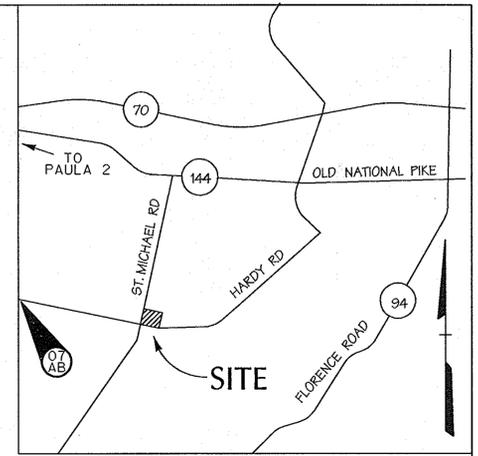


SITE DEVELOPMENT PLAN FOR ADDITION TO ST. MICHAEL'S ROMAN CATHOLIC CHURCH POPLAR SPRINGS, MD.



VICINITY MAP
SCALE: 1"=2000'

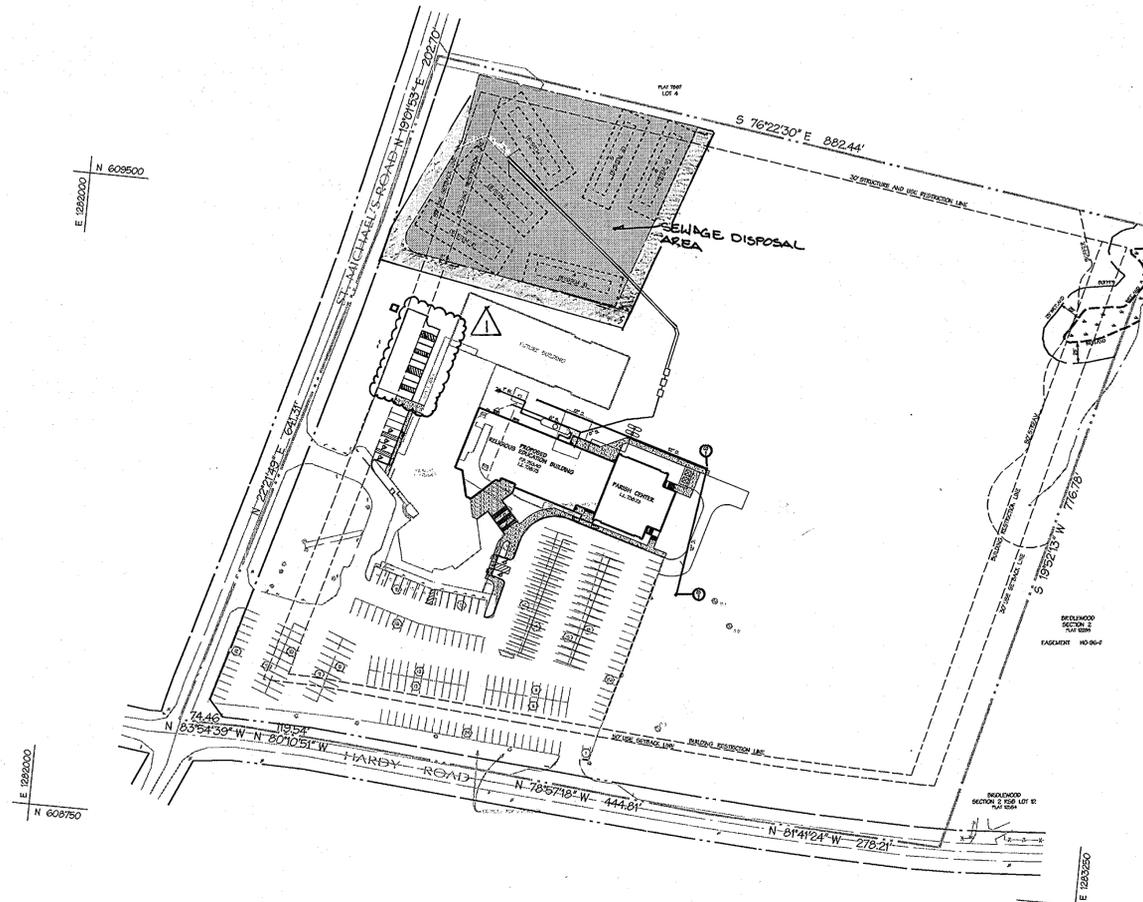
BENCHMARK

HOWARD COUNTY GEODETIC SURVEY CONTROL STA. 07AB		
NORTH	EAST	ELEV.
609,818.999	1,278,420.084	716.950
NGS STA. PAULA 2		
NORTH	EAST	ELEV.
644,963.37	1,275,316.39	796.700

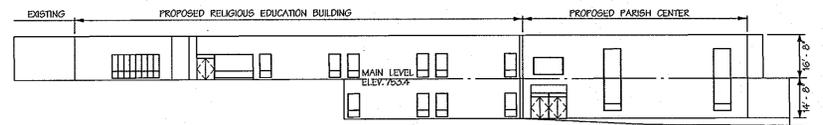
LOCAL BENCHMARK
ELEVATIONS SHOWN HEREON ARE BASED ON THE FIRST FLOOR ELEVATION OF THE EXISTING CHURCH BUILDING, ELEV. - 753.40

GENERAL NOTES

- All construction shall be performed in accordance with the latest standards and specifications of Howard County, plus MSHA standards and specifications if applicable or as specified.
- Approximate location of existing utilities are based solely on available records. Contractor shall verify the location of any utilities which may be impacted by the work. The contractor shall take all necessary precautions to protect the existing utilities and maintain uninterrupted service. Any damage incurred due to contractor's operation shall be repaired immediately at the contractor's expense.
- The contractor shall test pit existing utilities at least five (5) days before starting work shown on these drawings to verify their location and elevation. The contractor shall notify the engineer immediately if location of utilities is other than shown.
- The contractor shall notify 'Miss Utility' at 1-800-257-7777 at least 48 hours prior to any excavation work being done, and shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at (410) 313-1880 at least five (5) working days prior to the start of work.
- Any damage caused by the Contractor to existing public right-of-way, existing paving, existing curb and gutter, existing utilities, etc. shall be repaired at the Contractor's expense.
- Topography taken from field run survey by O'Connell & Lawrence, Inc. 1/81 based on Howard County Control via electronic transfer in January, 2000.
- The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System. Howard County monument 07AB and NGS Sta. PAULA 2 were used for this project.
- Private water and sewer on site.
- All fill areas shall be compacted to a minimum of 95% of the maximum dry density as determined and verified in accordance with AASHTO T-180.
- Stormwater management and water quality are provided in a retention facility located on site per SDP-02-47.
- This Site is conditionally exempt from Forest Conservation Ordinance with the filing of Declaration of Intent in accordance with Section 16.1202(b)(2)(i)(a), development of an existing single lot of any size if the total cutting, clearing or grading is less than 40,000 sf.
- Operating existing valves, switches, services or start up of new services shall be coordinated with the owners representative.
- The building will be provided with a sprinkler system.
- Trench compaction for storm drains shall be in accordance with Howard County Design Manual IV, Std. No. G-2.01.
- Unless otherwise noted, dimensions from curb are measured at face of curb.
- Refer to architectural drawings for building dimensions.
- The Contractor shall coordinate the location of all water, sewer, and drain house connections with the mechanical drawings.
- The Contractor shall maintain 2.0 feet minimum cover over all utilities during construction.
- Unless otherwise noted, all utility connections shall be capped or plugged five feet from buildings.
- Electric, telephone, gas, cable, lighting, and retaining walls to be designed by others. Where those facilities are shown, they are for coordination purposes only.
- All Curb radii 5' unless otherwise noted.
- There are no known cemeteries or burial grounds on this site. However, upon discovery of any evidence of burial or graves, the developer will be subject to Section 16.1305 of the Howard County Subdivision and Land Development Regulations.
- All exterior lighting fixtures shall be installed in compliance with Section 134 of the Zoning Regulations.
- Building addition to have an automatic sprinkler system.
- No clearing, grading or construction is allowed within the wetlands, stream or their required buffers.
- As a consequence of its submission on November 6, 2001, this SDP is grandfathered to the Fourth Edition of the Subdivision Regulations.
- Traffic control devices, marking and signing shall be in accordance with the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
- There is no floodplain on this site.
- The wetlands delineation study for this project was prepared by DMW, dated 4/7/01, and was approved on 9/01.
- No traffic study is required for this project.
- Board of Appeals Case no. BA-00-23E approved a conditional use petition for enlargement of an existing religious facility subject to the following: 1. Site shall be used only for the amended conditional use plans dated 10/11/00; 2. Parking lot lighting shall conform to Section 134 of the Zoning Regulations; 3. Improvements shall be phased, with the final phase commencing by 1/1/2007; and 4. Petitioner to comply with all applicable Federal, State and County regulations. **APPROVED 11/16/2000.**
- GROUNDWATER APPROPRIATIONS PERMIT NO. - HD 756-AP003 (REVISED) HAS BEEN APPLIED FOR.**
- THE SELVAGE DISPOSAL AREA SHOWN ON THIS SDP IS FOR SAND MOUND ONLY AND IS ± 76,000 S.F. THERE IS TO BE NO OTHER BUILDING ON THIS AREA. THIS AREA SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWER.**



Overall Property
Scale: 1"=100'



SCHMATIC BUILDING ELEVATION
SCALE: 1" = 30'

DATA SOURCES

- Boundary and topography provided hereon by O'Connell & Lawrence, Inc. via electronic transfer on January 7, 2000. DMW converted this topographic information to MAD 83.
- Approximate head of stream and wetland locations per DMW, Inc.

