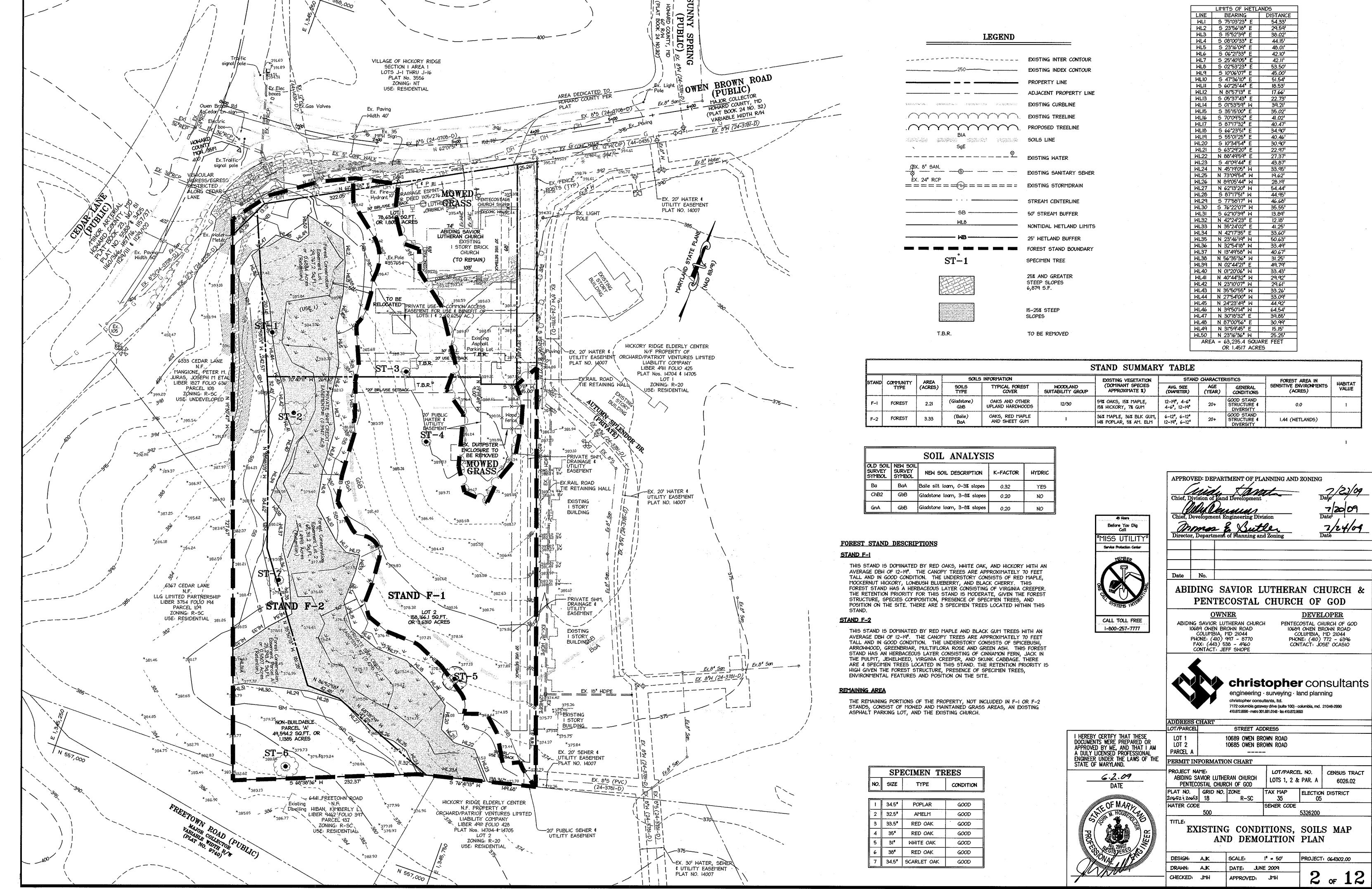
SITE DEVELOPMENT PLAN GENERAL NOTES **LEGEND** 44. NO WETLANDS, WETLAND BUFFERS. STREAMS ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. IV OR STREAM BUFFERS SHALL BE DISTURBED "STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION" FOR WORK IN THE COUNTY RIGHT-OF-WAY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE. ____ EXISTING INTER CONTOUR WITH THIS SITE DEVELOPMENT PLAN. ABIDING SAVIOR LUTHERAN CHURCH BOARD OF APPEALS CASE No. BA-06-015 WAS A THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/ EXISTING INDEX CONTOUR CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO PETITION FOR A CONDITIONAL USE FOR A RELIGIOUS FACILITY, AND WAS ON GRANTED ON THE START OF WORK. THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF HIGHWAYS AUGUST 8TH, 2006 AND EXTENDED ON MAY 13, AT (410) 313-2450 AT LEAST FIVE (5) WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER AND SEWER MAINS. PROPOSED INDEX CONTOUR PENTECOSTAL CHURCH OF GOD NON-BUILDABLE PARCEL 'A' IS BEING CREATED THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO PROPOSED SPOT ELEVATION FOR POSSIBLE SALE IN THE FUTURE TO ONE OF THE ADJOINING LOTS/PARCELS. THIS PARCEI PROPERTY LINE HAS NOT BEEN EVALUATED FOR ACCESS OR TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST LOTS 1, 2 & NON-BUILDABLE PARCEL A FRONTAGE, NOR HAS IT BEEN PROVIDED WITH EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE STATE HIGHWAY EXISTING PROPERTY LINE WATER AND SEWER, IT MAY ONLY BE DEVELOPED IN TANDEM WITH ONE OF THE ADJACENT PARCELS (AND THEN ONLY TO THE APPROXIMATE LOCATION OF EXISTING UTILITIES ARE PER HOWARD COUNTY RECORDS. EXTENT PERMITTED BY HOWARD COUNTY'S 5TH ELECTION DISTRICT ENVIRONMENTAL RESTRICTIONS) IT MAY NOT BE PUBLIC SEWER TO THE PROPOSED BUILDING WILL BE PROVIDED IN ACCORDANCE WITH SECTION SOLD AS A SEPARATE PARCEL 18,122B OF THE HOWARD COUNTY CODE. PUBLIC SEMER ALLOCATION WILL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT TIME. 47. THE GRANT OF EXSEMENT HAS BEEN RECORDED IN HOWARD HOWARD COUNTY, MARYLAND COUNTY RECORDS AT LIBER 11840, FOLLO 381. A STORMWATER THIS SITE IS LOCATED IN THE LITTLE PATUXENT WATERSHED (DNR# 02131105). MANAGEMENT, DROINAGE AND UTILITY EXCEMENT (AS SHOWN ALL FILL AREAS SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS VICINITY MAP ON PLOT NO. 20053) HAS BEEN RECORDED AT LIBER 11840, FOLIO 387. DETERMINED AND VERIFIED IN ACCORDANCE WITH AASHTO T-180,--STANDARD. EXISTING CURBLINE MAP 15 GRID D9 SCALE 1"=2000' ADC# 2070312 CONTRACTOR SHALL MAINTAIN ALL SEDIMENT