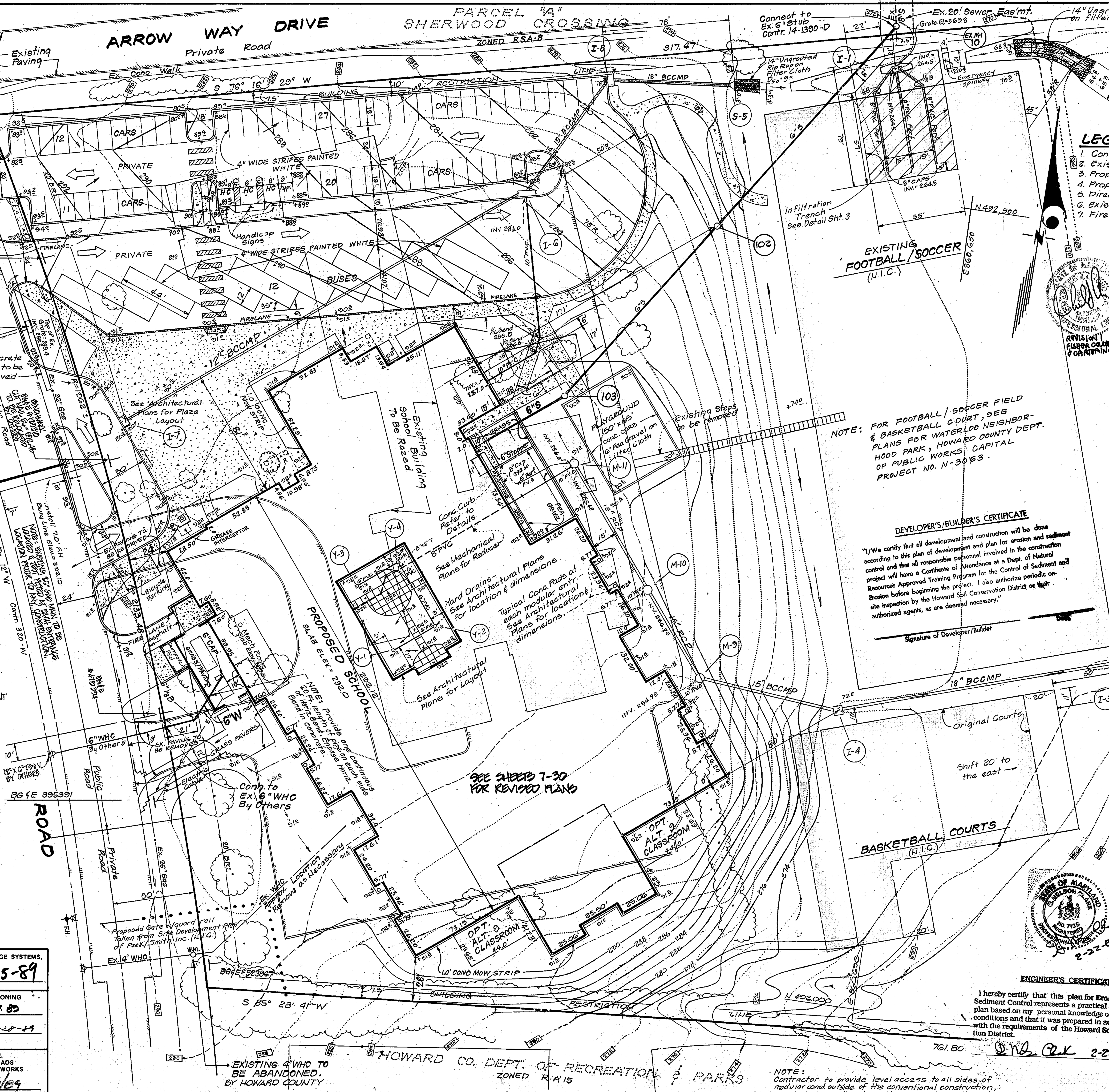


DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."

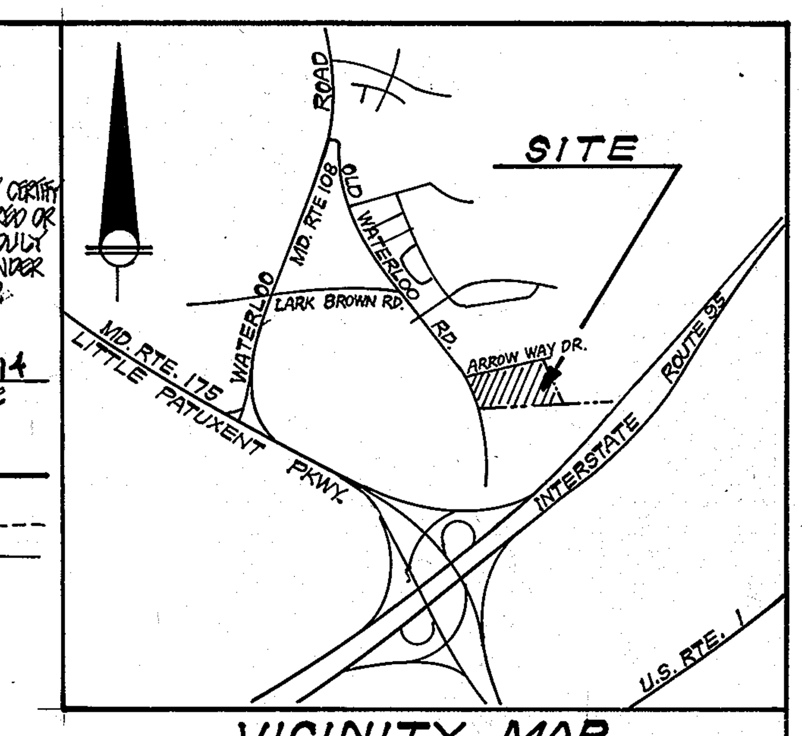
Signature of Developer/Builder

PROFESSIONAL CERTIFICATION, 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. 13204 EXPIRATION DATE: NOVEMBER 3, 2014.

CHARLES J. CROVO, SR., P.E. — 2/12/14 — DATE
REVISION 1 FISHER COLLINS AND CARTER INC.

LEGEND

1. Contour Interval — 2 ft.
2. Existing Contour — 280
3. Proposed Contour — 280
4. Proposed Spot Elevation — +80.1
5. Direction of Drainage
6. Existing Paving
7. Firelane



VICINITY MAP
SCALE: 1" = 2000'

GENERAL NOTES

1. All materials and construction to be in accordance with Howard County Road Construction Code and Specifications.
2. Coordinates are based on the Maryland State Plane as projected by Howard County monument # 2344005-R.
3. All driveways and parking to be privately owned and maintained.
4. Any damage to County owned rights-of-way to be corrected at the contractor's expense.
5. Installation of traffic control devices shall be in accordance with the latest edition of the "Manual of Uniform Traffic Control".
6. Topography was compiled from actual field survey.
7. The area shown is located on tax map No. 37, Parcel 168.
8. Trench bedding for storm drainage shall be in accordance with Howard County Std. S.D. G2.01.
9. Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location by digging test pits, by hand, at all utility crossings; well in advance of construction.
10. The contractor or developer shall contact the Construction Inspection / Survey Division 24 hours in advance of work at 992-2417 or 792-7272.
11. All downspout drains shall be connected to storm drains.
12. The developer agrees to work with the Dept. of Licenses & Inspections to resolve any problems caused by roof water discharge.
13. Handicap parking details shall be in accordance with the "Maryland Building Code for the Handicapped", Section 5.01-7.05 and details on sheet 2.
14. Recording reference: Liber 252, Folio 456.
15. UPON REVIEW AND APPROVAL OF THE SIMPLIFIED ECP FOR COMPLIANCE WITH ZONING AND SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SHALL OCCUR WITHIN THIS DEVELOPMENT PLAN AND IS SUBJECT TO ADDITIONAL AND MORE DETAILED COMMENTS AS THIS PLAN PROGRESSES THROUGH THE DEVELOPMENT PROCESS.
16. ON DECEMBER 16, 2013 THE COUNTY COUNCIL GRANTED A VARIANCE TO RESOLUTION NO. 167-2013 FOR SECTIONS 16.301 AND 13.200(a) OF THE HOWARD COUNTY CODE FOR THE ADMINISTRATION ADDITION AT DEEP RUN ELEMENTARY SCHOOL, RESOLUTION NO. 167-2013 GRANTED A VARIANCE FROM THE REQUIRED 20 FOOT STRUCTURE AND USE SETBACK TO BE 11 FEET IN THE R-SA-8 ZONING DISTRICT.
17. THIS PLAN IS SUBJECT TO WAIVER PETITION WP-14-044. THE PLANNING DIRECTOR ON NOVEMBER 20, 2013 GRANTED APPROVAL TO WAIVE SECTIONS 16.1201.(n) AND 16.1204.(d)(1) BASED ON THE STANDARD FOREST CONSERVATION OBLIGATION CALCULATION OF THE NET TRACT AREA TO BE DEFINED BY THE LIMIT OF DISTURBANCE (LOD) FOR THE AREA OF THE PROPOSED SITE EXPANSION AND NOT DEFINED BY THE GROSS AREA OF THE SITE MINUS FLOODPLAINS & UTILITIES. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS.
    A. THE FOREST CONSERVATION OBLIGATION FOR THE PROPOSED EXPANSION OF THIS SITE SHALL BE LIMITED TO THE AREA OF DISTURBANCE, THE CORRESPONDING OBLIGATION SHALL BE SATISFIED BY CREATING AN ON-SITE FOREST CONSERVATION RETENTION EASEMENT AS SHOWN ON THE WAIVER PLAN EXHIBIT TO ADDRESS THE AFFORESTATION OBLIGATION REQUIREMENT THAT IS CALCULATED BY USING THE LIMIT OF DISTURBANCE AS THE NET AREA OR ANY OTHER ACCEPTABLE METHOD TO ADDRESS THE FOREST CONSERVATION OBLIGATION.
    B. ANY FUTURE OR FURTHER DEVELOPMENT OF THIS SITE OUTSIDE THE CURRENT LOD WILL BE REQUIRED TO COMPLY WITH AFFORESTATION OF THE FOREST CONSERVATION ACT.
    C. COMPLIANCE WITH ALL SRC AGENCY COMMENTS GENERATED WITH THE REVIEW OF THE SITE DEVELOPMENT PLAN FOR THE PROPOSED EXPANSION.
    D. THE CONSULTANT SHALL SUBMIT A FCP AND FOREST CONSERVATION EASEMENT PLAT FOR REVIEW AND APPROVAL BY DPZ AND AS PART OF THE SITE DEVELOPMENT PLAN SUBMISSION FOR THE PROPOSED EXPANSION.
18. THE FOREST CONSERVATION ACT REQUIREMENTS FOR THIS PROJECT REQUIRES 0.8 ACRES OF FOREST RETENTION. THIS OBLIGATION WILL BE MET THROUGH 0.8 ACRES OF RETENTION ON-SITE.
19. SECTION 16.1200 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION ACT REQUIREMENTS FOR THE SITE EXPANSION UNDER SDP-89-098 RL#1 HAVE BEEN MET THROUGH THE CREATION OF AN 0.8 ACRE ON-SITE FOREST CONSERVATION RETENTION EASEMENT WHICH IS WITHIN THE PROPOSED LIMIT OF DISTURBANCE (LOD). THIS 0.8 ACRE RETENTION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE 0.7 ACRE AFFORESTATION OBLIGATION CALCULATED USING THE 4.7 ACRE LOD AS THE "NET TRACT AREA" (WP-14-044). THE AREA OF THE FCE BEING CREATED WILL RESULT IN A 0.1 ACRE INCREASE IN PROTECTED FOREST RESOURCES WHICH CAN BE USED IN SATISFYING FC OBLIGATIONS FOR THE REMAINDER OF THIS 11.5 ACRES SITE WHICH MAY BE IMPOSED AT THE TIME OF ANY FUTURE OR FURTHER DEVELOPMENT OF THIS SITE.