SHEET INDEX

SHEET	DESCRIPTION
1	COVER SHEET
2	SITE AND GRADING PLAN
3	SEDIMENT & EROSION CONTROL PLAN AND DRAINAGE AREA MAP
4	SEDIMENT & EROSION DETAILS
5	SEDIMENT & EROSION DETAILS AND SPECIFICATIONS
6	SEPTIC SYSTEM & STORM DRAIN PROFILE
7	LANDSCAPE PLAN
8	LANDSCAPE & CONSTRUCTION DETAILS
9	DRAINAGE AREA MAP
10	STORMWATER MANAGEMENT GRADING
11	STORMWATER MANAGEMENT PROFILE & DETAIL
12	BORING LOGS
13	MD-378 SPECIFICATIONS

ADDRESS CHART	
LOT/PARCEL #	STREET ADDRESS
260	1125 ST. MICHAELS ROAD, MT. AIRY, MD. 21797

Date	No.	Revision	Description

ST. Michael's Roman Catholic Church
Phase 1 - Education Building Addition and Parish Center

OWNER: CARDINAL WILLIAM H. KEELER, THE ROMAN CATHOLIC ARCHBISHOP OF BALTIMORE
A CORPORATE SOLE
320 CATHEDRAL STREET
BALTIMORE, MARYLAND 21201

DEVELOPER: ST. MICHAEL'S POPLAR SPRINGS ROMAN CATHOLIC CONGREGATION
1125 ST. MICHAELS ROAD
POPLAR SPRINGS, MD. 21771

DMW

Daft - McCune - Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

200 East Pennsylvania Avenue
Towson, Maryland 21286
410 296 3333
Fax: 296 4705

SUBDIVISION NAME	SECTION AREA	LOT/PARCEL #		
NA	NA	260		
PLAT OR L.P. BLOCK #	ZONE	RECORD MAP	ELECT. DISTRICT	CENSUS TRACT
350/26	B,9	RC-DEO	4th	6040.01
WATER CODE	SEWER CODE			
****	*****			

COVER SHEET		
Drn By:	Scale:	Proj. No.
	1" = 100'	99143.BO
Des By:	Date:	
	7/12/02	
Chk By:	Approved:	
		1 of 13

SITE ANALYSIS DATA CHART

1. General Site Data		3. Parking Space Data	
a. Present Zoning: RC-DEO		a. Floor Space on Each Level per Building(s) per Use:	
b. Applicable DPZ File References: BA-00-23E, BA-81-19E SDP-82-69		Existing Church	10,182 SF
		Existing Meeting Hall & Classrooms	8,450 SF
		Proposed Parish Center	6,000 SF
		Proposed Religious Education Building (First Floor)	11,600 SF
		(Lower Level)	3,600 SF
		TOTAL	39,832 SF
c. Proposed Use of Site or Structure(s): RELIGIOUS EDUCATION BUILDING & PARISH CENTER		b. Maximum Number of Employees, Tenants On-Site per Use: N/A	
		c. Number of Parking Spaces Required by Zoning Regulations and Criteria: 187 560 Seats 3 = 187	
d. Proposed Water and Sewer Systems: Public _____ Private <input checked="" type="checkbox"/> X		d. Total Number of Parking Spaces Provided On-Site: 252	
e. Any Other Information Which May be Relevant: N/A		e. Number of Handicapped Parking Spaces Provided: 14	
2. Area Tabulation		f. Proposed building is two-stories.	
a. Total Project Area: 16.5± Acres			
b. Net Area of Site: 16.5± Acres			
c. Area of This Plan Submission: 16.5± Acres			
d. Limit of Disturbed Area: 7.5± Acres			
e. Building Coverage of Site: 0.8± Acres and 5.2 % of Gross Area (Proposed)			

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

[Signature] 8/12/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 8/16/02
CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 8/23/02
DIRECTOR

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS

[Signature] 8-21-02
COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT

THIS SEAL IS FOR REVISION 1 BY SITE RESOURCES, INC. ONLY.

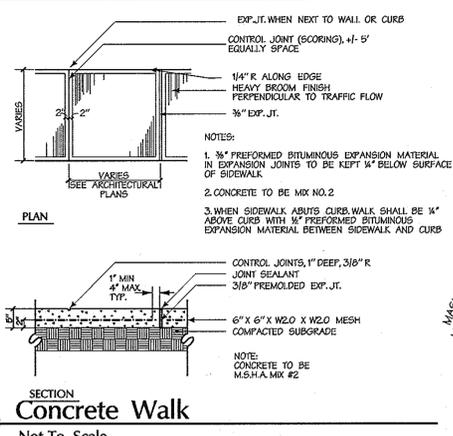
7-12-02
Date

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. 14144, EXPIRATION DATE: 02/15/14

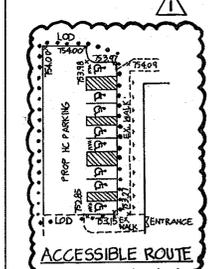
Professional Engr. No. 2998

STATE OF MARYLAND
PROFESSIONAL ENGINEER

Professional Engr. No. 2998



- LEGEND**
- EX CURB & GUTTER
 - EX MAJOR CONTOURS
 - EX MINOR CONTOURS
 - PROP. STORM DRAIN
 - PROP. SEWER
 - PROP. WATER
 - EX STORM DRAIN
 - EX SEWER
 - EX WATER
 - PARKING COUNT LABELS
 - CONCRETE SIDEWALKS
 - STANDARD CURB
 - REVERSE CURB
 - HANDICAP SYMBOLS
 - PROP. MAJOR CONTOURS
 - PROP. MINOR CONTOURS
 - WETLAND BUFFER
 - STREAM BUFFER
 - SLOPES 15% - 24.9%
 - SLOPES 25%+



APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

[Signature] 8/12/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 8/21/02
CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 8/23/02
DIRECTOR

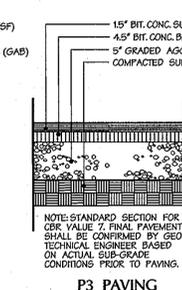
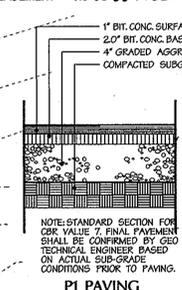
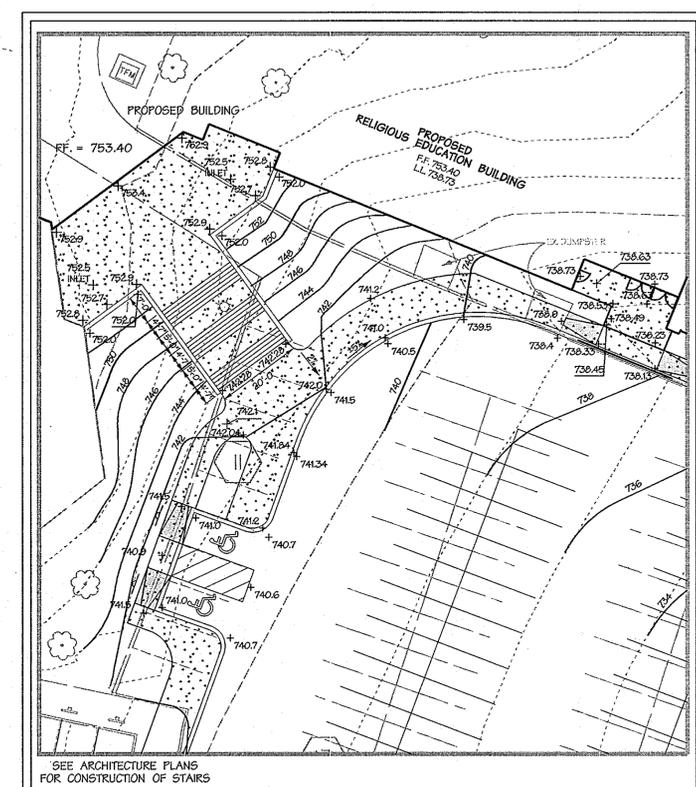
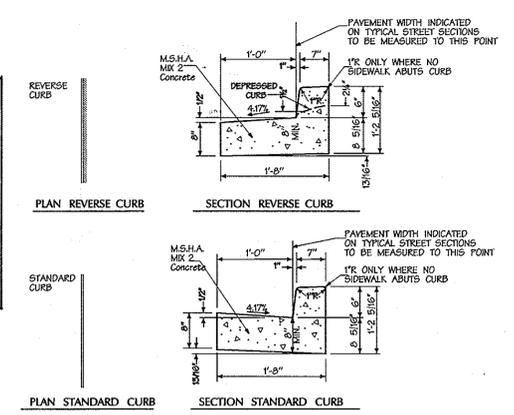
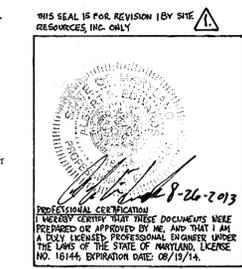
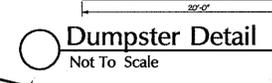
APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS

[Signature] 8-21-02
COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT

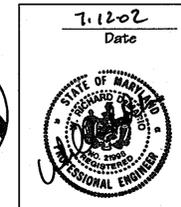
EXTERIOR LIGHTING WILL BE IN CONFORMANCE WITH SECTION 134, ZONING REGULATIONS

NOTE: AN ORANGE HIGH VISIBILITY FENCE NEEDS TO BE INSTALLED AROUND GDA DURING CONSTRUCTION.

DAYTON B. BARNARD, SR.
48976193
04-30911
PLAT 7887
LOT 4



Paving
Not To Scale
See Sheet 8 for paving locations.



Date	No.	Revision Description
7/12/02	1	ADD HANDICAP PARKING SPACES

ST. Michael's Roman Catholic Church
Phase 1 - Education Building Addition and Parish Center

OWNER: CARDINAL WILLIAM H. KEELER
THE ROMAN CATHOLIC ARCHBISHOP OF BALTIMORE
A CORPORATE SOLE
320 CATHEDRAL STREET
BALTIMORE, MARYLAND 21201

DEVELOPER: ST. MICHAEL'S, POPLAR SPRINGS ROMAN CATHOLIC CONGREGATION
1125 ST. MICHAEL'S ROAD
POPLAR SPRINGS, MD. 21777

DMW
Daft - McCune - Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
200 East Pennsylvania Avenue
Towson, Maryland 21286
410 296 3333
Fax 296 4705

SUBDIVISION NAME	SECTION AREA	NA	COMPARCEL #	200
PLAT OR LTR BLOCK #	ZONE	RC-DEO	ELECT. DISTRICT	4th
WATER CODE	POWER CODE		GEN. TRACT	6040.01

TITLE: **SITE AND GRADING PLAN**

Drn By:	Scale: 1" = 50'	Proj. No. 89143.00
Des By:	Date: 7/12/02	2 of 13
Chk By:	Approved:	

Prof. Engineer No. 21948

STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

Section I - Vegetative Stabilization Methods and Materials

- A. Site Preparation**
- Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.
 - Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
 - Schedule required soil test to determine soil amendment composition and application rates for sites having disturbed area over 5 acres.
- B. Soil Amendments (Fertilizer and Lime Specifications)**
- Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
 - Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Materials may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warranty of the producer.
 - Lime materials shall be ground limestone (hydrated or burnt lime may be substituted) which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestones shall be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 90 - 100% will pass through a #20 mesh sieve.
 - Incorporate lime and fertilizer into the top 3 - 5" of soil by diking or other suitable means.
- C. Seeded Preparation**
- Temporary Seeding**
 - Seeded preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows, or by hand using a shovel and rake. The construction equipment, after the soil is loosened it should not be rolled or dragged smooth but left in the roughened condition. Sloped areas (greater than 3%) should be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
 - Apply fertilizer and lime as prescribed on the plans.
 - Incorporate lime and fertilizer into the top 3 - 5" of soil by diking or other suitable means.
 - Permanent Seeding**
 - Minimum soil conditions required for permanent vegetative establishments:
 - Soil pH shall be between 6.0 and 7.0
 - Soluble salts shall be less than 500 parts per million (ppm).
 - The soil shall contain less than 40% clay but enough fine grained material (> 30% silt plus clay) to hold a moderate amount of moisture. An exception is if the soil is a heavy clay (> 50% silt plus clay) which is acceptable.
 - Soil shall contain 15% minimum organic matter by weight.
 - Soil must contain sufficient pore space to permit adequate root penetration.
 - If these conditions cannot be met by the soils on site, additional topsoil is required in accordance with Section 21 Standard and Specification for Topsoil.
 - Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3 - 5" to permit bonding of the topsoil to the surface and to create horizontal erosion check strips to prevent topsoil from sliding down a slope.
 - Apply soil amendments as per soil test or as included on the plans.
 - Mix soil amendments into the top 3 - 5" of topsoil by diking or other suitable means. Lawn areas should be rolled to smooth the surface, remove loose objects like stones and trenches, and ready the area for seed application. Where site conditions will not permit normal seeded preparation, loose surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3%) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1 - 3" of soil should be loose and friable. Seeded loosening may not be necessary on newly disturbed areas.

