE / ZONING MAP 37
WATER CODE C04	ELECT. DIST. 1st	CENSUS TRACT 6011.02
	SEWER CODE 4020000	

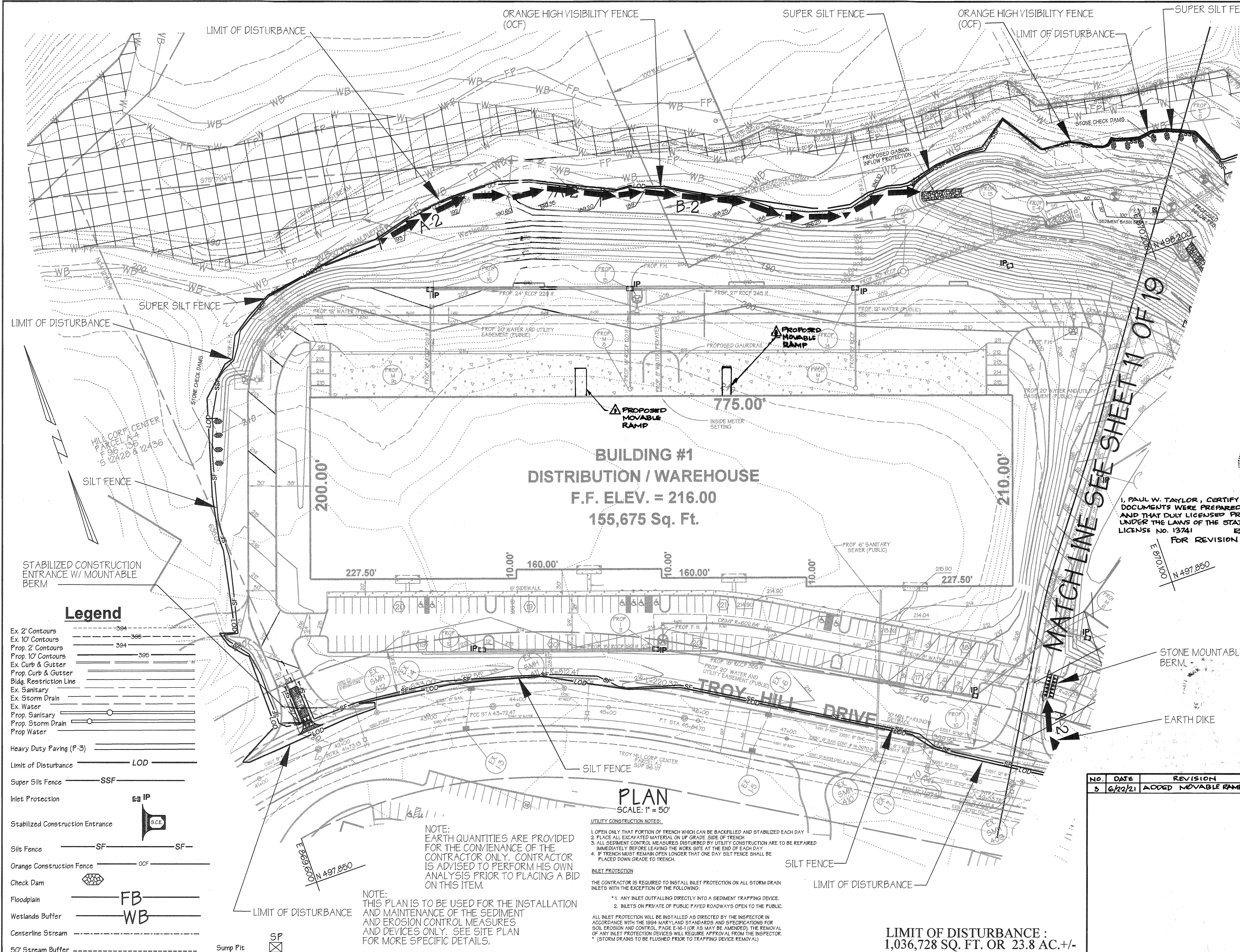
PREPARED BY:
GWS
GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.
Civil Engineers and Land Surveyors
658 Kenilworth Drive, Suite 100
Towson, Maryland 21204
(410) 825-8120

ENGINEER CERTIFICATION:
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.
Engineer: James A. Markle Jr. Date: 8/31/98
Name: JAMES A. MARKLE JR. PE # 11005

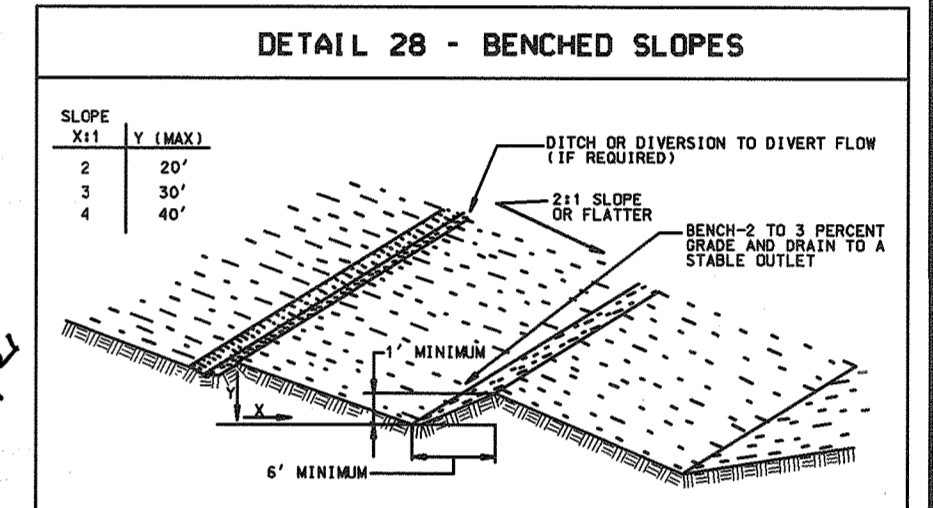
OWNER/DEVELOPER
TROY HILL BUSINESS PARK PARTNERSHIP
c/o MANEKIN CORPORATION
7165 COLUMBIA GATEWAY DRIVE
COLUMBIA, MARYLAND
21046
410-290-1400

DEVELOPER CERTIFICATION:
I/We certify that 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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I/We authorize periodic on-site inspection by the Howard Soil Conservation District.
Developer: David E. Meiners Date: 3/29/98
Name: DAVID E. MEINERS

STORMCEPTOR DETAILS
FOR
TROY HILL CORPORATE CENTER
PHASE 1 PARCEL A-2
PREVIOUS FILE #S 890-05, F90-25, F91-24, WP 96-91, F96-136
HOWARD COUNTY, MARYLAND SCALE: AS SHOWN
1st ELECTION DISTRICT SHEET 9 of 19 JUNE 03, 1998



- ### Sequence of Operation
- OBTAIN GRADING PERMIT.
 - NOTIFY THE HOWARD COUNTY DEPARTMENT OF PERMITS AND LICENSES 48 HOURS BEFORE BEGINNING WORK. (1 DAY)
 - INSTALL STABILIZED CONSTRUCTION ENTRANCES (2 DAYS)
 - INSTALL HIGH VISIBILITY FENCE AT THE LIMIT OF DISTURBANCE WHEN THE LIMIT OF DISTURBANCE IS WITHIN 50' OF WETLANDS BUFFER. CLEAR AND GRUB AND INSTALL SEDIMENT AND EROSION CONTROL MEASURES AND DEVICES FOR INSTALLATION OF SEDIMENT BASIN (10 DAYS)
 - INSTALL SEDIMENT BASIN ACCORDING TO S.W.M. PLANS AND SPECIFICATIONS WITH MODIFICATIONS FOR SEDIMENT CONTROL (10 DAYS)
 - CLEAR AND GRUB FOR THE REMAINING SEDIMENT CONTROL MEASURES AND DEVICES. (3 DAYS)
 - INSTALL REMAINING SEDIMENT CONTROL MEASURES AND DEVICES. (5 DAYS)
 - WITH PERMISSION OF SEDIMENT CONTROL INSPECTOR CLEAR AND GRUB REMAINING OF THE SITE AND BEGIN GRADING OPERATIONS. MAINTAIN POSITIVE DRAINAGE TO SEDIMENT BASIN (15 DAYS)
 - BEGIN BUILDING FOOTINGS AND BUILDING CONSTRUCTION. (6 DAYS)
 - CONTINUE GRADING. GRADE AREA BELOW EARTH DIKE (A) TO (B) TO THE FINISH GRADES. MAINTAIN POSITIVE DRAINAGE TO SEDIMENT BASIN. ADJUST EARTH DIKE IF NECESSARY. (8 DAYS)
 - INSTALL UTILITIES. PROVIDE INLET PROTECTION AS SHOWN ON THE PLAN (12 DAYS)
 - WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR REMOVE EARTH DIKE FROM (A) TO (B) (8 DAYS)
 - CONTINUE GRADING. FINE GRADE AND INSTALL STONE SUBBASE AND CURB AND GUTTER. STABILIZE ANY REMAINING AREAS. (10 DAYS)
 - WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR FLUSH THE STORM DRAIN SYSTEM. REMOVE ALL SEDIMENT AND EROSION CONTROL MEASURES AND DEVICES. (3 DAYS)
 - CONVERT EXISTING SEDIMENT BASIN TO THE S.W.M. POND AS PER APPROVED DRAINAGE AND PROCEED WITH PAVING AND LANDSCAPING OPERATIONS. (10 DAYS)



- ### Construction Specifications
- All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support buildings, structures and conduits, etc., shall be compacted in accordance with local requirements or codes.
 - All fills shall be placed and compacted in layers not to exceed 1' in thickness.
 - Except for approved fill or structural fills, fill material shall be free of brush, rubbish, rocks, logs, stumps, building debris and other objectionable materials that would interfere with or prevent construction of satisfactory fills.
 - Frozen material or soft, sandy or highly compressible materials shall not be incorporated into fill slopes or structural fills. Fill shall not be placed on a frozen foundation.
 - All benches shall be kept free of sediment during all phases of development.
 - Stops or springs encountered during construction shall be handled in accordance with the Standard and Specification for Subsurface Drain or other approved methods.
 - All graded areas shall be permanently stabilized immediately following finished grading.

I, PAUL W. TAYLOR, CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 13741 EXPIRE DATE: 12-08-2021 FOR REVISION #3 ONLY



- ### Legend
- Ex. 2' Contours
 - Ex. 10' Contours
 - Prop. 2' Contours
 - Prop. 10' Contours
 - Ex. Curb & Gutter
 - Prop. Curb & Gutter
 - Blgd. Restriction Line
 - Ex. Sanitary
 - Ex. Storm Drain
 - Prop. Sanitary
 - Prop. Storm Drain
 - Prop. Water
 - Heavy Duty Paving (P-3)
 - Limit of Disturbance
 - Super Silt Fence
 - Inlet Protection
 - Stabilized Construction Entrance
 - Silt Fence
 - Orange Construction Fence
 - Check Dam
 - Floodplain
 - Wetlands Buffer
 - Centerline Stream
 - 50' Stream Buffer
 - Sump Pit

PLAN SCALE: 1" = 50'

NOTE: EARTH QUANTITIES ARE PROVIDED FOR THE CONVIENANCE OF THE CONTRACTOR ONLY. CONTRACTOR IS ADVISED TO PERFORM HIS OWN ANALYSIS PRIOR TO PLACING A BID ON THIS ITEM.

NOTE: THIS PLAN IS TO BE USED FOR THE INSTALLATION AND MAINTENANCE OF THE SEDIMENT AND EROSION CONTROL MEASURES AND DEVICES ONLY. SEE SITE PLAN FOR MORE SPECIFIC DETAILS.

UTILITY CONSTRUCTION NOTES:

- OPEN ONLY THAT PORTION OF TRENCH WHICH CAN BE BACKFILLED AND STABILIZED EACH DAY
- PLACE ALL EXCAVATED MATERIAL ON UP GRADE SIDE OF TRENCH
- ALL SEDIMENT CONTROL MEASURES DISTURBED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY BEFORE LEAVING THE WORK SITE AT THE END OF EACH DAY
- IF TRENCH MUST REMAIN OPEN LONGER THAN ONE DAY SILT FENCE SHALL BE PLACED DOWN GRADE TO TRENCH

INLET PROTECTION

THE CONTRACTOR IS REQUIRED TO INSTALL INLET PROTECTION ON ALL STORM DRAIN INLETS WITH THE EXCEPTION OF THE FOLLOWING:

- ANY INLET OUTFALLING DIRECTLY INTO A SEDIMENT TRAPPING DEVICE.
- INLETS ON PRIVATE OF PUBLIC PAVED ROADWAYS OPEN TO THE PUBLIC.

ALL INLET PROTECTION WILL BE INSTALLED AS DIRECTED BY THE INSPECTOR IN ACCORDANCE WITH THE 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND CONTROL. PAGE E-8-1 (OR AS MAY BE AMENDED). THE REMOVAL OF ANY INLET PROTECTION DEVICES WILL REQUIRE APPROVAL FROM THE INSPECTOR. (STORM DRAINS TO BE FLUSHED PRIOR TO TRAPPING DEVICE REMOVAL)

LIMIT OF DISTURBANCE:
1,036,728 SQ. FT. OR 23.8 AC.+/-

NO.	DATE	REVISION	BY
3	6/22/21	ADDED MOVABLE RAMPS	

These plans for S.W.M. construction soil erosion and sediment control meet the requirements of Howard Soil Conservation District.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT *[Signature]* 7/16/98 DATE

PLAN NUMBER _____

Reviewed for the Howard Conservation District and meets technical requirements.

APPROVED: NATURAL RESOURCES CONSERVATION SERVICE *[Signature]* 7/16/98 DATE

APPROVED: Howard County Department of Planning and Zoning *[Signature]* 9/16/98 DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION & *[Signature]* 10/16/98 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT *[Signature]* 10/16/98 DATE

DIRECTOR *[Signature]* 10/16/98 DATE

ADDRESS CHART	PARCEL NO.	STREET ADDRESS
Building #1	7055 Troy Hill Drive	
Building #2	7045 Troy Hill Drive	

SUBDIVISION NAME	SECTION NAME	PARCEL #
TROY HILL CORPORATE CENTER	1	A-2

PLAN #	BLOCK #	ZONE	MAP	ELECT. DIST.	CENSUS TRACT
12428		M-1	37	1st	6011.02

WATER CODE C04 SEWER CODE 4020000

PREPARED BY:

GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.
Civil Engineers and Land Surveyors
658 Kenilworth Drive, Suite 100
Towson, Maryland 21204
(410) 825-8120

ENGINEER CERTIFICATION:

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.

Engineer *[Signature]* Date 8/31/98
Name JAMES A. MARKLE JR PE # 11005

OWNER/DEVELOPER

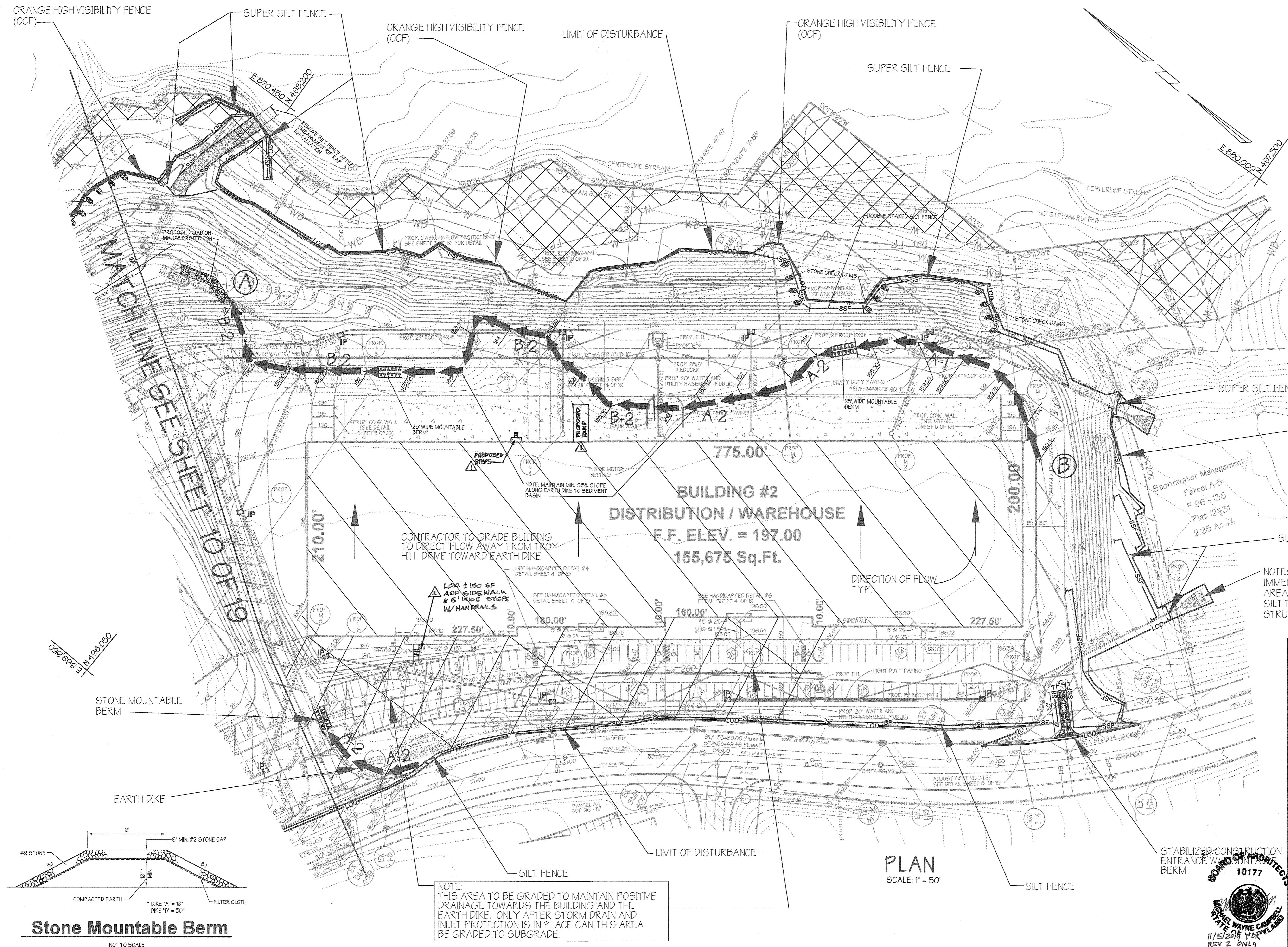
TROY HILL BUSINESS PARK PARTNERSHIP
c/o MANEKIN CORPORATION
7165 COLUMBIA GATEWAY DRIVE
COLUMBIA, MARYLAND
21046
410-290-1400

DEVELOPER CERTIFICATION:

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 the Environment 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.

Developer Name *[Signature]* Date 3/29/98
DAVID E. MEINER

SEDIMENT CONTROL PLAN
FOR
TROY HILL CORPORATE CENTER
PHASE 1 PARCEL A-2
PREVIOUS FILE #S S90-05, P90-25, F91-24, WP 96-91, P96-136
HOWARD COUNTY, MARYLAND SHEET 10 of 19 SCALE: AS SHOWN
1st ELECTION DISTRICT JUNE 03, 1998



Legend

- Ex. 2' Contours ----- 394
- Ex. 10' Contours ----- 395
- Prop. 2' Contours ----- 394
- Prop. 10' Contours ----- 395
- Ex. Curb & Gutter -----
- Prop. Curb & Gutter -----
- Ex. Sanitary -----
- Prop. Sanitary -----
- Ex. Storm Drain -----
- Prop. Storm Drain -----
- Ex. Water -----
- Prop. Water -----
- Heavy Duty Paving (P-3) -----
- Limit of Disturbance ----- LOD
- Super Silt Fence ----- SSF
- Inlet Protection ----- IP
- Stabilized Construction Entrance ----- SCE
- Silt Fence ----- SF
- Orange Construction Fence ----- OCF
- Check Dam -----
- Floodplain ----- FP
- Wetland Buffer ----- WB
- Centerline Stream -----
- 50' Stream Buffer ----- SP
- Sump Pit -----



Stone Mountable Berm
NOT TO SCALE

NOTE:
THIS AREA TO BE GRADED TO MAINTAIN POSITIVE DRAINAGE TOWARDS THE BUILDING AND THE EARTH DIKE. ONLY AFTER STORM DRAIN AND INLET PROTECTION IS IN PLACE CAN THIS AREA BE GRADED TO SUBGRADE.

NOTE:
IMMEDIATELY STABILIZE AREA BELOW SUPER SILT FENCE AROUND STRUCTURE E-2

NO.	DATE	REVISION	BY
1	11/5/2019	ADD WALK & STEPS W/HANDRAIL	MC
2	3/11/11	ADD LOADING RAMP AND STAIRS	CND

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

APPROVED: HOWARD SOIL CONSERVATION DISTRICT *[Signature]* 9/11/98 DATE

Reviewed for the Howard Conservation District and meets technical requirements. *[Signature]* 9/11/98 DATE

NATURAL RESOURCES CONSERVATION SERVICE

APPROVED: Howard County Department of Planning and Zoning *[Signature]* 9/16/98 DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION & *[Signature]* 10/16/98 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT *[Signature]* 10/16/98 DATE

DIRECTOR *[Signature]* 10/16/98 DATE

ADDRESS CHART		SECTION NAME	PARCEL #
PARCEL NO.	STREET ADDRESS	1	A-2
Building #1	7255 Troy Hill Drive		
Building #2	7245 Troy Hill Drive		
SUBDIVISION NAME		TROY HILL CORPORATE CENTER	
PLAT #	BLOCK #	ZONE	ELECT. DIST.
12428	C04	M-1	1st
WATER CODE C04		SEWER CODE	4020000

LIMIT OF DISTURBANCE : 1,036,728 SQ. FT. OR 23.8 AC. +/-

PREPARED BY:

GWS

GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.
Civil Engineers and Land Surveyors
658 Kenilworth Drive, Suite 100
Towson, Maryland 21204
(410) 825-8120

ENGINEER CERTIFICATION:

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.

Engineer: *[Signature]* Date: 8/31/98
Name: JAMES A. MARLLE JR. PE # 11005

OWNER/DEVELOPER

TROY HILL BUSINESS PARK PARTNERSHIP
c/o MANEKIN CORPORATION
7165 COLUMBIA GATEWAY DRIVE
COLUMBIA, MARYLAND
21046
410-290-1400

DEVELOPER CERTIFICATION:

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 the Environment 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.

