Index of Sheets

GENERAL NOTES

1. Contractor to verify location of all utilities prior to construction. Utilities may not be limited to those shown hereon.
2. Contractor's vehicles and construction equipment shall stay on designated roadways and pathways as shown on the plan at all times.
3. Where fence removal is required, the staff of Historic St. Mary's City will be responsible for removal and salvage. Contractor shall indicate to Staff after contract award the extent of fencing they wish to have removed.
4. Where feasible all dirt removed for excavation shall be utilized on shoulders within the same general vicinity as it was removed as indicated by the archeologist for Historic St. Mary's City.
5. No vehicular traffic or construction equipment will be permitted to utilize the existing bridge near the Visitor's Center.
6. Stockpile areas for excavated material shall be placed on filter fabric and located uphill of the excavation.
7. Contractor is responsible for any erosion and sediment controls to insure sediment laden runoff does not leave the site.
8. Excavation is limited to those areas approved by the Historic St. Mary's City archeologist. An archeologist will be on-site during any grading operations to prevent any unauthorized excavations.
9. All landscape timbers are to be pressure treated.
10. Trees shall only be removed with specific authorization from the Owner. Existing trees shall be protected per Section 2110 of the Project Manual.
11. Colored asphalt samples are available for review at the Historic St. Mary's City Administrative Office.

Legend

Existing Contours
Proposed Contours — 140
Existing Tree Line
Existing Edge of Pavement
Proposed Edge of Pavement
Benchmark No. & Location — BM #1
Existing Storm Drain — 15" RCP
Proposed Storm Drain — 15" RCP
Earth Dike
Perimeter Dike
Silt Fence — S — S — S
Limits of Disturbance
Soils Type Division Line
Drainage Flow Arrow

Abbreviations

CMP——Corrugated Metal Pipe
CMPA——Corrugated Metal Pipe Arch
RCP——Reinforced Concrete Pipe
RCEP——Reinforced Concrete Elliptical Pipe
LF——Linear Feet
SF——Square Feet
Elev.——Elevation
Inv.——Invert
YR——Year
BRL——Building Restriction Line
Typ.——Typical
SHA——State Highway Administration
ALT2——Aluminized Steel Type 2 Spiral Rib Pipe
Esmt.——Easement
PUE——Public Utility Easement
SD——Storm Drain

Vertical Control References

Vertical Control: NGVD 1929
Benchmark #1 – Monument City–1 N 112,045.153 / E 962,359.229
Elevation = 34.54
Benchmark #2 – Monument City–4 N 128,750.478 / E 962,664.449
Elevation= 35.28

Horizontal Control References

NAD 83/91 Maryland State Plane Coordinate System

REVISIONS		
Date	By	Description
6/29/99	PHM	Revised per MDE Comments
11/19/99	PHM	Revised per Owners Request

FOR REFERENCE ONLY

CONSTRUCTION PLANS
for

PATHWAY AND PARKING LOT IMPROVEMENTS

at

HISTORIC ST. MARY'S CITY

FIRST ELECTION DISTRICT
ST. MARY'S COUNTY, MARYLAND

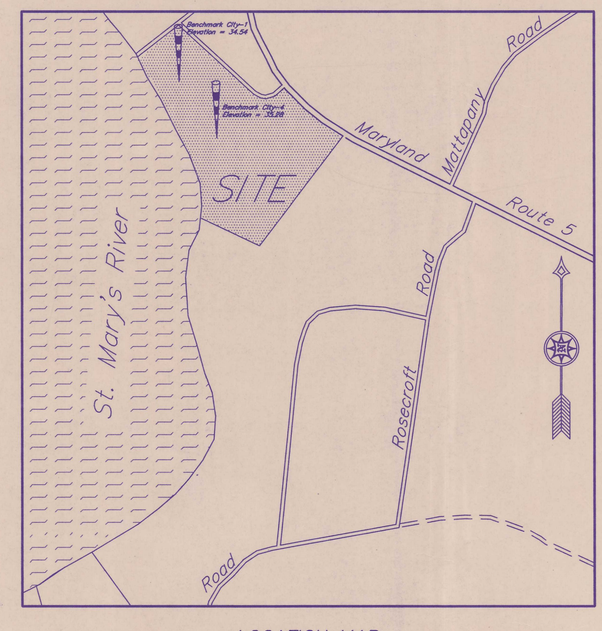
DGS PROJECT NUMBER ~~SM 000 - 943 - 001~~

STATE OF MARYLAND BOARD OF PUBLIC WORKS

PARRIS N. GLENDENING, GOVERNOR
WILLIAM DONALD SCHAEFER, COMPTROLLER
RICHARD N. DIXON, TREASURER

DEPARTMENT OF GENERAL SERVICES

PETA N. RICHKUS, SECRETARY
STATE OFFICE BUILDING
301 WEST PRESTON STREET
BALTIMORE, MARYLAND 21201



LOCATION MAP
Scale: 1" = 600'