F. Mulch Specifications (In order of preference)

- Straw shall consist of thoroughly threshed wheat, rye or oat straw reasonably bright in color, and shall be mostly mucky, called, decayed, or excessively dusty and shall be free of noxious weed seeds as specified in the Maryland Soil Law.
 - Wood Cellulose Fiber Mulch (WCFFM)
 - WCFFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
 - WCFFM shall be dyed green or contain a green dye in the package that will provide an appropriate color for visual inspection of the uniformity of spread slurry.
 - WCFFM, including dye, shall contain no germination or growth inhibitors.
 - WCFFM materials shall be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will bond with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material shall form a water-tight cover on application, having moisture absorption and permeation properties and shall cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
 - WCFFM material shall contain no elements or compounds at concentration levels that will be phytotoxic.
 - WCFFM must conform to the following physical requirements: fiber length to approximately 10 mm, diameter approximately 1 mm, pH range of 4.0 to 8.5, ash content of 15% maximum and water holding capacity of 50% minimum.
- G. Mulching Seeded Areas - Mulch shall be applied to all seeded areas where one species of grass is desired.**
- If grading is completed outside of the seeding season, mulch alone shall be applied as prescribed in this section and maintained until the seeding season returns and seeding can be performed in accordance with these specifications.
 - When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch shall be applied in a uniform loose depth of between 1" and 2". Mulch applied shall achieve a uniform distribution and depth so that the soil surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons/acre.
 - Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1500 lbs. per acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons of water.
- H. Securing Straw Mulch (Mulch Anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon size of area and erosion hazard:**
- A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of two (2) inches. This practice is most effective in areas, but is limited to flatter slopes where equipment can operate safely. If used on a sloping land, this practice should be used on the contour if possible.
 - Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds/acre. The binder shall be applied to the straw mulch and the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
 - Application of liquid binders should be heavier at the edges where wind catches much, such as in valleys or on crest of banks. The remainder of area should appear uniform after binder application. Synthetic binders such as Acrylic DLR (Acror-Lex), DCA-70, Fetosec, Terra Tex I, Terra Tack AS, or other approved equal may be used at rates recommended by the manufacturer to anchor mulch.
 - Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 16' feet wide and 300' to 5000' feet long.

B. Sod Installation

- During periods of excessively high temperature or in areas having dry soil, the subsoil shall be lightly irrigated immediately prior to laying the sod.
 - The first row of sod shall be laid in a straight line with subsequent rows placed parallel to and tightly wedged against each other. Lateral joints shall be staggered to promote more uniform growth and prevent erosion. Sod to be not stretched or overpiled, and thus all joints are buried tight in order to prevent voids which would cause air drying of the roots.
 - Wherever sod shall be laid with the long edge parallel to the contour and with staggered joints, Sod shall be rolled and tamped, pegged or otherwise secured to prevent slippage on slopes and to ensure solid contact between sod roots and the underlying soil surface.
 - Sod shall be watered immediately following rolling or tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. The operations laying, tamping and watering for any piece of sod shall be completed within eight hours.
- C. Sod Maintenance**
- In the absence of adequate rainfall, watering shall be performed daily or as often as necessary during the first week and in sufficient quantity to maintain moist soil to a depth of 4". Watering should be done during the heat of the day to prevent wilting.
 - After the first week, sod watering is required as necessary to maintain adequate moisture content.
 - The first mowing of sod should not be attempted until the sod is firmly rooted. No more than 1/3 of the grass leaf shall be removed by the initial cutting or subsequent cuttings. Grass height shall be maintained between 2" and 3" unless otherwise specified.

Section V - Turfgrass Establishment

Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will require a medium high level of maintenance. Areas to receive seed shall be tilled by diking or other approved methods to a depth of 2 to 4 inches, leveled and raked to prepare a proper seeded. Stones and debris over 1/2" inches in diameter shall be removed. The resulting seeded

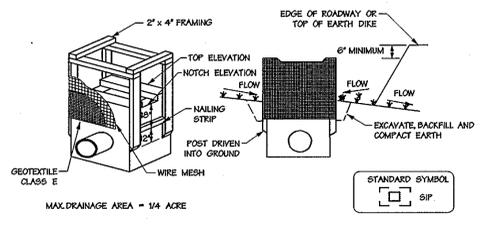
- A. Turfgrass Mixtures**
- Kentucky Bluegrass - Full sun mixture** - For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and eastern shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rates: 15 to 20 pounds/1000 square feet. A minimum of three bluegrass cultivars shall be chosen ranging from a minimum of 10% to a maximum of 35% of the mixture by weight.
 - Kentucky Bluegrass/Perennial Rye - Full sun mixture** - For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding rate: 2 pounds/1000 square feet. A minimum of 3 Kentucky Bluegrass Cultivars must be chosen with each cultivar ranging from 10% to 30% of the mixture by weight.
 - Tall Fescue/Kentucky Bluegrass - Full sun mixture** - For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes Certified Kentucky Bluegrass Cultivars 30-40%, Certified Kentucky Bluegrass Cultivars 0 - 5%, Seeding rate: 5 to 8 lb/1000 sq. ft. One or more cultivars may be blended.
 - Kentucky Bluegrass/Fine Fescue - Shade Mixture** - For use in areas with shade in bluegrass lawns. For establishment in high quality, intensively managed turf area. Mixture includes Certified Kentucky Bluegrass Cultivars 30-40%, Certified Fine Fescue and 60-70% Seeding rate: 1 1/2 - 3 lb/1000 square feet. A minimum of 3 Kentucky Bluegrass Cultivars must be chosen, with each cultivar ranging from a minimum of 10% to a maximum of 30% of the mixture by weight.
- Note: Turfgrass varieties should be selected from those listed in the most current University of Maryland Publication, Agronomy Mimeo #77, "Turfgrass Cultivar Recommendations for Maryland".
- B. Ideal times of seeding**
- Western MD: March 15 - June 1, August 1 - October 1 (Hardness Zones - 5B, 6A)
 Central MD: March 1 - May 15, August 15 - October 15 (Hardness Zones - 59)
 Southern MD, Eastern Shore: March 1 - May 15, August 15 - October 15 (Hardness Zones - 7a, 7b)
- C. Irrigation**
- If soil moisture is deficient, supply new seedlings with adequate water for plant growth (1/2" - 1" every 3 to 4 days) until the seedlings are firmly established. This is especially true when seedlings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.
- D. Repairs and Maintenance**
- Inspect all seeded areas for failures and make necessary repairs, replacements, and reseeding within the planting season.
- Once the vegetation is established, the site shall have 95% groundcover to be considered adequately stabilized.
 - If the stand provides less than 40% ground coverage, reestablish following original time, fertilizer, seeding preparation and seeding recommendations.
 - If the stand provides between 40% and 94% ground coverage, overseed and fertilize using half of the rates originally applied, may be necessary.
- Maintenance fertilizer rates for permanent seedings are shown in Table 24. For lawns and other medium high maintenance turfgrass areas refer to the University of Maryland publication "Lawn Care in Maryland" Bulletin No. 171.
- Soil tests must be performed to determine the exact ratios and

DUST CONTROL SPECIFICATIONS

- TEMPORARY METHODS:**
- MULCHES - SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES ONLY. MULCH SHOULD BE CRIMPED OR TACKED TO PREVENT BLOWING.
 - VEGETATIVE COVER - SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER.
 - TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE, THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN FLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
 - IRRIGATION - THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED. AT NO TIME SHOULD THE SITE BE IRRIGATED TO THE POINT THE RUNOFF BEGINS TO FLOW.
 - BARRIERS - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALES, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 10 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING SOIL BLOWING.
 - CALCIUM CHLORIDE - APPLY AT A RATE THAT WILL KEEP SURFACE MOIST, MAY NEED RETREATMENT.
- PERMANENT METHODS:**
- PERMANENT VEGETATION - SEE STANDARDS FOR PERMANENT VEGETATIVE COVER, AND PERMANENT STABILIZATION WITH SOIL EXISTING TREES OR LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.
 - TOPSOILING - COVERING WITH LESS ERODIBLE SOIL MATERIALS. SEE STANDARDS FOR TOPSOILING.
 - STONE - COVER SURFACE WITH CRUSHED STONE OR CONCRETE GRAVEL.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE H - 20 - 1

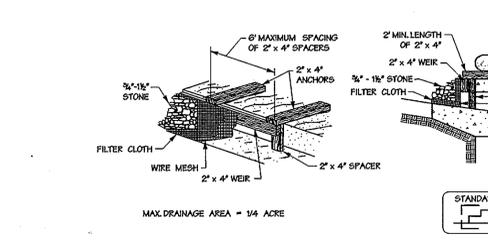
Dust Control Specifications Not To Scale



- CONSTRUCTION SPECIFICATIONS**
- EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 18" BELOW THE NOTCH ELEVATION.
 - DRIVE THE 2" x 4" CONSTRUCTION GRADE LUMBER POSTS INTO THE GROUND AT EACH CORNER OF THE INLET. PLACE NAIL STRIPS BETWEEN THE POSTS ON THE ENDS OF THE INLET. ASSEMBLE THE TOP PORTION OF THE 2" x 4" FRAME USING THE OVERLAP JOINT SHOWN ON DETAIL. THE TOP OF THE FRAME (WEIR) MUST BE 6" BELOW ADJACENT ROADWAYS WHERE FLOODING AND SAFETY ISSUES MAY ARISE.
 - STRETCH THE 6" x 6" WIRE MESH TIGHTLY AROUND THE FRAME AND FASTEN SECURELY. THE ENDS MUST MEET AND OVERLAP AT A POST.
 - STRETCH THE GEOTEXTILE CLASS E TIGHTLY OVER THE WIRE MESH WITH THE GEOTEXTILE EXTENDING FROM THE TOP OF THE FRAME TO 18" BELOW THE INLET NOTCH ELEVATION. FASTEN THE GEOTEXTILE FIRMLY TO THE FRAME. THE ENDS OF THE GEOTEXTILE MUST MEET AT A POST, BE OVERLAPPED AND FOLDED, THEN PASTED DOWN.
 - BACKFILL AROUND THE INLET IN COMPACTED 6" LAYERS UNTIL THE LAYER OF EARTH IS LEVEL WITH THE NOTCH ELEVATION ON THE ENDS AND TOP ELEVATION ON THE SIDES.
 - IF THE INLET IS NOT IN A GRAY CONSTRUCT A COMPACTED EARTH DITCH ACROSS THE DITCH LINE DIRECTLY BELOW IT. THE TOP OF THE EARTH DITCH SHOULD BE AT LEAST 6" HIGHER THAN THE TOP OF THE FRAME.
 - THE STRUCTURE MUST BE INSPECTED PERIODICALLY AND AFTER EACH RAIN AND THE GEOTEXTILE REPLACED WHEN IT BECOMES CLOGGED.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE E - 10 - 15