Developer: *[Signature]* Date: 3/29/98
Name: DAVID E. MEINERS



SEDIMENT CONTROL PLAN
FOR
TROY HILL CORPORATE CENTER
PHASE 1 PARCEL A-2
PREVIOUS FILE #S 590-05, P90-25, P91-24, WP 96-91, P96-136
HOWARD COUNTY, MARYLAND 1st ELECTION DISTRICT SHEET 11 of 19 SCALE: AS SHOWN JUNE 03, 1998

SDP 98-114 P/N: 8130 KE
NAME: 8130sedcon2.s01 08-24-98

Stabilization Specifications

Section I - Vegetative Stabilization Methods and Materials

- A. Site Preparation
- 1. Initial erosion and sediment control structures (silt fences, temporary or permanent) such as diversions, grade stabilization structures, berms, waterways, or treatment control basins.
- 2. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary structures.
- 3. Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed areas over 5 acres.

- B. Soil Ammendments (Fertilizer and Lime Specifications)
- 1. Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be taken by the University of Maryland or a recognized commercial laboratory. Soil samples may be taken for engineering purposes may also be used for chemical analysis.
- 2. Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Nitrogen may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warranty of the producer.
- 3. Lime materials shall be ground limestone (hydrated or burnt lime may be substituted) which contains at least 90% usable calcium oxide. Limestone shall be ground to pass through a 20 mesh sieve such that at least 50% will pass through a #20 mesh sieve and 90-100% will pass through a #100 mesh sieve.
- 4. Incorporate lime and fertilizer into the top 3-5" of soil by disk, or other suitable means.

- 5. Soil Ammendments - Use only one of the following schedules:
 - a. Fertilized - Apply 2 tons per acre dolomite limestone (90 lbs / 1000 ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs / 100 ft).
 - b. Fertilized, Tarrow and/or chisel (See Notes 5 and 11). Apply 300 lbs per acre 10-10-10 fertilizer, 400 lbs per acre 30-0-0 uniform fertilizer (8 lbs / 100 ft).
 - c. Acceptable - Apply 2 tons per acre dolomite limestone (90 lbs / 1000 ft) and 1000 lbs per acre 10-10-10 fertilizer (20 lbs / 1000 ft) before seeding (26 lbs / 1000 ft) after seeding according to Note 5.

- C. Seeded Preparation
- I. Temporary Seeding
- 1. Seeding preparation shall consist of loosening soil to a depth of suitable agricultural or construction equipment, such as disc harrows or other similar or approved equipment. After the soil is loosened it should not be rolled or dragged smooth but left in the rougher condition. Seeded areas (greater than 25) should be tracked away from the surface in an irregular condition with ridges running parallel to the contour of the slope.
- 2. Apply fertilizer and lime as prescribed on the plans.
- 3. Incorporate lime and fertilizer into the top 3-5" of soil by disk, or other suitable means.
- 4. Apply soil amendments as per soil test or as included on the plans.
- 5. Mix soil amendments into the top 3-5" of soil by disk, or other suitable means. Laminar areas that need to be smoothed or leveled, remove large objects like stones and branches, and ready the area for soil application. Where site conditions will not permit normal seeded propagation, loose surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3) should be tracked by a chisel leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1-2" of soil should be loose and friable. Seeded loosening may not be necessary on newly disturbed areas.

- II. Permanent Seeding
- 1. Minimum soil conditions required for permanent vegetative establishment:
 - a. Soil pH shall be between 6.0 and 7.0.
 - b. Soil shall contain less than 500 ppm per milligram (ppm).
 - c. The soil shall contain less than 40% clay and more than 10% sand (by dry weight).
 - d. Provide the capacity to hold a moderate amount of moisture. An exception to this requirement is for special purposes such as wildlife or aesthetic treatment may be made by the USGS-SCS Technical Field Office, Section 242 - Critical Area Planning For special laws maintenance areas, see Section 9. Soil and V Turfgrass.
 - e. Soil must contain sufficient pore space to permit adequate soil aeration.
 - f. If these conditions cannot be met by the site, adding topsoil in accordance with Section 21 Standard and Specification For Topsoil.
- 2. Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3-5" to permit bonding of the topsoil to the surface area and to create non-erosion check strips to prevent topsoil from sliding down a slope.
- 3. Apply soil amendments as per soil test or as included on the plans.

- III. Class of topsoil may be Maryland or Virginia State Certified or Approved Soil when the soil is made available to the job foreman and inspector.
- 4. For areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
 - a. Soil Mixture - Permanent Seeding
 - b. Seeding and irrigation
 - c. Maintenance

- 5. For sites having disturbed areas over 5 acres, the ratios shown in this table shall be deleted and the ratios recommended by the seeding agency shall be written in.
- 6. For areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
 - a. Soil Mixture - Permanent Seeding
 - b. Seeding and irrigation
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- 7. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
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- 8. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
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- 9. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
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 - b. Seeding and irrigation
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- 10. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
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 - b. Seeding and irrigation
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- 11. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
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- 12. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
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- 15. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
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- 16. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
 - a. Soil Mixture - Permanent Seeding
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- 20. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
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 - b. Seeding and irrigation
 - c. Maintenance

- 22. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
 - a. Soil Mixture - Permanent Seeding
 - b. Seeding and irrigation
 - c. Maintenance

- II. When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch shall be applied to a uniform loose depth of between 1" and 2". Mulch applied shall adhere to a uniform distribution and depth so that the soil surface is not exposed. If a mulch anchoring post is to be used, the rate should be increased to 2.5 tons/acre.
- III. Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1500 lb. per acre. The wood cellulose fiber must be anchored with a post and the mixture shall contain a minimum of 50 lbs. of wood cellulose fiber per 100 square feet of water.
- IV. Securing Straw Mulch (Mulch Anchoring): Mulch anchoring shall be performed immediately following mulch. Mulch anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (subject to preference), depending upon site of area and erosion hazard:
 - a. A mulch anchoring tube or tractor drawn implement designed to punch and anchor into the soil surface, forming a hole approximately 4 to 6 inches deep. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should be used on the contour if possible.
 - b. Wood cellulose fiber may be used for anchoring straw. The fiber breaker shall be applied at a net dry weight of 1500 pounds/acre. The wood cellulose fiber shall be mixed with water and the mixture applied at a rate of 1500 pounds/acre. A minimum of 2 Kentucky Bluegrass Cultivars or 20% of the mixture by weight.
 - c. A minimum of 3 Kentucky Bluegrass Cultivars must be chosen, with each cultivar ranging from 10% to 20% of the mixture by weight.
 - d. A minimum of 3 Kentucky Bluegrass Cultivars must be chosen, with each cultivar ranging from 10% to 20% of the mixture by weight.

- V. Lightweight plastic mulch may be applied over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4 to 10 feet wide and 300 to 3000 feet long.

- VI. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
 - a. Soil Mixture - Permanent Seeding
 - b. Seeding and irrigation
 - c. Maintenance

- 7. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
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 - a. Soil Mixture - Permanent Seeding
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- 23. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
 - a. Soil Mixture - Permanent Seeding
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- 24. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
 - a. Soil Mixture - Permanent Seeding
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 - a. Soil Mixture - Permanent Seeding
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 - a. Soil Mixture - Permanent Seeding
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- 27. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
 - a. Soil Mixture - Permanent Seeding
 - b. Seeding and irrigation
 - c. Maintenance

Sediment Control Notes

- 1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION OR DISTURBANCE.
- 2. ALL VEGETATION AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERE TO.
- 3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DICES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 1:1.
- 4. 14 DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- 5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING, SOIL TEMPORARY SEEDING AND MULCHING (SEC. 9), TEMPORARY STABILIZATION WITH MULCH ALONE SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- 6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS AND PERMITS.
- 7. SITE ANALYSIS:
 - a. TOTAL AREA OF SITE: 2674 ACRES
 - b. AREA DISTURBED: 2280 ACRES
 - c. AREA TO BE RESEED OR MAINTAINED: 86 ACRES
 - d. AREA TO BE VEGETATIVELY STABILIZED: 736 ACRES
 - e. TOTAL CUT: 36,921 C.Y.
 - f. TOTAL FILL: 62,835 C.Y.
 - g. OFFSITE WASTE/SOLIDS AREA LOCATION: FILL MATERIAL SHALL COME FROM A SITE WITH AN OPEN GRADING PERMIT.
- 8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- 9. ADDITIONAL SEDIMENT CONTROL MEASURES, IF DEEMED NECESSARY BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS SEDIMENT CONTROL INSPECTOR 10. 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 CONTROL, 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.
- 11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR 60 FEET EACH AND SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

- 12. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
 - a. Soil Mixture - Permanent Seeding
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 - c. Maintenance

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 - a. Soil Mixture - Permanent Seeding
 - b. Seeding and irrigation
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 - b. Seeding and irrigation
 - c. Maintenance

- 29. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
 - a. Soil Mixture - Permanent Seeding
 - b. Seeding and irrigation
 - c. Maintenance

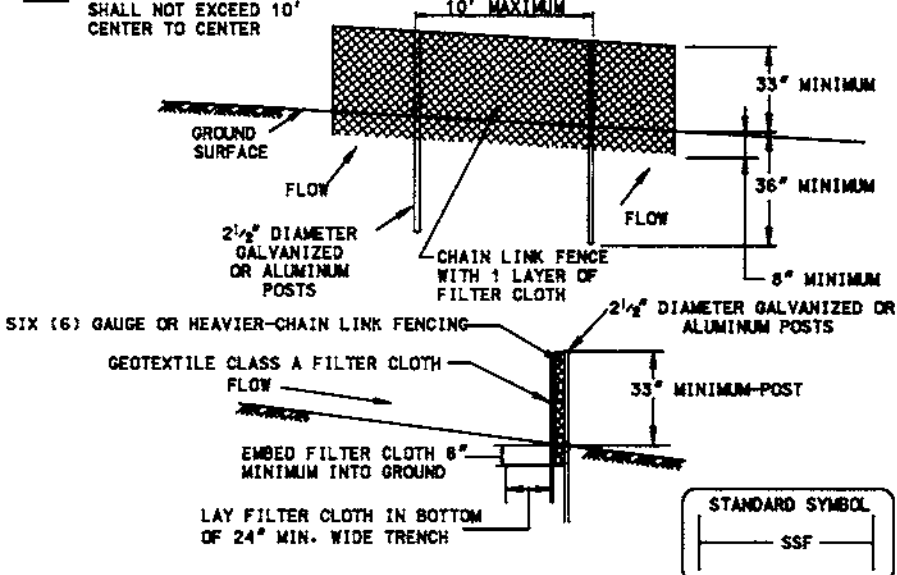
- 30. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
 - a. Soil Mixture - Permanent Seeding
 - b. Seeding and irrigation
 - c. Maintenance

- 31. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
 - a. Soil Mixture - Permanent Seeding
 - b. Seeding and irrigation
 - c. Maintenance

- 32. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
 - a. Soil Mixture - Permanent Seeding
 - b. Seeding and irrigation
 - c. Maintenance

- 33. Areas receiving low maintenance, apply urea-form fertilizer (46-0-0) at 3-12 lbs/1000 sq. ft. (50 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed as follows:
 - a. Soil Mixture - Permanent Seeding
 - b. Seeding and irrigation
 - c. Maintenance

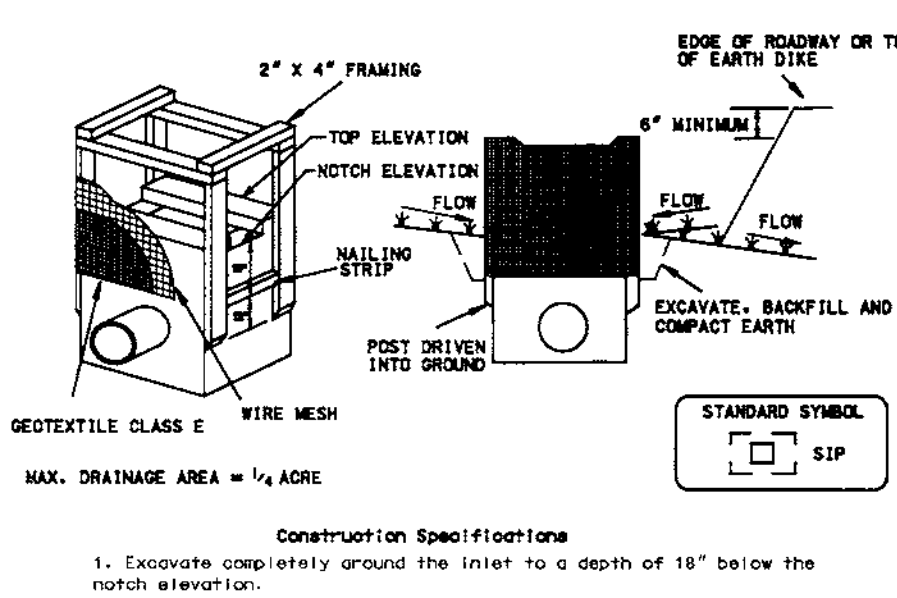
DETAIL 33 - SUPER SILT FENCE



- 1. Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Standard Specification for Chain Link Fencing. The Silt Fence specifications for 2 feet fence shall be used, substituting 42 inch fabric and 6 foot length posts.
- 2. The posts do not need to be set in concrete.
- 3. Chain link fence shall be fastened securely to the fence posts with wire (8 gauge or heavier) on the ends of the fence. The chain link fence shall be six (6) gauge or heavier.
- 4. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" on the mid section.
- 5. Filter cloth shall be embedded a minimum of 8" into the ground.
- 6. When two sections of geotextile fabric adjoin each other, they shall be overlapped by 8" and fastened.
- 7. Maintenance shall be performed on needed and all silt buildup removed when "bulges" develop in the silt fence, or when it exceeds 50% of the fence height.

U.S. DEPARTMENT OF AGRICULTURE	MARYLAND
SOIL CONSERVATION SERVICE	WATER MANAGEMENT ADMINISTRATION

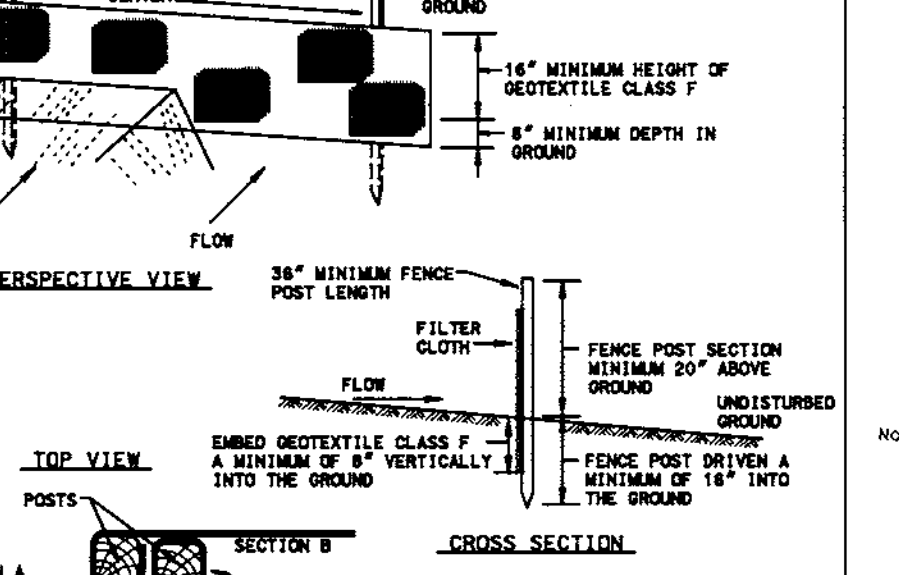
DETAIL 22 - SILT FENCE

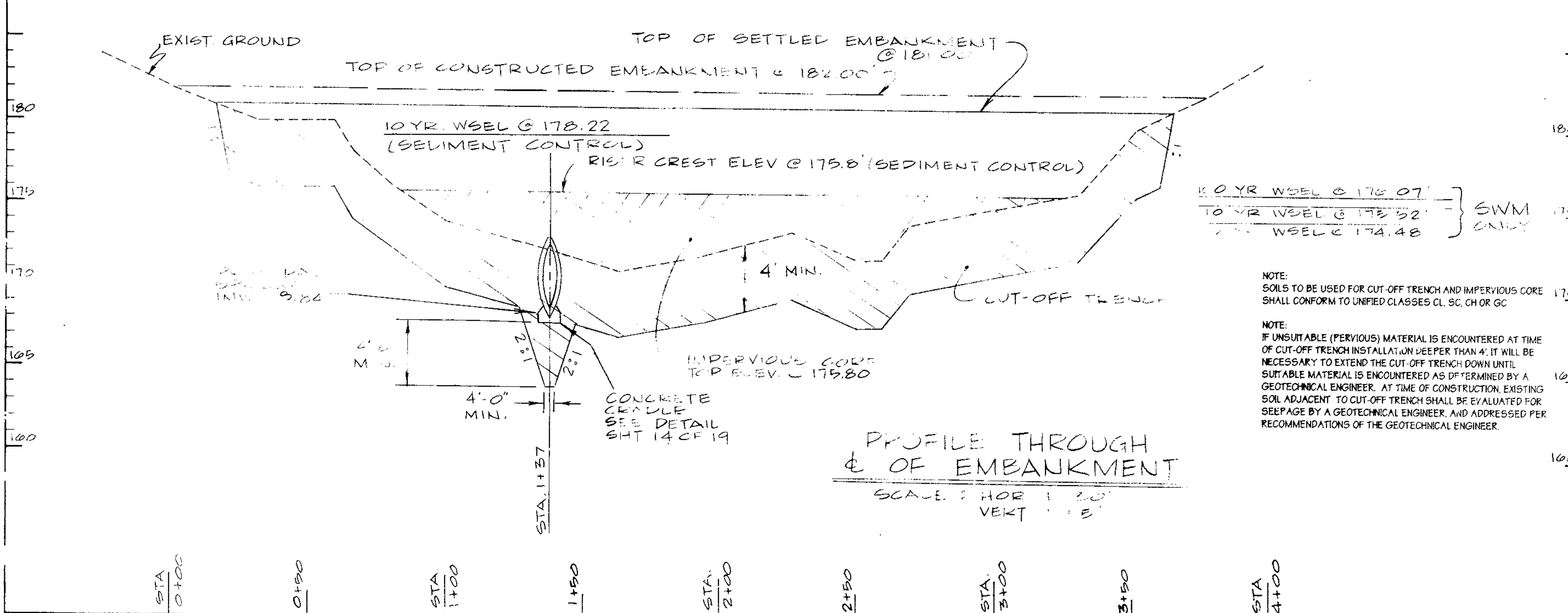
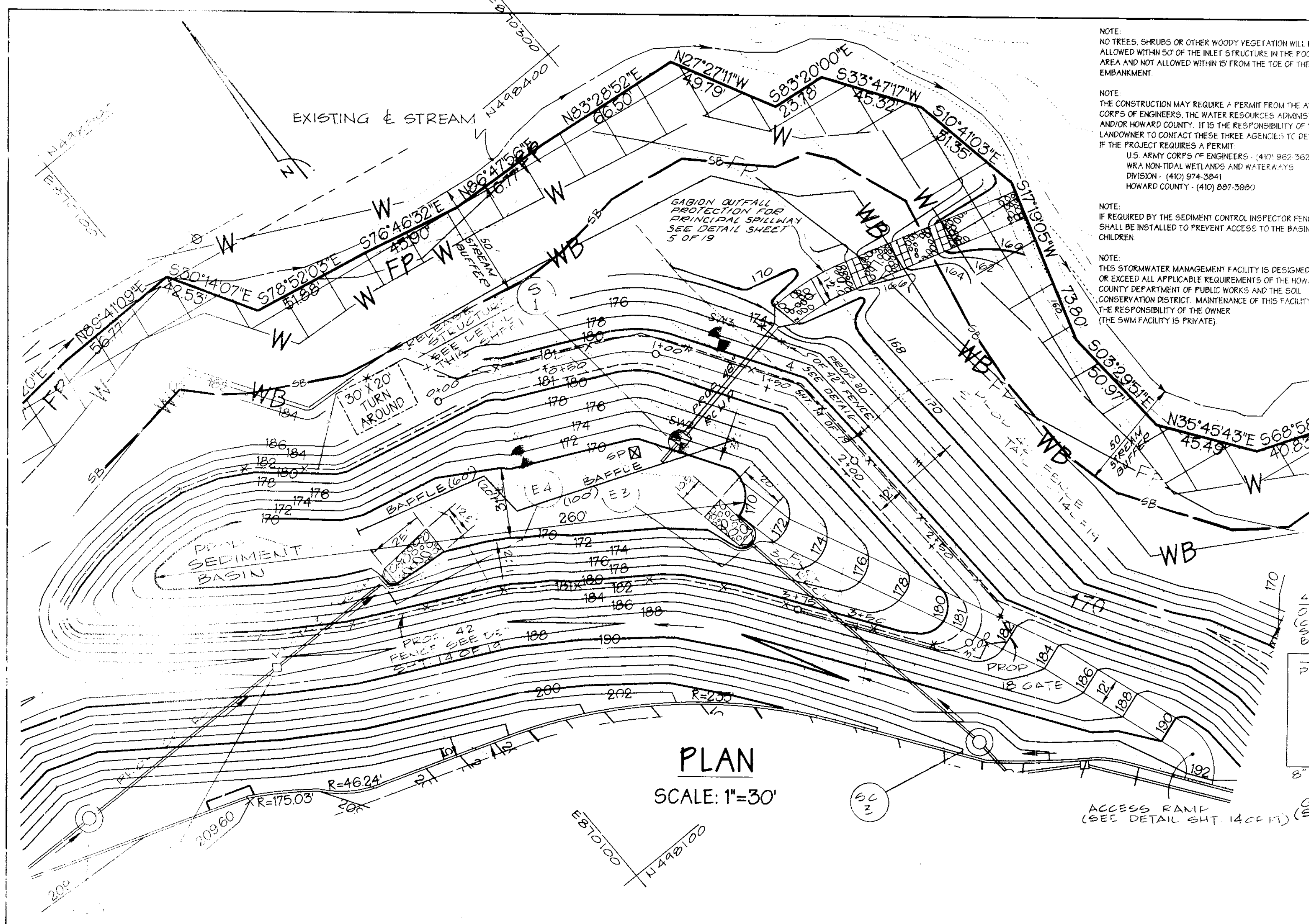


- 1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum cut), or 1 1/2" diameter (minimum round and shall be of sound quality hardwood). Steel posts will be standard T or U section weighing not less than 1.00 pound per linear foot.
- 2. Geotextile shall be fastened securely to each fence post with wire ties or staples of top and mid-section and shall meet the following requirements for Geotextile Class F:
 - a. Tensile Strength: 50 lbs/in (min.)
 - b. Flow Rate: 0.3 gal ft^2/minute (max.)
 - c. Filtering Efficiency: 75% (min.)
- 3. When ends of geotextile fabric come together, they shall be overlapped.
- 4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation exceeds 50% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE	MARYLAND
SOIL CONSERVATION SERVICE	WATER MANAGEMENT ADMINISTRATION

DETAIL 23A - STANDARD INLET PROTECTION





PREPARED BY:

GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.

Civil Engineers and Land Surveyors

658 Kenilworth Drive, Suite 100
Towson, Maryland 21284
(410) 825-8120

ENGINEER CERTIFICATION:

I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan and 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/she must engage a registered Professional Engineer to supervise pond construction and provide the Howard Soil Conservation District with as-built plans of the pond within 90 days of completion.