Reviewed for .... S.C.D.
Name
and meets Technical Requirements
Signature — 3/1/89 — Date
U.S. Soil Conservation Service

SHEET INDEX

1. SITE DEVELOPMENT PLAN
2. WATER, SEWER & STORM DRAIN PROFILES
3. SITE DIAGRAM & PAVING DETAILS
4. SEDIMENT & EROSION CONTROL PLAN
5. SEDIMENT & EROSION CONTROL PLAN
6. LANDSCAPE PLAN
7. DEMOLITION PLAN
8. DEMOLITION PLAN
9. SITE IMPROVEMENT PLAN
10. SITE IMPROVEMENT PLAN
11. SEDIMENT & EROSION CONTROL PLAN
12. SEDIMENT & EROSION CONTROL PLAN
13. DRAINAGE AREA MAP & LANDSCAPE PLAN
14. DRAINAGE AREA MAP & LANDSCAPE PLAN
15. DETAIL SHEET
16. DETAIL SHEET
17. SOIL BORINGS & SEDIMENT CONTROL DETAILS
18. SEDIMENT CONTROL NOTES
19. PROFILES
20. ROAD SECTION PROFILES
21. FIRE HYDRANT PLAN BY A.D.G.
22. HANDICAP PARKING RAMP & STAIRWAY ENLARGEMENT
23. FOREST CONSERVATION PLAN
24. FOREST CONSERVATION PLAN
25. FOREST CONSERVATION NOTES & DETAILS
26. STORMWATER MANAGEMENT BMP #1 PROFILES & DETAILS
27. STORMWATER MANAGEMENT BMP #1 PLANTING PLAN
28. STORMWATER MANAGEMENT BMP #2 PROFILES & DETAILS
29. STORMWATER MANAGEMENT BMP #2 PLANTING PLAN & MANHOLE S-1 DETAIL
30. STORMWATER MANAGEMENT SPECIFICATIONS & NOTES

APPROVED
DIVISION of COMMUNITY PLANNING & LAND DEVELOPMENT
HOWARD COUNTY MARYLAND
DATE 2-17-89

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

COUNTY HEALTH OFFICER — 3-15-89 — DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

PLANNING DIRECTOR — 3.31.89 — DATE

CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 3-28-89 — DATE

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

DIRECTOR — 3/9/89 — DATE

CHIEF BUREAU OF ENGINEERING — 3-9-89 — DATE

NO.	REVISION	DATE
1	ADDED SHEET INDEX, GENERAL NOTES & REVISED SHEET NUMBER	2/6/14

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

2-22-89

NOTE: THE PURPOSE OF THIS REDLINE IS TO ADD 2 ADDITIONS, A DROPOFF LANE, ADDITIONAL PARKING AND 2 BMPS ALONG WITH THEIR UTILITIES WITHIN SHEETS 7-30.

ADDRESS CHART					
P.168	6925 Old Waterloo Road				
Subdivision Name: DEEP RUN ELEMENTARY SCHOOL			Sect./Area: —		Lot/Parcel: 168
Plat No.: L.252 F.546	Block No.: 21	Zone: RSA-8	Tax Map No.: 37	Elec. Dist.: 1	Census Tr.: 6011
Water Code: D06			Sewer Code: 2500000		

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (301) 381-7500 — BALTO. • (301) 621-8100 — WASH.

DESIGNED: JME	SITE DEVELOPMENT PLAN	SCALE: 1" = 30'
DRAWN: CCM PER VLM	**DEEP RUN ELEMENTARY SCHOOL**	DRAWING: 1 OF 30
CHECKED: JME	PART OF PARCEL 168 LIBER 252 FOLIO 546, 1ST ELECTION DISTRICT, HOWARD COUNTY, MARYLAND	JOB NO.: 88-089
DATE: 1-31-89	FOR: HOWARD COUNTY DEPT. OF EDUCATION, 10901 ROUTE 108, ELLICOTT CITY, MARYLAND 21043	FILE NO.: 88-089X

SDP 89-98 SDP 89-98

133838

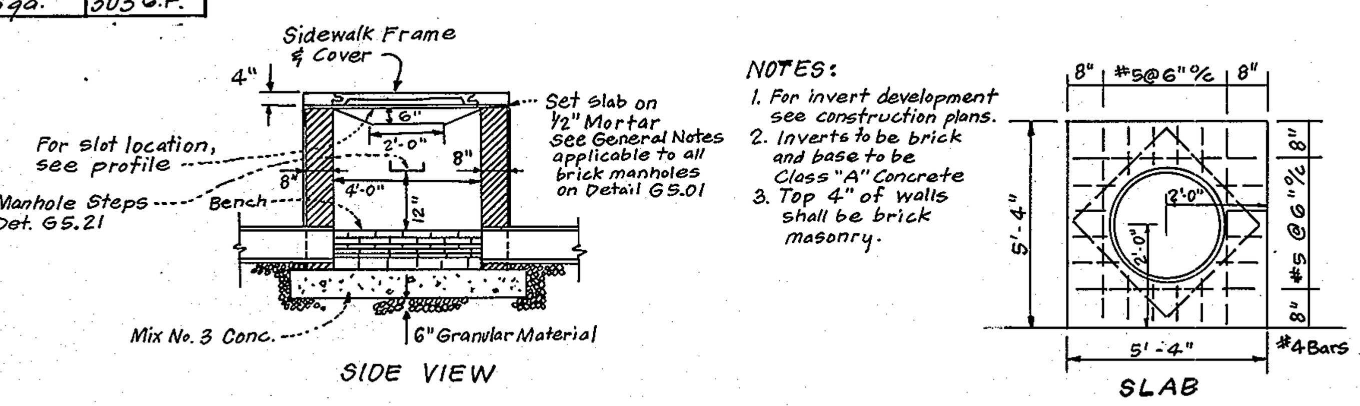
STRUCTURE SCHEDULE

	No.	TYPE	INV. IN	INV. OUT	TOP ELEVATION UPPER	TOP ELEVATION LOWER	REMARKS	LOCATION	
+	I-1	S-Inlet	264.50	264.50	269.8		Ho.Co.Std. S.D.4.22 32" Sq	See Plan	
	S-2	Metal End Section	254.35	254.00	–		Ho.Co.Std. S.D 5.61 18" Dia.	"	
*	I-3	Mod/Shallow Brick MH	261.54	260.00	269.13		Ho.Co.Std. G.5.05 48" Sq.	"	Slot west side only
*	I-4	" "	269.17	268.00	272.93		Ho.Co.Std. G.5.05 48" Sq.	"	Slot north side only
	S-5	Metal End Section	276.50/275.59	274.76	281.20		Ho.Co.Std. G.5.61 18" Dia.	"	
	I-6	A-10 Inlet w/ ▫ Def.	281.50/281.00	279.50	284.63	284.14	Ho.Co.Std. SD 4.02 W=2'-6"	"	
	I-7	A-5 Inlet	287.00	287.00	290.00		Ho.Co.Std. SD 4.01 W=2'-6"	"	
	I-8	" "	275.76	275.50	279.20	279.45	Ho.Co.Std. SD 4.01 W=2'-6"	"	
	M-9	Manhole	282.67/284.95	281.50	290.00		Ho.Co.Std. G 5.01 48" Dia.	"	
	M-10	" "	286.95/284.15	283.66	290.60		Ho.Co.Std. G 5.01 48" Dia.	"	
	M-11	" "	285.48	285.02	291.00		Ho.Co.Std. G 5.01 48" Dia.	"	
	Y-1	Yard Inlet	288.80	288.80	291.60		Ho.Co.Std. SD 4.14 24" Dia.	"	
	Y-2	" "	288.38	288.28	291.60		Ho.Co.Std. SD 4.14 24" Dia.	"	
	Y-3	" "	288.22	288.22	291.60		Ho.Co.Std. SD 4.14 24" Dia.	"	
	Y-4	" "	287.66	287.56	291.60		Ho.Co.Std. SD 4.14 24" Dia.	"	

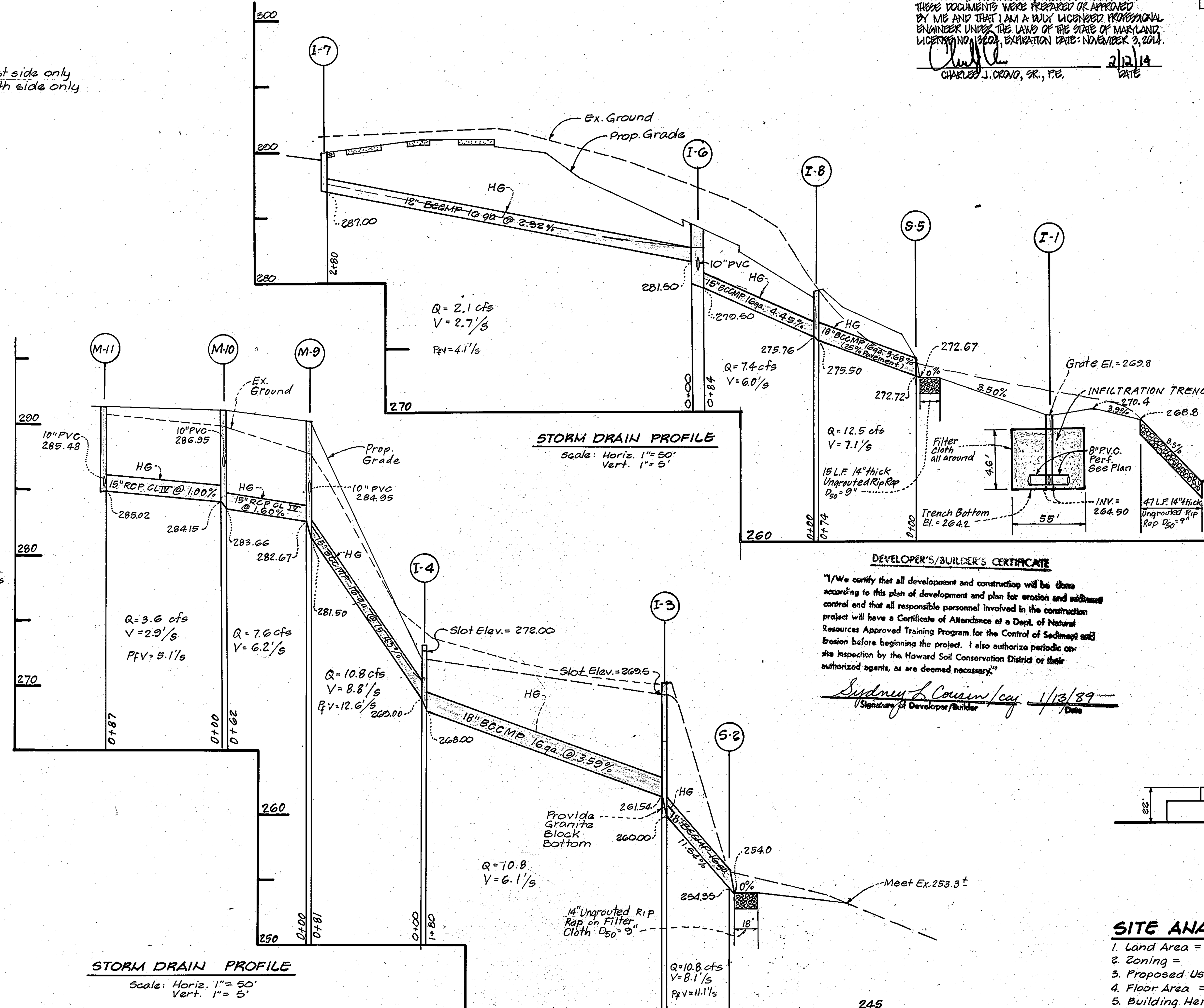
* Provide 4" top slab & 6" slot per D-inlet. Note: All inverts are to be fully developed.
▫ Ho.Co.Std. S.D-4.11.
+ Provide Reticular Grate Ho.Co.Std. SD 4.93.