Dept. of General Services Approval

Paul Ford, DGS — 1-31-2000
Project Administrator — Date

W. Richard Jones — 2/15/00
Director, Engr. & Constr. — Date

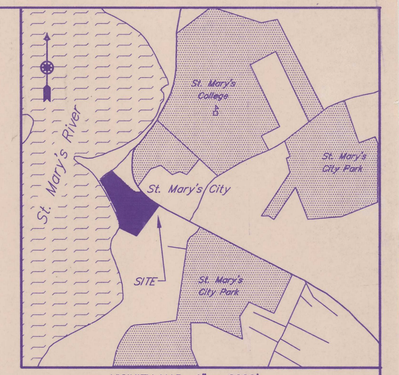
OWNER/APPLICANT/DEVELOPER

HISTORIC ST. MARY'S CITY
P.O. BOX 39
ST. MARY'S CITY, MARYLAND 20686
(301) 862-0990

MARYLAND STANDARD EROSION AND SEDIMENT CONTROL NOTES

1. The contractor shall notify the Administration (WMA) at (410) 631–3510 seven (7) days before commencing any land disturbing activity and, unless waived by the Administration, shall be required to hold a pre–construction meeting between project representatives and a representative of WMA.
2. The contractor must notify WMA in writing and by telephone at the following points:
   A. The required pre–construction meeting.
   B. Following installation of sediment control measures.
   C. During the installation of sediment basins (to be converted into permanent stormwater management structures) at the required inspection points (See Inspection Checklist on plan). Notification prior to commencing construction of each step is mandatory.
   D. Prior to removal or modification of any sediment control structure(s).
   E. Prior to removal of all sediment control devices.
   F. Prior to final acceptance.
3. The contractor shall construct all erosion and sediment control measures per the approved plan and construction sequence and, shall have them inspected and approved by the agency inspector or WMA inspector prior to beginning any other land disturbance. Minor sediment control device location adjustments may be made in the field with the approval of the WMA Inspector. The contractor shall ensure that all runoff from disturbed areas is directed to the sediment control devices, and shall not remove any erosion or sediment control measure without prior permission from WMA inspector and agency inspector. The contractor must obtain prior agency approval and WMA approval for changes to the Sediment Control Plan and/or Sequence of Construction.
4. The contractor shall protect all points of construction ingress and egress to prevent the deposition of materials onto public roads. All materials deposited onto public roads shall be removed immediately.
5. The contractor shall inspect daily and maintain continuously in an effective operating condition all erosion and sediment control measures until such time as they are removed with prior permission from WMA inspector and agency inspector.
6. All sediment basins, trap embankments and slopes, perimeter dikes, swales and all disturbed slopes steeper or equal to 3:1 shall be stabilized with sod or seed and anchored straw mulch, or other approved stabilization measures, as soon as possible but no later than seven (7) calendar days after establishment. All areas disturbed outside of the perimeter sediment control system must be minimized. Maintenance must be performed as necessary to ensure continued stabilization. (Requirement for stabilization may be reduced to three (3) days for sensitive areas).
7. The contractor shall apply sod or seed and anchored mulch, or other approved stabilization measures to all disturbed areas and stockpiles within fourteen (14) calendar days after stripping and grading activities have ceased in the area. Maintenance shall be performed as necessary to ensure continued stabilization. (Requirement may be reduced to (7) days for sensitive areas).
8. Prior to removal of sediment control measures, the contractor shall stabilize and have established permanent stabilization for all contributory disturbed areas using sod or an approved permanent seed mixture with required soil amendments and an approved anchored mulch. Wood fiber mulch may only be used in seeding season where the slope does not exceed 10% and grading has been done to promote sheet flow drainage. Areas brought to finished grade during the seeding season shall be permanently stabilized as soon as possible, but no later than fourteen (14) calendar days after establishment. When property is brought to finished grade during the months of November through February, and permanent stabilization is found to be impractical, temporary seed and anchored straw mulch shall be applied to disturbed areas. The final permanent stabilization of such property shall be applied by March 15 or earlier if ground and weather conditions allow.
9. The site's approval letter, approved Erosion and Sediment Control Plans, daily log books and test reports shall be available at the site for inspection by duly authorized officials of WMA and agency responsible for project.
10. Surface drainage flows over unstabilized cut and fill slopes shall be controlled by either preventing drainage flows from traversing the slopes or by installing protective devices to lower the water downslope without causing erosion. Dikes shall be installed and maintained at the top of cut or fill slopes until the slope and drainage area to it are fully stabilized, at which time they must be removed and final grading done to promote sheet flow drainage. Protective methods must be provided at points of concentrated flow where erosion is likely to occur.
11. Permanent swales or other points of concentrated water flow shall be stabilized with sod or seed with an approved erosion control matting, riprap or by other approved stabilization measures.