Engineer: **James A. Markle Jr.** PE # 11005
Date: **8/31/98**

OWNER/DEVELOPER

TROY HILL BUSINESS PARK PARTNERSHIP
c/o MANEKIN CORPORATION
7165 COLUMBIA GATEWAY DRIVE
COLUMBIA, MARYLAND 21046
(410) 290-1400

DEVELOPER CERTIFICATION:

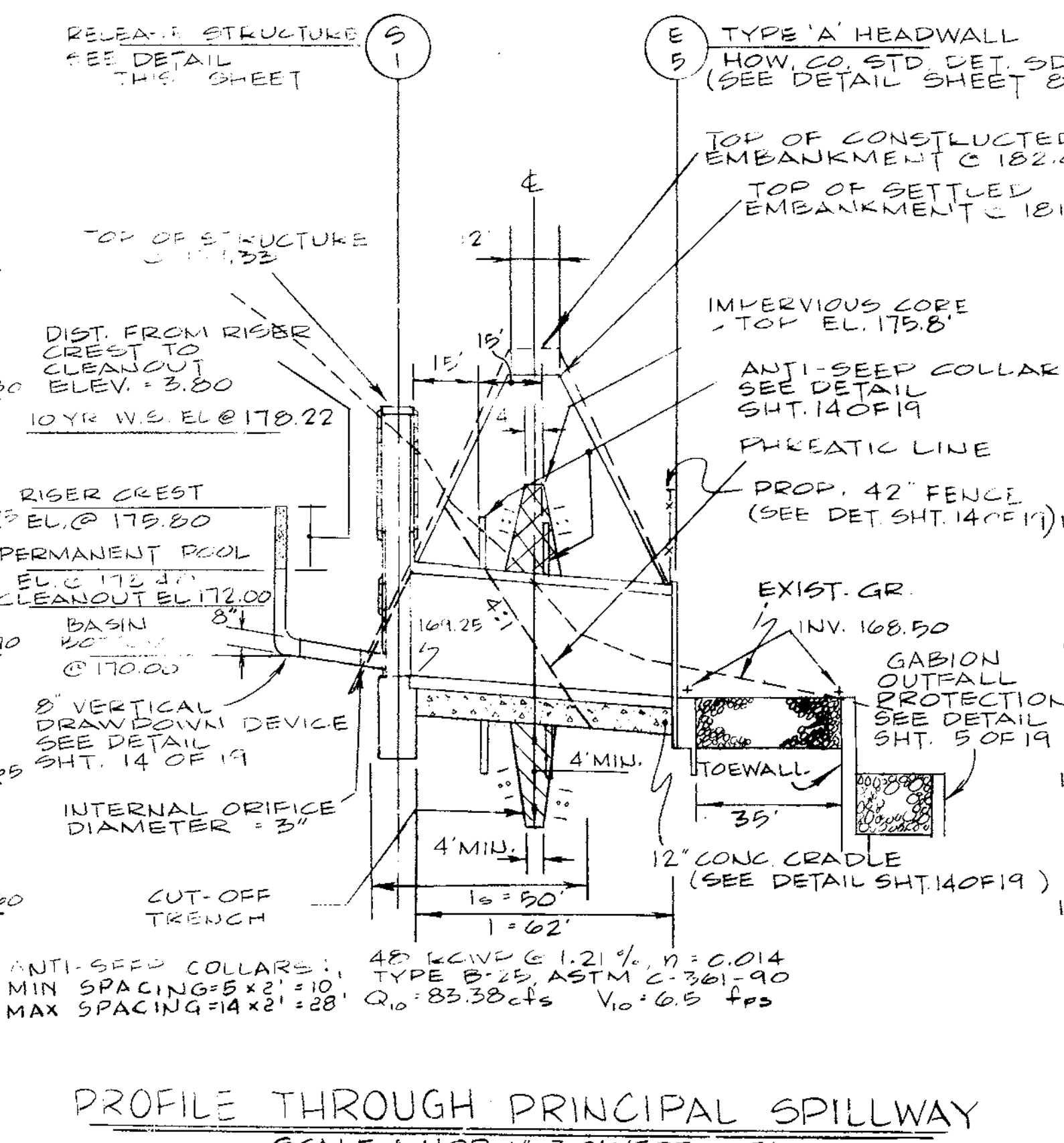
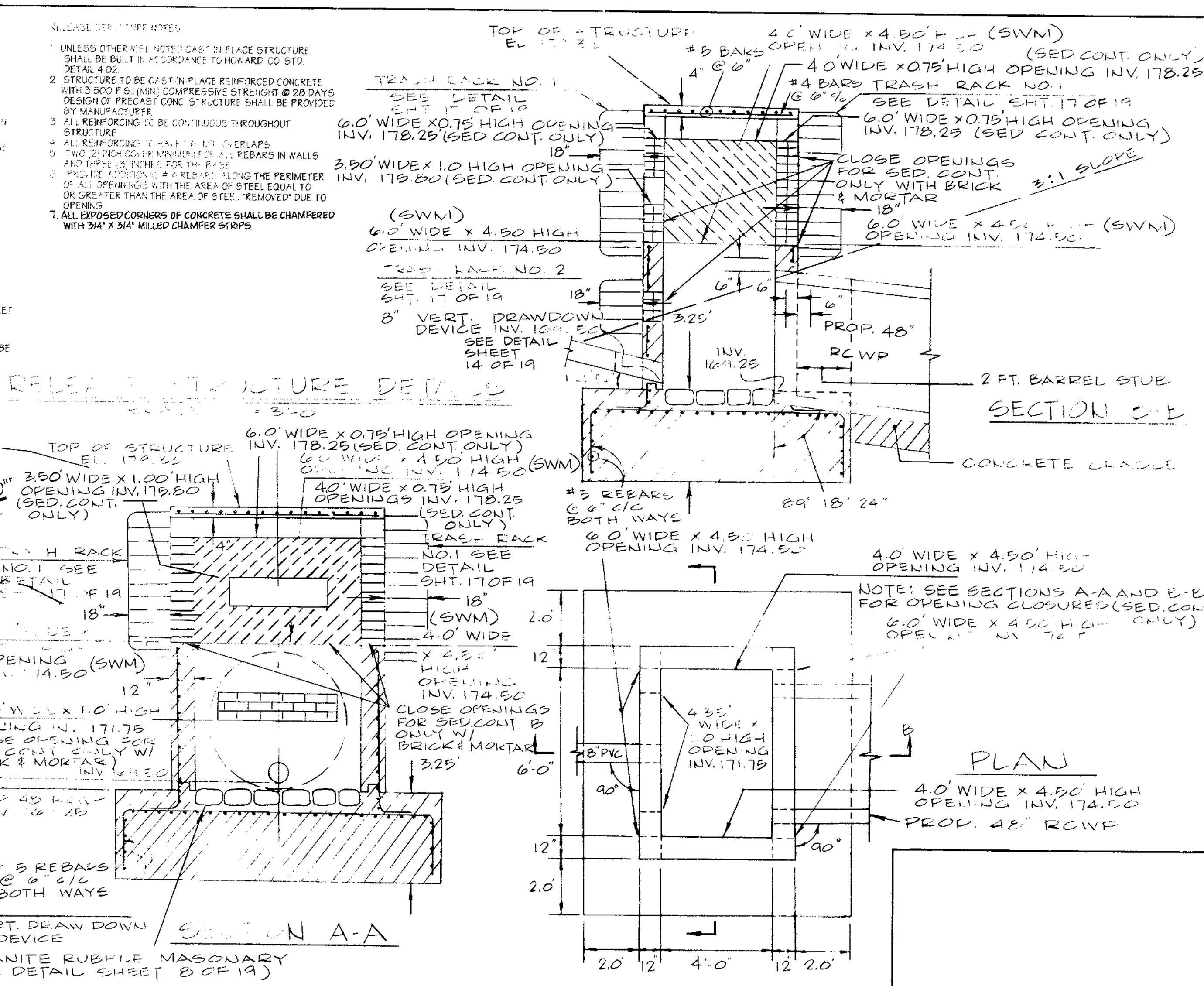
I/We certify that all development and/or construction will be done according to these plans and that any responsible personnel involved in the construction project will have a Certificate of Attendance as a Dept. of the Environment Approved Trainee Program, or the Control of Sediment and Erosion before beginning the project. I shall engage a registered Professional Engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 90 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

Developer: **David E. Meiners** Date: **3/29/98**
Date: **DAVID E. MEINERS**

AS-BUILT CERTIFICATION:

I hereby certify that the facility shown on this plan was constructed as shown on the as-built plans and meets the approved plans and specifications.

Signature: _____ PE # _____
Date: _____



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

Approved HOWARD SOIL CONSERVATION DISTRICT
DATE: **9/1/98**

PLAN NUMBER: _____ DATE: _____

Reviewed for the Howard Conservation District and meets technical requirements:
Charles Summers, Inc. DATE: **9/1/98**
NATURAL RESOURCES CONSERVATION SERVICE

APPROVED: Howard County Department of Planning and Zoning

Chief, Development Engineering Division DATE: **9/16/98**
Chief, Division of Land Development DATE: **10/6/98**

Director DATE: **10/16/98**

ADDRESS CHART	
PARCEL NO.	STREET ADDRESS
Building # 1	7055 Troy Hill Drive
Building # 2	7045 Troy Hill Drive

SUBDIVISION NAME	SECTION NAME	PARCEL #
TROY HILL CORPORATE CENTER	1	A-2
PLAT #	BLOCK #	ZONE
12428		M-1
WATER CODE	SEWER CODE	CENSUS TRACT
C04	4020000	6011.02

SEDIMENT BASIN PLAN
FOR
TROY HILL CORPORATE CENTER
PHASE 1 PARCEL A-2
PREVIOUS FILE #'S 890-05, 890-25, 891-24, WP 96-91, P96-136

HOWARD COUNTY, MARYLAND
1st ELECTION DISTRICT

DATE: **JUNE 03, 1998**

SCALE: AS SHOWN

SHEET 13 OF 19
SDF 98114

POND CONSTRUCTION SPECIFICATIONS

These specifications are appropriate to all ponds within the scope of the Standard Practice MD 37B. All references to ASTM and AASHTO specifications apply to the most recent version.

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.

Areas to be covered by the reservoir will be cleared of all trees, brush, logs, fences, stumps, and other objectionable material unless otherwise designated on the plans.

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.

EARTH FILL

MATERIAL: The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6" in diameter, or other objectionable material.

PLACEMENT: Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in a maximum 6" thick (before compaction) layers which are to be continuous over the entire length of the fill.

COMPACTION: The method of the hauling and spreading equipment, over the fill shall be controlled so that the entire surface of each lift shall be covered by not less than one road track of the equipment or compaction shall be achieved by a minimum of four complete passes of a subsoiler, rubber tired or vibratory roller.

Minimum required density shall not be less than 95% of maximum dry density with a moisture content within +/- 2% of the optimum. Each layer of fill shall be compacted as necessary to obtain that density, and it to be certified by the Engineer at the time of construction.

STRUCTURE BACKFILL

Backfill adjacent to pipes or structures 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 manually directed compaction equipment.

PIPE CONDUITS

All pipes shall be circular in cross section.

REINFORCED CONCRETE PIPE

All the following of items shall apply for reinforced concrete pipe:

- 1. Material: Reinforced concrete pipe shall have bell and spigot joints with rubber gaskets and shall equal or exceed ASTM Designation C-501.
2. Bedding: All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length.

PERFORATED PIPE

Luminous coated corrugated metal pipe (BCKMP) shall conform to the requirements of AASHTO M-196. Pipe shall be specified to be fully luminous coated in accordance with AASHTO M-196D.

CONCRETE

Concrete shall meet the requirements of Maryland Department of Transportation State Highway Administration Standard Specifications for Construction and Materials, Section 910: (Portland Cement Concrete Mixture) Mix No. 3.

REINFORCING STEEL IN CONCRETE STRUCTURES

Reinforcing steel shall be ASTM A 615 Grade 60. Steel angles and anchor bars shall be ASTM 36.

ROCK RIP RAP

Rock riprap shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 905.

FENCE

The riprap shall be placed to the required thickness in one operation. The rock shall be delivered and placed in a manner that will insure the riprap in place shall be reasonably homogeneous with the larger rocks uniformly distributed and firmly in contact.

CARE OF WATER DURING CONSTRUCTION

All work on permanent structures shall be carried out in areas free from water. The contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage channels, and stream diversions necessary to protect the areas to be occupied by the permanent works.

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 in accordance with the Maryland Soil Conservation Service Standards and Specifications for Critical Area Planting (MD-342) or as shown on the accompanying drawings.

Stomwater management facility will be stabilized with permanent slope seeding as follows:

- 1. Seeded Preparation: loosen upper 3 inches of soil by raking, disking or other acceptable means before seeding.
2. Soil Amendments: apply 2 tons per acre Dolomitic Limestone (92 lbs/1000sq. ft.), 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.), and 400 lbs per acre of 30-0-0 Ureaform Fertilizer (32 lbs/1000 sq. ft.).

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.

PERMANENT SLOPE SEEDING

After spreading 4" topsoil, seed with a mixture of 30% Inoculated Crown Vetch and 70% Kentucky 31 Tall Fescue applied at a rate of 60 lbs/acre; 10-20-20 fertilizer shall be applied at a rate of 25 lbs/1000 sq. ft.

FILTER CLOTH

Filter cloth shall meet or exceed the requirements in Section 20-25-5 of the Baltimore County Standard Specifications and Details for Construction. Durable filter fabrics for drainage purposes are not limited to Miraflo MDS DuPont TYFAC No. 3341 or 3401.

GABIONS

Gabions shall meet the requirements of Maryland Department of Transportation State Highway Administration Standard Specifications for Construction and Materials, Section 312 and must be C1, PVC coated.

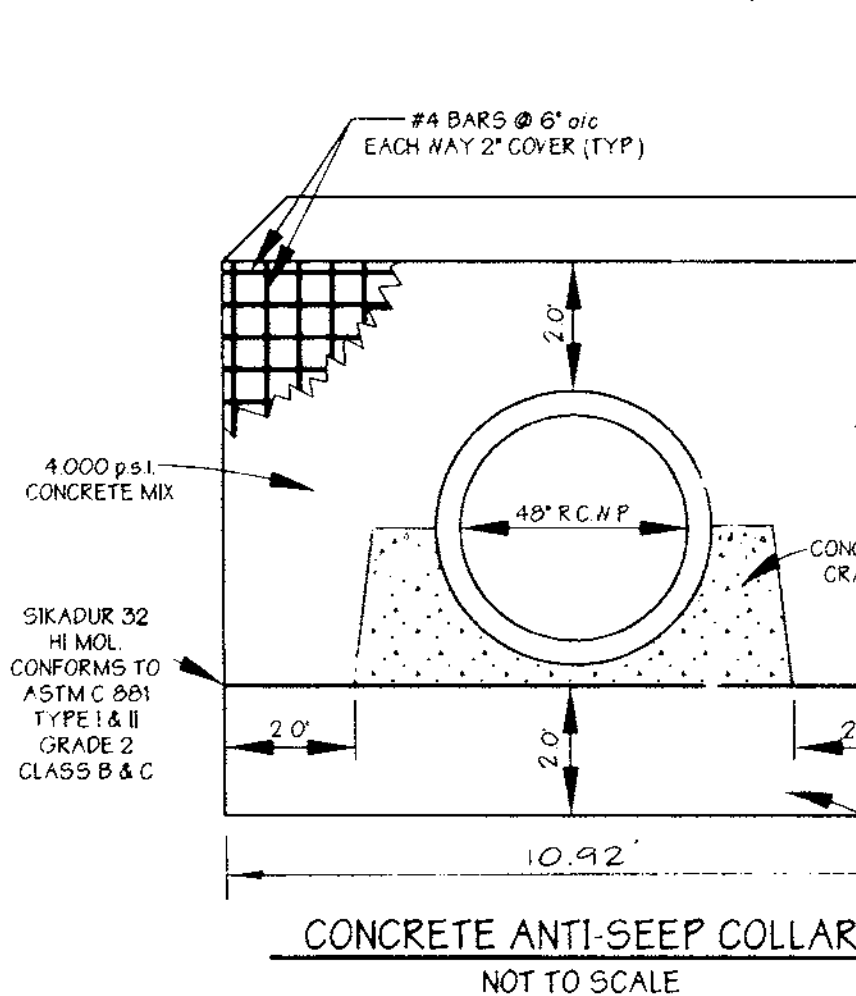
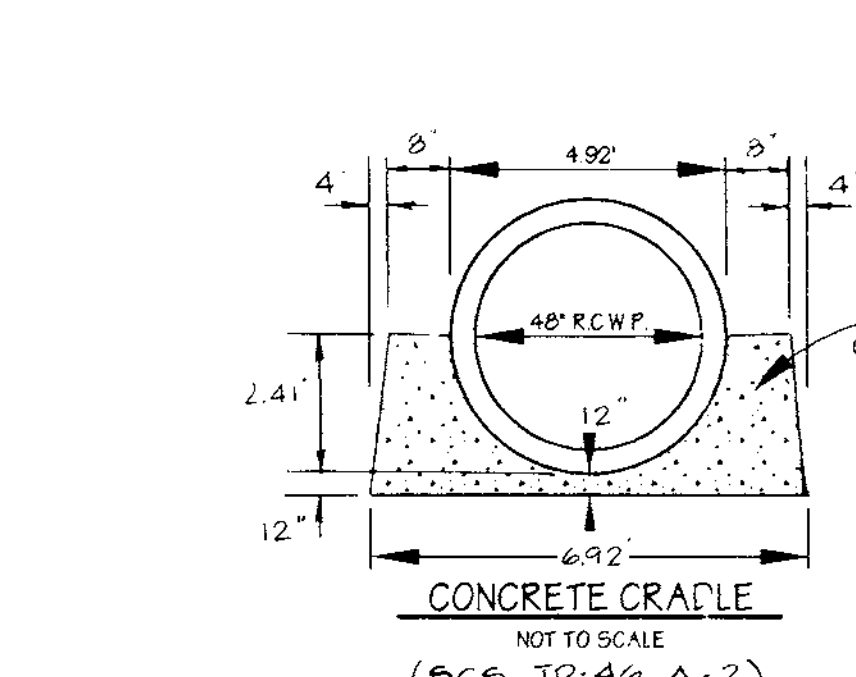
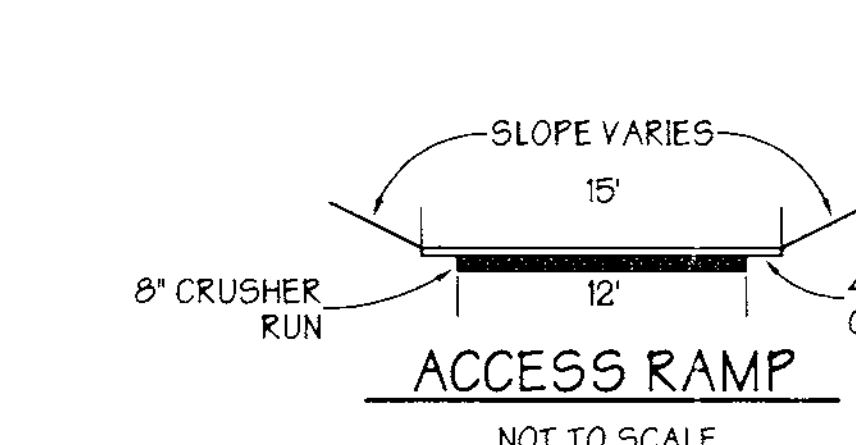
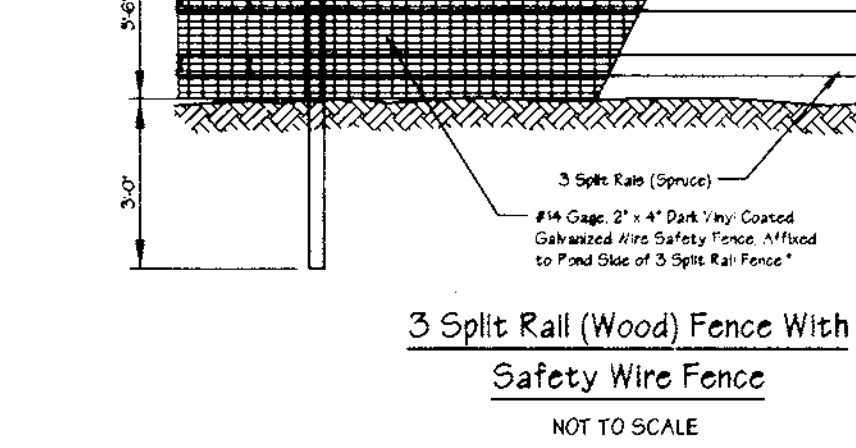
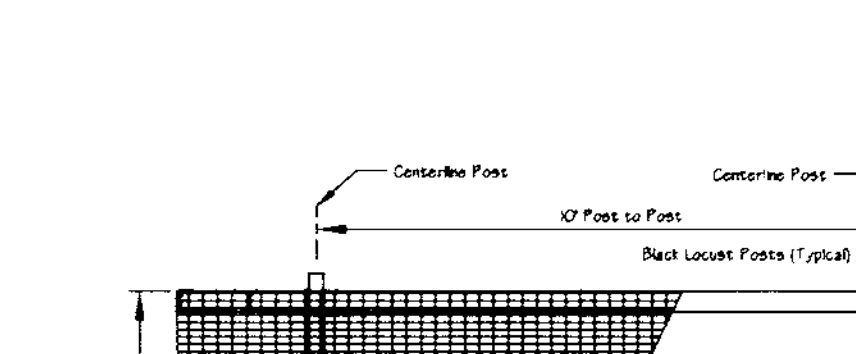
OUTFALL PROTECTION

Subgrade for riprap or gabion outfalls shall be prepared to the required line and grades. Any fill required in the subgrade shall be compacted to a density of approximately that of the surrounding undisturbed material.