PIPE SCHEDULE

SIZE	TYPE	LENGTH
6"	PVC	99 L.F.
8"	Perf. PVC	193 L.F.
10"	PVC	165 L.F.
12"	BCCMP 16 ga.	280 L.F.
15"	RCP CL. IV	149 L.F.
15"	BCCMP 16 ga.	84 L.F.
18"	BCCMP 16 ga.	303 L.F.

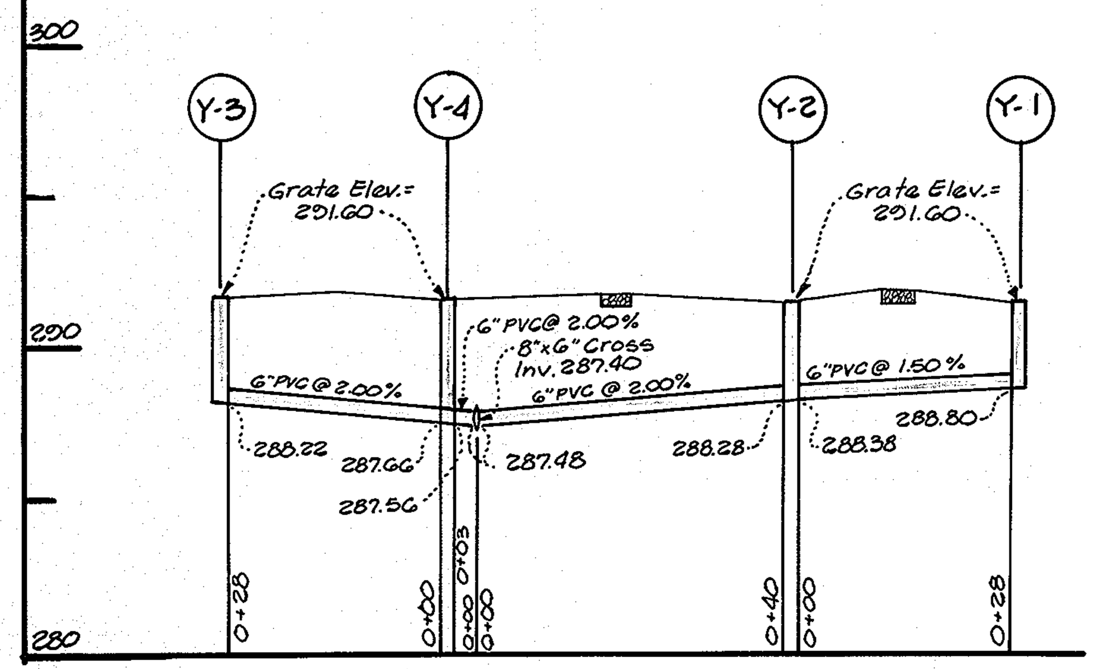


MODIFIED SHALLOW BRICK MANHOLE DETAIL
NO SCALE

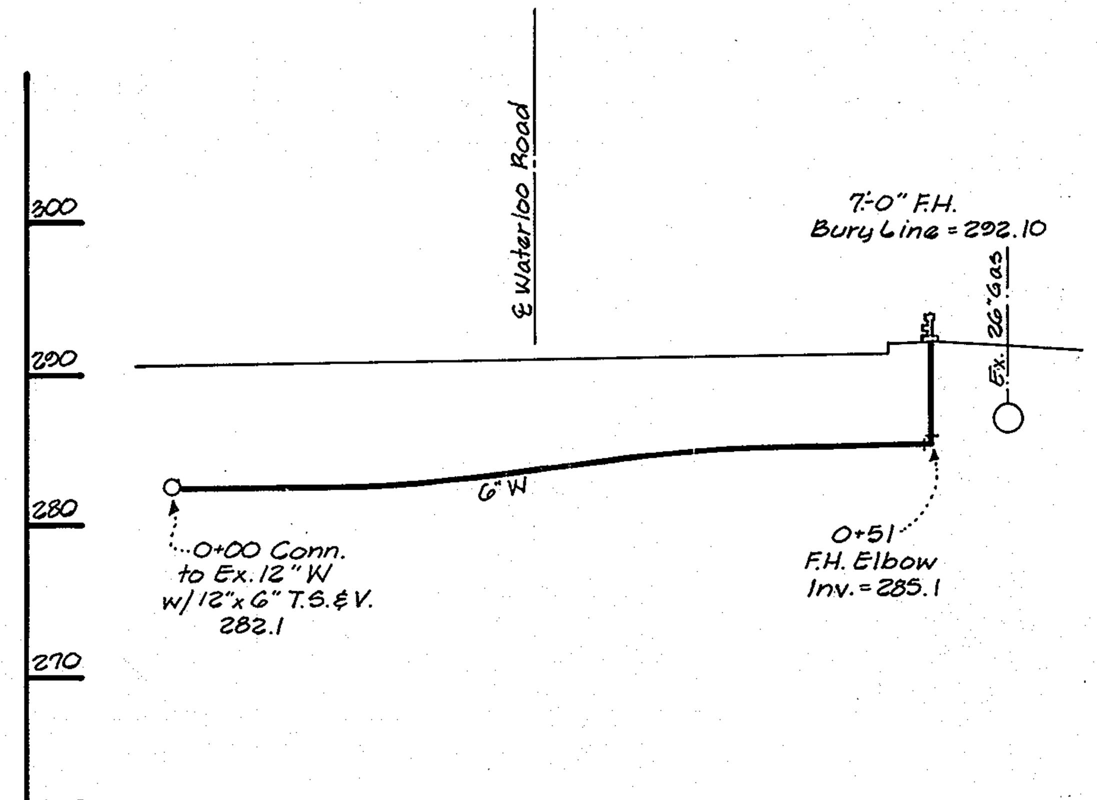


STORM DRAIN PROFILE
Scale: Horiz. 1" = 50'
Vert. 1" = 5'

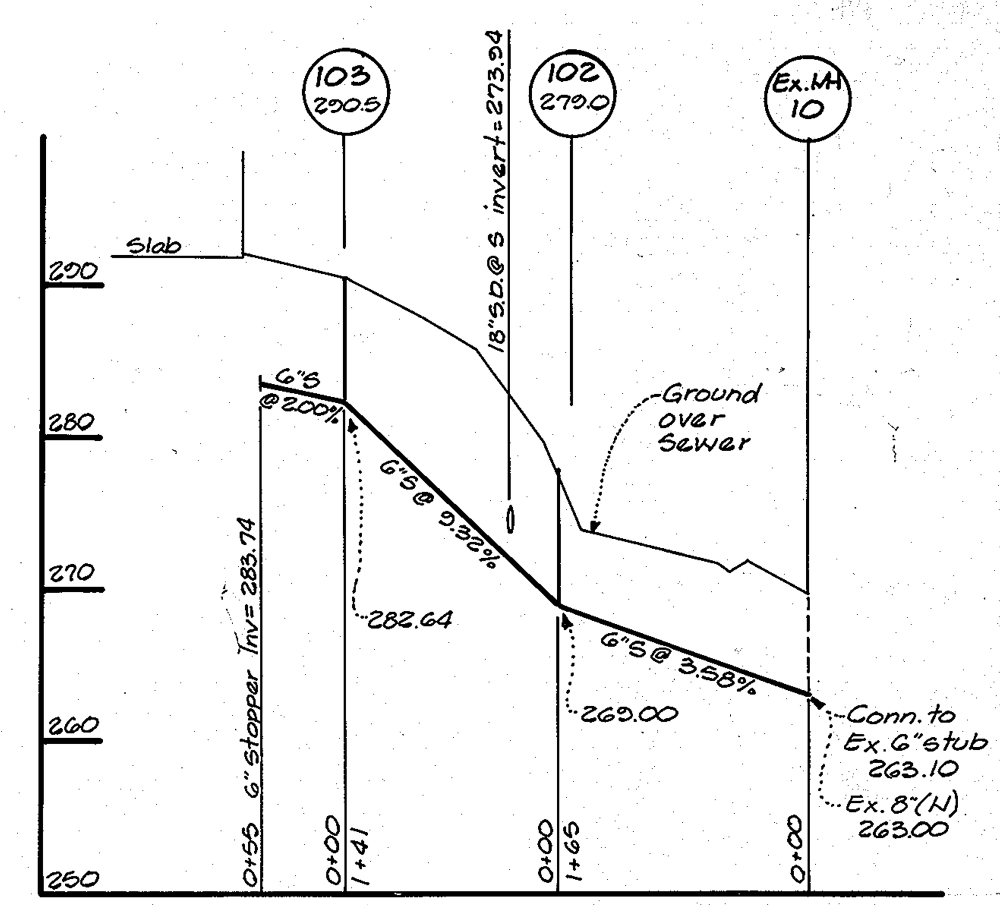
STORM DRAIN PROFILE
Scale: Horiz. 1" = 50'
Vert. 1" = 5'



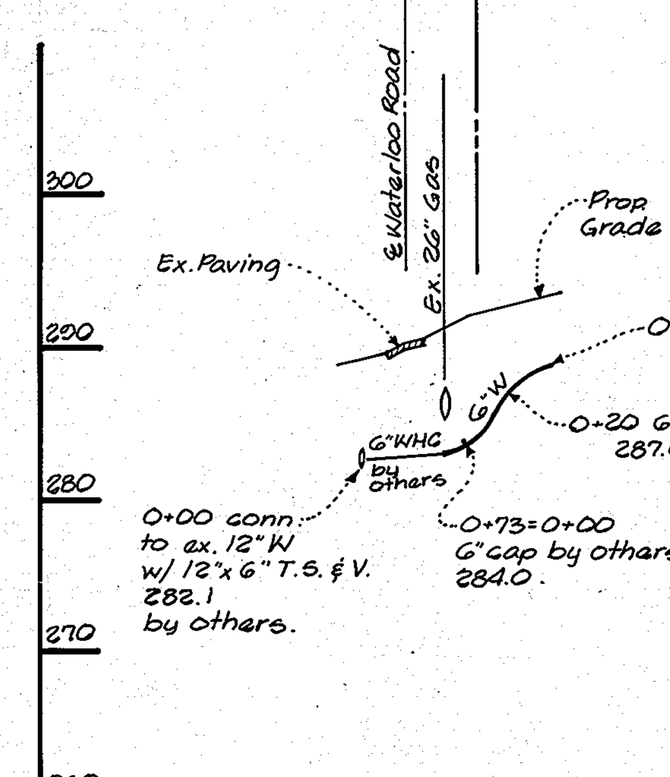
YARD INLET PROFILE
Scale: Horiz. 1" = 20
Vert. 1" = 5'



FIRE HYDRANT INSTALLATION
Scale: Horiz. 1" = 10'
Vert. 1" = 10'



SEWER PROFILE
Scale: Horiz. 1" = 100'
Vert. 1" = 10'



WATER PROFILE

Scale: Horiz. 1" = 100'
Vert. 1" = 10'

PROFESSIONAL CERTIFICATION. 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. 13204, EXPIRATION DATE: NOVEMBER 3, 2014.