12. Temporary sediment control devices may be removed, with permission of WMA Inspector and agency inspectors, within thirty (30) calendar days following establishment of permanent stabilization in all contributory drainage areas. Stormwater management structures used temporarily for sediment control shall be converted to the permanent configuration within this time period as well.
13. No permanent cut or fill slope with a gradient steeper than 3:1 will be permitted in lawn maintenance areas. A slope gradient of up to 2:1 will be permitted in non–maintenance areas provided that those areas are indicated on the erosion and sediment control plan with a low–maintenance ground cover specified for permanent stabilization. Slope gradient steeper than 2:1 will not be permitted with vegetative stabilization.
14. For finished grading, the contractor shall provide adequate gradients so as to: prevent water from standing on the surface more than twenty–four (24) hours after the end of a rainfall except in designated drainage courses and swale flow areas which may drain as long as forty–eight (48) hours after the end if a rainfall, areas designed to have standing water shall not be required to meet this requirement.
15. Sediment traps or basins are not permitted within 20 feet of a foundation which is existing or under conction. No structure may be constructed within 20 feet of an active sediment trap or basin.
16. The WMA Inspector has the option of requiring additional safety or sediment control measures, if deemed necessary.
17. All trap depth dimensions are relative to the outlet elevation. All traps must have a stable outfall. All traps and basins shall have stable inflow points.
18. Vegetative stabilization shall be performed in accordance with the Standards and Specifications for Soil Erosion and Sediment Control. Refer to appropriate specifications for temporary seeding, permanent seeding, mulching sodding and ground covers.
19. Temporary sediment trap(s) shall be cleaned out and restored to the original dimensions when sediment has accumulated to a point one half (1/2) the depth between the outlet crest and the bottom of the trap. Sediment basins shall be cleaned out and restored to the original dimensions when sediment has accumulated to one half (1/2) the depth between the dewatering elevation and the bottom of the basin.
20. Sediment removed from traps (and basins) shall be placed and stabilized in approved areas, but not within a floodplain, wetland or tree–save area. When pumping sediment laden water, the discharge must be directed to a sediment trapping device prior to release from the site. A sump pit may be used if sediment traps themselves are being pumped out.
21. When deemed appropriate by the engineer or inspector, sediment basins and traps may need to be surrounded with an approved safety fence. The fence must conform to local ordinances and regulations. The developer or owner shall check with local building officials on applicable safety requirements. Where safety fence is deemed appropriate and local ordinances do not specify fencing sizes and types, the following shall be used as a minimum standard: The safety fence must be made of welded wire and at least 42 inches high, have posts spaced no farther apart than 8 feet, have mesh openings no greater than 2 inches in width and 4 inches in height with a minimum of 14 gauge wire. Safety fence must be maintained and in good condition at all times.
22. Sediment control for utility construction for areas outside of designed controls or as directed by engineer or WMA Inspector:
   (a) Call "Miss Utility" at 1–800–257–7777 48 hours prior to the start of work.
   (b) Excavated trench material shall be placed on the high side of the trench.
   (c) Trenches for utility installation shall be backfilled, compacted and stabilized at the end of each working day. No more trench shall be opened than can be completed the same day, unless;
   (d) Temporary silt fence shall be placed immediately downstream of any disturbed area intended to remain disturbed for more than one day.
23. Off–site spoil or borrow areas on State or Federal property must have prior approval by WMA and other applicable State, Federal and local agencies otherwise, approval must be granted by the local authorities. All waste and borrow areas off–site must be protected by sediment control measures and stabilized.
24. Sites where infiltration devices are used for the control of stormwater extreme care must be taken to prevent runoff from unstabilized areas from entering the structure during construction. Sediment control devices placed in infiltration areas must have bottom elevations at least two (2) feet higher than the finished grade bottom elevation of the infiltration practice. When converting a sediment trap to an infiltration device, all accumulated sediment must be removed and disposed of prior to final grading of infiltration device.
25. When storm drain system outfall is directed to a sediment trap or sediment basin and the system is to be used for temporary conveying sediment laden water, all storm drain inlets in non–sump areas shall have temporary asphalt berms constructed at the time of base paving to direct gutter flow into the inlets to avoid surcharging and overflow of inlets in sump areas.
26. Site Information:

Total Area of Site	835 acres
Total Disturbed	5.2 acres
Area to be roofed or paved	1.68 ac, or 73,387 S.F.
Total Cut	250 CY
Total Fill	2,200 CY
Offsite Waste/borrow area Location	An approved location



VICINITY MAP 1" = 2000'

OWNER'S/DEVELOPER'S CERTIFICATION

We hereby certify that all clearing, grading, construction and or development will be done pursuant to this plan and that any responsible personnel involved in the construction project will have a certificate of attendance of a Maryland Department of the Environment approved program for the control of sediment and erosion before beginning the project. We hereby authorize the right of entry for periodic on–site evaluation by State of Maryland, Department of the Environment, Compliance Inspectors.

12/14/99 — Date
Bruce Metzger — Owner/Developer Signature
#3030 — Card No.
Paul Ford — Printed Name and Title

STANDARD STABILIZATION NOTE

Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within seven (7) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1); and fourteen days (14) as to all other disturbed or graded areas on the project site.

DESIGN CERTIFICATION

I hereby certify that this plan has been designed in accordance with the 1994 Standards and Specifications for Soil Erosion and Sediment Control or current revisions thereof, and Department of the Environment Stormwater Management Regulations.

11-30-99 — Date
Designer's Signature
16422 — MD Registration No.
Patrick Mudd — Printed Name

STATE OF MARYLAND — PATRICK HENRY MUDD — 16422 — REGISTERED PROFESSIONAL ENGINEER

CONSTRUCTION PLANS
for

PATHWAY AND PARKING LOT IMPROVEMENTS

at

HISTORIC ST. MARY'S CITY

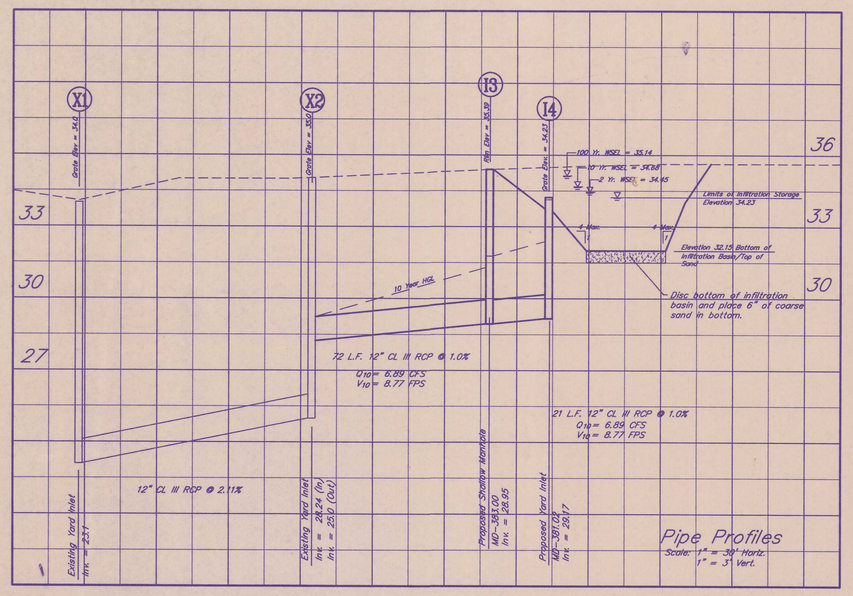
Prepared By

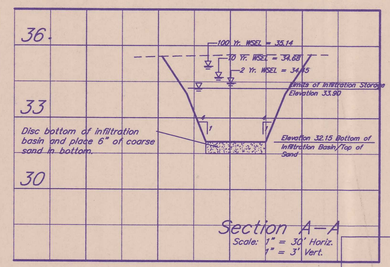
MUDD ENGINEERING, INC.

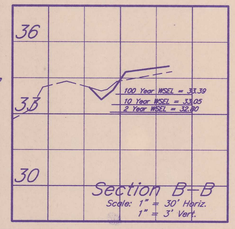
P.O. Box 1022
Lexington Park, Maryland 20653
301–862–5282

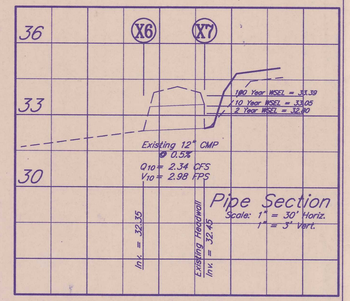
Date: May 5, 1998 *Drawing Name: COV.dwg* *Sheet 1 of 4*

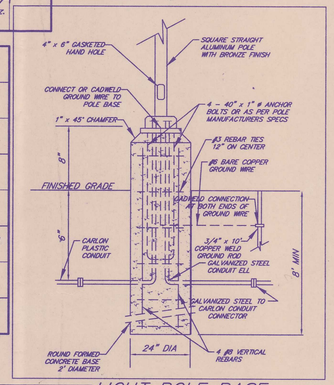
10' width is not consistent, doesn't need to be (no additional excavation should be done)



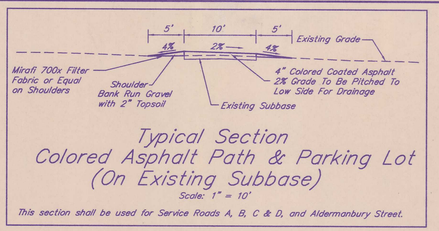






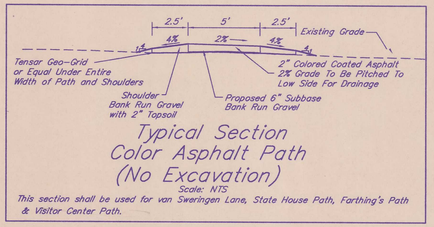


LIGHT POLE BASE
NTS



Typical Section
Colored Asphalt Path & Parking Lot
(On Existing Subbase)
Scale: 1" = 10'

This section shall be used for Service Roads A, B, C & D, and Aldermanbury Street.



Typical Section
Color Asphalt Path
(No Excavation)
Scale: NTS

This section shall be used for van Sweringen Lane, State House Path, Farthing's Path & Visitor Center Path.