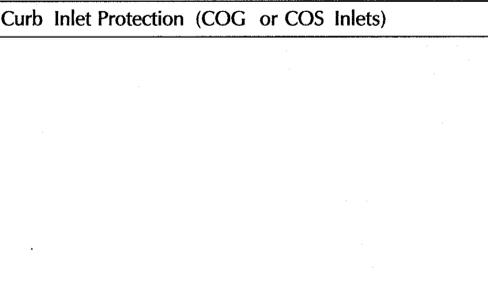
Standard Inlet Protection Not To Scale



- CONSTRUCTION SPECIFICATIONS**
- ATTACH A CONTINUOUS PIECE OF 6" x 6" WIRE MESH (30" MINIMUM WIDTH BY THROAT LENGTH PLUS 4") TO THE 2" x 4" WEIR (MEASURING THROAT LENGTH PLUS 2") AS SHOWN ON THE STANDARD DRAWING.
 - PLACE A CONTINUOUS PIECE OF GEOTEXTILE CLASS E THE SAME DIMENSIONS AS THE WIRE MESH OVER THE WIRE MESH AND SECURELY ATTACH IT TO THE 2" x 4" WEIR.
 - SECURELY NAIL THE 2" x 4" WEIR TO A 6" LONG VERTICAL SPACER TO BE LOCATED BETWEEN THE WEIR AND THE INLET FACE (MAX. 4" APART).
 - PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL (MINIMUM 2" LENGTHS OF 2" x 4" TO THE TOP OF THE WEIR AT SPACER LOCATIONS). THESE 2" x 4" ANCHORS SHALL EXTEND ACROSS THE INLET TOP AND BE HELD IN PLACE BY SANDBAGS OR ALTERNATE WEIGHT.
 - THE ASSEMBLY SHALL BE PLACED SO THAT THE ENDS SPACERS ARE A MINIMUM 1" FROM BOTH ENDS OF THE THROAT OPENING.
 - FORM THE 6" x 6" WIRE MESH AND THE GEOTEXTILE FACING TO THE CONCRETE CURB, AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET. PLACE CLEAN 3/4" x 1/4" STONE OVER THE WIRE MESH AND GEOTEXTILE IN SUCH A MANNER TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE GEOTEXTILE.
 - THIS TYPE OF PROTECTION MUST BE INSPECTED FREQUENTLY AND THE FILTER CLOTH AND STONE REPLACED WHEN CLOGGED WITH SEDIMENT.
 - ENSURE THAT STORM FLOW DOES NOT BYPASS THE INLET BY INSTALLING A TEMPORARY EARTH OR ASPHALT DITCH TO DIRECT THE FLOW OF THE INLET.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE E - 10 - 20

Curb Inlet Protection (COG or COS Inlets) Not To Scale



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE E - 10 - 20

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (S.D.S.R.S.).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - SEVEN CALENDAR DAYS FOR ALL PERMITS, SEDIMENT CONTROL STRUCTURES, DRESSES, PERMITS AND PERMITS EXCEEDING 3000 SQ. YARDS.
 - FOURTEEN DAYS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRANSPORTERS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12 OF THE "HOWARD COUNTY DESIGN MANUAL", STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE "HOWARD COUNTY STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR PERMANENT SEEDINGS (S.E.C.S.), SODS (S.E.C.S.), TEMPORARY SEEDINGS (S.E.C.S.), AND MULCHING (S.E.C.S.). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING RATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:

TOTAL AREA OR SITE AREA DISTURBED	16.51 ACRES
AREA TO BE REFORED OR PAVED	7.46 ACRES
AREA TO BE VEGETATIVELY STABILIZED	1.53 ACRES
TOTAL CUT	3970 CUBIC YARDS
TOTAL FILL	460 CUBIC YARDS
- OFF-SITE WASTEWATER AREA LOCATION WASTE -
- ANY SEDIMENT CONTROL PRACTICE WHICH IS REQUIRED BY GRASSING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERMANENT EROSION AND SEDIMENT CONTROLS BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRASSING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE FEET LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

Sediment Control General Notes Not To Scale

SEQUENCE OF CONSTRUCTION	
SEQUENCE	NUMBER OF DAYS
1. OBTAIN A GRADING PERMIT.	7
2. INSTALL SEDIMENT AND EROSION CONTROL DEVICES.	7
3. ROUGH GRADE SITE.	14
4. CONSTRUCT WATER, SEWER AND STORM DRAIN AND INSTALL INLET PROTECTION.	30
5. BEGIN BUILDING CONSTRUCTION.	180
6. FINE GRADE SITE.	5
7. INSTALL CURB & GUTTER, PAVING AND SIDE WALKS.	7
8. STABILIZE ALL AREAS IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS.	30
9. UPON APPROVAL OF THE SEDIMENT AND EROSION CONTROL INSPECTION REMOVE ALL EROSION CONTROL MEASURES AND STABILIZE.	10

Section II - Temporary Seeding Vegetation - annual grass or grain used to provide cover on disturbed areas for up to 12 months. For longer duration of vegetative cover, Permanent Seeding is required.

SEED MIXTURE (HARDINESS ZONE)					FERTILIZER RATE (10-10-10)	LIME RATE
NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS		
					600 LB/AC (15 LB/1000 SF)	2 TONS/AC (100 LB/1000 SF)

Section III - Permanent Seeding Seeding grass and legumes to establish ground cover for a minimum period of one year on disturbed areas generally receiving low maintenance.

SEED MIXTURE (HARDINESS ZONE)					FERTILIZER RATE (10-10-10)	LIME RATE
NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS		
1	ANNUAL RYEGRASS	50		1/4" - 1/2"	600 LB/AC (15 LB/1000 SF)	2 TONS/AC (100 LB/1000 SF)
2	WEEPING LOVEGRASS	4		1/4" - 1/2"		

Section IV - Sod - To provide quick cover on disturbed areas (2% grade or flatter).

- A. General Specifications**
- Class of turfgrass sod shall be Maryland or Virginia State Certified or Approved Sod labels shall be made available to the job foreman and inspector.
 - Sod shall be machine cut at a uniform soil thickness of 3/4" plus or minus 1/4", at the time of cutting. Measurement for thickness shall exclude top growth and thatch. Individual pieces of sod shall be cut to the suppliers width and length. Maximum allowable deviation from standard widths and lengths shall be 5 percent. Broken pads and torn or uneven ends will not be acceptable.
 - Standard size sections of sod shall be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.
 - Sod shall not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
 - Sod shall be harvested, delivered, and installed within a period of 26 hours. Sod not transplanted within this period shall be approved by an agronomist or soil scientist prior to its installation.

VEGETATIVE STABILIZATION

Reviewed for Howard SCD and meets Technical Requirements

Jim Myer 8/7/02
 U.S. - Natural Resources Conservation Service
 Date

John K. Robinson 8/9/02
 Howard SCD
 Date

ENGINEER'S CERTIFICATE

"I certify that this plan for sediment and erosion 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."

W. J. P. M... 7-12-02
 Signature of Engineer (print name below signature) Date

DEVELOPER'S CERTIFICATE

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

Rev. Michael J. Ruane, Pastor 7/27/02
 Signature of Developer (print name below signature) Date

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

[Signature] 8/12/02
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 8/14/02
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 8/23/02
 DIRECTOR DATE

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS

[Signature] 8-21-02
 COUNTY HEALTH OFFICER DATE
 HOWARD COUNTY HEALTH DEPARTMENT

ST. Michael's Roman Catholic Church
 Phase I - Education Building Addition and Parish Center

OWNER: CARDINAL WILLIAM H. KEELER THE ROMAN CATHOLIC ARCHBISHOP OF BALTIMORE A CORPORATE SOLE 320 CATHEDRAL STREET BALTIMORE, MARYLAND 21201

DEVELOPER: ST. MICHAEL'S, POPLAR SPRINGS ROMAN CATHOLIC CONGREGATION 1125 ST. MICHAEL'S ROAD POPLAR SPRINGS, MD 21771

DMW
 Daft - McCune - Walker, Inc.
 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

200 East Pennsylvania Avenue Towson, Maryland 21286
 410 396 3333
 Fax 396 4705

SUBMITTER NAME	NA	SECTION AREA	NA	LOT/FACILITY #	280
PLAT OR INSTRUMENT #	305/225	TAZONING MAP #	7	CORNER TRACT	6040.01
WATER CODE	****	RC-DEQ	69	SEWER CODE	*****

TITLE: **SEDIMENT & EROSION CONTROL DETAILS**

Drn By: ADL Scale: Proj. No. 99143.00
 Des By: Date: 10-15-01
 Chk By: Approved: 5 of 13

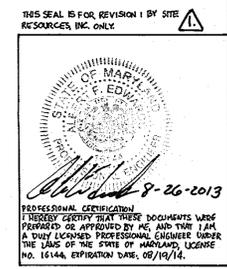
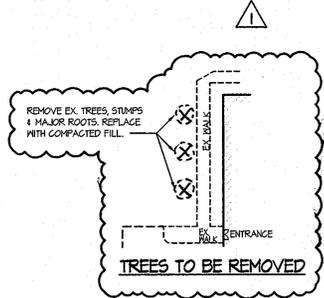
PLANT LIST

QTY	SYM	BOTANICAL NAME/ COMMON NAME	SIZE	REMARKS
LARGE TREES				
5	AR	ACER RUBRUM 'OCTOBER GLORY' October Glory Red Maple	2 1/2" - 3" CAL. 12' - 14' HT.	B & B FULL HEAD
22	QP	QUERCUS FALUSTRIS Pin Oak	2 1/2" - 3" CAL. 12' - 14' HT.	B & B FULL HEAD
FLOWERING TREES				
2	MS	MAGNOLIA STELLATA Star Magnolia	5' - 6' HT.	B & B
4	PY	PRUNUS YEDOENSIS Yoshino Cherry	1 1/2" - 2" CAL.	B & B
EVERGREEN TREES				
49	PS	PINUS STROBUS Eastern White Pine	6' - 8' HT.	B & B
SHRUBS				
23	AG	ABELIA X 'EDWARD GOUCHER' Abelia 'Edward Goucher'	30" - 36" HT.	CONT.
8	CA	CORNUS ALBA 'ARGENTEA' -MARGINATA 'ELEGANTISSIMA'	24" - 30" HT.	CONT. Ø O.C.
9	TB	TAXUS MEDIA 'DENSIFORMIS' Dense Yew	30" - 36" SP.	CONT. Ø O.C.
69	CS	COTON. SALICIFOLIA 'REPANDENS' Willowleaf Cotoneaster	24" - 30" SP.	CONT. Ø O.C.

LEGEND

---	EX. MAJOR CONTOUR	X 360.70	SPOT ELEVATION
---	EX. MINOR CONTOUR	○	PROPOSED SHADE TREE
---	EX. WATER	○	PROPOSED FLOWERING TREE
---	EX. SANITARY SEWER	○	PROPOSED EVERGREEN
---	EX. STORM DRAIN	○	PROPOSED SHRUBS
---	EX. GAS	□	PROPOSED ADDITION
---	EX. EDGE OF ROAD		
---	PROP. UTILITIES		
---	PROP. EDGE OF ROAD		

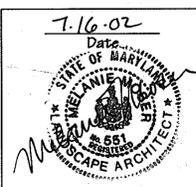
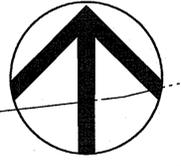
NOTE: SEE SHEET 8 FOR LANDSCAPE NOTES AND DETAILS.