CONTROL DEVICES WITHIN THE LIMITS OF THE SITE SHEET INDEX DURING CONSTRUCTION OF THE SITE IMPROVEMENTS. CONTRACTOR SHALL PROVIDE ADDITIONAL EXISTING TREELINE EROSION AND SEDIMENTATION CONTROL MEASURES AS MAY BE NECESSARY DURING CONSTRUCTION SHEET TITLE EXISTING CONDITIONS, SOILS MAP, AND DEMOLITION PLAN SITE DEVELOPMENT PLAN PRE & POST DA MAPS FOR SEDIMENT & EROSION CONTROL SEDIMENT & EROSION CONTROL PLAN EXISTING TREE BENCHMARKS PER FEMA MAP# 2400440033B DATED DECEMBER 04, 1986, THIS SITE IS LOCATED IN ZONE 'C', AN Horizontal Datum: Maryland State Coordinates, NAD 83/91 AREA DEDICATED TO VILLAGE OF HICKORY RIDGE Vertical Datum: NAVD 88 THERE ARE EXISTING WETLANDS ON SITE AS DETERMINED BY christopher consultants, Itd. IN A HOWARD COUNTY PER SECTION I AREA I Howard County Monument 35FA REPORT DATED AUGUST 30, 2006. 7 STORMDRAIN PROFILES & DETAILS 3 GRADING & UTILITY PLAN LOTS J-I THRU J-16 N559266.II, El344682.69, Elev. 410.40 PLAT No. 3556 STEEP SLOPES LOCATED ON THIS SITE HAVE BEEN SHOWN ACCORDINGLY. Howard County Monument 35FI SITE NOTES AND DETAILS SIM DRAINAGE AREA MAP & DETAILS LANDSCAPE PLAN LANDSCAPE DETAILS ZONING: R-NT EXISTING STREAM N557787.36, EI345217.36, Elev. 400.40 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. STREAM BUFFER THE SUBJECT PROPERTY IS ZONED R-SC (RESIDENTIAL: SINGLE CLUSTER) PER THE COMPREHENSIVE ZONING PLAN (02/02/2004.) AND THE COMP LITE ZONING REGULATION AMENDMENTS EFFECTIVE JULY THE TOPOGRAPHY AND SITE BOUNDARY WERE PREPARED BY christopher consultants, IN JUNE AND WETLANDS THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. MONUMENT NUMBERS 35FA AND 35FI WERE USED FOR THIS PROJECT (NAD 88.) PROPOSED STORM DRAIN ALL EXISTING UNDERGROUND UTILITIES TO BE FIELD VERIFIED. UTILITIES CONTRACTOR SHALL VERIFY THE SIZE AND LOCATIONS OF ALL UNDERGROUND UTILITIES AND TEST PIT ALL UTILITIES, INCLUDING PROPOSED TIE IN LOCATIONS, AT LEAST 5 DAYS PRIOR TO STARTING ANY WORK ON THESE DRAWINGS. DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IN ADVANCE OF CONSTRUCTION WATER IS PUBLIC (CONTRACT NO. 24-4552-D) 6333 CEDAR LANE PROPOSED SANITARY LINE SEWER IS PUBLIC (CONTRACT NO. 24-4552-D) LANE MANGIONE, PETER JURAS, JOSEPH M PROPOSED CURBLINE THE CONTRACTOR SHALL INSURE THAT CURRENT AS BUILT RECORDS ARE MAINTAINED DURING CONSTRUCTION. UPON COMPLETION OF CONSTRUCTION, CERTIFIED (i.e. P.E. STAMPED) AS-BUILT LIBER 1827 FOLIO 636 PROPOSED TREELINE PARCEL 108 ZONING: R-SC THE SITE IS SUBJECT TO REDEVELOPMENT CRITERIA FOR STORMWATER MANAGEMENT. THE REDEVELOPMENT INCLUDES WATER QUALITY FOR 0.91 AC