INFILTRATION BASIN DESIGN NOTES

1. Excavation

Initial basin excavation should be carried to within 1 foot of the final elevation of the basin floor. Final excavation to the finished grade should be deferred until all disturbed areas of the watershed have been stabilized or protected. The final phase excavation should remove all accumulated sediment. Relatively light tracked equipment is recommnded for this operation to avoid compaction of the basin floor. After final grading is completed, the basin floor should be deeply tilled by means of rotary tillers or disc harrows to provide a well-aerated, highly porous surface texture.

2. Lining Material

Infiltration basins may be lined with a 6 to 12 inch layer of filter material such as coarse sand to help prevent buildup of impervious deposits on the soil surface. The filter layer can be replaced or cleaned when it becames clogged. When a 6-inch layer of coarse organic material is specified for discing (such as hulls, leaves, stems, etc.) or spading into the basin floor to increase the permeability of the soils, the basin floor should be soaked or inundated for a brief period, then allowed to dry subsequent to this operation. This induces the organic material to decay rapidly, loosening the upper soil layer.

3. Establishing dense vegetation on the basin side slopes and floor is recommended. A dense vegetative stand will not only prevent erosion and sloughing, but will also provide a natural means of maintaining relatively high infiltration rates. Erosion protection of inflow points to the basin shall also be provided. Removal of accumulated sediment is a problem only at the basin floor. Little maintenance is normally required to maintain the infiltration capacity of slope areas.

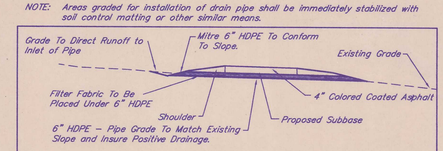
4. Selection of suitable vegetative materials for the side slopes and all other areas to be stabilized with vegetation and application of required fertilizer and mulches shall be done in accordance with Maryland Standards and Specifications for Soil Erosion and Sediment Control. Local Extension Agencies should also be consulted.

5. Maintenance and Inspection Schedule

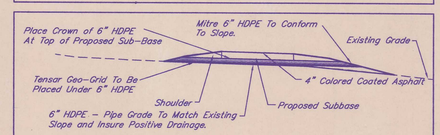
Infiltration basin must be inspected on a routine basis to ensure that it is functioning properly. Inspection can be on a semiannual basis but should always be conducted following major storms.

If standing water consistantly remains in pond basin for longer than 72 hours after storm events, sediment removal and tilling of basin floor will be required. Dewater pond by approved methods. After basin floor has completely dried, remove all sediment from floor. Rotary till or disc basin floor using light tractors. After tilling, basin floor should be level, smooth and free of ridges. Place a 6 to 12 inch layer of coarse sand filter material over basin floor.

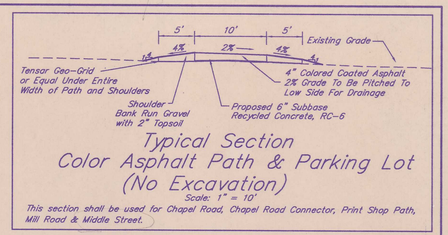
NOTE: Areas graded for installation of drain pipe shall be immediately stabilized with soil control matting or other similar means.



Typical Drain Pipe Installation
For Paths On Existing Sub-Base
Not To Scale



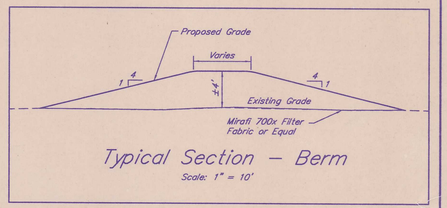
Typical Drain Pipe Installation
For Paths With No Excavation Permitted
Not To Scale



Typical Section
Color Asphalt Path & Parking Lot
(No Excavation)
Scale: 1" = 10'

This section shall be used for Chapel Road, Chapel Road Connector, Print Shop Path, Mill Rood & Middle Street.

NOTE:
1. In Parking lot area, for fill depths over 6" on existing ground, use clean fill dirt on filter fabric, compacted to 95%. Use recycled concrete, RC-6 as base fill between earth and bottom of asphalt, and bank run gravel as base fill between existing gravel and bottom of asphalt as needed.
2. The proposed shoulders shall be immediately stabilized after being placed in position.
3. Contractor shall use Roundup or other approved herbicide to kill all vegetation prior to placing any filter fabric or base materials.



Typical Section - Berm
Scale: 1" = 10'

PAVING SPECIFICATIONS

	PAVING SECTION	COLOR
BAROQUE ROADS		
Middle Street	4" BC Asphalt	Campground
Mill Road	4" BC Asphalt	Campground
Chapel Road	4" BC Asphalt	Campground
Aldermanbury Street	4" BC Asphalt	Campground
Van Sweringen Lane [1]	2" BC Asphalt	Campground
MODERN ROADS		
Service Roads A[2], B, C & D	4" BC Asphalt	Bedrock
State House Path	2" BC Asphalt	Bedrock
Farthings Path	2" BC Asphalt	Bedrock
Print Shop Path [3]	4" BC Asphalt	Bedrock
Visitor Center Path	2" BC Asphalt	Bedrock
PARKING LOT [4]	3" BC Asphalt	Bedrock
	1" SF Asphalt	

NOTE: Baroque Roads are to have an irregular paving edge.
[1] If ALTERNATE #3 is accepted.
[2] If ALTERNATE #1 is accepted.
[3] If ALTERNATE #2 is accepted.
[4] If ALTERNATE #4 is accepted.