CHARLES J. CROVO, SR., P.E. — 2/12/14 DATE

NO.	REVISION	DATE
1	REVISED SITE ANALYSIS AND SHEET NUMBER	2/6/14

REVISION FISHER COLLINS & CARTER INC. 2/12/14

DEVELOPER'S/BUILDER'S CERTIFICATE

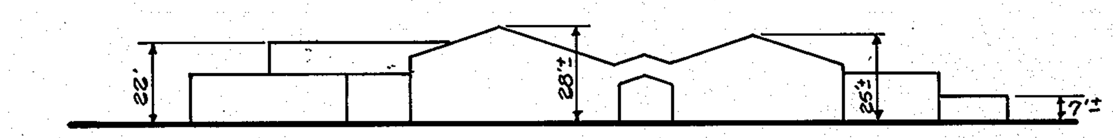
"I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."

Sydney L. Cousin /cay — Signature of Developer/Builder — 1/13/89 Date

Reviewed for HOWARD S.C.D.
Name
and meets Technical Requirements
Signature Date
U.S. Soil Conservation Service

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

APPROVED 3/1/89 DATE



TYPICAL BUILDING
NORTH ELEVATION

SITE ANALYSIS

1. Land Area = 11.67 Acres
2. Zoning = R-SA-8
3. Proposed Use = Public Elementary School
4. Floor Area = 89,670± (incl. Alt. Classrooms)
5. Building Height = 1 story - 28'±
6. Parking Spaces Provided = 128 spaces
   110 std. spaces (9' wide)
   5 handicap spaces
7. Bus Loading Spaces Provided = 13 (12' x 44')
8. Building Coverage = 17.6 %
9. Vehicular Area = 12.0 %
10. Open Space = 74.8 %
11. FORESTED AREA 0.8 ACRE
12. PREVIOUS DPZ FILE NOS.: SDP-97-91, WP-14-044, RESOLUTION NO. 167-2013

WATER AND SEWER NOTES

1. All sewer mains shall be P.V.C., C.S.P.X. or V.C.P.X.
2. All construction methods and materials for on-site private water & sewer systems shall follow the current edition of the Howard Co. Plumbing Code, supplemented by the Howard Co. Std. Details & Specs. where necessary.
3. All 6" water mains shall have a minimum of 3.5' cover.
4. All water mains shall be D.I.P.
5. Sewer House connections shall be built to within 10' of buildings, at a 2.0% slope.
6. Block all fittings with concrete.

ENGINEER'S CERTIFICATE

"I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

G. NELSON CLARK — 1-13-89 DATE

STATE OF MARYLAND G. NELSON CLARK NO. 7139 REGISTERED PROFESSIONAL ENGINEER

APPROVED
DIVISION of COMMUNITY PLANNING & LAND DEVELOPMENT
HOWARD COUNTY, MARYLAND
DATE 2-17-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — 3-15-89 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR — 3 31 89 DATE
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 3-28-89 DATE

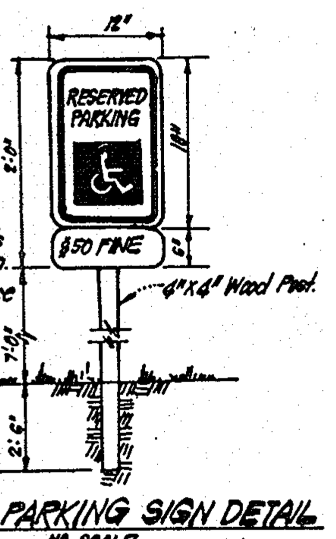
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — 3/9/89 DATE
CHIEF BUREAU OF ENGINEERING — 3-9-89 DATE

133838

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (301) 381-7500 — BALTO. • (301) 621-8100 — WASH.

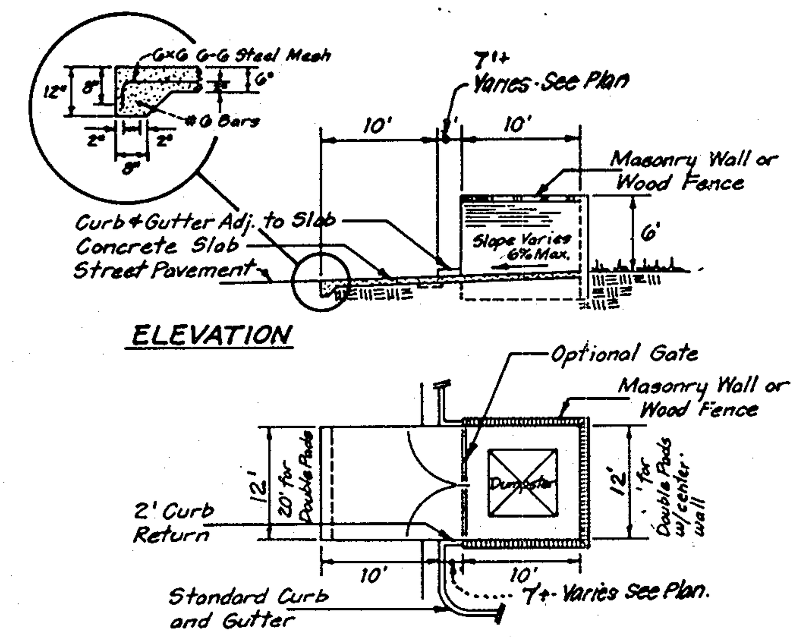
DESIGNED DAB	WATER, SEWER & STORM DRAIN PROFILES	SCALE As Shown
DRAWN P.E.R.	DEEP RUN ELEMENTARY SCHOOL	DRAWING 2 of 20
CHECKED DAB	PART OF PARCEL 168, LIBER 252 FOLIO 546, 1ST ELECTION DISTRICT, HOWARD COUNTY, MARYLAND	JOB NO. 88-089
DATE 1-31-89	FOR: HOWARD COUNTY DEPT. OF EDUCATION, 10901 ROUTE 108, ELLICOTT CITY, MARYLAND 21043	FILE NO. 88-089X

NO.	REVISION	DATE
1	REVISED SHEET NUMBER	2/6/14



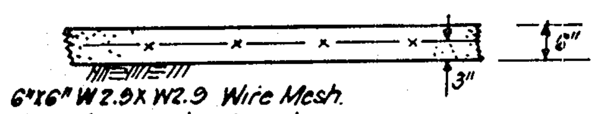
NOTE:
1. Sign shall meet design standards of Federal Hwy. Administration.
2. One required per parking space placed as shown (8 spaces).

HANDICAP PARKING SIGN DETAIL
NO SCALE



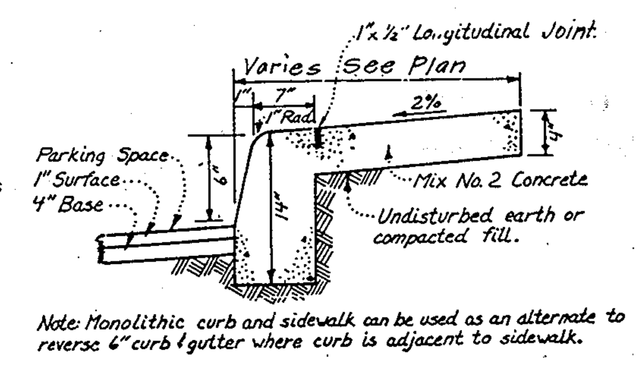
DUMPSTER PAD & ENCLOSURE
No Scale

Notes:
1. Materials and Construction to be in accordance with Ho. Co. Stds. & Specs.
2. See plan view for limits of conc. paving, shown thus:



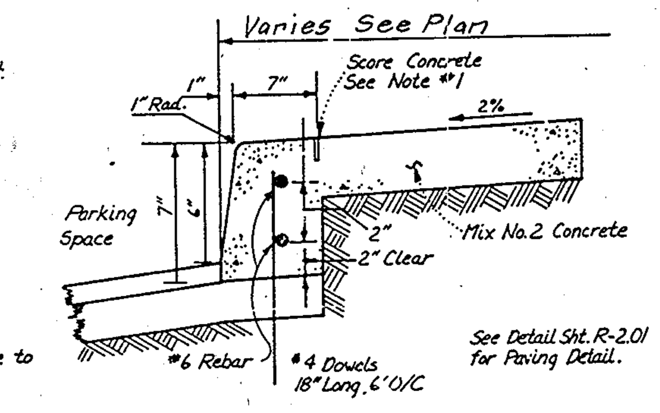
CONCRETE PAVING DETAIL · DUMPSTER AREA
NO SCALE

Notes:
1. Longitudinal Joint between sidewalk & curb shall be continuous and to a depth of 1/4 the thickness of the sidewalk or 1" Max. Latitudinal Joints shall run from back edge of sidewalk continuous to the bottom face of curb to a depth of 1/4" and spaced 5' apart.
2. Provide 1/2" expansion joints at 15' intervals. In latitudinal joints to full cross-section.

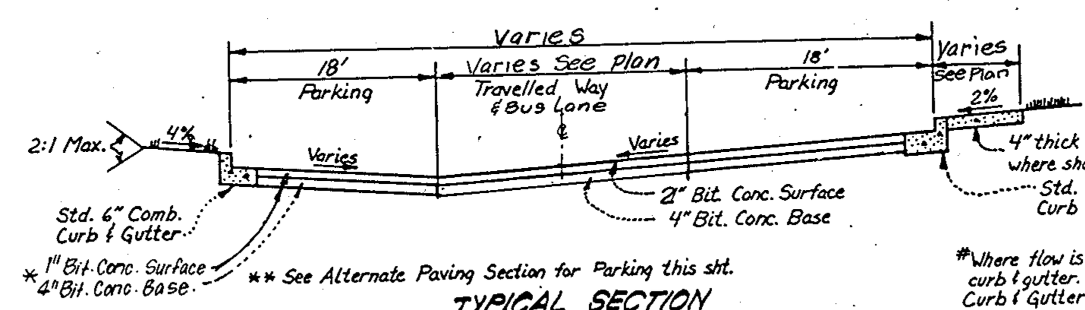


Note: Monolithic curb and sidewalk can be used as an alternate to reverse 6" curb & gutter where curb is adjacent to sidewalk.