FENCE

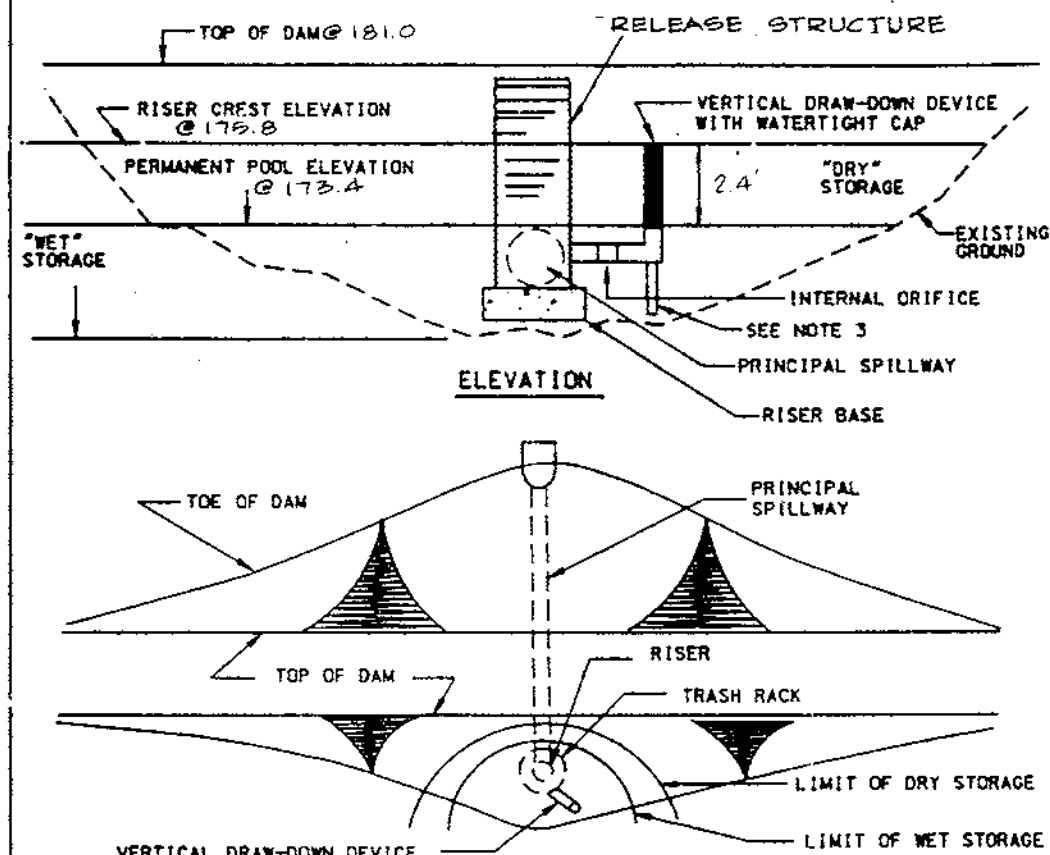
Concrete fencing in accordance with the State Highway Administration standard details 680.01 and 680.02. Use specifications for a 6' fence, substituting 42" fabric and 6" x 6" tie posts.

CUT-OFF TRENCH: THE CUT OFF TRENCH SHALL BE EXCAVATED INTO IMPERVIOUS MATERIAL ALONG OR PARALLEL TO THE CENTERLINE OF THE EMBANKMENT AS SHOWN ON THE PLANS. THE BOTTOM WIDTH OF THE TRENCH SHALL BE GOVERNED BY THE EQUIPMENT USED FOR EXCAVATION.



- NOTE:
1. LOCATE 2 MIN FROM ALL PIPE JOINTS.
2. ALL MATERIAL TO BE IN ACCORDANCE WITH CONSTRUCTION AND CONSTRUCTION MATERIALS SPECIFICATIONS.
3. THE SEAL BETWEEN THE PIPE AND COLLAR SHALL BE WATER TIGHT.
4. COLLAR SHALL PROJECT A MIN OF 2" FROM THE EXTERIOR OF THE CONCRETE CRADLE AND THE PIPE ON ALL FOUR SIDES.

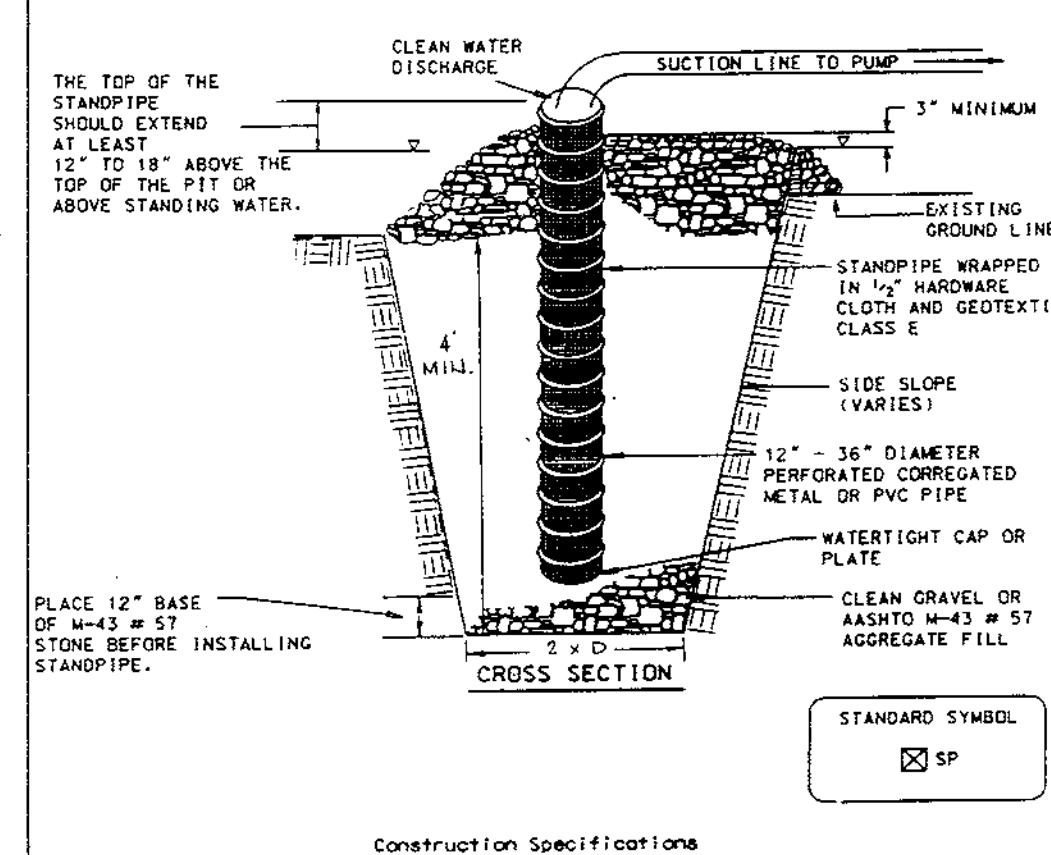
BASIN DRAW-DOWN SCHEMATIC VERTICAL DRAW-DOWN DEVICE



- 1. Perforations in the draw-down device may not extend into the wet storage.
2. The total area of the perforations must be greater than 4 times the area of the internal orifice.
3. The perforated portion of the draw-down device shall be wrapped with 1/2" hardware cloth and geotextile fabric.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE C-10-28 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

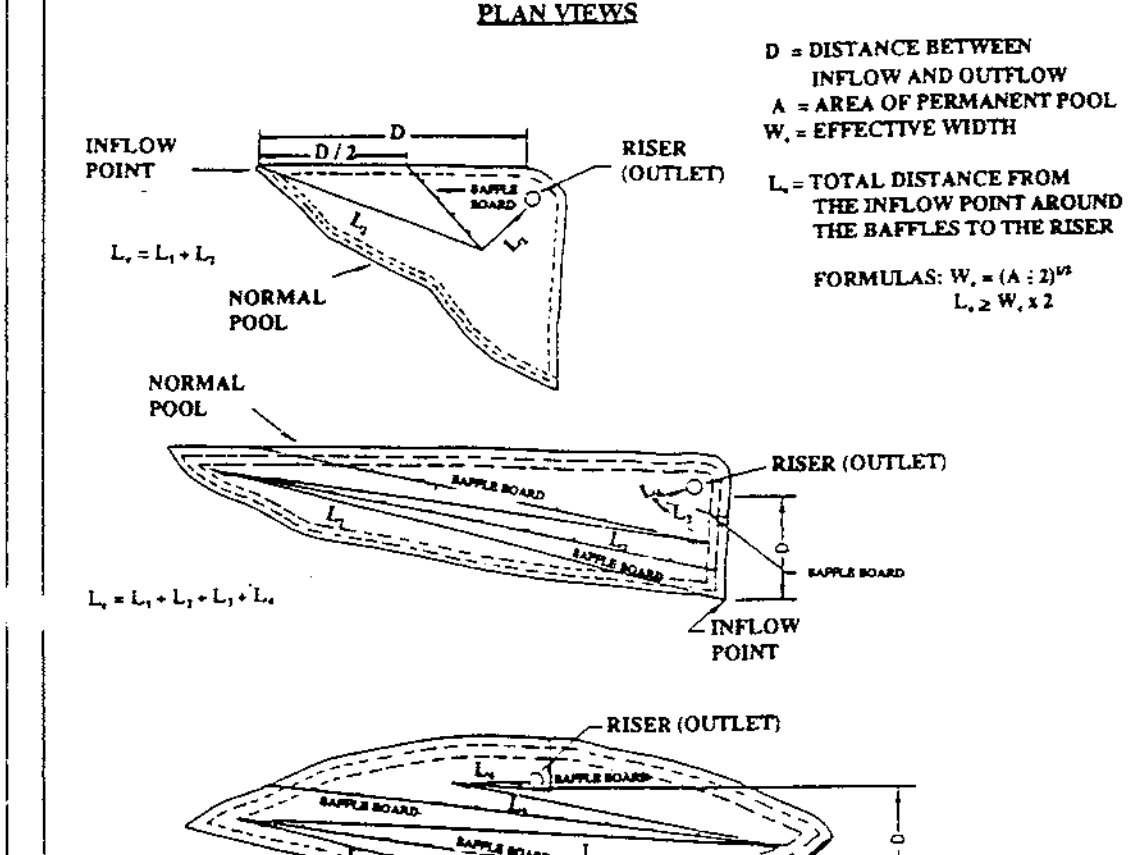
DETAIL 20B - SUMP PIT



- 1. Pit dimensions are variable, with the minimum diameter being 2 times the standpipe diameter.
2. The standpipe should be constructed by perforating a 12" to 24" diameter corrugated or PVC pipe. Then wrapping with 1/2" hardware cloth and geotextile Class E.
3. A base of filter material consisting of clean gravel or #57 stone should be placed in the pit to a depth of 12".

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE D-15-2 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 18 - SEDIMENT BASIN BAFFLES



FORMULAS: W = (A x 2)^(1/3) L = W x L2

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE C-10-28 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SEDIMENT BASIN

PERFORATED PIPE (AASHTO M-36) STANDARD PATTERN FOR PERFORATION HAS A MIN. OF THIRTY (30) 3/8" DIA. ROUND HOLES PER SQ. FT. OF PIPE SURFACE

- SIZE OF PERFORATIONS = 3/8" DIA.
AREA OF PERFORATION = 0.00077 FT^2
LENGTH OF PERFORATED SECTION OF PIPE = 2.4 FT.
MAX. ORIFICE AREA (A.) = 0.34 FT.^2
DRAW-DOWN ORIFICE DIA. = 3.0"
NUMBER OF PERFORATIONS PER LINEAR FOOT OF PIPE (Two double rows of perforations) = 28 x 4 = 112
TOTAL AREA OF PERFORATIONS = 0.207 FT.^2

- 1. Min. required vol. = 3600 ft^3 x 0.75 = 2700 cu. yds.
2. Actual Volume of basin = 128,025 ft^3
3. Excessage: 128,025 ft^3 / 2700 = 47.42 cu. yds.
4. Vol. at desludging elev. = 1800 ft^3/ac x 38.75 ac. = 69,750 cu. yds.
5. Vol. of basin at cleanout = 900 ft^3/ac x 38.75 ac. = 34,875 cu. yds.

NOTE: A table showing design data shall be included on the plan for each basin.

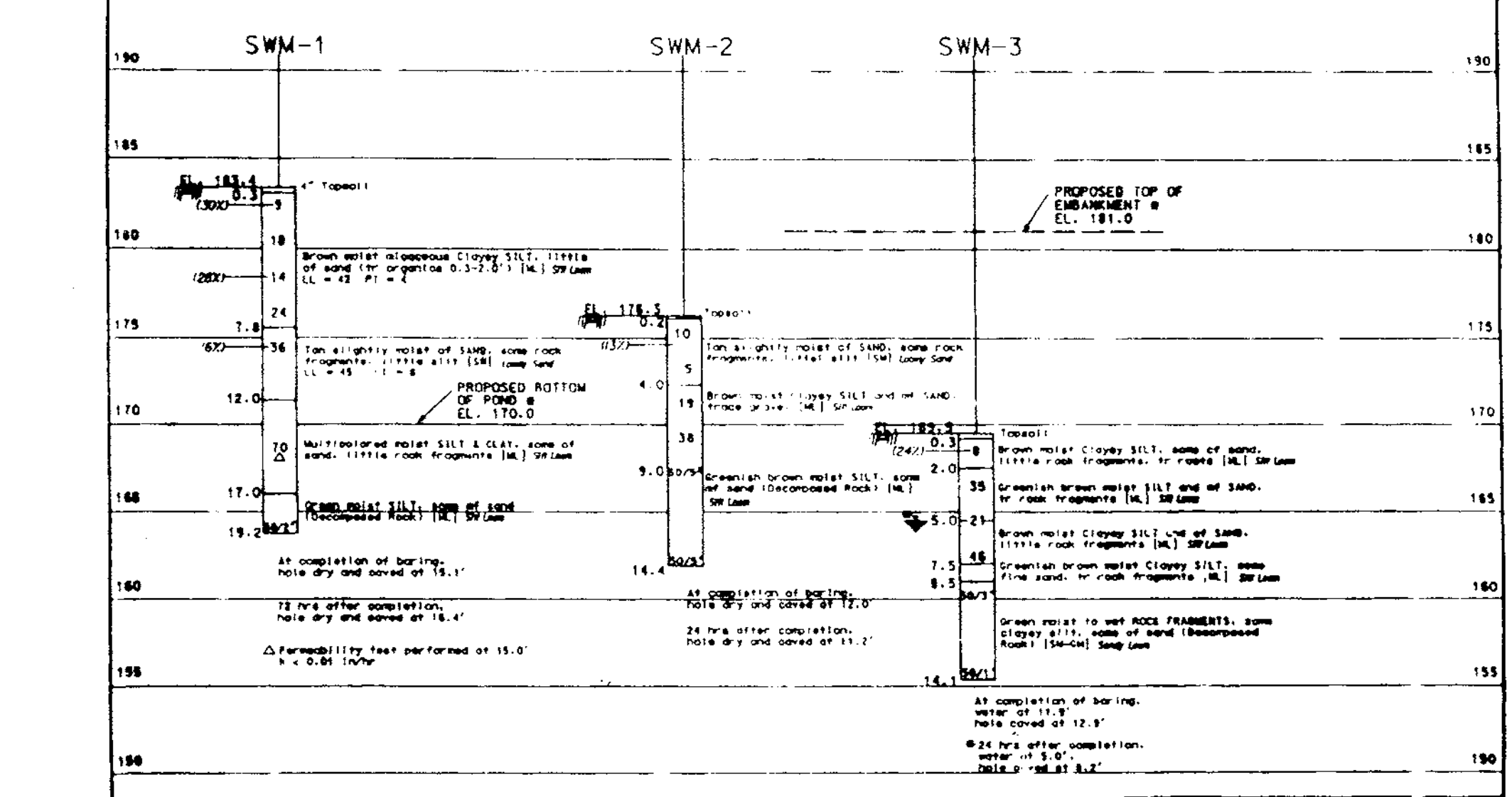


Figure 2. Temporary Sediment Basin Design Data Sheet

Computed by: M. J. ... Date: 08/24/98 Checked by: Date: ... Project name: Troy Hill Location: ...

- 17. Emergency spillway cap: Qc = Qd - Qe = ... cfs
18. Width: ft. Sp: ft.
19. Entrance channel slope: %
20. Exit channel slope: %

- 31. Min. basin surface area: SA = 0.0035 x Qc = 0.0035 x 118.32 cfs = 0.32 ac.
32. A = Total area of perforations = 4A (c. cover) = (4 x 0.207) = 0.828 ft^2
A = Internal orifice area (from Table 1) or computed

Approval stamps and signatures: APPROVED: HOWARD SOIL CONSERVATION DISTRICT, APPROVED: Howard County Department of Planning and Zoning, CHIEF, DEVELOPMENT ENGINEERING DIVISION, CHIEF, DIVISION OF LAND DEVELOPMENT, DIRECTOR.

PREPARED BY: GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC. Civil Engineers and Land Surveyors 658 Kenilworth Drive, Suite 100 Towson, Maryland 21204 (410) 825-8120

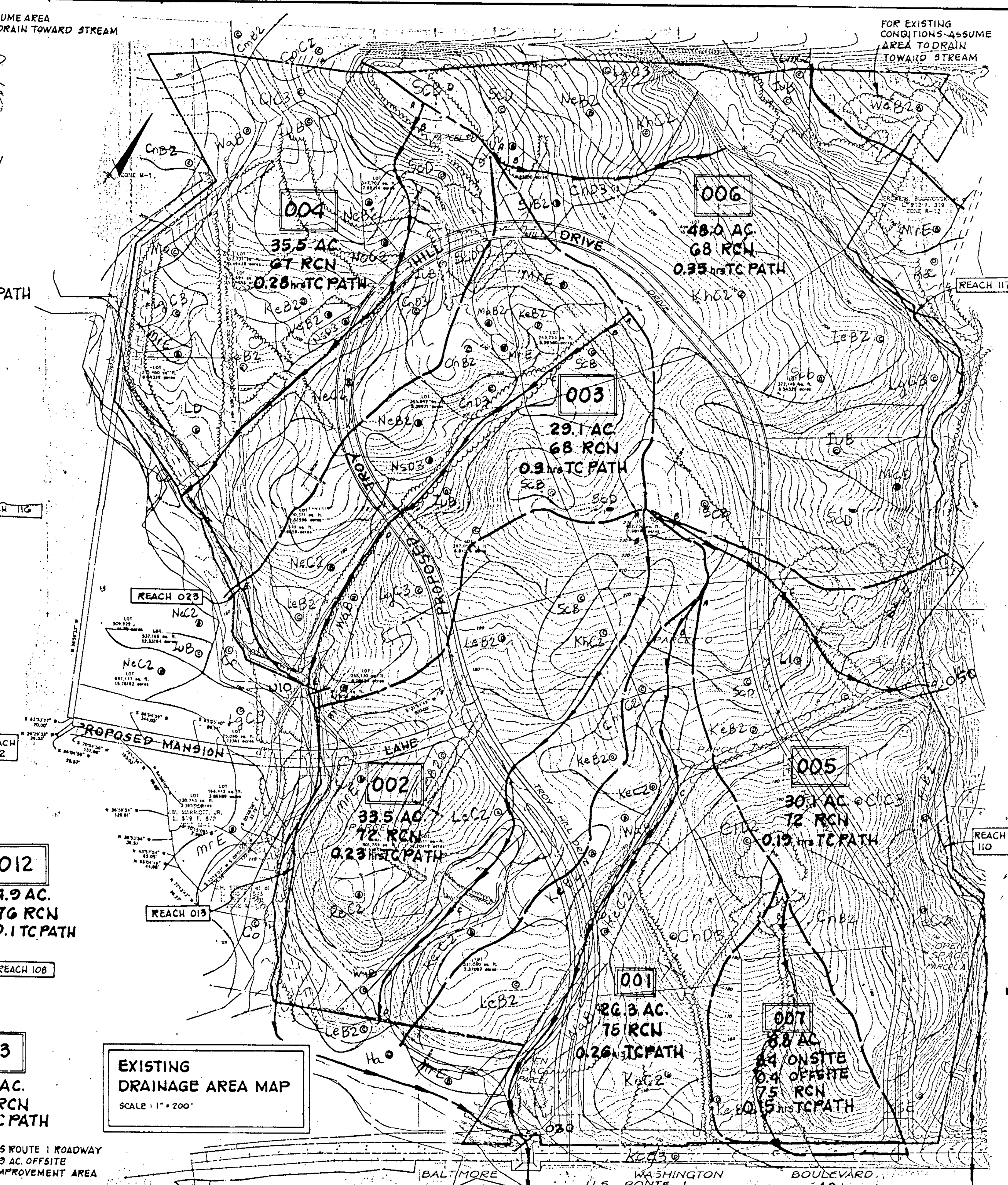
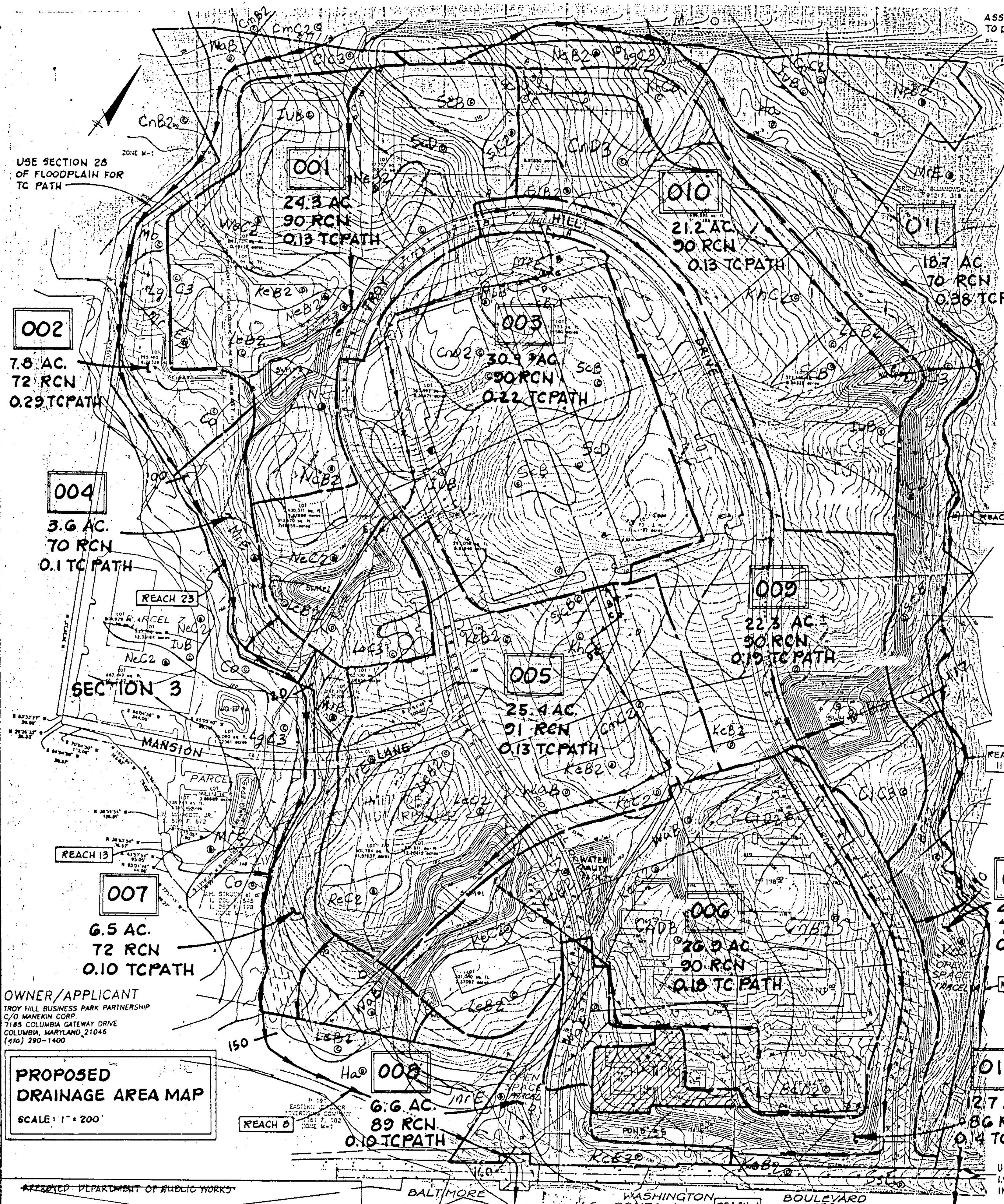
ENGINEER CERTIFICATION: I certify that the plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered Professional Engineer to supervise pond construction and provide the Howard Soil Conservation District with an 'as built' plan of the pond within 30 days of completion. 56.90 October 1, 1990 *3 Split rail (wood) fence is optional.