SEQUENCE OF CONSTRUCTION
Pathways

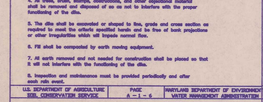
1. The contractor shall notify MDE Enforcement Division at least seven (7) days prior to commencing clearing or grading at (410) 631-3510 or Sediment and Storm Water Management, 2500 Broening Hwy., Building 30, Baltimore, MD 21224
2. Contractor to insure that sediment and sediment laden runoff is not tracked onto public rights of way, or allowed to leave the site untracted.
3. Install perimeter controls as indicated on the plan. (1 Day)
4. Clear and grade pathways where necessary. (3 Weeks)
   Temporarily seed areas not being worked.
5. Construct pathways. (1 Month)
11. Stabilize all disturbed areas. (2 Days)
16. Obtain Inspectors permission to remove sediment controls.
17. Remove perimeter control devices. (1 Day)

conduct

SEQUENCE OF CONSTRUCTION
Parking Area

1. The contractor shall notify MDE Enforcement Division at least seven (7) days prior to commencing clearing or grading at (410) 631-3510 or Sediment and Storm Water Management, 2500 Broening Hwy., Building 30, Baltimore, MD 21224
2. Install Stabilized Construction Entrances and perimeter controls. Meet with Inspector before proceeding. (1 Day)
3. Grade and stabilize ditch along MD. Rte. 584 (2 Days)
4. Clear and rough grade site (except stockpile area) and temporarily seed areas not being worked. (1 Week)
5. Install storm drains with inlet protection. (1 Week)
6. Grade a swale from the parking lot low point to inlet 1-4 and stabilize. (2 Days)
7. Install asphalt parking lot and pathways. (2 Weeks)
8. Remove Stockpile Area. (1 Day)
9. Rough grade stockpile area. (1 Week)
10. Final site grading and stabilization. (1 Week)
11. Construct berms to plan elevations. (2 Days)
12. Stabilize all disturbed areas. (2 Weeks)
13. Construct infiltration basin and stabilize. (2 Weeks)
14. After infiltration basin is stabilized, regrade swale from parking lot low point to basin and stabilize. (1 Day)
15. Install landscaping around infiltration basin. (2 Weeks)
16. Install landscape timbers & erect lights. (2 Weeks)
17. Obtain Inspectors permission to remove sediment controls.
18. Remove perimeter control devices. (1 Day)

DETAIL 1 - EARTH DIKE



FLOW CHANNEL STABILIZATION
GRADE 0.5% MIN. 10% MAX.

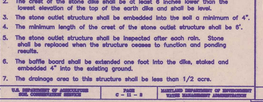
1. Sod and cover with straw mulch.
2. Seed and cover with Erosion Control Matting or line with sod.
3. 4" - 7" stone or recycled concrete equivalent pressed into the soil 7" minimum

Construction Specifications

1. All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.
2. Runoff directed from a disturbed area shall be conveyed to a sediment trapping device.
3. Runoff directed from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non-erosive velocity.
4. All trees, brush, stumps, obstructions, and other objectionsl material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.
5. The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.
6. Fill shall be compacted by earth moving equipment.
7. All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.
8. Inspection and maintenance must be provided periodically and after each rain event.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE A-1 & 6 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 19 - STONE OUTLET STRUCTURE



Construction Specifications

1. Crushed stone shall be used. Gravel may be used if crushed stone is not available. The stone shall be 2"-3" in size.
2. The crest of the stone dike shall be at least 6 inches lower than the lowest elevation of the top of the earth dike and shall be level.
3. The stone outlet structure shall be embedded into the soil a minimum of 4".
4. The minimum length of the crest of the stone outlet structure shall be 6'.
5. The stone outlet structure shall be inspected after each rain. Stone shall be replaced when the structure ceases to function and ponding results.
6. The baffle board shall be extended one foot into the dike, staked and embedded 4" into the existing ground.
7. The drainage area to this structure shall be less than 1/2 acre.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE C-15-8 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 23B - AT GRADE INLET PROTECTION

Construction Specifications

1. Lift grate and wrap with Geotextile Class E to completely cover all openings, then set grate back in place.
2. Place 3/4" to 1 1/2" stone, 4"-6" thick on the grate to secure the fabric and provide additional filtration.