DATA SOURCES
Boundary and topography provided herein by O'Connell & Lawrence, Inc. via electronic transfer on January 7, 2000.
Approximate head of stream and wetland locations per DMW, Inc.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 [Signature] 8/21/02
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 8/21/02
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 8/23/02
 DIRECTOR

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS
 [Signature] 8-21-02
 COUNTY HEALTH OFFICER
 HOWARD COUNTY HEALTH DEPARTMENT



Date	No.	Revision Description
7/8/13	1	ADD HANDICAP PARKING SPACES

ST. Michael's Roman Catholic Church
 Phase 1 - Education Building Addition and Parish Center

OWNER: CARDINAL WILLIAM H. KUELER
 THE ROMAN CATHOLIC ARCHBISHOP OF BALTIMORE
 A CORPORATE SOLE
 320 CATHEDRAL STREET
 BALTIMORE, MARYLAND 21201

DEVELOPER: ST. MICHAEL'S POPLAR SPRINGS ROMAN CATHOLIC CONGREGATION
 1125 ST. MICHAEL'S ROAD
 POPLAR SPRINGS, MD. 21771

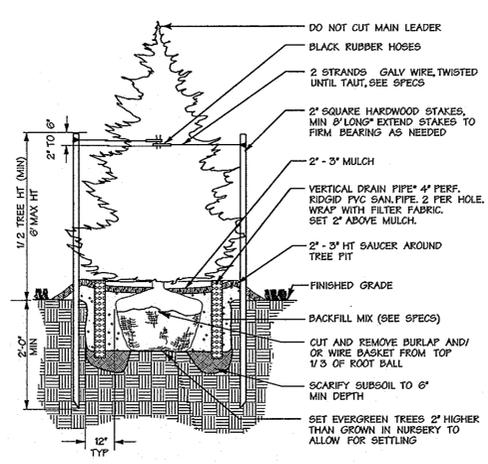
DMW
 Daft · McCune · Walker, Inc.
 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 410 296 5333
 Fax 296 4705

SUBDIVISION NAME	SECTION AREA	LOT/PARCEL #
NA	NA	260
PLAT OR REFERENCE	TAXZONE MAP	ELECT. DISTRICT
355226 1, 2	RC-DEO	7
WATER CODE	SEWER CODE	GENSB TRACT
---	---	6040.D1

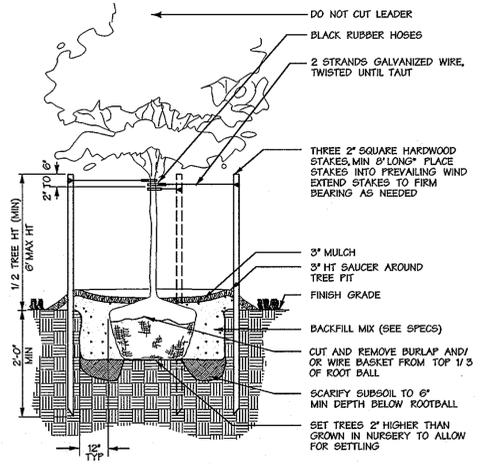
TITLE: **LANDSCAPE PLAN**

Drn By: AJ5	Scale: 1" = 50'	Proj. No. 99143.BO
Des By:	Date: 7/12/02	
Chk By:	Approved:	7 of 13

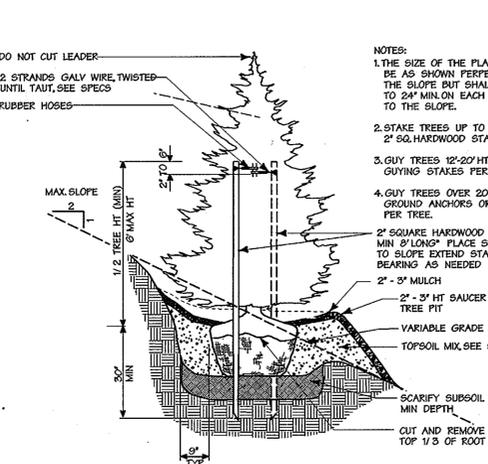
Landscape Architect No.



EVERGREEN TREE PLANTING
NOT TO SCALE



TREE PLANTING 2 1/2 - 3" CALIPER
NOT TO SCALE



EVERGREEN TREE PLANTING ON SLOPE
NOT TO SCALE

SCHEDULE A
PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAYS		ADJACENT TO PERIMETER PROPERTIES		
LANDSCAPE TYPE "A" LINEAR FEET OF PERIMETER					
LANDSCAPE TYPE "B" LINEAR FEET OF PERIMETER	P 3	P 4			
LANDSCAPE TYPE "C" LINEAR FEET OF PERIMETER			P 1	P 2	
LANDSCAPE TYPE "E" LINEAR FEET OF PERIMETER					P 5
CREDIT FOR EXISTING VEGETATION (DESCRIBE BELOW IF NEEDED)	N/A	165 LF	N/A	N/A	N/A
CREDIT FOR BERM (DESCRIBE BELOW IF NEEDED)	N/A		N/A	N/A	N/A
NUMBER OF PLANTS REQUIRED					
SHADE TREES	5	2	6	7	
EVERGREEN TREES	6	0	13	13	
SHRUBS	0	23	0	0	
NUMBER OF PLANTS PROVIDED					
SHADE TREES	5	2	6	7	
EVERGREEN TREES	6	0	13	13	
OTHER TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION) (DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	0	23	0	0	

NOTE: PERIMETER 4 CREDIT FOR EXISTING HEDGEROW AND LANDSCAPING PER SDP 82-69.

General Planting Notes

- All plant material to meet A.A.N. Standards.
- Landscape Contractor to follow landscape specification guidelines for Baltimore Washington Metro area approved by LCA/MW.
- No substitutions to be made without consent of Landscape Architect or Owner.
- All beds to be topped with three inches of hardwood mulch.
- Landscape Contractor to verify location of utilities with Owner before planting.
- Landscape Architect/Owner shall select, verify and/or approve all plant material. At Owner's discretion, specimen and other plant material will be selected.
- Landscape Contractor shall coordinate plant bed filling operations and plant material installation with General Contractor and Utilities Contractor. At the time of final inspection with acceptance, all electric, water, drainage, and fountain utilities, as well as all plant materials, shall remain undamaged. Likewise, Landscape Contractor and Utilities Contractor shall coordinate efforts to ensure that surface utilities are at the proper elevation relative to final grades.
- Contractor shall notify Miss Utility 72 hours prior to construction.
- The owner, tenant, and/or their agents shall be responsible for maintenance of the required landscaping, including both plant materials and berms, fences and walls. All plant materials shall be maintained in good growing condition, and when necessary, replaced with new materials to ensure continued compliance with applicable regulations. All other required landscaping shall be permanently maintained in good condition, and when necessary, repaired or replaced.
- This plan has been prepared in accordance with the provisions of Section 16.124 of the Ho. Co. Code. Financial surety for the required landscaping in the amount of \$19,240.00 must be posted as part of the Developer's Agreement. (34 shade, 49 evergreen, 23 shrubs).
- At the time of installation, all shrubs and other plantings herewith listed and approved for this site, shall be of proper height requirements in accordance with the Howard County Landscape Manual. In addition, no substitutions or relocation of required plantings as shown on this plan may be made without prior approval from the Department of Planning and Zoning. Any deviation from this approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or revisions are made to applicable plans and certificates.
- Developer's/Builder's Certificate

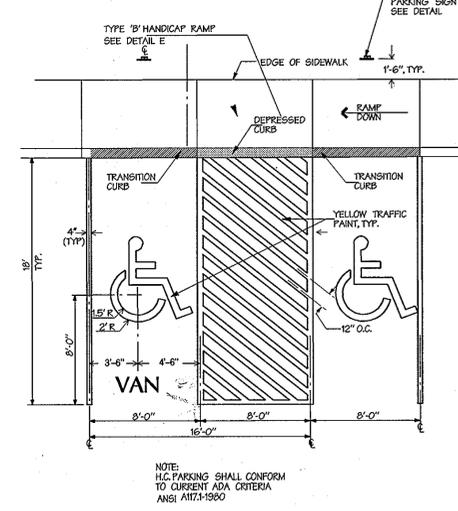
I/we certify that the landscaping shown on this plan will be done according to the plan Section 16.124 of the Howard County code and the Howard County Landscape Manual. I/we further certify that upon completion, a certification of landscape installation, accompanied by an executed one-year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.

SCHEDULE D
STORMWATER MANAGEMENT AREA
LANDSCAPING

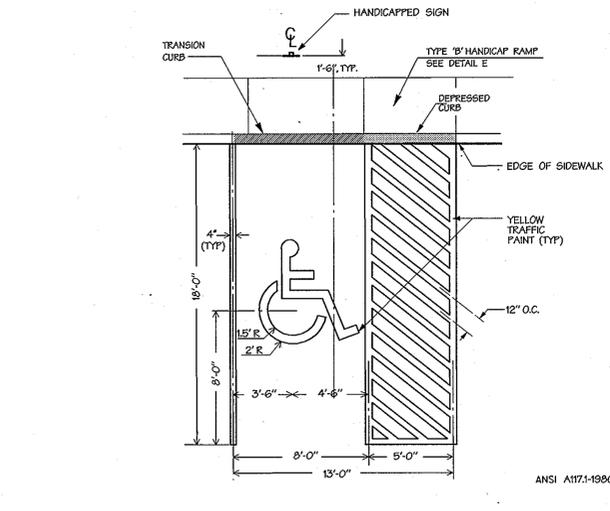
STORMWATER MANAGEMENT AREA	
LANDSCAPE TYPE "B" (LINEAR FT OF PERIMETER)	691 LF
NUMBER OF TREES REQUIRED	
SHADE TREES @ 1/50 L.F.	14
EVERGREEN TREES @ 1/40 L.F.	17
CREDIT FOR EXISTING VEGETATION	0 LF
CREDIT FOR OTHER LANDSCAPING	N/A
NUMBER OF TREES PROVIDED	
SHADE TREES	12*
FLOWERING TREES	4
EVERGREEN TREES	17

* 4 FLOWERING TREES SUBSTITUTED FOR 2 SHADE TREES.