OWNER/DEVELOPER: TROY HILL BUSINESS PARK PARTNERSHIP c/o MANEKIN CORPORATION 7165 COLUMBIA GATEWAY DRIVE COLUMBIA, MARYLAND 21046 (410) 290-1400

DEVELOPER CERTIFICATION: I/we certify that all development and/or construction will be done in accordance with the Maryland Standards and Specifications for Pond Code 37B, November 1992. All necessary investigations and computations have been performed to certify this finding. A copy of said information has been supplied to Howard County, Soil Conservation District. Developer: David E. Meiners Date: 3/29/98

CONSULTANT'S HAZARD CLASS CERTIFICATION: I certify that this pond meets all requirements for Hazard Class B or C. (Requirements as stated in the Soil Conservation Service, Maryland Standards and Specifications for Pond Code 37B, November 1992). All necessary investigations and computations have been performed to certify this finding. A copy of said information has been supplied to Howard County, Soil Conservation District. Consultant: James A. Markle Jr. PE # 11005 Date: 8/31/98

SEDIMENT BASIN PLAN FOR TROY HILL CORPORATE CENTER PHASE 1 PARCEL A-2 PREVIOUS FILE # S 590-05, 1990-25, F91-24, WP 96-91, F96-116 HOWARD COUNTY, MARYLAND 1st ELECTION DISTRICT SHEET 14 OF 19 SCALE: AS SHOWN JUNE 03, 1998 SDP 98-114



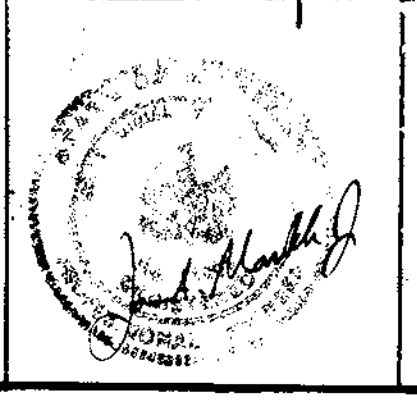
OWNER/APPLICANT
TROY HILL BUSINESS PARK PARTNERSHIP
C/O MANEKIN CORP.
7185 COLUMBIA GATEWAY DRIVE
COLUMBIA, MARYLAND 21046
(410) 290-1400

PROPOSED DRAINAGE AREA MAP
SCALE: 1" = 200'

EXISTING DRAINAGE AREA MAP
SCALE: 1" = 200'

APPROVED: DEPARTMENT OF PLANNING AND ZONING
C. Hamilton 10/16/98
CHIEF, DIVISION OF LAND DEVELOPMENT AND REGULATION
John J. Williams 10/16/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION
John J. Williams 10/16/98
DIRECTOR

ENGINEER
**GEORGE WILLIAM STEPHENS JR.
AND ASSOCIATES, INC.**
658 KENILWORTH DRIVE
SUITE 100
TOWSON, MARYLAND 21204
(301) 825-8120



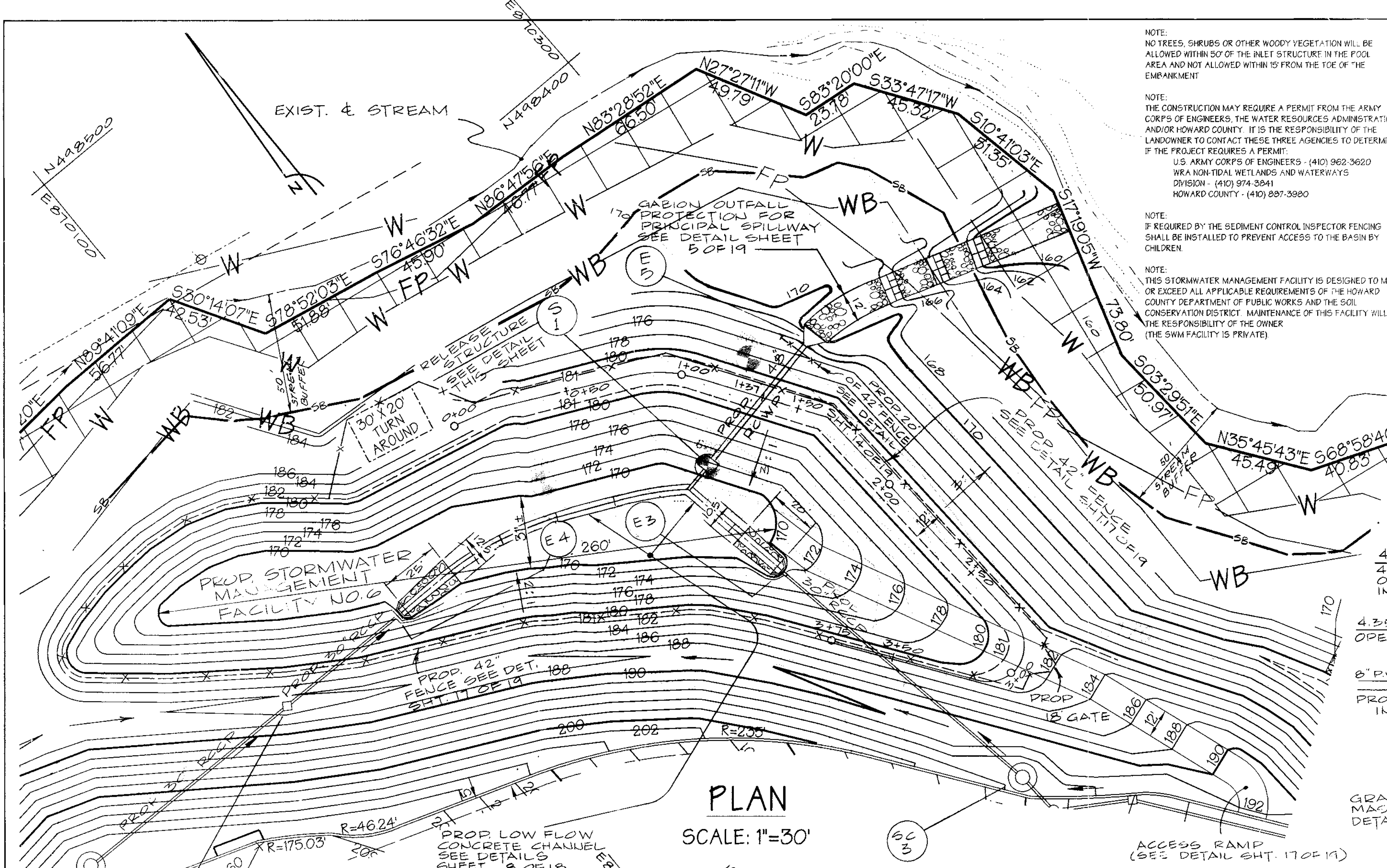
DESIGNED:
DRAWN:
CHECKED:

REV.	NO.	REVISION	DATE

**DRAINAGE AREA MAP
STORM WATER MANAGEMENT**

**TROY HILL CORPORATE CENTER
PHASE 1
PARCEL A-2**
SCALE: AS SHOWN
HOWARD COUNTY, MD. ELECTION DISTRICT #1
SCALE: AS SHOWN DATE: JUNE 03, 1998
FILE NOS. S90-05, P90-25, F91-24
SHEET NO. 15 OF 19

SDP 93-114

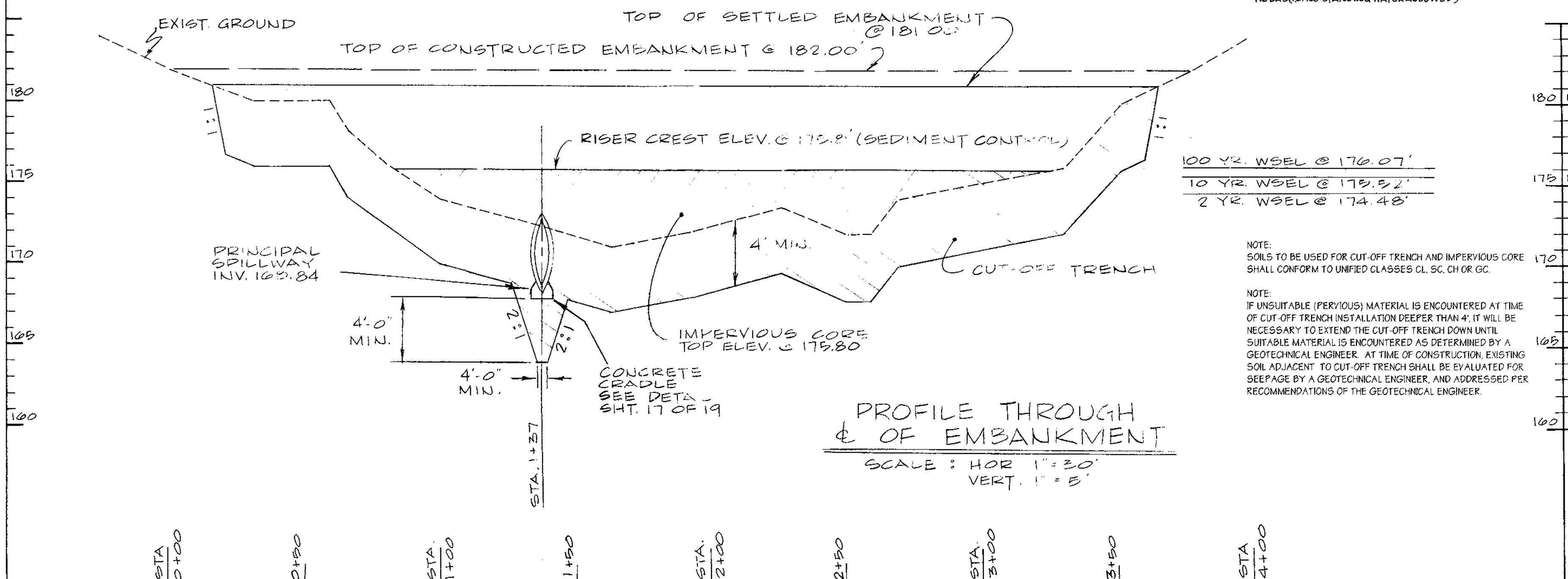


PLAN
SCALE: 1"=30'

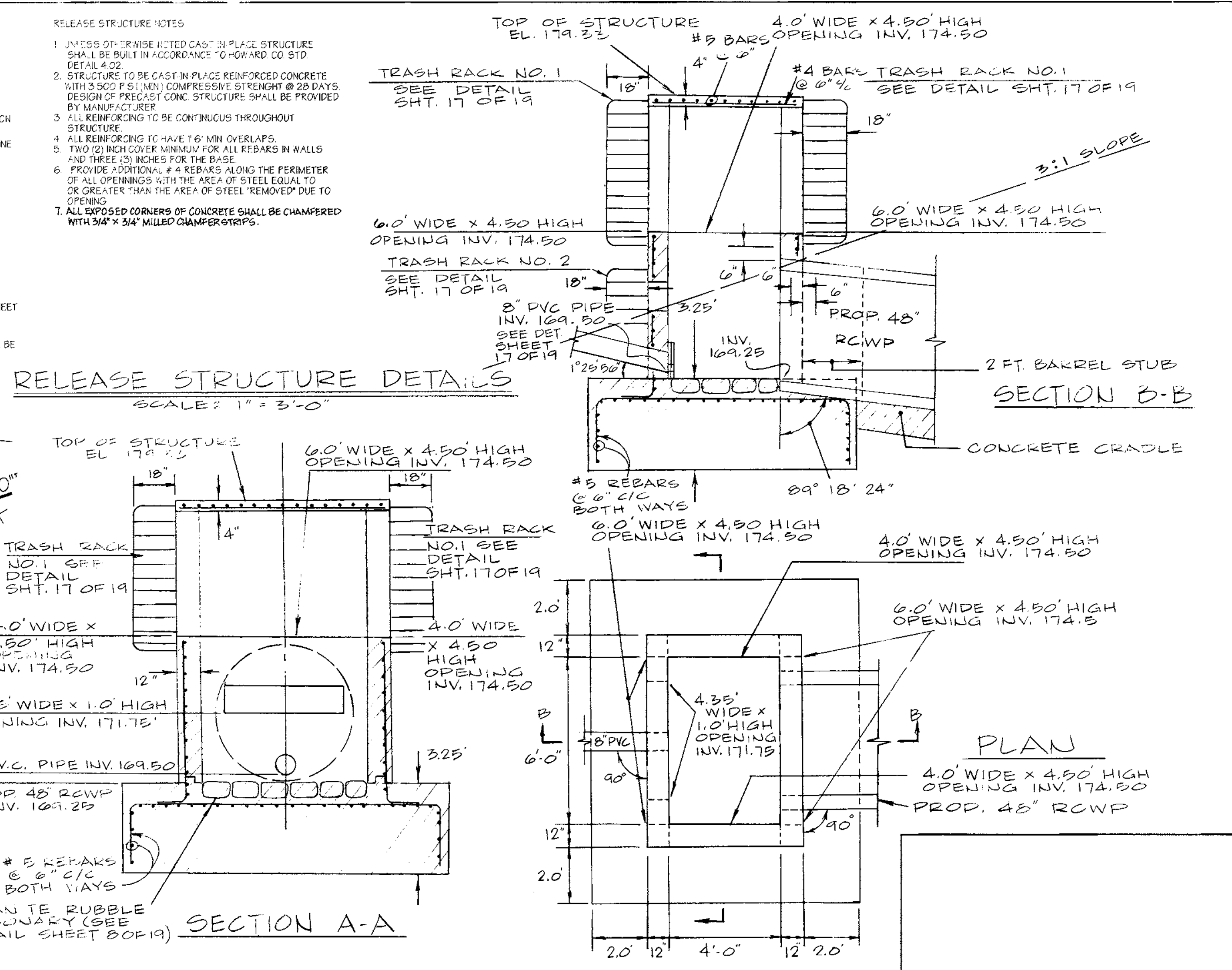
HEADWALL E-4
 $Q_{10} = 43.38$ cfs
 $V_{10} = 8.5$ fps
 $S_f = 1.25\%$
 PARTIAL DEPTH 171.00

HEADWALL E-3
 $Q_{10} = 38.75$ cfs
 $V_{10} = 7.5$ fps
 $S_f = 1.00\%$
 PARTIAL DEPTH = 171.00

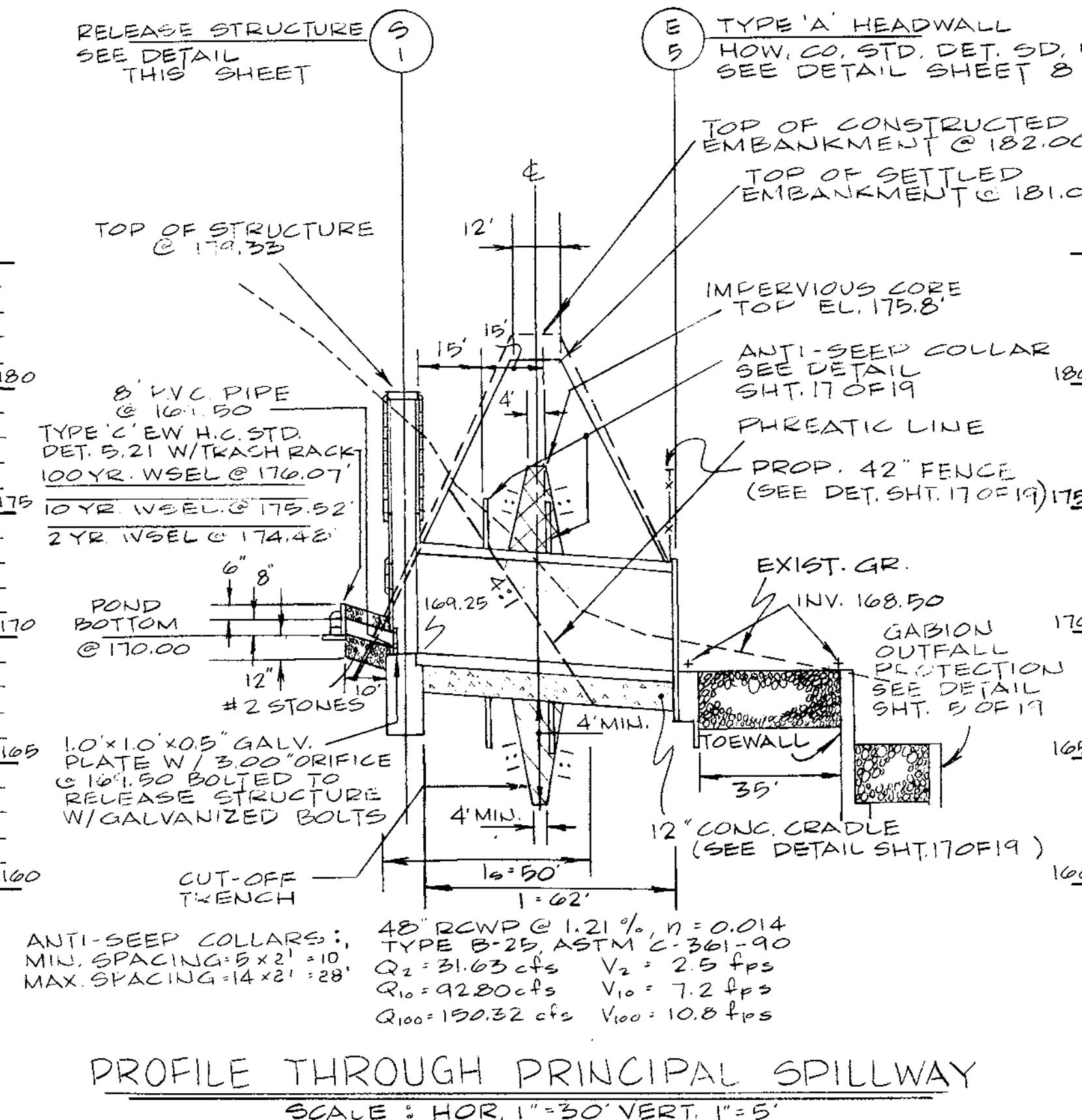
- STORMWATER MANAGEMENT MAINTENANCE SCHEDULE FOR POND**
- REMOVAL OF SILT WHEN ACCUMULATION EXCEEDS FOUR (4) INCHES IN THE FOREBAY.
 - REMOVAL OF ACCUMULATED PAPER, TRASH AND DEBRIS AS NECESSARY.
 - VEGETATION GROWING ON THE EMBANKMENT TOP OR FACES IS NOT ALLOWED TO EXCEED 18 INCHES IN HEIGHT AT ANY TIME.
 - ANNUAL INSPECTION AND REPAIR OF THE STRUCTURE.
 - CORRECTIVE MAINTENANCE IS REQUIRED ANY TIME THE FOREBAY DOES NOT DRAIN DOWN COMPLETELY WITHIN 96 HOURS (i.e. NO STANDING WATER ALLOWED).



PROFILE THROUGH & OF EMBANKMENT
SCALE: HOR. 1"=30', VERT. 1"=5'



RELEASE STRUCTURE DETAILS
SCALE: 1"=3'-0"



PROFILE THROUGH PRINCIPAL SPILLWAY
SCALE: HOR. 1"=30', VERT. 1"=5'

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

APPROVED: HOWARD SOIL CONSERVATION DISTRICT
 DATE: 9/11/98

Reviewed for the Howard Conservation District and meets technical requirements:
 APPROVED: NATURAL RESOURCES CONSERVATION SERVICE
 DATE: 9/11/98

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 DATE: 9/16/98

CHIEF, DEVELOPMENT ENGINEERING DIVISION &
 DATE: 10/6/98

CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 10/16/98

DIRECTOR
 DATE: 10/16/98

ADDRESS CHART	
PARCEL NO.	STREET ADDRESS
Building #1	7055 Troy Hill Drive
Building #2	7045 Troy Hill Drive

SUBDIVISION NAME	SECTION NAME	PARCEL #			
TROY HILL CORPORATE CENTER	1	A-2			
PLAT #	BLOCK #	ZONE	YAX MAP	ELECT. DIST.	CENSUS TRACT
12428		M-1	37	1st	6011.02
WATER CODE		SEWER CODE			
C04		4020000			

PREPARED BY:
GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.
 Civil Engineers and Land Surveyors
 658 Kenilworth Drive, Suite 100
 Towson, Maryland 21204
 (410) 825-8120

ENGINEER CERTIFICATION:
 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/she must engage a registered Professional Engineer to supervise pond construction and provide the Howard Soil Conservation District with an as-built plan of the pond within 30 days of completion.
 Engineer: *James A. Markle* PE # 11005
 Name: **JAMES A. MARKLE** Date: 8/31/98

OWNER/DEVELOPER
TROY HILL BUSINESS PARK PARTNERSHIP
 c/o MANEKIN CORPORATION
 7165 COLUMBIA GATEWAY DRIVE
 COLUMBIA, MARYLAND 21046
 (410) 290-1400

DEVELOPER CERTIFICATION:
 I/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 Dept. of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I shall engage a Professional Engineer to supervise pond construction and 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.
 Developer: *David E. Meiners* Date: 3/29/98
 Name: **DAVID E. MEINERS**

AS-BUILT CERTIFICATION:
 I hereby certify that the facility shown on this plan was constructed as shown on the as-built plans and meets the approved plans and specifications.
 Signature: _____ Date: _____
 Certify means to state or declare a professional opinion based upon on-site inspections and material tests which are conducted during construction. The on-site inspections and material tests are those inspections and tests deemed sufficient and appropriate by commonly accepted engineering standards. Certify does not mean or imply a guarantee by the engineer nor does an engineer's certification relieve any other party from meeting requirements imposed by contract, employment, or other means, including meeting commonly accepted industry practices.