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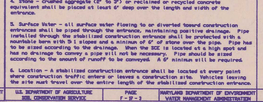
DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



Construction Specification

1. Length - minimum of 50' (*20' for single residence lot).
2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.
3. Geotextile Fabric (Filter cloth) shall be placed over the existing ground prior to placing stone. *The plan approval authority may not require single family residences to use geotextile.
4. Stone - crushed aggregate (2" to 3"), or recleimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

STABILIZED CONSTRUCTION ENTRANCE

Construction Specification

1. Length - minimum of 50' (*20' for single residence lot).
2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.
3. Geotextile Fabric (Filter cloth) shall be placed over the existing ground prior to placing stone. *The plan approval authority may not require single family residences to use geotextile.
4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

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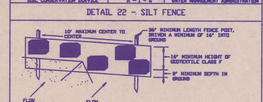
DETAIL 22 - SILT FENCE



JOINING TWO ADJACENT SILT FENCE SECTIONS

Construction Specifications

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/2" square cut, or 13/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.
2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal/ft²/ minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

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SILT FENCE

Silt Fence Design Criteria

Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 Feet	1,000 Feet
10:1 to 5:1	100 Feet	750 Feet
5:1 to 3:1	60 Feet	300 Feet
3:1 to 2:1	40 Feet	220 Feet
2:1 and steeper	20 Feet	125 Feet

Note: In areas of less than 10% slope and sandy soils (USDA general classification system, soil Class A) maximum slope length and silt Fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.

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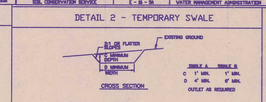
DETAIL 2 - TEMPORARY SWALE



1. Seed and cover with straw mulch.
2. Seed and cover with Erosion Control Matting or line with sod.
3. 4"-7" stone or recycled concrete equivalent pressed into soil to a minimum 7" layer.

Construction Specifications

1. All temporary swales shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.
2. Runoff directed from a disturbed area shall be conveyed to a sediment trapping device.
3. Runoff directed from an undisturbed area shall outlet directly into an undisturbed stabilized area at a non-erosive velocity.
4. All trees, brush, stumps, obstructions, and other objectionsl material shall be removed and disposed of so as not to interfere with the proper functioning of the swale.
5. The swale shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.
6. Fill, if necessary, shall be compacted by earth moving equipment.
7. All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the swale.
8. Inspection and maintenance must be provided periodically and after each rain event.

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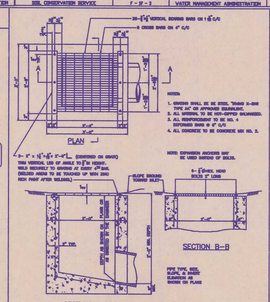
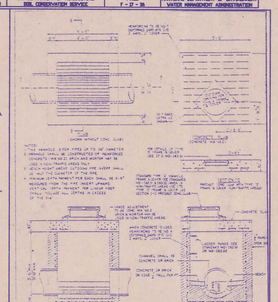


MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR TERRORISTS AND ACCIDENTAL STRUCTURES
STANDARD YARD INLET
STANDARD NO. MD-381.01



Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARD NO. MD-383.00

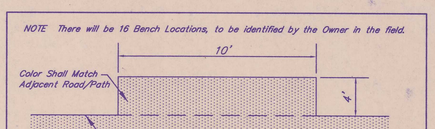
Permanent Seeding Summary

No.	Seed Mixture (Hardiness Zone 7a) Species	From Table 25 Application Rate (lb/ac)	Seeding Dates	Seeding Depths	Fertilizer Rate (10-20-20) N	P205	K20	Lime Rate
1	Tall Fescue (75%) Canada Bluegrass (10%) Kentucky Bluegrass (10%) Redtop (5%)	150	3/1 — 5/15 8/15 — 11/15	1" — 2"	90 lb/ac (2.0 lb/ 1000 sf)	175 lb/ac (4 lb/ 1000 sf)	175 lb/ac (4 lb/ 1000 sf)	2 tons/ac (100 lb/ 1000 sf)
3	Tall Fescue (85%) Perennial Bluegrass (10%) Kentucky Bluegrass (5%)	125 15 10	3/1 — 5/15 8/15 — 11/15	1" — 2"				

Temporary Seeding Summary

Species	Notes	Seeding Depths	Fertilizer Rate (10-10-10)	Lime Rate
	1/30	1" — 2"	600 lb/ac	2 tons/ac
	1/30	1"	15 lb/1000 sf	100 lb/1000 sf

NOTE There will be 16 Bench Locations, to be identified by the Owner in the field.



Typical Bench Location Detail
Scale: 1" = 10'

FOR REFERENCE ONLY

Using Agency Approval	Dept. of General Services Approval
Signature — Date 11/30/99	Project Administrator — Date 1-31-2000
Title: Chief Administrative Officer	Director, Engr. & Constr. — Date 2/15/00

11/22/99 - REVISED PER OWNERS REQUEST
7/29/99 - REVISED PER MDE COMMENTS
6/28/99 - REVISED PER MDE COMMENTS
REVISIONS

MUDD ENGINEERING, INC.
CIVIL ENGINEERING • SITE PLANS • LAND PLANNING
21803-A Three Notch Road P.O. Box 1022
Lexington Park, Maryland 20653
(301) 862-5282 Fax (301) 862-1841