Rev. Michael J. Ruane, Pastor
NAME: Rev. Michael J. Ruane DATE: June 17, 2002
ST. MICHAEL'S ROMAN CATHOLIC CHURCH



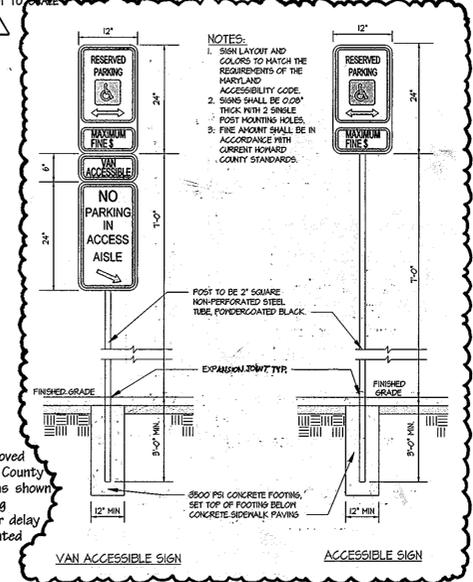
Handicap Parking: Van & Standard
Not To Scale



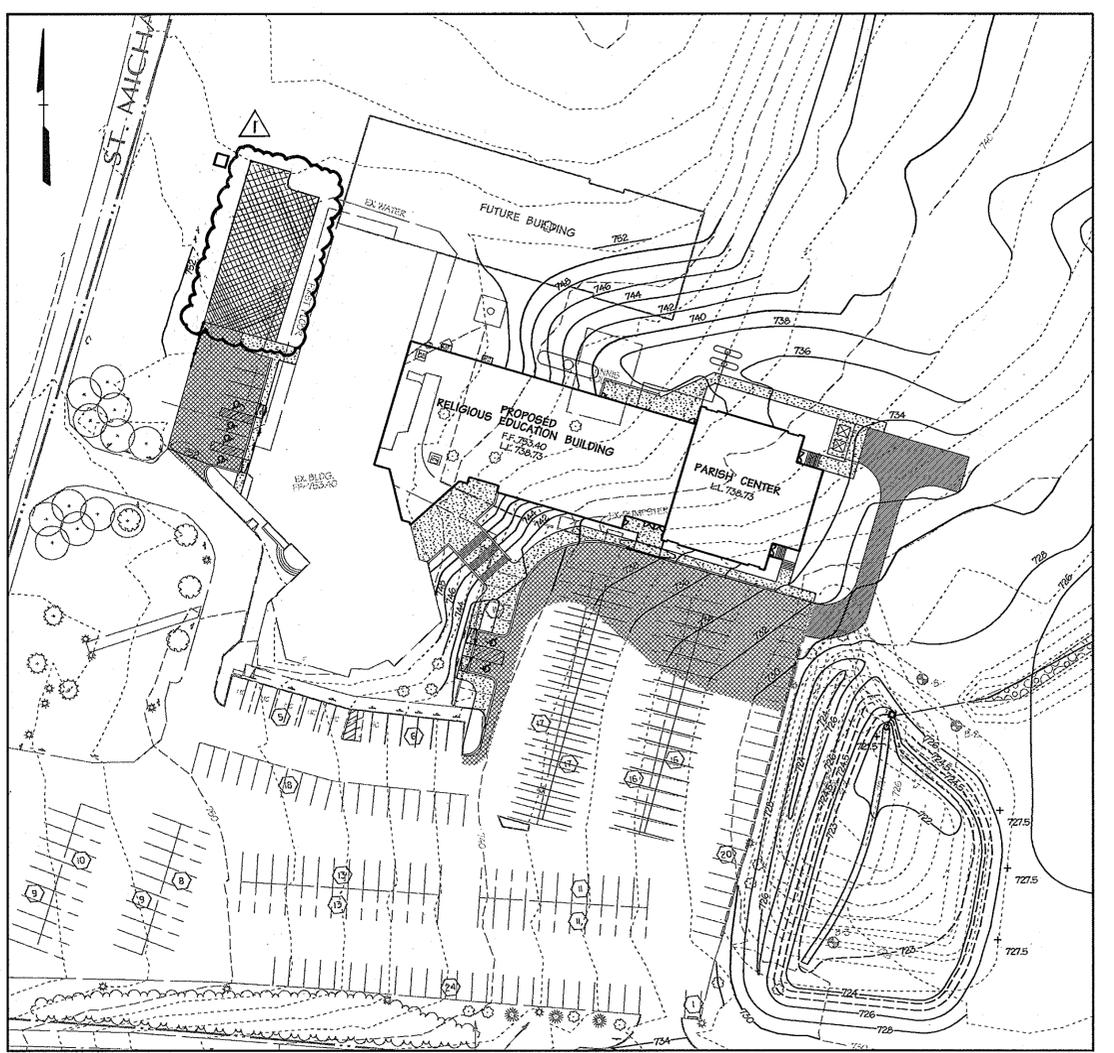
Handicap Parking Space
Not To Scale

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
[Signature] 8/2/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature] 8/2/02
CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature] 8/23/02
DIRECTOR

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS
[Signature] 8-21-02
COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT



Handicap Parking Sign
Not To Scale



PAVING LEGEND
SCALE: 1"=50'
P1 PAVING P3 PAVING CONCRETE
NOTE: SEE SHEET 2 FOR PAVING SECTION (DETAIL).

THIS SEAL IS FOR REVISION 1 BY SITE RESOURCES, INC. ONLY.
[Professional Seal]
8-26-2013

7-16-02
Date
[Professional Seal]
Landscape Architect No.

Date	No.	Revision Description
7/18/03	1	ADD HANDICAP PARKING SPACES

ST. Michael's Roman Catholic Church
Phase 1 - Education Building Addition and Parish Center

OWNER: CARDINAL WILLIAM H. KEELER, THE ROMAN CATHOLIC ARCHBISHOP OF BALTIMORE
DEVELOPER: ST. MICHAEL'S, POPLAR SPRINGS ROMAN CATHOLIC CONGREGATION
320 CATHEDRAL STREET, BALTIMORE, MARYLAND 21201
1129 ST. MICHAEL'S ROAD, POPLAR SPRINGS, MD. 21771

DMW
Daft · McCune · Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
200 East Pennsylvania Avenue, Towson, Maryland 21286
410 296 3333
410 296 4705

SUPERVISION NAME: NA SECTION AREA: NA LOT/FACEL: 260
PLATE OF LOT/BLOCK # ZONE: 305/228 P.2.9 RC-DEO TAXING MAP: 7 ELECT. DISTRICT: 416 GENS. TRAC: 6040.01
WATER CODE: ***** SEWER CODE: *****

TITLE: **LANDSCAPE & CONSTRUCTION DETAILS**

Drn By: AJS Scale: AS SHOWN Proj. No. 99143.00
Des By: Date: 7/12/02
Chk By: Approved: 8 of 13

LEGEND

- EX MAJOR CONTOUR
- EX MINOR CONTOUR
- EX WATER
- EX SANITARY SEWER
- EX STORM DRAIN
- EX GAS
- EX EDGE OF ROAD
- PROP. UTILITIES
- PROP. EDGE OF ROAD
- STABILIZED CONSTRUCTION ENT.
- LIMIT OF DISTURBANCE
- PROPOSED CONTOUR
- SPOT ELEVATION

- NOTES:
1. THIS SWM POND SHALL BE OWNED AND MAINTAINED BY THE ST. MICHAEL'S POPLAR SPRINGS ROMAN CATHOLIC CONGREGATION.
 2. THE SEDIMENT FOREBAY SHALL BE ACCESSED FOR MAINTENANCE FROM THE PARKING LOT.



THIS POND WILL HAVE A FLOOD HAZARD CLASSIFICATION OF 'A'

ENGINEER'S CERTIFICATE

"I certify that this plan for sediment and erosion 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."

W. J. Ruane
Signature of Engineer (print name below signature) **7/12/02**
Date

DEVELOPER'S CERTIFICATE

"I/we certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

Rev. Michael J. Ruane, Pastor
Signature of Developer (print name below signature) **June 17, 2002**
Date
Rev. Michael J. Ruane

Date	No.	Revision Description
7/12/02	1	ADD HANDICAP PARKING SPACES

ST. Michael's Roman Catholic Church
Phase I - Education Building Addition and Parish Center

OWNER: CARDINAL WILLIAM H. KEELER, THE ROMAN CATHOLIC ARCHBISHOP OF BALTIMORE, A CORPORATE SOLE, 322 CATHEDRAL STREET, BALTIMORE, MARYLAND 21201

DEVELOPER: ST. MICHAEL'S, POPLAR SPRINGS ROMAN CATHOLIC CONGREGATION, 1125 ST. MICHAEL'S ROAD, POPLAR SPRINGS, MD, 21771

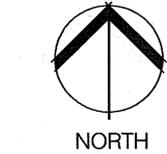
DMW
Daft · McCune · Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

200 East Pennsylvania Avenue, Towson, Maryland 21286
410 296 3333
Fax 296 4705

SUBDIVISION NAME	NA	SECTION AREA	NA	LOT/FACILITY #	280
POINT OF INTERSECTION	7	TAXIDONE MAP #	7	ELECT. DISTRICT	CB000 TRACT
WATER CODE	000	SEWER CODE	000	CD040.01	

TITLE: **STORMWATER MANAGEMENT GRADING PLAN**

Drn By: ADL Scale: 1"=50' Proj. No. 99143.00
Des By: MRT Date: 7/12/02
Chk By: WRD Approved: 10 of 13



7-12-02
Date



THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

U.S.D.A. NATURAL RESOURCES CONSERVATION DISTRICT DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT DATE

PLAN NUMBER

ENGINEERS CERTIFICATE:

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

W. J. Ruane
SIGNATURE OF ENGINEER
PRINT NAME BELOW SIGNATURE **W. J. Ruane**
DATE **7/12/02**

DEVELOPER'S CERTIFICATE:

I WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Rev. Michael J. Ruane, Pastor
SIGNATURE OF DEVELOPER
PRINT NAME BELOW SIGNATURE **Rev. Michael J. Ruane**
DATE **June 17, 2002**

SWM POND DESIGN FLOW SUMMARY PROPOSED CONDITIONS

	2-YEAR	10 YEAR	100 YEAR
Existing DF (cfs) - Allowable Release *	6.96	15.36	N/A
Developed Outflow D.P. (cfs) *	13.4	10.79	23.45
Developed Inflow (cfs)	13.84	26.31	40.03
Developed Outflow D.P. (cfs)	11.0	10.87	24.23
Water Surface Elevation	724.2	724.9	725.43
Water Quality Storage (ac. ft.)	0.497	0.487	N/A
Total Storage (ac. ft.)	0.950	0.800	1.020
Storage Height Product	4.65	4.65	4.65

Structure Type: EXTENDED DETENTION
Water Quality Type: DRY POND
Structure Classification: 'A'
Watershed Area to Facility: 0.0092 SQ. MILES
Level of Management Required: 2.10
Level of Management Provided: 2.10
Minimum Top Width Provided: 12'
Maximum Height of Fill: 0.0' (at embankment)
Freeboard Required: 2.0'
Freeboard Provided: 2.07'
1-Year Ext. Det. Discharge (cfs) *: 0.22
1-Year Ext. Det. Discharge (cfs): 0.19
1-Year Ext. Det. Control Offset (hrs): 22.19

* These values taken from O'Connell & Lawrence Inc. (OLI) SWM report

NOTES:
Design point is the SWM pond outfall and only considers flow that drains to the pond. There are no bypass areas.