STORMWATER MANAGEMENT PLAN
 FOR
TROY HILL CORPORATE CENTER
 PHASE 1, PARCEL A-2
 PREVIOUS FILE #S 590-05, P90-25, F91-24, W9-96-91, F96-136
 HOWARD COUNTY, MARYLAND
 1st ELECTION DISTRICT
 SHEET 16 of 19
 SCALE: AS SHOWN
 DATE: JUNE 03, 1998
 SDF 98114

POND CONSTRUCTION SPECIFICATIONS

These specifications are applicable to all ponds within the scope of the Standard Practice No. 207-7. References to ASTM and AASHTO specifications apply to the most recent editions.

SITE PREPARATION

Areas designated for borrow areas, embankment, and structural works shall be cleared, graded, and staked. All trees, vegetation, roots and stumps, brush, logs, and other debris shall be removed. Channels and sharp breaks shall be smoothed, straightened.

Areas to be covered by the reservoir will be cleared of all trees, brush, logs, brush, stumps, and other debris. Areas of all trees, brush, logs, stumps, and other debris shall be removed. Channels and sharp breaks shall be smoothed, straightened.

All cleared and graded material shall be disposed of outside and below the limits of the dam and reservoir. The owner or his representative when approved a sufficient quantity of topsoil will be stockpiled in a suitable location for use in the embankment and other designated areas.

EMBRANKMENT

EMBRANKMENT: The fill material shall be taken from approved designated borrow areas. It shall be free from roots, stumps, logs, brush, debris greater than 6" in diameter or other objectionable material. The material for the center of the embankment and at 25% intervals shall conform to the Soil Classification: SC-100 (CL or CLC). Consideration may be given to the use of other materials in the embankment if approved by the owner and supervised by a geotechnical engineer.

FOUNDATION: Areas in which fill is to be placed shall be scanned prior to placement of fill. If material shall be placed in a maximum 8" thick before compacting. Areas which are to be placed over the entire length of the fill, the most compacted normal water shall be placed in the downstream portion of the embankment. The topsoil, highway, must be installed concurrently with fill placement and not placed into the embankment.

COMPACTING: 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 compacted shall be traversed by a minimum of four consecutive passes of a sheepfoot, rubber tired or vibratory roller. Fill material shall be compacted in lifts not greater than the required degree of compaction. All areas shall be compacted. The fill material shall conform to the required degree of compaction. The fill material shall conform to the required degree of compaction. The fill material shall conform to the required degree of compaction.

Minimum required density shall be not less than 95% of maximum dry density with a moist unit weight within 2% of the optimum. Each layer of fill shall be compacted as necessary to obtain that density, and is to be certified by the engineer at the time of construction. All compaction is to be determined by ASTM D-1557-93.

STRUCTURE DETAILS

Structure Details: Structure shall be constructed of concrete. The concrete shall be placed in horizontal layers not to exceed four feet in thickness and compacted by hand tamping or other means. The concrete shall be placed in horizontal layers not to exceed four feet in thickness and compacted by hand tamping or other means. The concrete shall be placed in horizontal layers not to exceed four feet in thickness and compacted by hand tamping or other means.

PERMANENT SLOPE SEEDING

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CARE OF WATER DURING CONSTRUCTION

All work on permanent structures shall be carried out in areas free from water. The contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage channels and stream diversions necessary to protect the areas to be occupied by the permanent works. The contractor shall also furnish material, labor, and maintain all necessary pumping and other equipment required for removal of water from the various parts of the work and for maintaining the excavations, foundation and other parts of the work free from water as required or directed by the engineer for constructing each part of the work. After having served their purpose all temporary protective works shall be removed or leveled and graded to the extent required to prevent obstruction in any degree whatsoever of the flow of water to the spillway or outlet works and so as not to interfere in any way with the operation or maintenance of the structure. Stream diversions shall be maintained until the full flow can be passed through the permanent works. The removal of water from the required excavation and the foundation shall be accomplished in a manner and to the extent that will maintain stability of the excavated slopes and bottom of required excavations and will allow satisfactory performance of all construction operations. During the placing and compacting of material in required excavations, the water level at the locations being refilled shall be maintained below the bottom of the excavation at such locations which may require draining the water to pumps from which water shall be pumped.

STABILIZATION

All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway, and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching in accordance with the Maryland Soil Conservation Service Standards and Specifications for Critical Area Planting (MD-342) or as shown on the accompanying drawings.

Stormwater management facility will be stabilized with permanent slope seeding as follows:

1. Seeding Preparation: loosen upper 3 inches of soil by raking, grading or other acceptable means before seeding.
2. Soil Amendments: apply 2 tons per acre Dolomitic Limestone (92 lbs/1000 sq. ft.), 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.), and 400 lbs per acre of 30-0-0 Urea-form Fertilizer (92 lbs/1000 sq. ft.). Harvest or disc lime and fertilizer into upper 3 inches of soil. At time of seeding, apply 400 lbs/1000 sq. ft. of 30-0-0 Urea-form Fertilizer and 500 lbs per acre (115 lbs/1000 sq. ft.) of 10-0-0 fertilizer.
3. Seeding: for the period March 1 through April 30 seed with 40 lbs per acre Kentucky 31 Tall Fescue, and 15 lbs per acre inoculated Crown Vetch. For the period May 1 through July 31 seed with 60 lbs per acre Kentucky 31 Tall Fescue and 2 lbs per acre inoculated Weeping Lovegrass. For the period August 1 through October 15 seed with 40 lbs per acre Kentucky 31 Tall Fescue, and 20 lbs per acre inoculated Interstate Seneca Lespedeza. For the period October 16 through February 28 protect the site by Option (1); 2 tons per acre of well anchored straw. For the period May 1 through February 28 inoculated Crown Vetch shall be applied during the subsequent period of March 1 through April 30 at the rate of 15 lbs per acre. 4. Mulching: apply 15 to 2 tons per acre of non rotted small grain straw immediately after seeding. Anchor mulch immediately after application using 2lb gallons per acre of emulsified asphalt. On flat areas of slope 8 feet or higher, use 34B gallons per acre of anchoring. 5. Maintenance: inspect all seeded areas and make needed repairs, replacements and re seeding.

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.

PERMANENT SLOPE SEEDING

After spreading 4" topsoil, seed with a mixture of 30% inoculated Crown Vetch and 70% Kentucky 31 Tall Fescue applied at a rate of 60 lbs/acre; 10-20-20 fertilizer shall be applied at a rate of 25 lbs/1000 sq. ft.; lime at a rate of 92 lbs/1000 sq. ft. mulch area with unweathered small grain straw at a rate of 15 tons/acre; anchor with a rapid curing asphalt (RC-70, RC-250 or RC-800) at a rate of 0.1 gal/sq. yd.

FILTER CLOTH

Filter cloth shall meet or exceed the requirements in Section 202.5 of the Baltimore County Standard Specifications and Details for Construction. Durable fabric fabrics for drainage purposes are not limited to Marfil 140D, DuPont TYPAC No. 3341 or 3401. Filter cloth shall be protected from punching or tearing. Any damage other than an occasional small hole shall be repaired by placing another small piece of filter cloth over the damaged area or by replacing the cloth section. All overlaps shall be a minimum of one foot.

GABIONS

Gabions shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 312 and must be CL IV, PVC coated.

OUTFALL PROTECTION

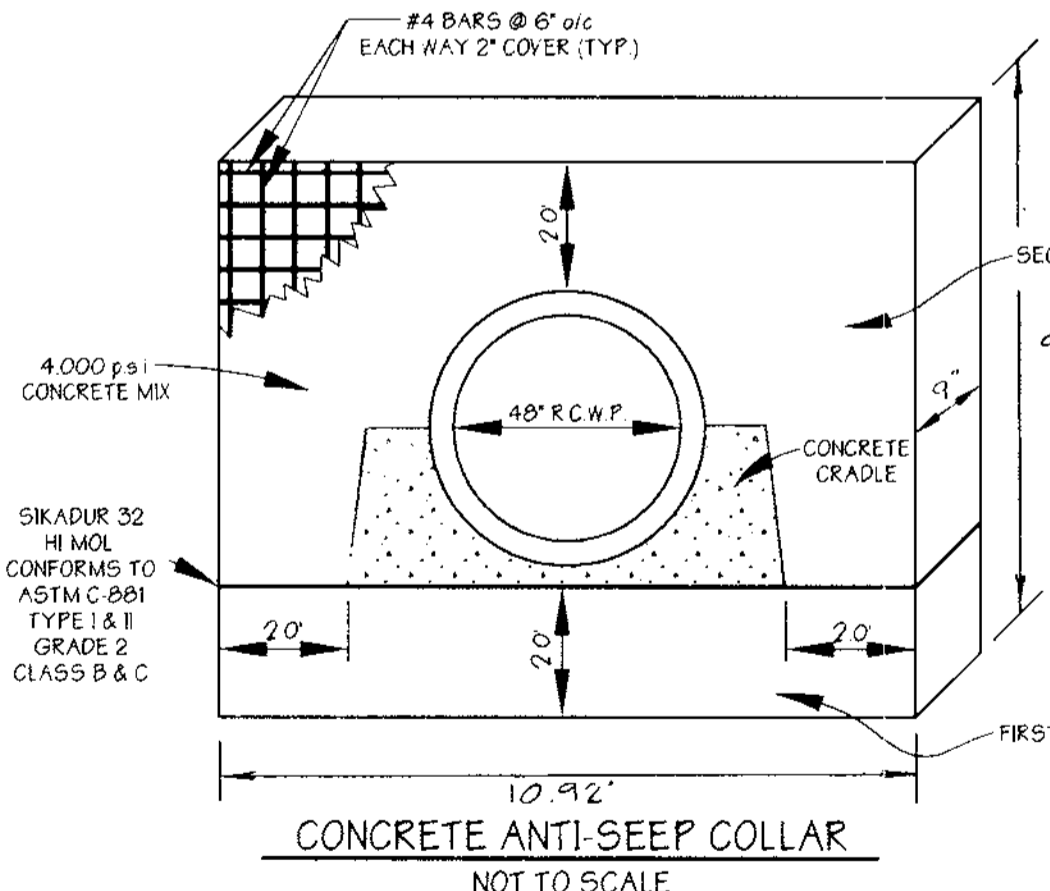
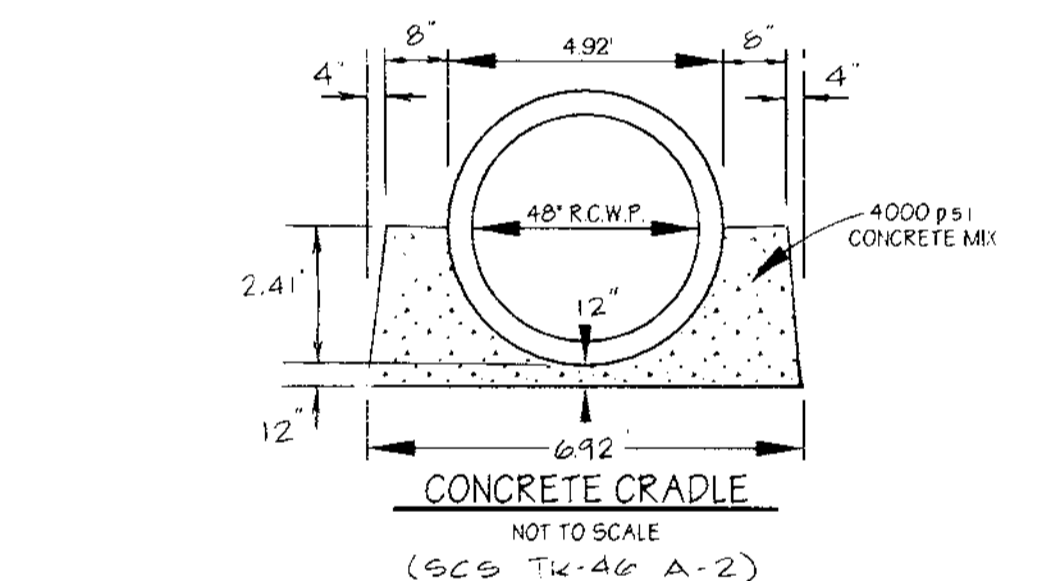
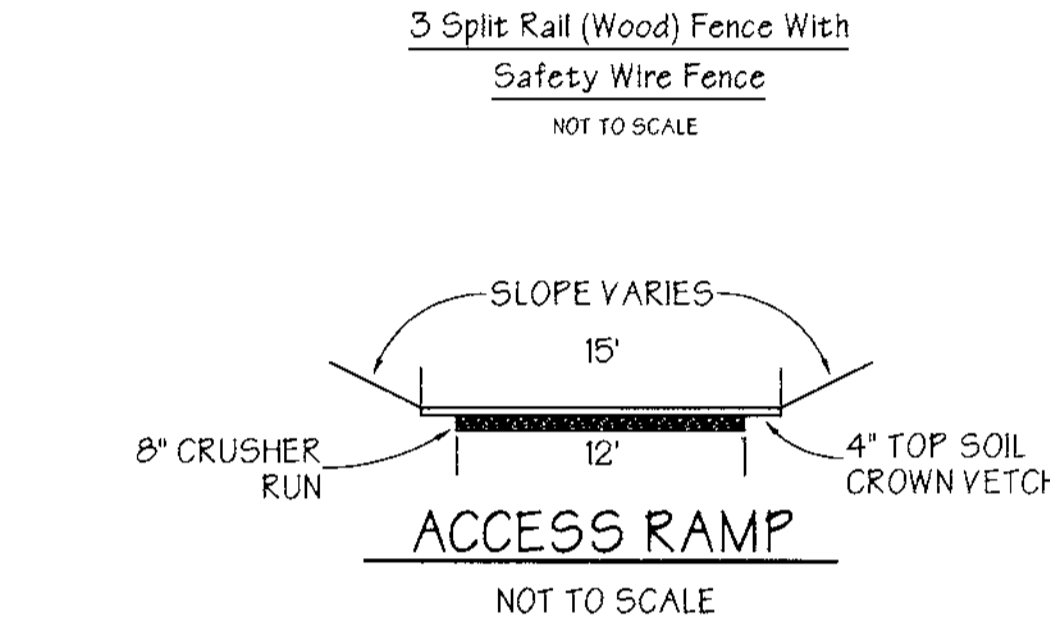
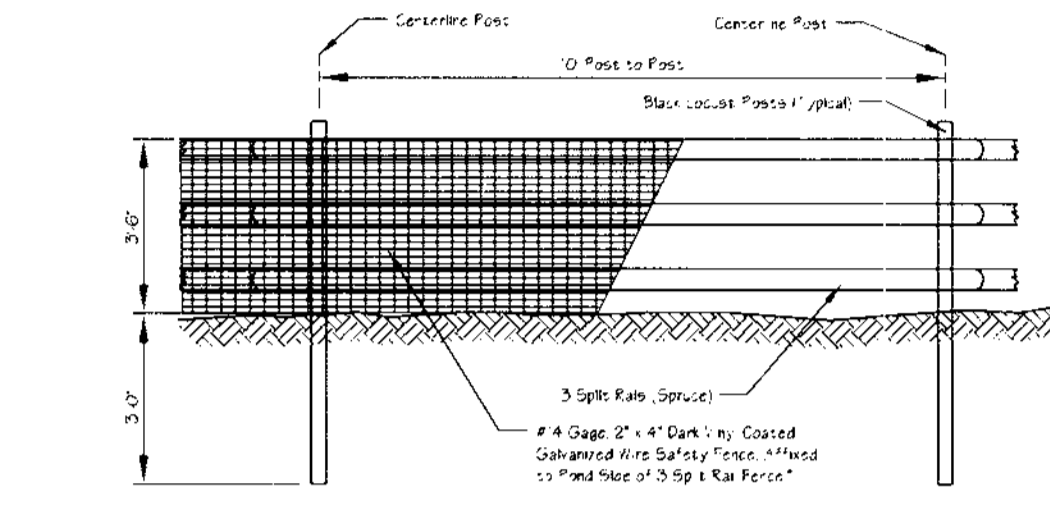
Subgrade for riprap or gabion outfalls shall be prepared to the required line and grades. Any fill required in the subgrade shall be compacted to a density of approximately that of the surrounding undisturbed material. All rock or gravel shall conform to the specified grading limits when installed in the riprap or gabion. All stone shall be delivered and placed in a manner that will insure the stone in place shall be reasonably homogeneous with the larger rocks uniformly distributed and firmly in contact one to another, with the smaller rocks filling the voids between the larger rocks. Stone for outfalls may be placed by equipment. Riprap or gabion outfalls shall be constructed to full concrete thickness in one operation and in such a manner as to avoid any displacement of underlying materials. The contractor shall avoid damage to the filter blankets or cloth during placement of riprap. Hand placements shall be required as needed to prevent damage to the permanent works. Filter cloth shall be placed under all riprap and gabions.

FENCE

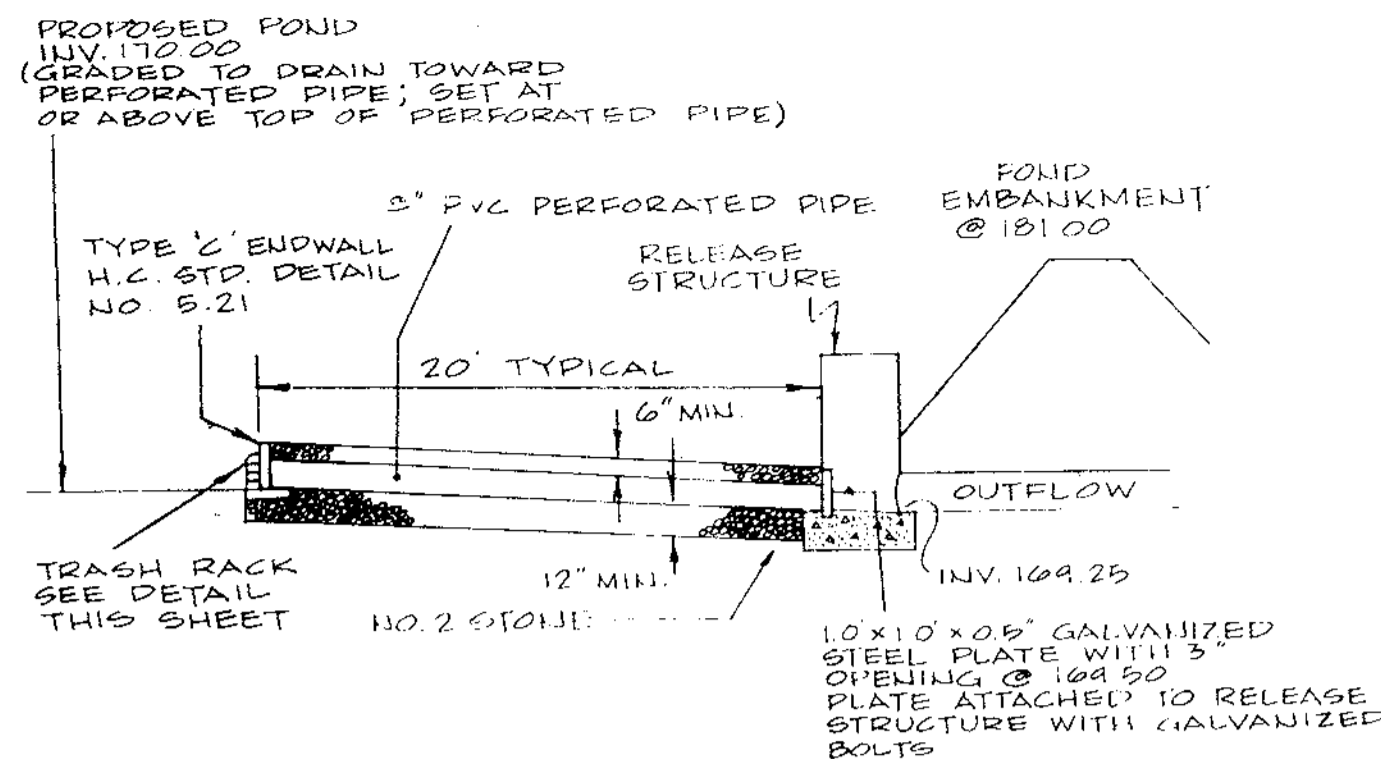
Concrete fencing in accordance with the State Highway Administration standard details 690.01 and 690.02. Use specifications for a 6" fence substituting 42" fabric and 6" 8" posts. Construct the gate in accordance with the S.H.A. standard detail 690.01 with 42" fabric. The fabric used for the fence and gate must conform to AASHTO designation M10174. Dark vinyl coating is required for the fence posts and wire fabric in accordance with the landscape manual adopted by resolution 56.90 October 1, 1990. 3" Splits rail (wood) fence is optional.

CUT OFF TRENCH: THE CUT OFF TRENCH SHALL BE EXCAVATED INTO IMPERVIOUS MATERIAL ALONG OR PARALLEL TO THE CENTERLINE OF THE EMBANKMENT AS SHOWN ON THE PLANS. THE BOTTOM WIDTH OF THE TRENCH SHALL BE GOVERNED BY THE EQUIPMENT USED FOR EXCAVATION WITH THE MINIMUM WIDTH BEING FOUR FEET. THE DEPTH SHALL BE AT LEAST FOUR FEET BELOW EXISTING GRADE OR AS SHOWN ON THE PLANS. THE SIDE SLOPES OF THE TRENCH SHALL BE 1:1 OR FLATTER. THE BACKFILL SHALL BE COMPACTED WITH CONSTRUCTION EQUIPMENT; ROLLERS OR HAND TAMPERS TO ASSURE MAXIMUM DENSITY AND MINIMUM PERMEABILITY.

IMPERVIOUS CORE: THE CORE SHALL BE FILLED ALONG OR PARALLEL TO THE CENTERLINE OF THE EMBANKMENT AS SHOWN ON THE PLANS. THE TOP WIDTH OF THE FILL SHALL BE GOVERNED BY THE EQUIPMENT USED, WITH MINIMUM WIDTH BEING FOUR FEET. THE TOP WIDTH SHALL BE SHOWN ON THE PLAN. THE SIDE SLOPES OF THE FILL SHALL BE 1:1 OR FLATTER. THE BACKFILL SHALL BE COMPACTED WITH CONSTRUCTION EQUIPMENT, ROLLERS OR HAND TAMPERS TO ASSURE MAX PERMEABILITY.