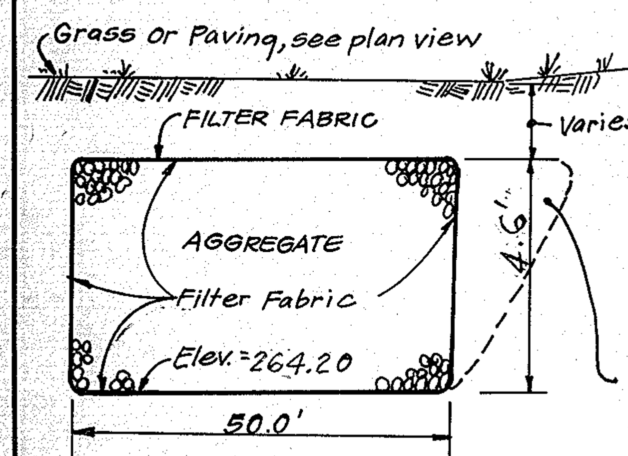
MONOLITHIC CURB & SIDEWALK - PRIVATE PARKING AREA
NO SCALE



ALTERNATE SECTION
NO SCALE



TYPICAL SECTION
PRIVATE DRIVE & PARKING
NO SCALE



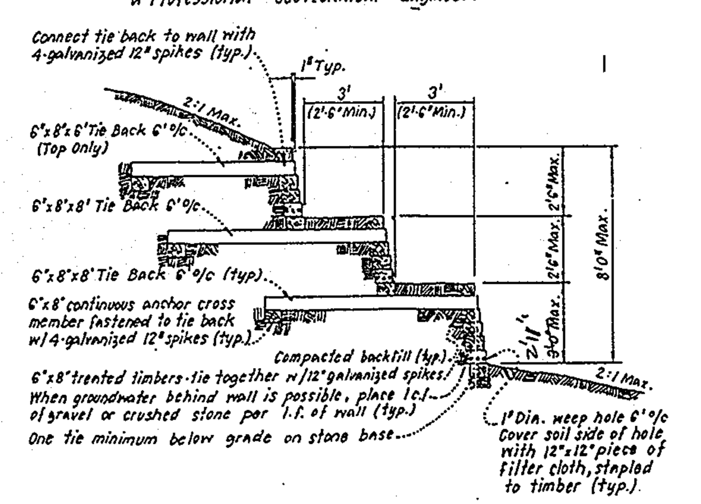
NOTE: If sides must be sloped for stability, stone and filter cloth shall be placed in the sloped areas.

NOTE: Trench is 70 feet long.

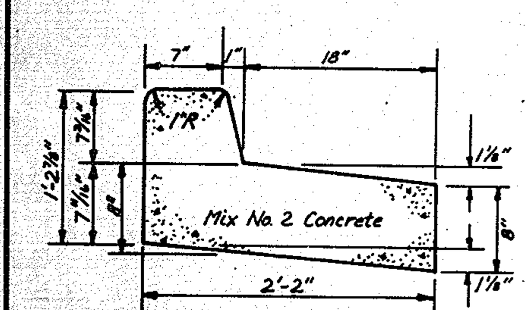
TYPICAL SECTION
INFILTRATION TRENCH
No Scale

Note: Aggregates to be clean with a max. diameter of 3" and a min. dia. of 1½". Filter fabric shall completely surround aggregate. Stone surface shall be 2" washed stones. Contractor shall observe all requirements of State Safety Regulations in constructing the trenches.

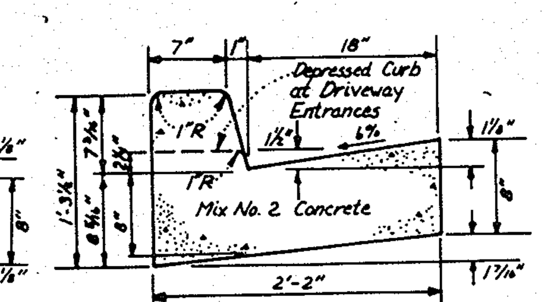
NOTE:
1. Timbers shall be either:
   a) Creosote treated railroad ties.
   b) CCA treated landscaping timbers (.40 lb/cf retention)
2. Hardware shall be hot dipped galvanized.
3. Weepholes with or without gravel drain are minimum measures for groundwater. For any substantial amount of groundwater, a drain system should be designed and utilized.
4. Design shall be verified for site specific soil condition by a Professional Geotechnical Engineer.



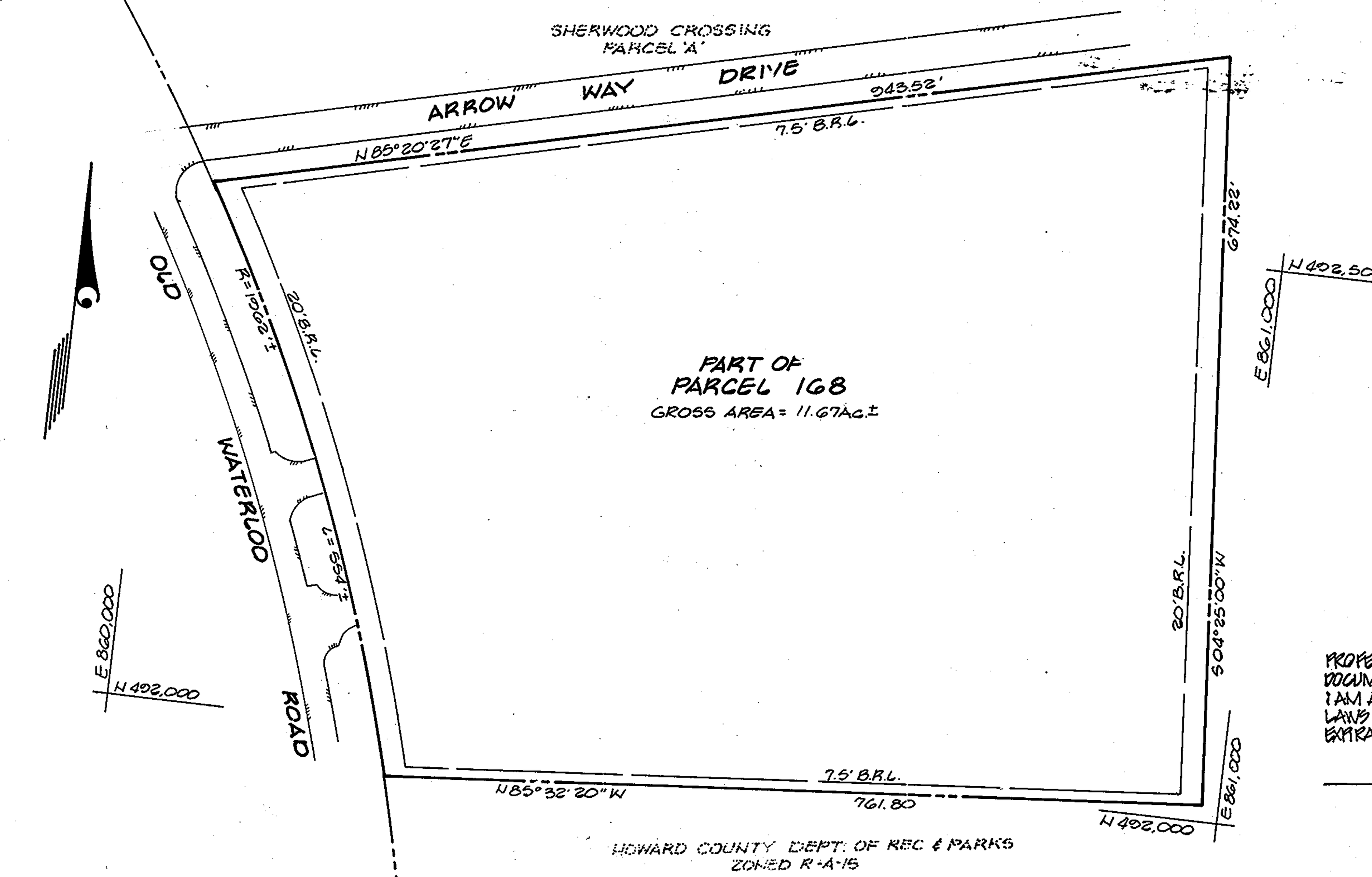
RETAINING WALL DETAIL

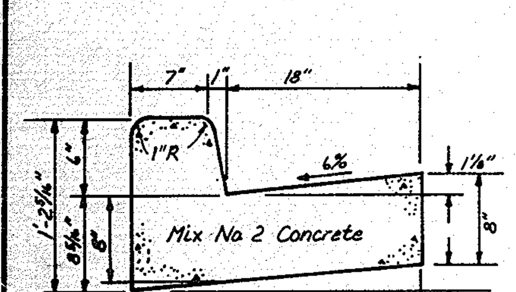


REVERSE 7" COMBINATION CURB & GUTTER
NO SCALE

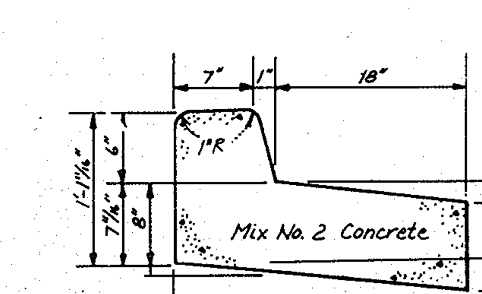


STANDARD 7" COMBINATION CURB & GUTTER
NO SCALE





STANDARD 6" COMBINATION CURB & GUTTER
NO SCALE



REVERSE 6" COMBINATION CURB & GUTTER
NO SCALE

Layer	Thickness
1½" Bituminous Conc. Surface	1½"
1½" Bituminous Conc. Base	1½"
5" Bituminous Conc. Base	5"
Prime; 8" Crusher Run Base Course or 6" Dense Graded Stabilized Aggregate Base Course	8" or 6"

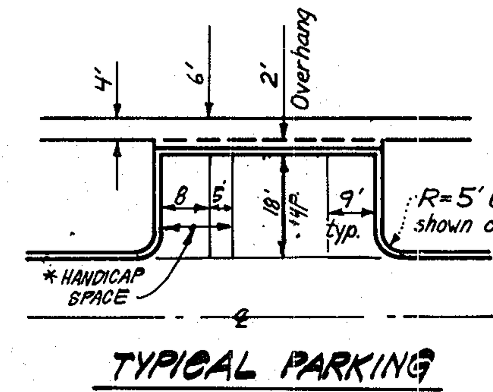
ALTERNATE PAVING SECTION
FOR OLD WATERLOO ROAD
NO SCALE
(SECTION P-5)

Layer	Thickness
Bituminous Conc. Surface	1"
Bituminous Conc. Base	2"
Prime; 5" Crusher Run Base Course or 4" Dense Graded Stabilized Aggregate Base Course	5" or 4"

ALTERNATE PAVING SECTION
FOR PARKING AREAS
NO SCALE
(SECTION P-1)

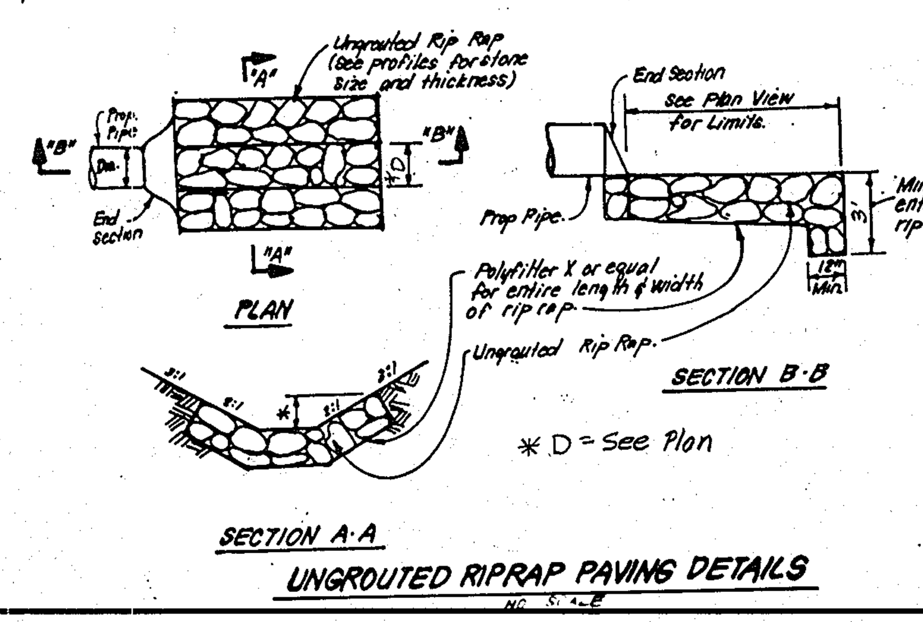
Layer	Thickness
Bituminous Conc. Surface	1½"
Bituminous Conc. Base.	4½"
Bituminous Conc. Base	5"

PAVING SECTION FOR
OLD WATERLOO ROAD
NO SCALE
(SECTION P-5)



TYPICAL PARKING
NO SCALE

* Two 8' Handicap Spaces may share one 5' Aisle



UNGROUTED RIPRAP PAVING DETAILS
NO SCALE

INFILTRATION TRENCH:

3.3.6. Construction Specifications

3.3.6.1. Timing

An infiltration trench shall not be constructed or placed in service until all of the contributing drainage area has been stabilized and approved by the responsible inspector.