Detail Sheet
Historic St. Mary's City
First Election District
St. Mary's County, Maryland
DGS PROJECT # SM-060-012-001

DATE 2/26/98
DRAWN BY ZOR
CHECKED BY PHM
PROJECT NO.
DWG. NAME details
SCALE As Shown
SHEET 2 of 4

letter to Troy
elem conduit Alder St

1 mile = 5280'

100 0 100 200 300
Scale 1" = 100'

CHAPEL ROAD CONNECTOR
Switchback Pathway To Be Laid Out In The Field By The Owner To Meet ADA Requirements. Switchback To Be In Addition To Roadway
SERVICE ROAD 'B'
Limits of Disturbance
800' =
Contractor Entrance – See Notes
CHAPEL ROAD
130'
Limits of Disturbance
BROME BARN
BROME OFFICE
MARYLAND ROUTE 5
APPROX. CRITICAL AREA BUFFER
FUTURE CONNECTION
Contractor Staging Area As Designated By the Staff of Historic St. Mary's City
Limits of Disturbance
WOODLAND INDIAN HAMLET
VISITOR CENTER
VISITOR CENTER PATH
Drop Inlet
Contractor Entrance – See Notes
Existing Path To Be Removed per Note, Sheet 4
Pathway To Be Laid Out In The Field By The Owner to Meet ADA Requirements
down 24"
5x5 hole w/ cover
Rip Rap at end of pipe
Existing Bridge Contractor is restricted From Using Bridge for Vehicular Traffic
2x2
Contractor Entrance – See Notes
MILL ROAD
PRINT SHOP PATH
ALTERNATE 2
SERVICE ROAD 'A'
ALTERNATE 1
Limits of Disturbance
CORDEA'S HOPE
LAWYERS LODGING
TOWN SQUARE
SMITH'S OUTBUILDING
SMITH'S ORDINARY
Proposed Drain Pipe See Detail Sheet 2 of 4 (Typical)
2" Phone Conduit
2" Electric Conduit
FUTURE KIOSK
MIDDLE STREET
Limits of Disturbance
ALTERNATE 5
CALVERT HOUSE
2" Phone Conduit
2" Electric Conduit
Existing Path To Remain
Contractor Staging Area Improvements See Sheet 4
MARYLAND ROUTE 5
BERM
FARTHING'S PATH
VAN SWERINGEN LANE
ALTERNATE 3
ALDERMANBURY STREET
Contractor Entrance – See Notes
SERVICE ROAD 'D'
SERVICE ROAD 'C'
STATE HOUSE PATH
ORCHARD
STATE HOUSE
FARTHING'S
Limits of Disturbance
Existing Path To Be Removed See Note, Sheet 4
ST. MARY'S RIVER
DOVE DOCK

Pedestrian Path
5' x 5' Level section (typical)
5' x 5' Level section (typical)
Pedestrian Path
VISITOR CENTER
VISITOR CENTER PATH

Scale 1" = 50'

ALTERNATE LISTINGS
1. SERVICE ROAD 'A' from the Service Road 'B' to the Print Shop Path.
2. PRINT SHOP PATH from Service Road 'A' to Chapel Road.
3. VAN SWERINGEN LANE from Aldermanbury Street to Middle Street.
4. Color Coating FARTHING'S PARKING LOT, including imprinting the lines and handicap parking icons.
5. Impress a Square measuring 20 feet per side using the "Stacked Brick Border" design. Exact location will be specified in the field.
6. Handtool the names of the four Baroque Roads into asphalt using 6" inch letters. Exact location will be specified in the field. Stencils will be provided by the owner.

LEGEND
- Pathways/Roadways On Existing Ground
- Pathways/Roadways On Existing Sub-Base
- Proposed Bench Location
- W Future Water Fountain

ENTRANCE NOTES:
1. Contractor shall utilize existing gravel driveway for the required stabilized contrustion entrance (SCE).
2. Contractor shall ensure that sediment laden runoff does not leave the site. Contractor shall sweep the public roadways to prevent accumulation of soil or sediment on those roads.
3. If public roadways are consistantly tracked with soil, Inspector may require installation of a SCE per the detail on Sheet 2.

STABILIZATION NOTE:
All pathways and roads outs of sediment controls shall have 24 hour stlization.

FOR REFERENCE ONLY

Using Agency Approval
Signature — Date 12/14/99
Chief Administrative Officer
Title

Dept. of General Services Approval
Project Administrator — Date 1-31-2000
Director, Engr. & Constr. — Date 2/15/00

11-30-99

11/22/99 – Revised per Owners Request.
7/29/99 – Revised per MDE Comments
7/1/99 – Revised per MDE Comments
Revised 5/14/99
Revised 8/17/98
REVISIONS Revised 8/11/98

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Exhibit Path Improvements
Historic St. Mary's City
First Election District
St. Mary's County, Maryland

DATE 2/26/99
DRAWN BY ZOR
CHECKED BY PHM
PROJECT NO.
DWG. NAME park
SCALE 1" = 100'
SHEET 3 of 4