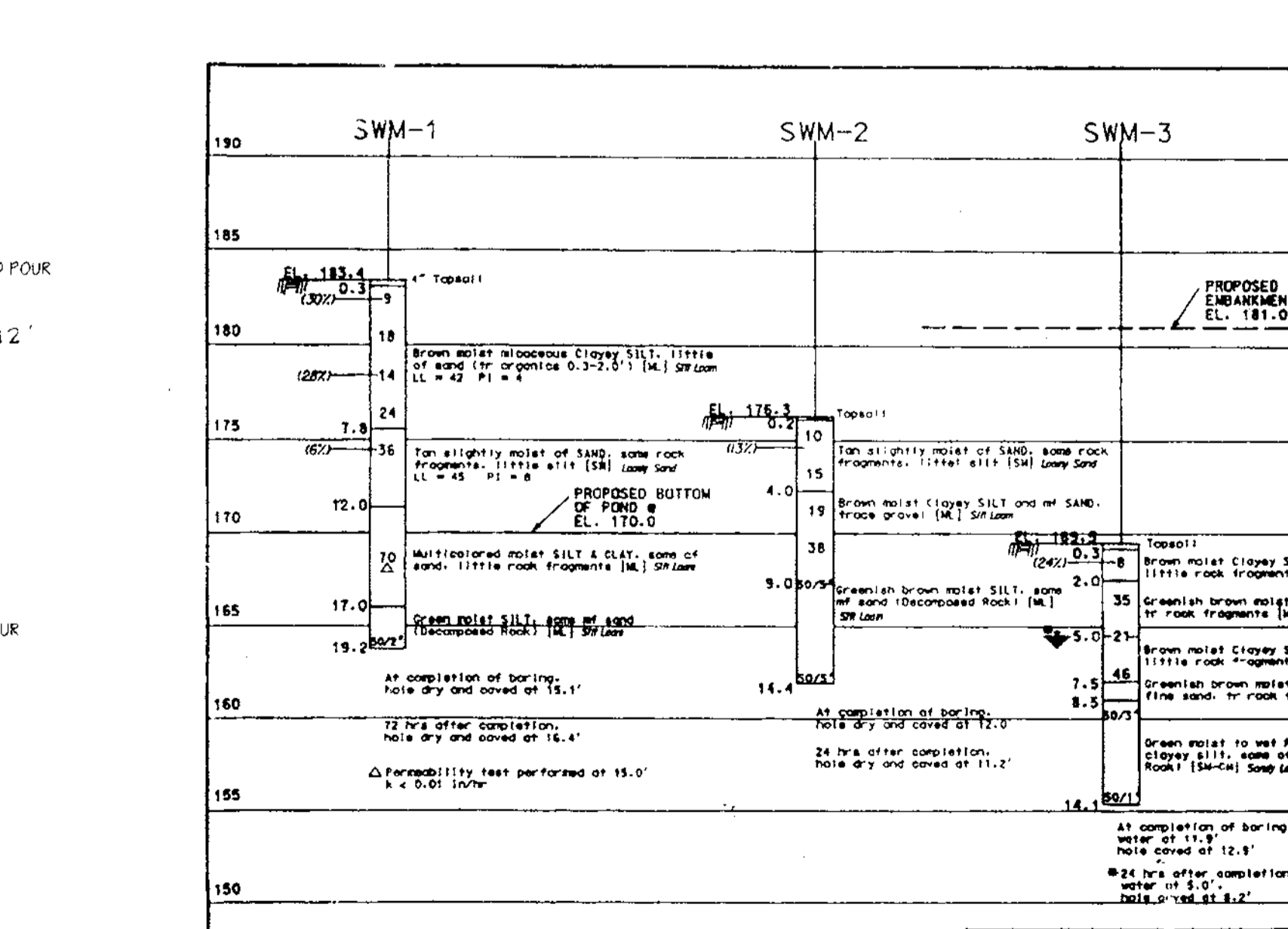
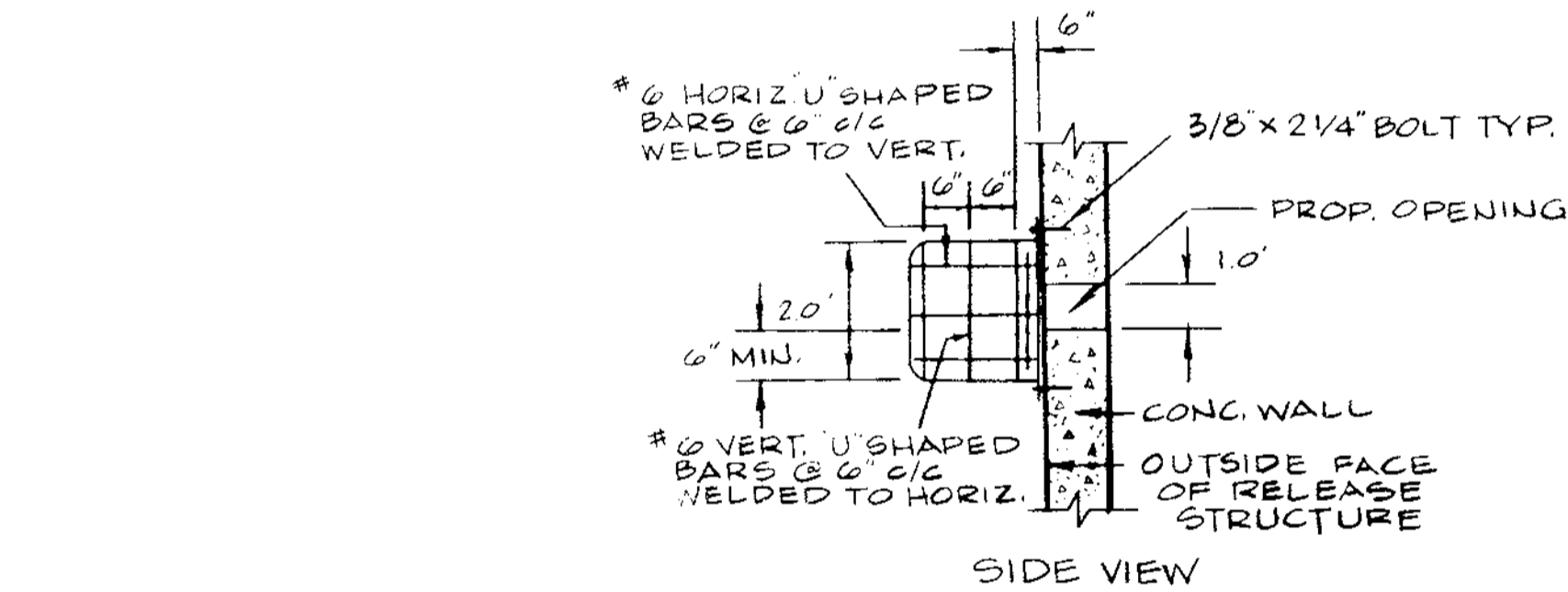
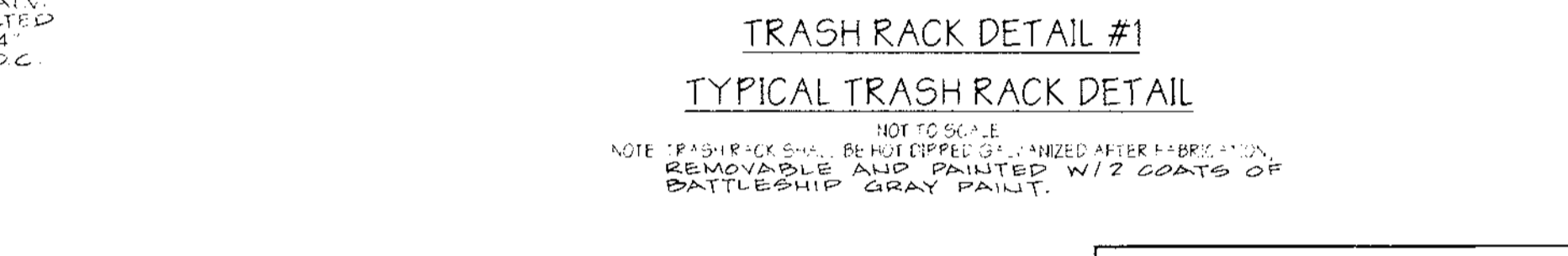
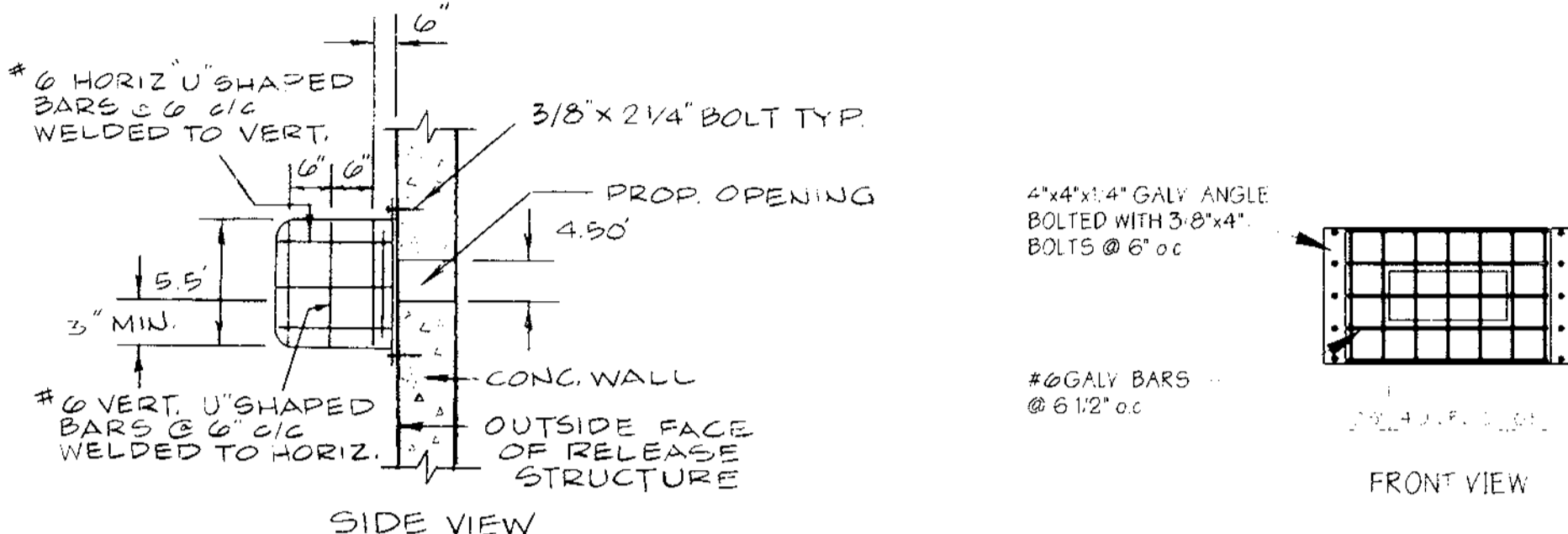
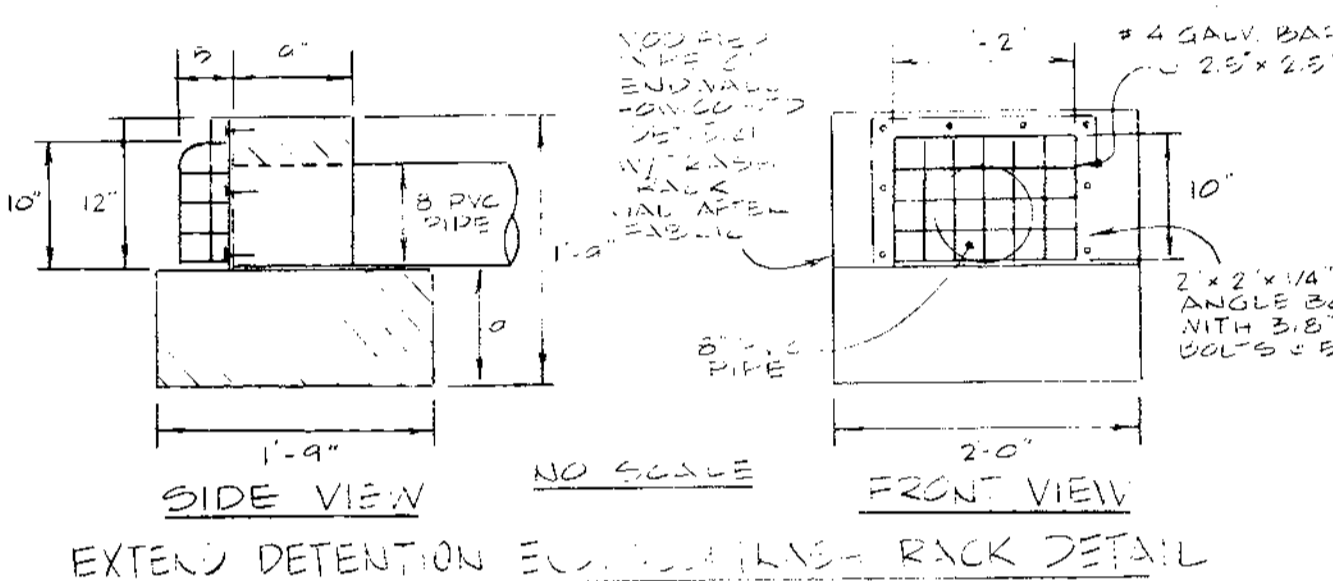


- NOTE:
1. LOCATE 2" MIN. FROM ALL PIPE JOINTS.
 2. ALL MATERIAL TO BE IN ACCORDANCE WITH CONSTRUCTION AND CONSTRUCTION MATERIALS SPECIFICATIONS.
 3. THE SEAL BETWEEN THE PIPE AND COLLAR SHALL BE WATER TIGHT.
 4. COLLAR SHALL PROJECT A MIN. OF 2" FROM THE EXTERIOR OF THE CONCRETE CRADLE AND THE PIPE ON ALL FOUR SIDES.



EXTENDED DETENTION POND DEWATERING DEVICE

- NOTES:
1. PERFORATED PIPE SHALL HAVE METAL CAP WELDED TO OTHER END OF PIPE.
 2. PERFORATED PIPE SHALL BE COVERED ON ALL SIDES WITH 12" MINIMUM OF #2 STONE - EXCEPT WHERE OTHERWISE NOTED.
 3. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE MINIMIZED.
 4. SET PERFORATED PIPE AT INVERTS SPECIFIED ON STORM WATER MANAGEMENT PLANS - PRINCIPAL SPILLWAY PROFILE.



POND SPECIFICATIONS FOR STORM WATER MANAGEMENT FACILITY #6	
DESCRIPTION	DATA
STRUCTURE CLASSIFICATION	A
STORAGE X HEIGHT PRODUCT	(183 AC FT) (6.46 FT) = 1184 AC FT ²
WATER AREA TO THE POND	212 A
POND TYPE	DRY LAY DE
FREEBORD	REQUIRED/PROVIDED
IMPERVIOUS AREA	480 A
TOP OF EMBANKMENT	181.0

POND SUMMARY						
DESIGN STORM	FACILITY INFLOW (CFS)	FACILITY DISCHARGE (CFS)	BYPASS DISCHARGE (CFS)	TOTAL DISCHARGE (CFS) DESIGN PT	WATER SURFACE ELEVATION (FT)	STORAGE (CU FT)
2 YR	61.5	31.63	N/A	30.18	174.48	1,292.4
10 YR	108.71	42.80	N/A	45.75	179.62	1,613.0
100 YR	180.31	130.32	N/A	142.07	170.07	1,803.5

PREPARED BY:
GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.
 Civil Engineers and Land Surveyors
 658 Kenilworth Drive, Suite 100
 Towson, Maryland 21204
 (410) 825-8120

ENGINEER CERTIFICATION:
 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 County Department of Planning and Zoning. I have notified the developer that he/she must engage a registered Professional Engineer to supervise pond construction and provide the Howard County Department of Planning and Zoning with an approved plan of the pond within 30 days of completion.
 Engineer: *James A. Markle Jr.* P.E. # 11005
 Name: *JAMES A. MARKLE JR.* Date: *8/31/98*

OWNER/DEVELOPER:
 TROY HILL BUSINESS PARK PARTNERSHIP
 c/o MANEKIN CORPORATION
 7165 COLUMBIA GATEWAY DRIVE
 COLUMBIA, MARYLAND 21046
 (410) 290-1400

DEVELOPER CERTIFICATION:
 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 as a Dept. of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I warrant to provide a Professional Engineer to supervise pond construction and provide the Howard County Department of Planning and Zoning with a plan of the pond within 30 days of completion. I also warrant to provide the Howard County Department of Planning and Zoning with a plan of the pond within 30 days of completion.
 Developer: *David E. Meiners* Date: *8/27/98*
 Name: *DAVID E. MEINERS*

CONSULTANT'S HAZARD CLASS CERTIFICATION:
 I certify that this project meets all requirements for hazard class B or C. (Requirements as stated in the Soil Conservation Service Maryland Standards and Specifications for Pond, Code 37B, November 1992). All necessary investigations and computations have been performed to verify this finding. A copy of said information has been supplied to the Howard County Department of Planning and Zoning.
 Signature: _____ P.E. # _____
 Name: _____ Date: _____

APPROVED HOWARD COUNTY SOIL CONSERVATION DISTRICT
 PLAN NUMBER: _____ DATE: *9/14/98*
APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION: *David Simmons* DATE: *9/14/98*
 CHIEF, DIVISION OF LAND DEVELOPMENT: *Cindy Hamotta* DATE: *10/16/98*
 DIRECTOR: *Paul Smith* DATE: *10/16/98*

ADDRESS CHART

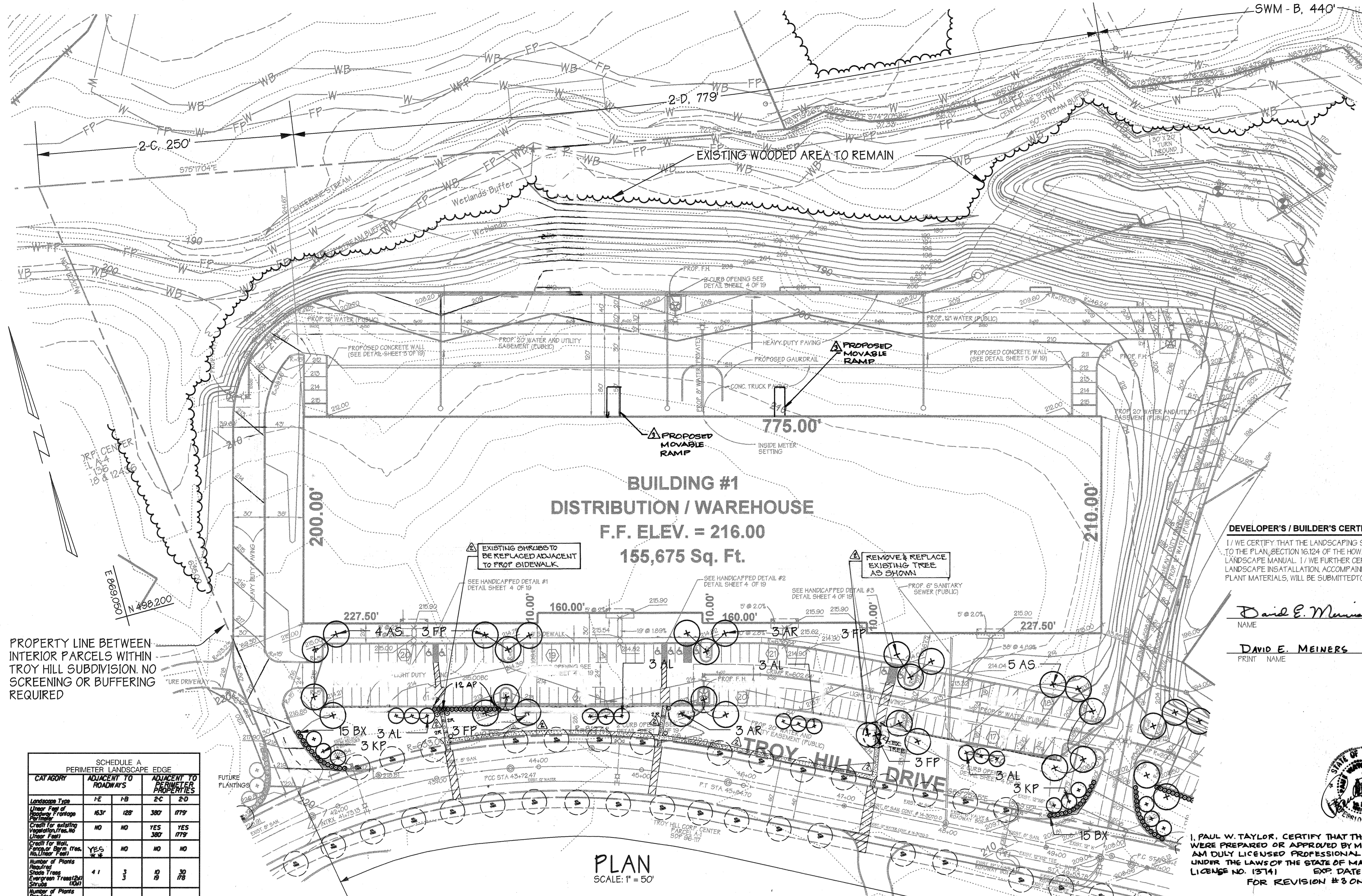
PARCEL NO.	STREET ADDRESS
Building # 1	7055 Troy Hill Drive
Building # 2	7045 Troy Hill Drive

SUBDIVISION NAME: TROY HILL CORPORATE CENTER
SECTION NAME: I
PARCEL #: A-2

PLAT #: 12428
BLOCK #: _____
ZONE #: M-1
TAX MAP #: _____
ELECT. DIST.: 1st
CENSUS TRACT #: 6011.02

WATER CODE: C04
SEWER CODE: 4020000

STORM WATER MANAGEMENT PLAN FOR TROY HILL CORPORATE CENTER
 PHASE 1 PARCEL A-2
 PREVIOUS FILE # S 590-05, P90-25, P91-24, W P 96-91, P96-136
 HOWARD COUNTY, MARYLAND
 1st ELECTION DISTRICT SHEET 17 of 19 SCALE: AS SHOWN JUNE 03, 1998



PLANTING NOTES
 PLANT LOCATIONS SHALL BE FIELD ADJUSTED TO AVOID UTILITIES. CONTRACTOR IS RESPONSIBLE FOR LOCATING UTILITIES PRIOR TO START OF WORK. ALL TREES AND SHRUBS SHALL BE MULCHED TO A MINIMUM OF 18" BEYOND THE EDGE OF THE ROOT BALL. SHRUBS MASSSES SHALL BE PLANTED IN CONTINUOUS MULCH BEDS. ALL WIRE, PLASTIC AND TWINE TIES SHALL BE REMOVED FROM TOP OF THE ROOT BALL.

PLANT STANDARDS
 ALL NURSERY STOCK SHALL BE TOP QUALITY AND IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. "AMERICAN STANDARDS FOR NURSERY STOCK", LATEST EDITION. INFERIOR NURSERY STOCK WILL BE SUBJECT TO REJECTION BY THE LANDSCAPE ARCHITECT. BARE-ROOT SHALL NOT BE ALLOWED FOR ANY TREE DEFINED AS MAJOR DECIDUOUS, MINOR DECIDUOUS OR EVERGREEN.

CHANGES MAY IMPACT REQUIRED CERTIFICATION
 PLANT TYPES (DECIDUOUS TREES, EVERGREEN, ETC.), QUANTITIES, SPACING, LOCATION, AND SPECIES SHOWN ON THE APPROVED LANDSCAPE PLAN ARE BASED ON REQUIREMENTS STATED IN THE LATEST BALTIMORE COUNTY LANDSCAPE MANUAL. ANY CHANGE IN THESE ITEMS MAY AFFECT THE REQUIRED APPROVAL AND CERTIFICATION OF THE INSTALLED PLANTING. OWNER IS REQUIRED TO ARRANGE AND PAY FOR CERTIFICATION BY LANDSCAPE ARCHITECT.