3.3.6.2. Trench Preparation

Excavate the trench to the design dimensions. Excavated materials shall be placed away from the trench sides to enhance trench wall stability. Large tree roots must be trimmed flush with the trench sides in order to prevent fabric puncturing or tearing during subsequent installation procedures. The side walls of the trench shall be roughened where sheared and sealed by heavy equipment.

3.3.6.3. Fabric Laydown

The filter fabric roll must be cut to the proper width prior to installation. The cut width must include sufficient material to conform to trench perimeter irregularities and for a 6-inch minimum top overlap. Place the fabric roll over the trench and unroll a sufficient length to allow placement of the fabric down into the trench. Stones or other anchoring objects should be placed on the fabric at the edge of the trench to keep the lined trench open during windy periods. When overlaps are required between rolls, the upstream roll should lap a minimum of 2 feet over the downstream roll in order to provide a shingled effect. The overlap ensures fabric continuity or to ensure that the fabric conforms to the excavation surface during aggregate placement and compaction.

3.3.6.4. Stone Aggregate Placement and Compaction

The stone aggregate should be placed in lifts and compacted using plate compactors. As a rule of thumb, a maximum loose lift thickness of 12 inches is recommended. The compaction process ensures fabric conformity to the excavation sides, thereby reducing the potential for soil piping, fabric clogging, and settlement problems.

3.3.6.5. Overlapping and Covering

Following the stone aggregate placement, the filter fabric shall be folded over the stone aggregate to form a 6" minimum longitudinal lap. The desired fill soil or stone aggregate shall be placed over the lap at sufficient intervals to maintain the lap during subsequent backfilling.

3.3.6.6. Contamination

Care shall be exercised to prevent natural or fill soils from intermixing with the stone aggregate. All contaminated stone aggregate shall be removed and replaced with uncontaminated stone aggregate.

3.3.6.7. Voids Behind Fabric

Voids can be created between the fabric and excavation sides and shall be avoided. Removing boulders or other obstacles from the trench walls is one source of such voids. Natural soils should be placed in these voids at the most convenient time during construction to ensure fabric conformity to the excavation sides. Soil piping, fabric clogging, and possible surface subsidence will be avoided by this remedial process.

3.3.6.8. Unstable Excavation Sides

Vertically excavated walls may be difficult to maintain in areas where the soil moisture is high or where soft cohesive or cohesionless soils predominate. These conditions may require laying back of the side slopes to maintain stability; trapezoidal rather than rectangular cross sections may result.

3.3.6.9. Vegetative Buffer

A vegetative buffer of at least 20 feet (wider, if possible) shall be used to intercept surface runoff from all impervious areas.

3.3.6.10. Traffic Control

Heavy equipment and traffic shall be restricted from travelling over the infiltration areas to minimize compaction of the soil.

3.3.6.11. Observation Well

An observation well, as described in subsection 3.3.4.8 and Figure 3-5 shall be provided. The depth of the well at the time of installation will be clearly marked on the well cap.

3.3.7. Maintenance

Infiltration trenches shall be designed to minimize maintenance. However, it is recognized that all infiltration facilities are subject to clogging by sediment, oil, grease, grit and other debris. In addition, the performance and longevity of these structures is not well documented. Consequently, a monitoring observation well is required for all infiltration structures.

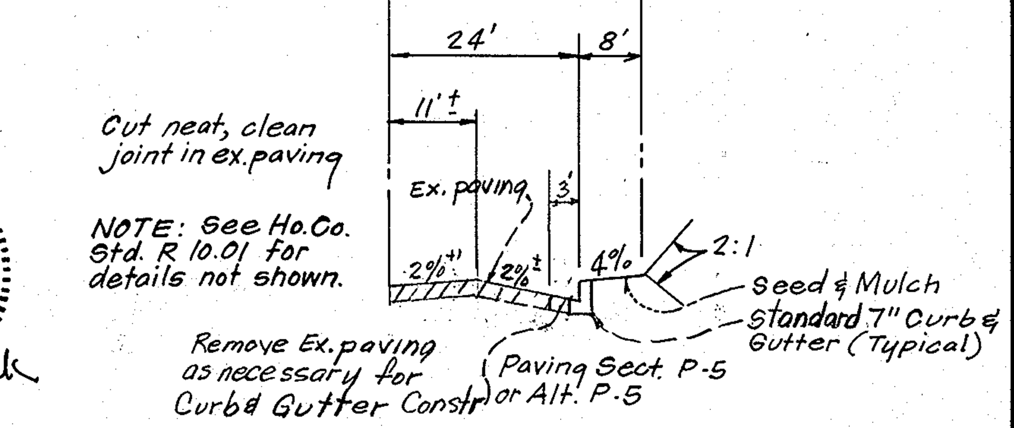
The observation well shall be monitored periodically. For the first year after completion of construction, the well should be monitored on a quarterly basis and after every large storm. It is recommended that a log book be maintained indicating the rate at which the facility dewaters after large storms and the depth of the well for each observation. Once the performance characteristics of the structure have been verified, the monitoring schedule can be reduced to an annual basis, unless the performance data indicate that a more frequent schedule is required.

Sediment build-up in the top foot of stone aggregates or the surface inlet should be monitored on the same schedule as the observation well. A monitoring well in the top foot of stone aggregate will be required when the trench has a stone surface. Sediment deposited shall not be allowed to build up to the point where it will reduce the rate of infiltration into the trench.

REVISION 1 2/12/14
FISHER COLLINS & CARTER INC.

PROFESSIONAL CERTIFICATION, 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. 13204, EXPIRATION DATE: NOVEMBER 3, 2014.

CHARLES J. CROVO, SR., P.E. — 2/12/14 DATE



TYPICAL HALF SECTION
OLD WATERLOO ROAD
(Minor Arterial, Design Speed = 40 mph)
NO SCALE

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

G. NELSON CLARK — 1-13-89 DATE

STATE OF MARYLAND · G. NELSON CLARK · NO. 7139 · REGISTERED · PROFESSIONAL ENGINEER — 1-13-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 3-15-89

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR — DATE 3.31.89
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 3-28-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 3/9/89
CHIEF BUREAU OF ENGINEERING — DATE 3-9-89

APPROVED
DIVISION of COMMUNITY PLANNING & LAND DEVELOPMENT
HOWARD COUNTY, MARYLAND
DATE 2-17-89

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."

Sydney L. Cousin /cey — Signature of Developer/Builder — 1/13/89 Date

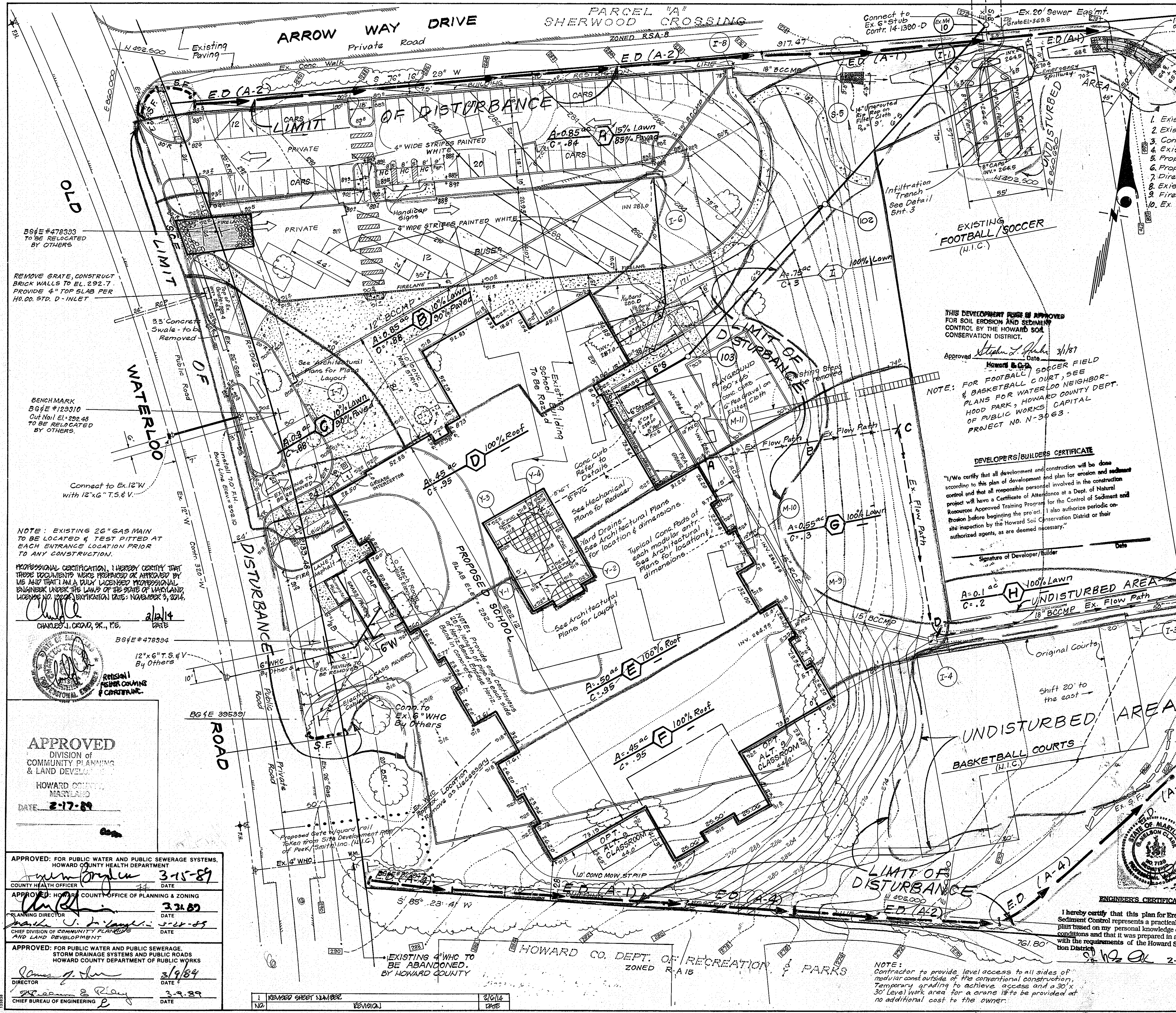
Reviewed for HOWARD S.C.D.
Name
and meets Technical Requirements
Signature — 3/1/89 Date
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED — 3/1/89 DATE

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (301) 381-7500 — BALTO. • (301) 621-8100 — WASH.