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

USDA - Natural Resources Conservation Service

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

HOWARD SCD DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

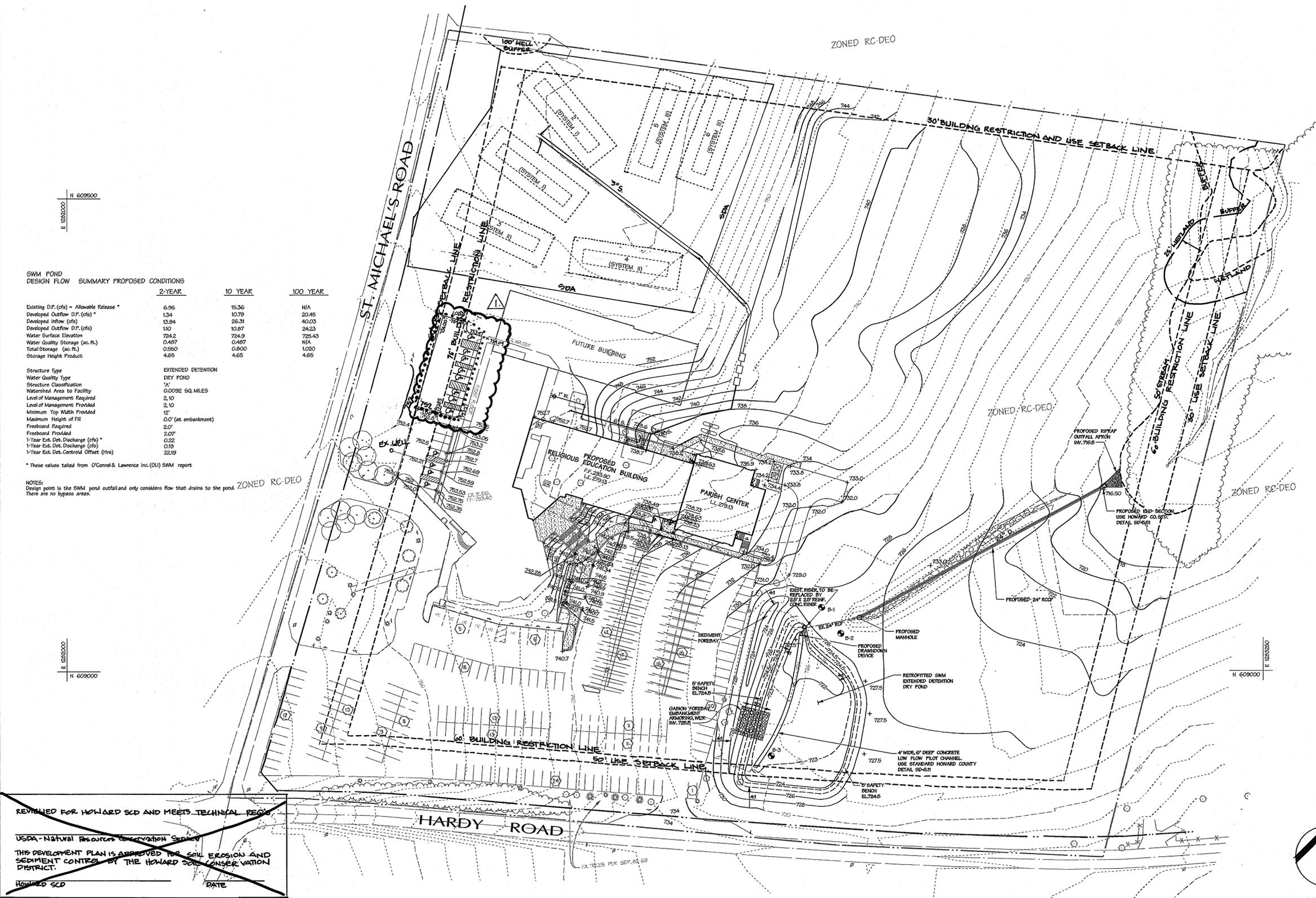
W. J. Ruane
CHIEF DEVELOPMENT ENGINEERING DIVISION 8/11/02
DATE

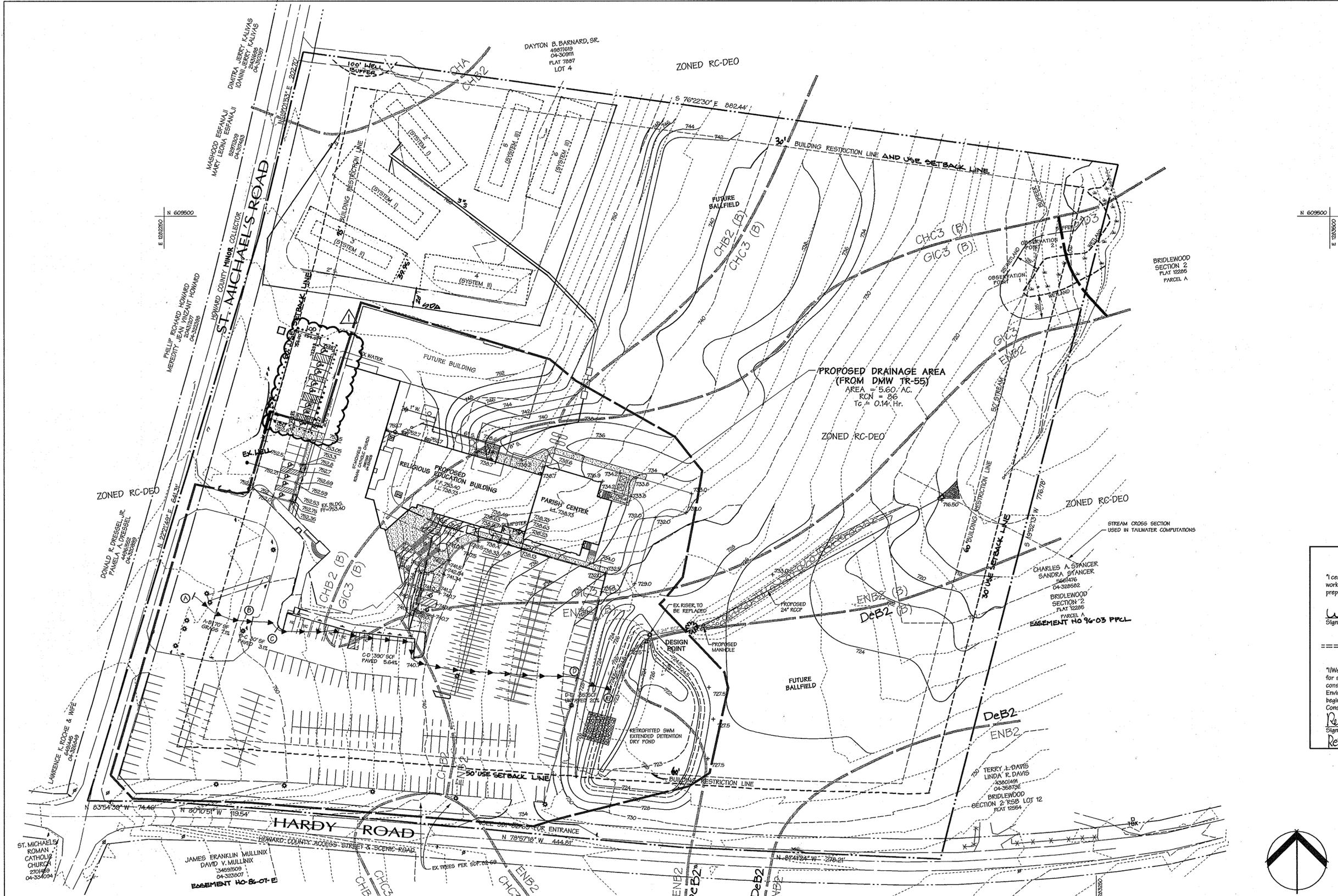
Paul Shindler
CHIEF DIVISION OF LAND DEVELOPMENT 8/21/02
DATE

Paul Shindler
DIRECTOR 8/23/02
DATE

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS

Dennis Brinton
COUNTY HEALTH OFFICER 8-21-02
DATE
HOWARD/COUNTY HEALTH DEPARTMENT





LEGEND

- EX MAJOR CONTOUR
- EX MINOR CONTOUR
- EX WATER
- EX SANITARY SEWER
- EX STORM DRAIN
- EX GAS
- EX EDGE OF ROAD
- PROP. UTILITIES
- PROP. EDGE OF ROAD
- LIMIT OF DISTURBANCE
- PROPOSED CONTOUR
- X 360.70 SPOT ELEVATION
- ENB2 SOILS TYPE BOUNDARIES
- PROP. DRAIN DIVIDE

N 609500
E 1023500

ENGINEER'S CERTIFICATE

"I certify that this plan for sediment and erosion 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."

W.D. DeMunn 7-12-02
Signature of Engineer (print name below signature) Date

DEVELOPER'S CERTIFICATE

"I/we certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

Rev. Michael J. Ruane, Pastor June 17, 2002
Signature of Developer (print name below signature) Date

7/8/13	ADD HANDICAP PARKING SPACES
Date	Revision Description
ST. Michael's Roman Catholic Church	
Phase 1 - Education Building Addition and Parish Center	
OWNER:	DEVELOPER:
CARDINAL WILLIAM H. KEELER THE ROMAN CATHOLIC ARCHBISHOP OF BALTIMORE A CORPORATE SOLE 320 CATHEDRAL STREET BALTIMORE, MARYLAND 21201	ST. MICHAEL'S, POPLAR SPRINGS ROMAN CATHOLIC CONGREGATION 1125 ST. MICHAEL'S ROAD POPLAR SPRINGS, MD. 21771
DMW	
Darr McCune - Walker, Inc.	
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals	
200 East Pennsylvania Avenue Tousson, Maryland 21286 410 296 3333 Fax 296 4705	
SUBDIVISION NAME	SECTION/AREA
NA	NA
PLAN OR LOTS/BLK OR ZONE	TAXIDISTRICT
385/26 1, 2, 3 RC-DEO	7
WATER CODE	SEWER CODE
444	444
LOT/PARCEL # 280	
CROSS YRGT 6040.01	
TITLE	
SWM DRAINAGE AREA MAP	
Dwn By: ADL	Scale: 1"=50'
Des By: MRT	Date: 7/12/02
Chk By: WRD	Approved:
9 of 13	

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

W.D. DeMunn 8/2/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

W.D. DeMunn 8/21/02
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

W.D. DeMunn 8/23/02
DIRECTOR DATE

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS

David V. Mullinix 8-21-02
COUNTY HEALTH OFFICER DATE
HOWARD COUNTY HEALTH DEPARTMENT

Reviewed by Howard SCD and meets Technical Requirements

USDA - Natural Resources Conservation Service Date

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

Howard SCD Date

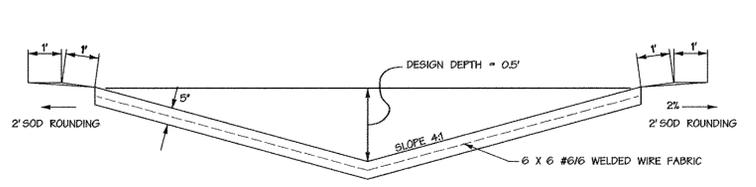
THIS SEAL IS FOR REVISION 1 BY SITE REVISIONS ARE ONLY.

W.D. DeMunn 8-26-2013
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. 16144, EXPIRATION DATE: 08/19/14.