LANDSCAPE SPECIFICATIONS
 LANDSCAPE SPECIFICATION SHALL CONFORM TO LCA LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREA, INCLUDING PLANTING PROCEDURES AND SOIL PREPARATION FOR SHRUBS AND PERENNIAL BEDS. A ONE-YEAR WARRANTY PERIOD SHALL BE REQUIRED. MAINTENANCE REQUIRED TO HONOR THE ONE YEAR WARRANTY SHALL BE PERFORMED AS PART OF THIS CONTRACT.

SPECIAL PROVISIONS TO LCA STANDARD SPECIFICATIONS
 CONTRACTOR IS ENCOURAGED TO PERFORM SOIL TESTING. TEST RESULTS SHALL BE SUBMITTED 30 DAYS BEFORE PLANTING. FAILURE TO PERFORM TESTING WILL NOT VOID GUARANTEE PROVISIONS.

CONTRACTOR SHALL REVIEW AND TEST SUBSOIL DRAINAGE CHARACTERISTICS 30 DAYS PRIOR TO PLANTING AND NOTIFY OWNER UNACCEPTABLE CONDITIONS.

NO EXCEPTIONS TO THE GUARANTEE PROVISIONS ARE ALLOWED UNLESS AGREED TO IN WRITING PRIOR TO PLANTING.

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$11,600.00.

THE OWNER, TENANT, AND / OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

DEVELOPER'S / BUILDER'S CERTIFICATION

I / WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I / WE FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE-YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

David E. Meiners 3/29/98
 NAME DATE
 DAVID E. MEINERS
 PRINT NAME

PROPERTY LINE BETWEEN INTERIOR PARCELS WITHIN TROY HILL SUBDIVISION. NO SCREENING OR BUFFERING REQUIRED

BUILDING #1
DISTRIBUTION / WAREHOUSE
 F.F. ELEV. = 216.00
 155,675 Sq. Ft.

PLAN
 SCALE: 1" = 50'

SCHEDULE A
 PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES
Linear Feet of Property Frontage	153'	380'
Credit for existing Vegetation (Trees, No Utility Plant)	NO	YES 380'
Credit for Wall, Fence, or Other Barrier	YES 4.3'	NO
Number of Plants Required	41	30
Number of Plants Provided	38	30

Comments: PROVIDED BY EXISTING PLANTS IN WOODED AREA TO REMAIN ALONG NORTHEASTERN TRACT BOUNDARY.
 ** MOST OF PARKING LOT IS DEEPENED 3'-4" FROM ROAD - THIS NEGATING SHRUBS

SCHEDULE D
 STORMWATER MANAGEMENT AREA LANDSCAPING

Linear Feet of Perimeter	440' (B)
Number of Trees Required	9
Shade Trees	0
Evergreen Trees	9
Credit for Existing Vegetation (No, Yes and %)	YES 300%
Credit for Other Landscaping (No, Yes and %)	NO
Number of Trees Provided	9
Shade Trees	0
Evergreen Trees	9
Other Trees (2:1 substitution)	0

* PROVIDED BY EXISTING PLANTS IN WOODED AREA TO REMAIN

PLANT SCHEDULE

KEY	QUANT.	BOTANICAL NAME/COMMON NAME	SIZE/COND.	SPACING	REMARKS
LARGE TREES					
AS	18	Acer saccharum / Green Mountain / Green Mountain Sugar Maple	2 1/2-3' cal / B&B	25' o.c. as shown	full crown
AR	12	Acer rubrum / October Glory / October Glory Red Maple	2 1/2-3' cal / B&B	25' o.c. as shown	full crown
FP	24	Fraxinus pennsylvanica / Patmore / Patmore Green Ash	2 1/2-3' cal / B&B	25' o.c. as shown	full crown
KP	15	Koeleruteria paniculata / Golden Rain Tree	2-2 1/2' cal / B&B	15' o.c. as shown	matched
AL	24	Amelanchier x grandiflora / Lamarkil / Lamarkil Serviceberry	8-10' ht. / B&B	15' o.c. as shown	multi-stem, matched
SMALL TREES					
AP	40	FAXUS PENSILVANICA / William Penn Barberry	24-30" ht. / cont.	4' o.c. as shown	
BX	75	Berberis x gladyensis / Wm. Penn / William Penn Barberry	24-30" spr. / cont.	4' o.c. as shown	

- KEY**
- (-) EXISTING TREE
 - (x) PROPOSED SHADE TREE
 - (*) PROPOSED ORNAMENTAL TREE
 - (o) PROPOSED SHRUBS

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

APPROVED: HOWARD SOIL CONSERVATION DISTRICT 9/10/98
 PLAN NUMBER DATE

Reviewed for the Howard Conservation District and meets technical requirements.
 APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 9/10/98
 NATURAL RESOURCES CONSERVATION SERVICE DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 9/10/98
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 10/16/98
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 10/16/98
 DIRECTOR DATE

ADDRESS CHART
 PARCEL NO. STREET ADDRESS
 Building #1 7055 Troy Hill Drive
 Building #2 7045 Troy Hill Drive

SUBDIVISION NAME SECTION NAME PARCEL #
 TROY HILL CORPORATE CENTER 1 A-2

PLAT # BLOCK # ZONE / ZONING MAP ELECT. DIST. CENSUS TRACT
 12428 37 M-1 / ZONING MAP 1st 6011.02

WATER CODE C04 SEWER CODE 4020000

PREPARED BY:
GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.
 Civil Engineers and Land Surveyors
 658 Kenilworth Drive, Suite 100
 Towson, Maryland 21204
 (410) 825-8120

OWNER/DEVELOPER
TROY HILL BUSINESS PARK PARTNERSHIP
 c/o MANEKIN COPORATION
 7165 COLUMBIA GATEWAY DRIVE
 COLUMBIA, MARYLAND
 21046
 410-290-1400

REVISION	DATE	REV. PER AS-BUILT CONDITIONS
1	10-31-02	RELOCATED PLANTS, ADDED SIDEWALKS
2	12/5/02	ADDED MOVABLE RAMP
3	6/22/21	ADDED MOVABLE RAMP

LANDSCAPE PLAN
 FOR
TROY HILL CORPORATE CENTER
 PHASE 1 PARCEL A-2
 PREVIOUS FILE #S 890-05, P90-25, F91-24, WP 96-91, F96-136
 HOWARD COUNTY, MARYLAND SHEET 18 OF 19 SCALE: AS SHOWN
 1st ELECTION DISTRICT JUNE 03, 1998

SDP 98-114 P.N.: 8150 K.E. NAME: landscapes01 08-24-98

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 PLANT LOCATIONS SHALL BE FIELD ADJUSTED TO AVOID UTILITIES. CONTRACTOR IS RESPONSIBLE FOR LOCATING UTILITIES PRIOR TO START OF WORK. ALL TREES AND SHRUBS SHALL BE MULCHED TO A MINIMUM OF 18" BEYOND THE EDGE OF THE ROOT BALL. SHRUBS MASSSES SHALL BE PLANTED IN CONTINUOUS MULCH BEDS. ALL WIRE, PLASTIC AND TWINE TIES SHALL BE REMOVED FROM TOP OF THE ROOT BALL.

PLANT STANDARDS
 ALL NURSERY STOCK SHALL BE TOP QUALITY AND IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. "AMERICAN STANDARDS FOR NURSERY STOCK", LATEST EDITION. INFERIOR NURSERY STOCK WILL BE SUBJECT TO REJECTION BY THE LANDSCAPE ARCHITECT. BARE-ROOT SHALL NOT BE ALLOWED FOR ANY TREE DEFINED AS MAJOR DECIDUOUS, MINOR DECIDUOUS OR EVERGREEN.

CHANGES MAY IMPACT REQUIRED CERTIFICATION
 PLANT TYPES (DECIDUOUS TREES, EVERGREEN, ETC.), QUANTITIES, SPACING, LOCATION, AND SPECIES SHOWN ON THE APPROVED LANDSCAPE PLAN ARE BASED ON REQUIREMENTS STATED IN THE LATEST BALTIMORE COUNTY LANDSCAPE MANUAL. ANY CHANGE IN THESE ITEMS MAY AFFECT THE REQUIRED APPROVAL AND CERTIFICATION OF THE INSTALLED PLANTING. OWNER IS REQUIRED TO ARRANGE AND PAY FOR CERTIFICATION BY LANDSCAPE ARCHITECT.

LANDSCAPE SPECIFICATIONS
 LANDSCAPE SPECIFICATION SHALL CONFORM TO LCA LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREA, INCLUDING PLANTING PROCEDURES AND SOIL PREPARATION FOR SHRUBS AND PERENNIAL BEDS. A ONE-YEAR WARRANTY PERIOD SHALL BE REQUIRED. MAINTENANCE REQUIRED TO HONOR THE ONE YEAR WARRANTY SHALL BE PERFORMED AS PART OF THIS CONTRACT.

SPECIAL PROVISIONS TO LCA STANDARD SPECIFICATIONS
 CONTRACTOR IS ENCOURAGED TO PERFORM SOIL TESTING. TEST RESULTS SHALL BE SUBMITTED 30 DAYS BEFORE PLANTING. FAILURE TO PERFORM TESTING WILL NOT VOID GUARANTEE PROVISIONS.

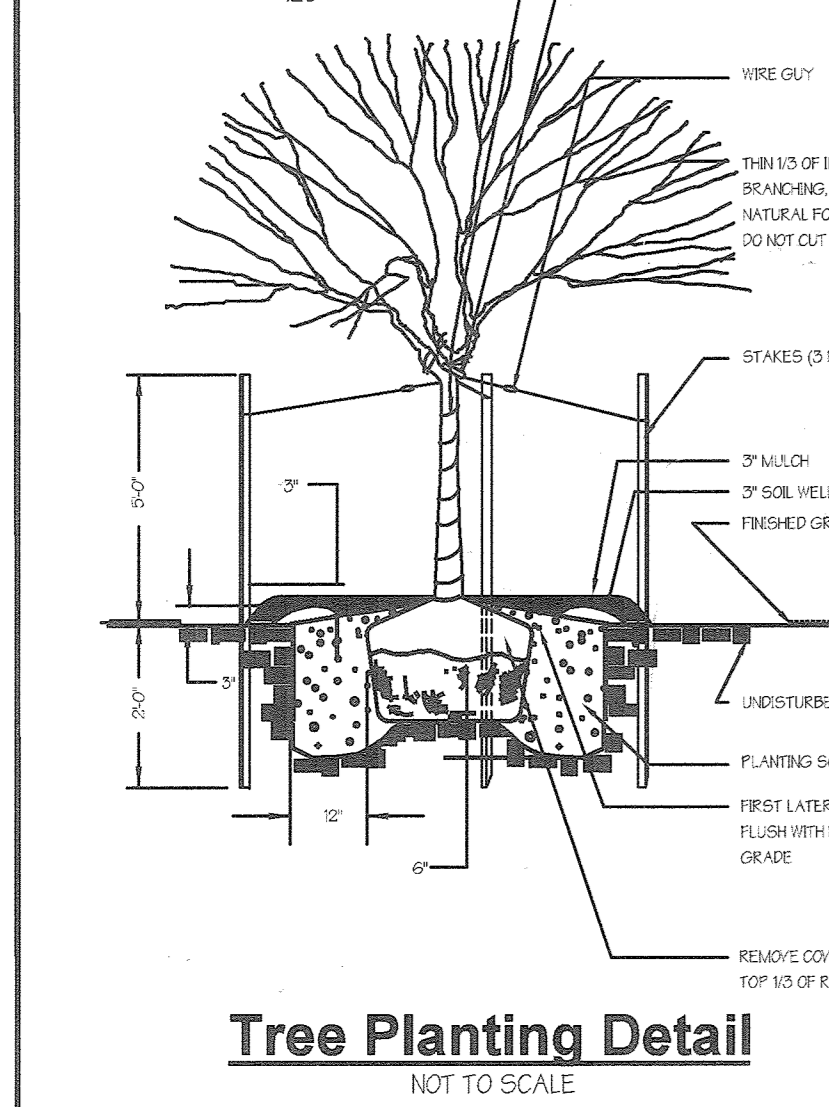
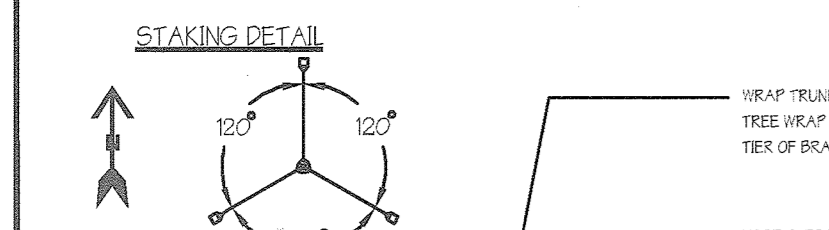
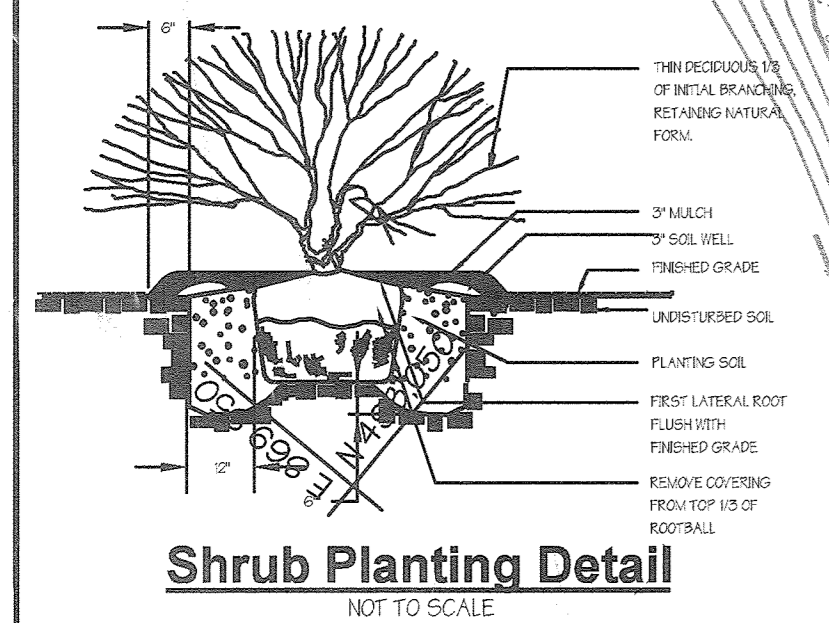
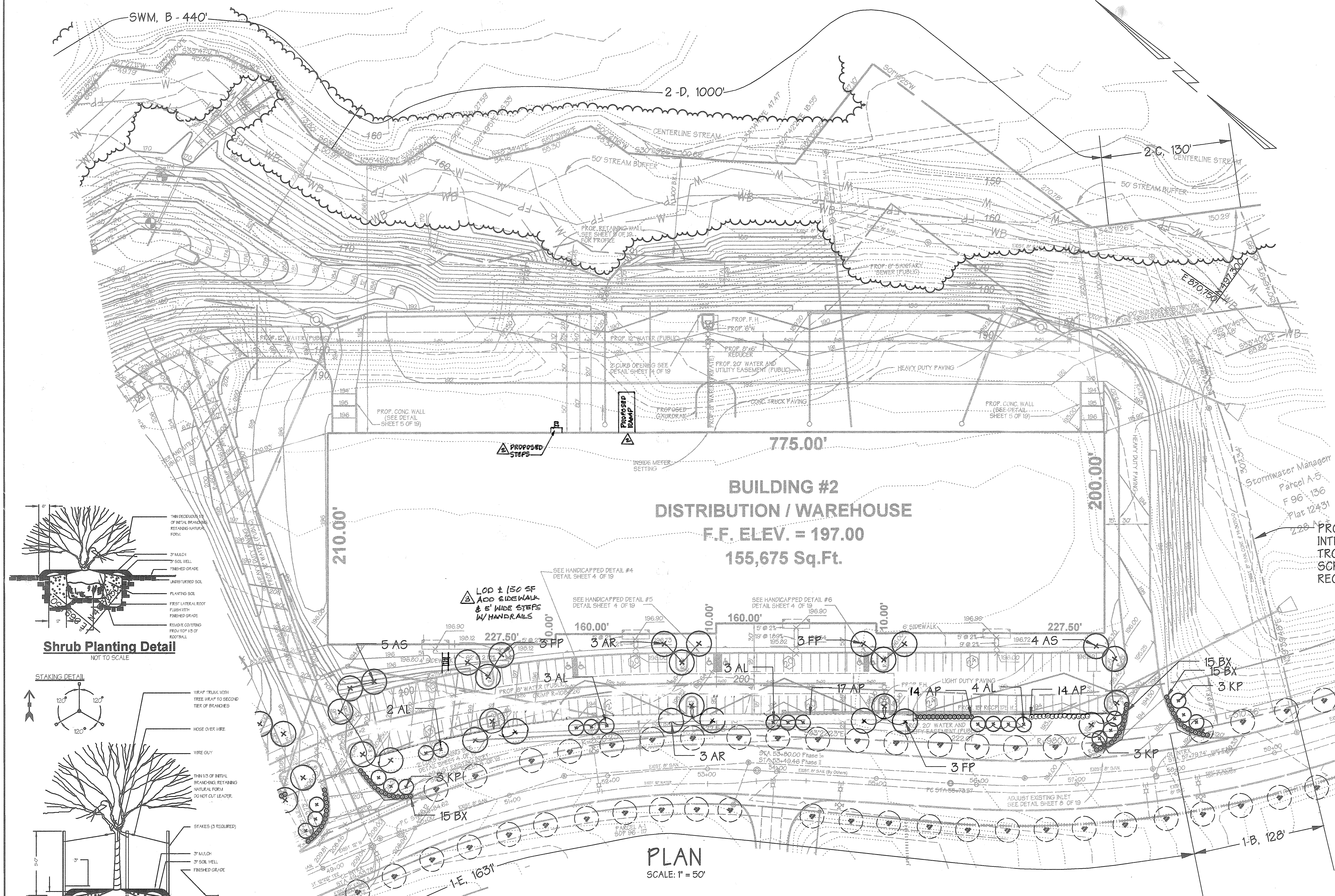
CONTRACTOR SHALL REVIEW AND TEST SUBSOIL DRAINAGE CHARACTERISTICS 30 DAYS PRIOR TO PLANTING AND NOTIFY OWNER UNACCEPTABLE CONDITIONS.

NO EXCEPTIONS TO THE GUARANTEE PROVISIONS ARE ALLOWED UNLESS AGREED TO IN WRITING PRIOR TO PLANTING.

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$11,600.00.

THE OWNER, TENANT, AND / OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

PROPERTY LINE BETWEEN INTERIOR PARCELS WITHIN TROY HILL SUBDIVISION. NO SCREENING OR BUFFERING REQUIRED



PLANT SCHEDULE

KEY	QUANT.	BOTANICAL NAME/COMMON NAME	SIZE/COND.	SPACING	REMARKS
LARGE TREES					
AS	10	Acer saccharum 'GreenMountain' / Green Mountain Sugar Maple	2 1/2-3' cal / B&B	25' o.c. as shown	full crown
AR	12	Acer rubrum 'October Glory' / October Glory Red Maple	2 1/2-3' cal / B&B	25' o.c. as shown	full crown
FP	24	Fraxinus pennsylvanica 'Patmore' / Patmore Green Ash	2 1/2-3' cal / B&B	25' o.c. as shown	full crown
KP	15	Koelerutera paniculata / Golden Rain Tree	2-2 1/2' cal / B&B	15' o.c. as shown	matched
AL	24	Amelanchier x grandiflora 'Lamarkii' / Lamarkii Serviceberry	8-10' ht. / B&B	15' o.c. as shown	multi-stem, matched
SMALL T.					
SHRUBS					
AP	40	TAXUS DENSIFORMIS	24-30' ht. / cont.	4' o.c. as shown	
BX	75	Berberis x gladiolensis 'Wm. Penn' / William Penn Barberry	24-30' spr. / cont.	4' o.c. as shown	

- KEY**
- (-) EXISTING TREE
 - (x) PROPOSED SHADE TREE
 - (*) PROPOSED ORNAMENTAL TREE
 - (o) PROPOSED SHRUBS

DEVELOPER'S / BUILDER'S CERTIFICATION
 I / WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I / WE FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSATALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

David E. Meiners 3/29/98
 NAME DATE
 DAVID E. MEINERS
 PRINT NAME

These plans for S.W.M. construction, soil erosion and sediment control meet the requirements of Howard Soil Conservation District.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT

PLAN NUMBER _____ DATE _____

Reviewed for the Howard Conservation District and meets technical requirements.

NATURAL RESOURCES CONSERVATION SERVICE DATE _____

APPROVED: Howard County Department of Planning and Zoning

Chief, Development Engineering Division 9/10/98
 DATE

Chief, Division of Land Development 10/16/98
 DATE

Director 10/12/98
 DATE

ADDRESS SHEET	
PARCEL NO.	STREET ADDRESS
Building #1	7055 Troy Hill Drive
Building #2	7045 Troy Hill Drive

SUBDIVISION NAME	SECTION NAME	PARCEL #
TROY HILL CORPORATE CENTER	1	A-2
PLAT #	BLOCK #	ZONE
12428		M-1
WATER CODE C04	SEWER CODE	4020000

PREPARED BY:

GWS

GEORGE W. STEPHENS, JR. AND ASSOCIATES, INC.
 Civil Engineers and Land Surveyors
 658 Kenilworth Drive, Suite 100
 Towson, Maryland 21204
 (410) 825-8120

OWNER/DEVELOPER

TROY HILL BUSINESS PARK PARTNERSHIP
 c/o MANEKIN COPORATION
 7165 COLUMBIA GATEWAY DRIVE
 COLUMBIA, MARYLAND
 21046
 410-290-1400

10177
 BOARD OF ARCHITECTS
 MICHAEL WAYNE CANNELL
 STATE OF MARYLAND
 FOR REV #2 ONLY

10/31/12
 STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 5/20/11
 FOR REV #2 ONLY

REVISION	DATE	DESCRIPTION
1	10-31-02	REV. PER AS-BUILT CONDITIONS
2	5/19/11	ADD LOADING RAMP & STEPS
3	11/5/2019	ADD WALK & STEPS W/HANDRAILS

LANDSCAPE PLAN

FOR

TROY HILL CORPORATE CENTER

PHASE 1 PARCEL A-2

PREVIOUS FILE #S S90-05, P90-25, F91-24, WP 96-91, P96-136

HOWARD COUNTY, MARYLAND SHEET 19 OF 19 SCALE: AS SHOWN
 1st ELECTION DISTRICT JUNE 03, 1998

SDP 98-114 P/N: 8100 K.E. NAME: landscapes01 08-24-98