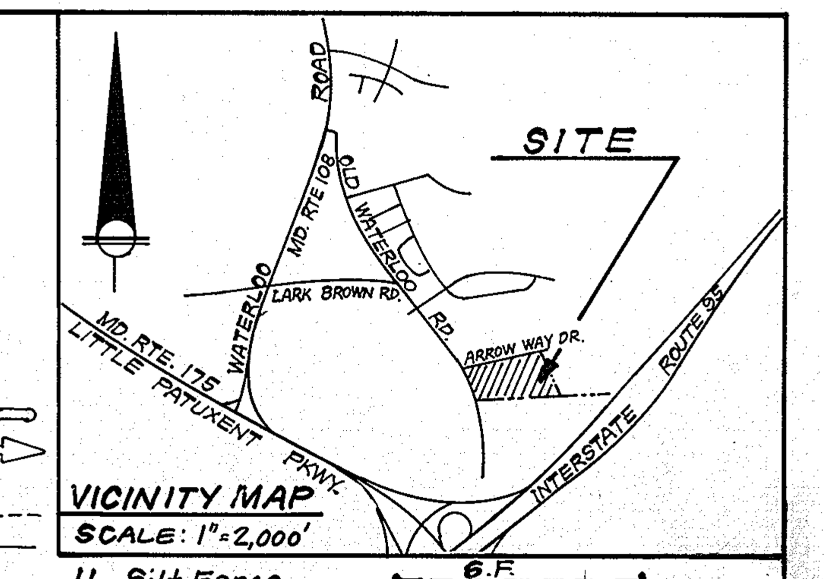
DESIGNED: JME	SITE DIAGRAM AND PAVING DETAILS	SCALE: As Shown
DRAWN: PER	DEEP RUN ELEMENTARY SCHOOL	DRAWING: 3 OF 30
CHECKED: JME	PART OF PARCEL 168 LIBER 252 FOLIO 546; 1ST ELECTION DISTRICT; HOWARD COUNTY, MARYLAND	JOB NO. 88-089
DATE: 1-31-89	FOR: HOWARD COUNTY DEPT. OF EDUCATION 10901 ROUTE 108 ELLICOTT CITY, MARYLAND 21043	FILE NO. 88-089-X

SDP 89-98



LEGEND

1. Existing Silt Fence — EX. S.F.
2. Existing Earth Dike — EX. E.D.
3. Contour Interval — 2 ft.
4. Existing Contour — 280
5. Proposed Contour — 280
6. Proposed Spot Elevation — +80⁰
7. Direction of Drainage
8. Existing Paving
9. Firelane
10. Ex. Flow Path — A Ex. Flow Path B
11. Silt Fence — S.F.
12. Earth Dike — E.D. (A-1)
13. Stabilized Construction Entrance — S.C.E.



VICINITY MAP
SCALE: 1" = 2,000'

GENERAL NOTES

1. All materials and construction to be in accordance with Howard County Road Construction Code and Specifications.
2. Coordinates are based on the Maryland State Plane as projected by Howard County monument # 2344005-R.
3. All driveways and parking to be privately owned and maintained.
4. Any damage to County owned rights-of-way to be corrected at the contractor's expense.
5. Installation of traffic control devices shall be in accordance with the latest edition of the "Manual of Uniform Traffic Control".
6. Topography was compiled from actual field survey.
7. The area shown is located on tax map No. 37, Parcel 168.
8. Trench bedding for storm drainage shall be in accordance with Howard County Std. S.D. G2.01.
9. Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location by digging test pits, by hand, at all utility crossings; well in advance of construction.
10. The contractor or developer shall contact the Construction Inspection / Survey Division 24 hours in advance of work at 992-2417 or 792-7272.
11. All downspout drains shall be connected to storm drains.
12. The developer agrees to work with the Dept. of Licenses & Inspections to resolve any problems caused by roof water discharge.
13. Handicap parking details shall be in accordance with the "Maryland Building Code for the Handicapped", Section 5.01-7.05 and details on sheet 2.
14. Recording reference: Liber 252, Folio 456.

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

Approved [signature] 3/1/89 Date
Howard S.C.D.

DEVELOPERS/BUILDERS CERTIFICATE

"I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."

Signature of Developer/Builder — Date

REVISED EX. RIP RAP OUTLET SEDIMENT TRAP II

Drainage Area = 9.6 Ac.
Storage Required = 17,280 c.f.
Storage Provided = 18,354 c.f.
Outlet Length = 27'
Depth = 3.5'
Top Crest El. = 253.0
Bottom El. = 248.50
Cleanout El. = 250.25
Channel Depth = 2.0'
Storage El. = 252.0
Embankment El. = 259.75

Reviewed for .... S.C.D. Name
and meets Technical Requirements
[signature] 3/1/89
Signature Date
U.S. Soil Conservation Service

NOTE: EXISTING 26" GAS MAIN TO BE LOCATED & TEST PITTED AT EACH ENTRANCE LOCATION PRIOR TO ANY CONSTRUCTION.

PROFESSIONAL CERTIFICATION, 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. 13204, EXPIRATION DATE: NOVEMBER 3, 2014.

[signature] 2/12/14
CHARLES J. CROVO, SR., P.E. — DATE

REVISION 1 FISHER COLLINS & CARTER INC.

APPROVED
DIVISION of COMMUNITY PLANNING & LAND DEVELOPMENT
HOWARD COUNTY, MARYLAND
DATE 2-17-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
[signature] 3-15-89
COUNTY HEALTH OFFICER — DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
[signature] 3.31.89
PLANNING DIRECTOR — DATE
[signature] 3-28-89
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[signature] 3/9/89
DIRECTOR — DATE
[signature] 3-9-89
CHIEF BUREAU OF ENGINEERING — DATE

NO.	REVISION	DATE
1	REVISED SHEET NUMBER	2/6/14

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

[signature] 2-22-89

ADDRESS CHART

P.168	6925 Old Waterloo Road				
Subdivision Name: DEEP RUN ELEMENTARY SCHOOL			Sect./Area: —		Lot/Parcel: 168
Plat No.: L.252 F.546	Block No.: 20	Zone: RSA-8	Tax Map No.: 37	Elec. Dist.: 1	Census Tr.: 6011
Water Code: DOG			Sewer Code: 2500000		

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (301) 381-7500 — BALTO. • (301) 621-8100 — WASH.

SEDIMENT AND EROSION CONTROL PLAN AND DRAINAGE AREA MAP

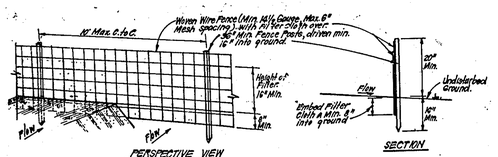
DEEP RUN ELEMENTARY SCHOOL

PART OF PARCEL 168 LIBER 252 FOLIO 546
1ST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FOR: HOWARD COUNTY DEPT. OF EDUCATION
10901 ROUTE 108
ELLICOTT CITY, MARYLAND 21043

DESIGNED	JME
DRAWN	CCM PER YLM
CHECKED	JME
DATE	1-31-89
SCALE	1" = 30'
DRAWING	4 OF 30
JOB NO.	88-089
FILE NO.	88-089-X

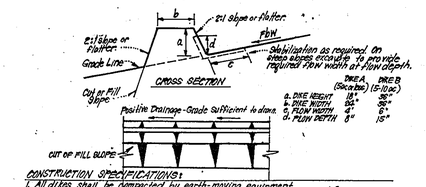
SDP 89-98



CONSTRUCTION SPECIFICATIONS:
1. Woven wire fence to be fastened securely to fence posts with wire ties or staples.
2. Filter Cloth to be fastened securely to woven wire fence with ties spaced every 24" at top and mid section.
3. When 2 sections of filter cloth adjoin each other they shall be overlapped by 6" and folded.
4. Maintenance shall be performed as needed and material removed when "Bulges" develop in silt fence.

POSTS: Steel either T or U Type or 2" Hardwood.
FENCE: Woven Wire, 14½ Gauge 6" Max. Mesh Opening.
FILTER CLOTH: Filter X, Mirafi 100X, Stabinka, T140N or Approvl. equal.
PREFABRICATED UNIT: GeoFab, Envirofence, or Approvl. equal.

SILT FENCE DETAIL (S)
NO SCALE



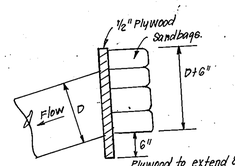
CONSTRUCTION SPECIFICATIONS:
1. All dikes shall be compacted by earth-moving equipment.
2. All dikes shall have positive drainage to an outlet.
3. Top width may be wider and side slopes may be flatter if desired, to facilitate crossing by construction traffic.
4. Final location should be adjusted as needed to utilize a stabilized safe outlet.
5. Earth dikes shall have an outlet that functions with a minimum of erosion. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin where either the site channel or the drainage area above the site are not adequately stabilized.
6. Stabilization shall be: (A) In accordance with standard specifications for seed and straw mulch or straw mulch if not in seeding season, (B) Flow channel as per chart below.

FLOW CHANNEL STABILIZATION

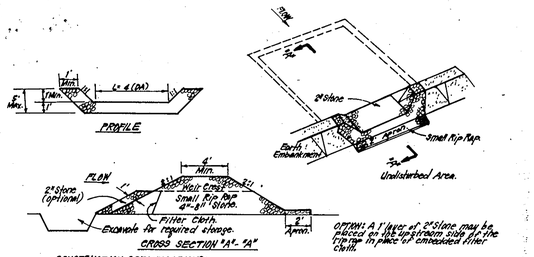
TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	0.5-3.0%	Seed & Straw Mulch	Seed or Straw Mulch
2	3.1 - 5.0%	Seed & Straw Mulch	Seed w/Jute, or Excelsior; Sod, 2" stone
3	5.1 - 6.0%	Seed w/Jute, or Sod, 2" stone	Lined Rip Rap 4"-8" Stone
4	6.1 - 20.0%	Lined Rip Rap 4-8" Stone	Engineering Design

A. Stone to be 2" Stone, or recycled concrete equivalent, in a layer at least 3" thick and be pressed into soil with construction equipment.
B. Rip Rap to be 4"-8" in a layer at least 8" thick, pressed into soil.
C. Approved equivalents can be substituted for any of the above materials.
7. Periodic Inspection and Required Maintenance must be provided after each rain.

EARTH DIKE DETAIL (E.D.)
NO SCALE

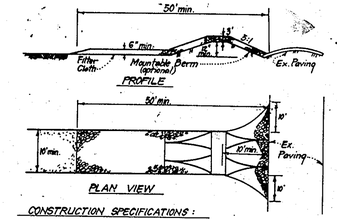


PIPE BLOCKING DETAIL
NO SCALE



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

STONE OUTLET SEDIMENT TRAP (S.O.S.T.) ST-V
NO SCALE



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

STABILIZED CONSTRUCTION ENTRANCE (SCE)
NO SCALE

SEDIMENT CONTROL NOTES

1) A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (992-2437)
2) All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
3) Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
4) All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chaper 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5) All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52.) Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6) All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector
7) Site Analysis:
   Total Area of Site 11.6 Acres
   Area Disturbed 8.0 Acres
   Area to be roofed or paved 3.0 Acres
   Area to be vegetatively stabilized 1.0 Acres
   Total Cut 6,000 Cu. yds
   Total Fill 14,600 Cu. yds
   Offsite waste/borrow area location N/A
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 must be provided, if deemed necessary by the Howard County DPW sediment control inspector.
10) On all sites wich disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
11) If houses are to be constructed on an "As-Sold" basis, at random, Single Lot Sediment Control as shown below shall be implemented. N/A
12) All pipes to be blocked at the end of each day (see detail below).
13) The total amount of straw bale dikes/silt fence equals 80 L.F.