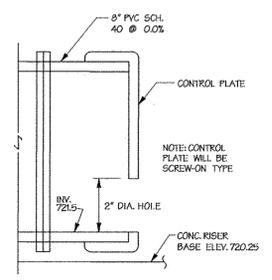
NORTH

7-12-02
Date

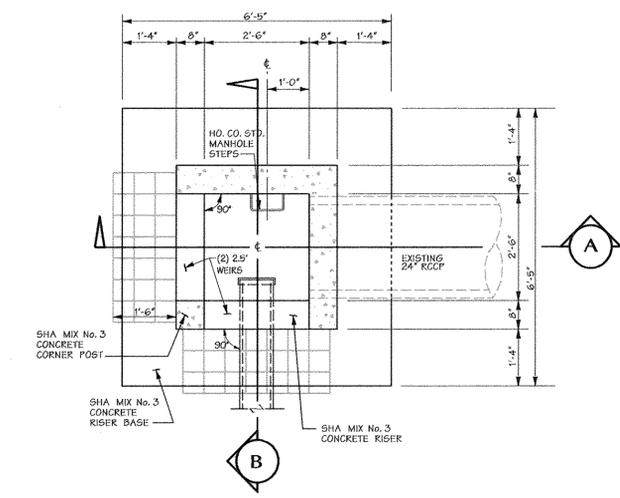
STATE OF MARYLAND
PROFESSIONAL ENGINEER



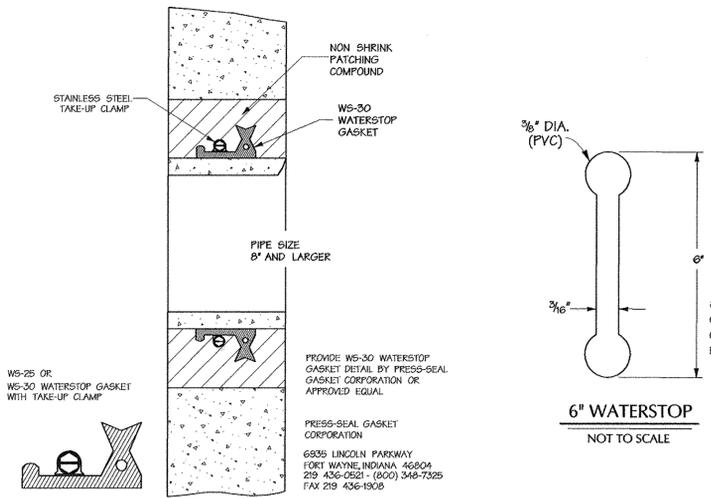
CONCRETE TRIANGULAR SECTION
HOWARD COUNTY S.D. 6.11
NOT TO SCALE



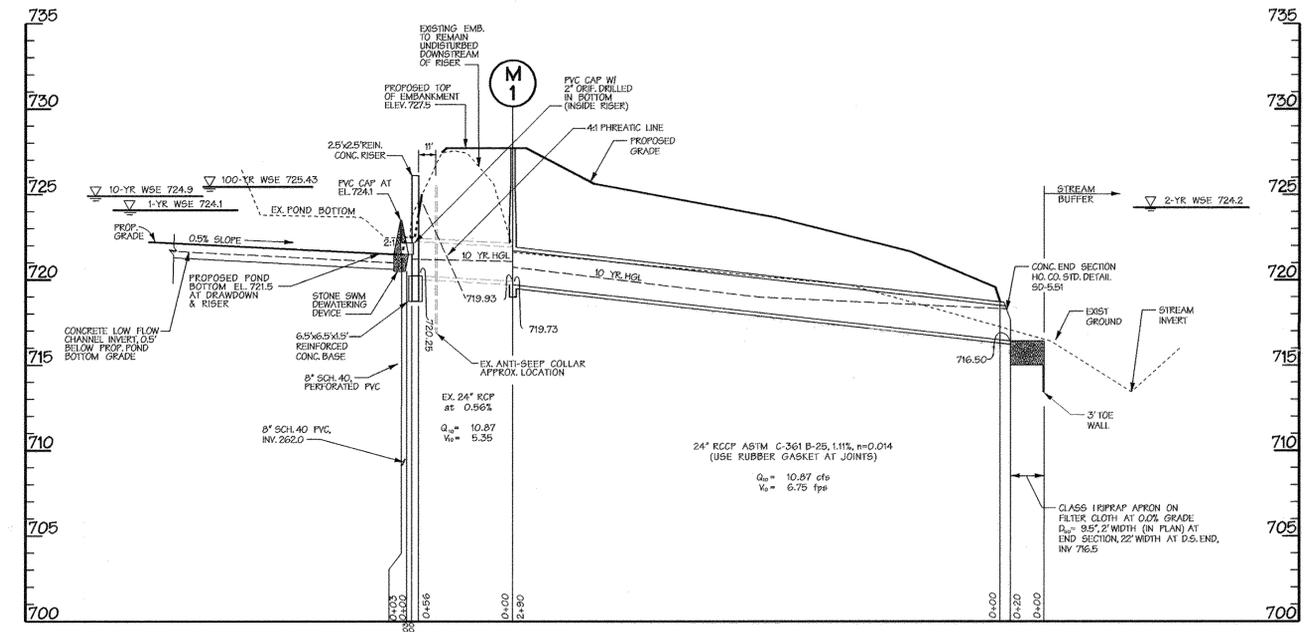
SWM LOW FLOW CONTROL PLATE DETAIL
NTS



RISER PLAN (TOP SLAB REMOVED) - SWM POND
Scale: 1/2" = 1'-0"
CAST IN PLACE

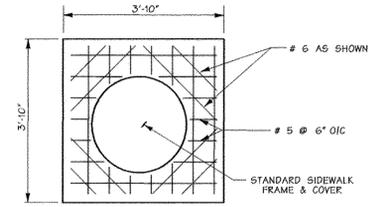


PIPE WATER STOP DETAIL
NOT TO SCALE

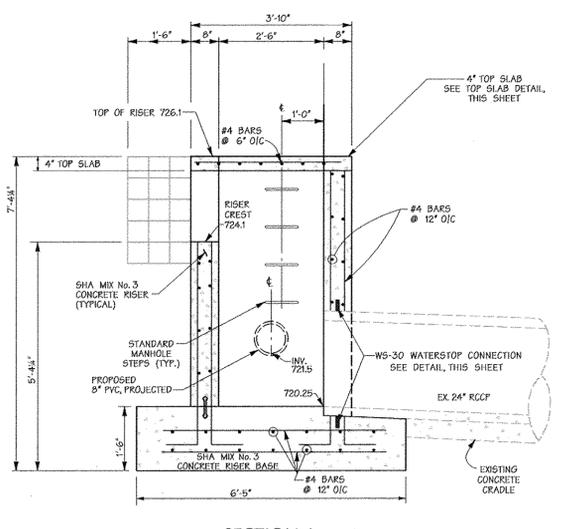


RISER / BARREL PROFILE
SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'

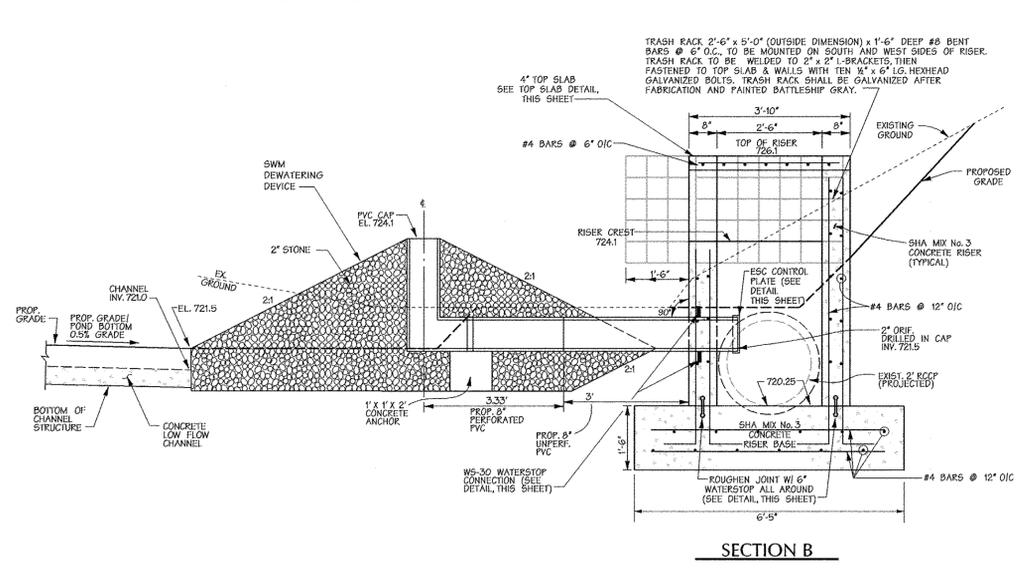
APPROVED HOWARD COUNTY DEPT. OF PLANNING AND ZONING
 Chief, Development Engineering Division
 Chief, Division of Land Development
 Director



TOP SLAB
Scale: 1/2" = 1'-0"
CAST IN PLACE

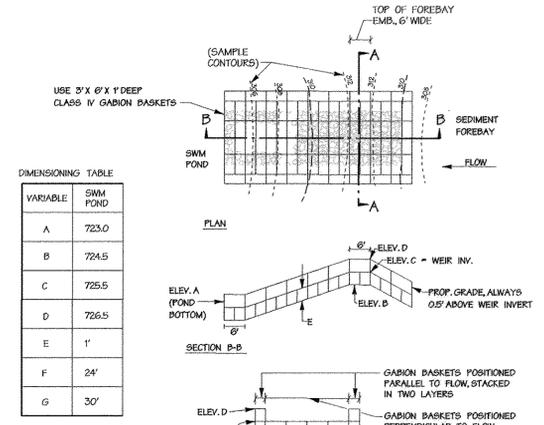


SECTION A



SECTION B

RISER DETAIL FOR SWM POND
Scale: 1/2" = 1'-0"
CAST IN PLACE



SWM FOREBAY EMBANKMENT ARMORING DETAIL
NOT TO SCALE

VARIABLE	SWM POND
A	723.0
B	724.5
C	725.5
D	726.5
E	1'
F	24'
G	30'

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS.
 COUNTY HEALTH OFFICER
 HOWARD COUNTY HEALTH DEPARTMENT

REMOVED FOR HOWARD SCD AND MEETS TECHNICAL REQ'S.
 DEPARTMENT OF NATURAL RESOURCES CONSERVATION SERVICE
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL CONSERVATION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 HOWARD SCD

DEVELOPERS CERTIFICATE:
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I/WE SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I/WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

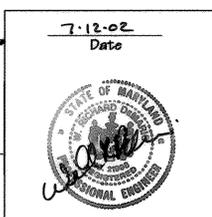
Rev. Michael J. Ruane, Pastor
 June 17, 2002

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W. Richard DeMazio
 June 12, 2002

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE
 DATE: 7-12-02
 APPROVED: HOWARD SOIL CONSERVATION DISTRICT



Date	No.	Revision Description
1-7-03		REMOVE CONCRETE CRADLE

ST. Michael's Roman Catholic Church
 Phase 1 - Education Building Addition and Parish Center

OWNER: CARDINAL WILLIAM H. KEELER, THE ROMAN CATHOLIC ARCHBISHOP OF BALTIMORE
 DEVELOPER: ST. MICHAEL'S, POPLAR SPRINGS ROMAN CATHOLIC CONGREGATION, 1225 ST. MICHAEL'S ROAD, POPLAR SPRINGS, MD. 21771

DMW
 Daft · McCune · Walker, Inc.
 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

200 East Pennsylvania Avenue
 Towson, Maryland 21286
 410 296 3333
 Fax 410 296 4705

TITLE: **STORMWATER MANAGEMENT PROFILE & DETAILS**

Drn By: ADL
 Des By: MRT
 Chk By: WRD

Scale: AS SHOWN
 Date: 7/12/02
 Approved:

Proj. No. 09143.50
 11 of 13