CONSTRUCTION SEQUENCE

	# OF DAYS
1. Obtain Grading Permit	2
2. Install sediment & erosion control measures	7
3. Clear & rough grade site	21
4. Construct utilities & all storm drains except Str. I-1	90
5. Fine grade & construct paving & building	180
6. Stabilize all other disturbed areas on site in accordance with standards and specs.	14
7. Upon approval of the sediment control inspector remove sediment & erosion control measures and stabilize	14
8. After all areas on site are stabilized, construct infiltration trench and storm drainage Str. I-1 and stabilize area disturbed	5

Note: Existing trap as shown must be installed in accordance with SDP 88-152 prior to any grading per this plan.

PROFESSIONAL CERTIFICATION. 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. 19291, EXPIRATION DATE: NOVEMBER 3, 2014.

STATE OF MARYLAND — CHARLES A. GRONO — No. 19291 — PROFESSIONAL ENGINEER

2/10/14
DATE

CHARLES A. GRONO, JR., P.E.

REVISION 1 FISHER COLLINS & CARTER INC.

APPROVED
DIVISION of COMMUNITY PLANNING & LAND DEVELOPMENT
HOWARD COUNTY, MARYLAND
DATE 2-17-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 3-15-89

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR — DATE 3.21.89
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 3-23-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 3/9/89
CHIEF BUREAU OF ENGINEERING — DATE 3-9-89

Reviewed for HOWARD S.C.D.
Name
and meets Technical Requirements
Signature — Date 3/1/89
U.S. Soil Conservation Service

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

Approved — Date 3/1/89

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."

Sydney L. Cousin / cey — Signature of Developer/Builder — Date 11/11/88

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

G. Nelson Clark — Date 11-10-88

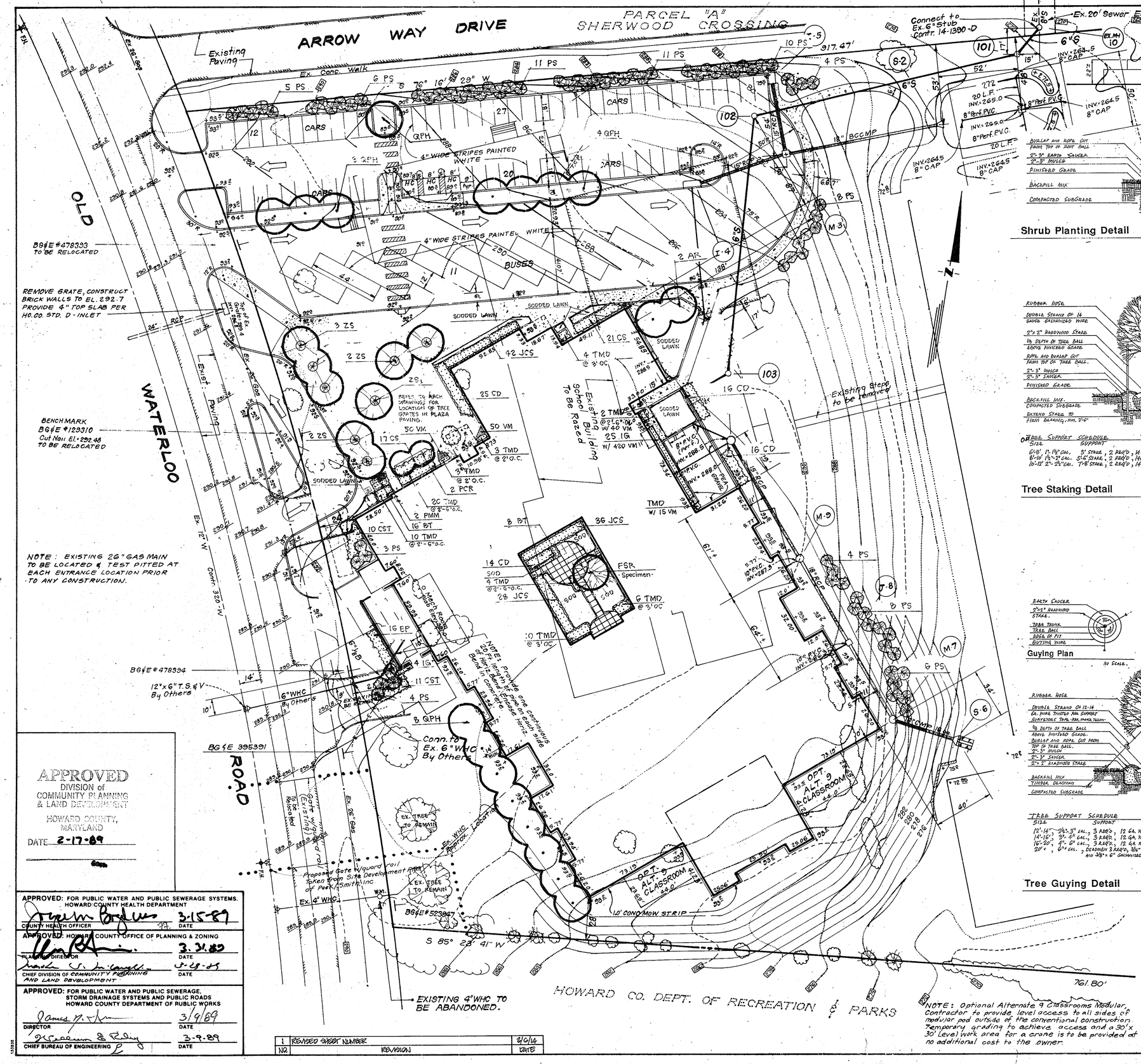
STATE OF MARYLAND — G. NELSON CLARK — No. 7139 — REGISTERED PROFESSIONAL ENGINEER — 11-10-88

NO.	REVISION	DATE
1	REVISED SHEET NUMBER	2/10/14

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (301) 381-7500 — BALTO. • (301) 621-8100 — WASH.

DESIGNED DAB	SEDIMENT AND EROSION CONTROL PLAN	SCALE 1"=30'
DRAWN CCM YLM	DEEP RUN ELEMENTARY SCHOOL	DRAWING 5 OF 20
CHECKED DAB	PART OF PARCEL 168 LIBER 252 FOLIO 546 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 88-089
DATE 1-31-89	FOR: HOWARD COUNTY DEPT. OF EDUCATION 10901 ROUTE 108 ELLICOTT CITY, MARYLAND 21043	FILE NO. 88-089X

SDP 89-98



NOTE: Optional Alternate 9 Classrooms Modular. Contractor to provide level access to all sides of modular pod outside of the conventional construction. Temporary grading to achieve access and a 30'x 30' Level work area for a crane is to be provided at no additional cost to the owner.

Plant List

KEY	QTY.	BOTANICAL/COMMON NAME	SIZE & CONDITION	REMARKS
AR	2	Acer rubrum 'Red Sunset'/ Red Sunset Maple	3 1/2"-4" Cal. B&B	
~~CK~~		~~Cornus kousa/Kousa Dogwood~~	~~8'-10' Ht. B&B~~	~~Treeform~~
CST	21	Cornus stolonifera/ Red Twig Dogwood	2'-3'Ht. CONT.	@3' OC
CD	79	Cotoneaster dammeri 'Skogsholmen'/ Christmas Carpet Cotoneaster	18"-24" Spd. CONT.	@3' OC
CS	98	Cotoneaster salicifolia 'Repandens'/ Willowleaf Cotoneaster	18"-24" Spd. CONT.	@3' OC
FSR	1	Fagus sylvatica 'Riversii'/ River's Purple Beech	4"-4 1/2" Cal. B&B	Specimen
IG	29	Ilex glabra 'Compacta'/ Dwarf Inkberry	18"-24" Spd. B&B	@2' OC Hedge
JCS	106	Juniperus chinensis 'Sargentii'/ Sargent's Juniper	18"-24" Spd. CONT.	@2' 6" OC
PS	80	Pinus strobus/White Pine	7'-8' Ht. B&B	
PCR	2	Pyrus calleryana 'Redspire'/ Redspire Pear	2 1/2"-3" Cal. B&B	
QPH	16	Quercus phellos/Willow Oak	3"-3 1/2" Cal. B&B	
TMD	69	Taxus cuspidata 'Densiformis'/ Dense Japanese Yew	24"-30" Ht. B&B	Spacing varies: see Plan
VM	575	Vinca minor/Periwinkle	1 yr. plants; 2 1/2" PP	@6" OC
EP	16	Euonymus alatus 'Manhattan'/ Spreading Euonymus	24" - 30" Ht. CONT.	@ 3' O.C.
ZS	8	Zelkova serrata / Japanese Zelkova	3½"-4" Cal. B&B	
BT	24	Berberis thunbergii 'Crimson Pygmy'/ Crimson Pygmy Barberry	15" - 18" Ht. CONT.	@ 2' O.C.
PMW	2	Pinus mugo mugo / Dwarf Mugo Pine	15" - 18" Spd. CONT.	@ 2' O.C.

Planting Notes

1. All plant material installed shall be full and heavy and conform to A.A.N. specifications and be installed in full conformance with project specifications.
2. All areas disturbed by construction activities but not otherwise planted or paved shall be hydroseeded as per project specifications.
3. All trees shall be matched within groups.
4. Plant quantities are provided for the convenience of the contractor only - if discrepancies exist between the plan and the plant list, the quantities shown on the plan shall take precedence, and contractor shall notify Architect of the disrepancies.
5. THIS PLAN IS TO BE USED FOR PLANTING ONLY!

PROFESSIONAL CERTIFICATION. 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. 12904, EXPIRATION DATE: NOVEMBER 3, 2014.

CHARLES J. CORNO, SR., P.E. — DATE 2/6/14

REVISION 1 FISHER COLLINS & CARTER INC.

APPROVED
DIVISION of COMMUNITY PLANNING & LAND DEVELOPMENT
HOWARD COUNTY, MARYLAND
DATE 2-17-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT	
COUNTY HEALTH OFFICER	DATE 3-15-89
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING	
PLANNING DIRECTOR	DATE 3.31.89
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	DATE 3-29-89
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
DIRECTOR	DATE 3/9/89
CHIEF BUREAU OF ENGINEERING	DATE 3-9-89

NO.	REVISION	DATE
1	REVISED SHEET NUMBER	2/6/14

KILDUFF NAGY • LANDSCAPE ARCHITECTS
10726 Baltimore Avenue Beltsville, MD 20705
(301) 595-4955
Land Planning · Landscape Architecture · Park and Recreation Planning

STATE OF MARYLAND EDWARD F. KILDUFF NO. 3 REGISTERED LANDSCAPE ARCHITECT

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 – BALTO. • (301) 621-8100 – WASH

DESIGNED CFF	Landscape Plan DEEP RUN ELEMENTARY SCHOOL PART OF PARCEL 16B LIBER 252 FOLIO 546 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE 1" = 30'
DRAWN CFF		DRAWING 6 of 30
CHECKED MGN		JOB NO. 9874
DATE 12-1-88 REV 1-10-89	FOR: HOWARD COUNTY DEPT. OF EDUCATION 10901 ROUTE 108 ELLICOTT CITY, MARYLAND 21043	FILE NO. 88-089X

SDP 89-98