OF IMPERVIOUS AREA, WHICH WILL BE LIMITS OF DISTURBANCE PROVIDED BY TWO DRY SWALES AND UTILIZING THE SHEET FLOW TO BUFFER CREDIT. LEVEL SPREADERS AND TIMBER CHECK DAMS HAVE BEEN PROVIDED WHERE APPROPRIATE. RECHARGE IS MET BY THE DRY SWALE IN ACCORDANCE WITH THE 2000 MDE DESIGN REQUIREMENTS THIS PROJECT COMPLIES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY HICKORY RIDGE ELDERLY CODE FOR FOREST CONSERVATION BY THE PROVISION OF 2.76 AC OF PRESERVATION IN A FOREST CENTER CONSERVATION EASEMENT. FOREST CONSERVATION REQUIREMENTS HAVE BEEN ADDRESSED UNDER N/F PROPERTY OF ORCHARD/RATRIOT VENTURES LIMITED LIABILITY COMPANY THE LANDSCAPE PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD LIBER 4911 FOLIO 425 COUNTY CODE, AND THE LANDSCAPE MANUAL. PENTECOSTAL CHURCH PLAT Nos. 14704 \$ 14705 6367 CEDAR LANE LANDSCAPE SURETY IN THE AMOUNT OF \$15,570.00 HAS BEEN POSTED AS A PART OF THE DEVELOPER'S AGREEMENT, LANDSCAPE SURETY IS BASED ON THE NUMBER OF REQUIRED PLANTS ZONING: R-20 LLG LIMITED PARTNERSHIP AND FENCING PER THE HOWARD COUNTY LANDSCAPE MANUAL (24 SHADE TREES, 28 EVERGREEN TREES, 96 SHRUBS AND 129 LINEAR FEET OF SOLID FENCE). PARCEL 109 APPROVED: DEPARTMENT OF PLANNING AND ZONING ZONING: R-SC ASSOCIATED PLANS LISTED UNDER ABIDING SAVIOR LUTHERAN CHURCH. CONDITIONAL USE (ABIDING SAVIOR LUTHERAN CHURCH): BA 83-14E (GRANTED 07.19.1983) CONDITIONAL USE (PENTECOSTAL CHURCH OF GOD): BA 06-015C (GRANTED 08.08.2006, AND EXTENDED ON 05.13.2008) Millomunus FINAL PLAT (ABIDING SAVIOR LUTHERAN CHURCH: F-08-123 UNLESS OTHERWISE NOTED, DIMENSIONS FROM CURB ARE MEASURED AT FACE OF CURB. 7/24/09 Date ルーーーーー SITE ANALYSIS DATA CHART ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS. a. TOTAL PROJECT AREA: 6.5747 AC (286,395.2 SF) LOT I: 1.8052 AC (78,634.9 SF) ABIDING SAVIOR LUTHERAN CHURCH LOT 2: 3.6310 AC (158,166.1 SF) PENTECOSTAL CHURCH OF GOD NON-BUILDABLE PARCEL A: 1.1385 AC (49,594.2 SF) CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS PRIOR TO STARTING ON THESE PLANS: -MISS UTILITY 1-800-257-7777 -HOWARD COUNTY DPWT, BUREAU OF UTILITIES (410) 313-4900 b. AREA OF PLAN SUBMISSION: 6.5747 AC (286,395.2 SF) c. LIMIT OF DISTURBED AREA: ±2.710 AC (±118,212 SF) BUILDABLE -BALTIMORE GAS AND ELECTRIC COMPANY CONTRACTOR SERVICES (410)850-4620 -BALTIMORE GAS AND ELECTRIC COMPANY UNDERGROUND DAMAGE CONTROL (410)787-9068 PARCEL A d. Present zoning designation: R-SC (RESIDENTIAL: SINGLE CLUSTER) MAXIMUM BUILDING HEIGHT (PRINCIPAL STRUCTURE): 34' MINIMUM LOT MIDTH AT B.R.L.: 60' MINIMUM SETBACK REQUIREMENTS: CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS AS NECESSARY TO GRADE THE SITE AND 6441 FREETOWN RD ABIDING SAVIOR LUTHERAN CHURCH & FROM ARTERIAL OR COLLECTOR OR PUBLIC STREET R.O.W.: christopher consultants, Itd. SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION, MEANS. METHODS. LA HICKORY RIDGE ELDERLY CENTER HIBAN, KIMBERLY N.F. PROPERTY OF TECHNIQUES, OR PROCEDURES, UTILIZED BY THE CONTRACTOR . NOR FOR THE SAFETY OF PUBLIC PENTECOSTAL CHURCH OF GOD GRAPHIC SCALE LIBER 9462 FOLIO 397 & ORCHARD/PATRIOT VENTURES LIMITED OR CONTRACTOR'S EMPLOYEES, OR FOR THE FAILURE OF THE CONTRACTOR TO CARRY OUT THE PARCEL: 137 WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND STANDARD CONSTRUCTION PRACTICES. USES (OTHER THAN STRUCTURES) IN ALL DEVELOPMENT LIABILITY COMPANY ZONING: R-SC PROJECTS EXCEPT SINGLE-FAMILY DETACHED: 30' LIBER 4911 FOLIO 428 THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES WHICH FROM OTHER PUBLIC STREET R.O.W.: STRUCTURES: PLAT Nos. 14704 \$ 14705 ABIDING SAVIOR LUTHERAN CHURCH PENTECOSTAL CHURCH OF GOD ARE TO REMAIN FREE FROM DAMAGE AND MAINTAIN UNINTERRUPTED SERVICE TO ALL USERS, ANY LOT 2 ZONING: R-20 10689 OWEN BROWN ROAD 10689 OWEN BROWN ROAD DAMAGE INCURRED DUE TO THE CONTRACTOR'S OR SUBCONTRACTOR'S ACTIONS SHALL BE REPAIRED COLUMBIA, MD 21044 PHONE: (410) 772 - 6396 COLUMBIA, MD 21044 PHONE: (410) 997 - 8770 IMMEDIATELY AT THE CONTRACTOR'S EXPENSE (IN FEET SITE PLAN 1 inch = 100^{-1} FAX: (443) 538 - 4960 CONTACT: JOSE' OCASIO USES (OTHER THAN STRUCTURES) EXCLUDING USE IN SINGLE-FAMILY SCALING OF THESE PLANS IS DISCOURAGED UNLESS DIRECTED BY THE ENGINEER. IN THE EVENT OF CONTACT: JEFF SWOPE DETACHED DEVELOPMENT PROJECTS AND PARKING FOR SINGLE-FAMILY A DISCREPANCY BETWEEN THE SCALED AND THE FIGURED DIMENSIONS, THE FIGURED DIMENSIONS DETACHED DEVELOPMENT PROJECTS AND PARKING FOR SINGLE-FAMILY SHALL BE HELD. ATTACHED DWELLINGS: 20' 3. T.B.R. = TO BE REMOVED FROM LOT LINES: STRUCTURES: ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-WAY SHALL christopher consultants BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) 3' LONG. A engineering · surveying · land planning USES (OTHER THAN STRUCTURES) IN ALL DEVELOPMENT GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST PROJECTS EXCEPT SINGLE-FAMILY DETACHED: 201 christopher consultants, Itd. PER HOWARD COUNTY BUILDING CODE SECTION 904.1.1 ALL BUILDINGS IN EXCESS OF 5,000 SF IN SIZE e. PROPOSED USES FOR SITE AND STRUCTURE: RELIGIOUS FACILITY W/ SHARED PARKING 7172 columbia gateway drive (suite 100) - columbia, md. 21046-2990 WILL HAVE A COMPLETE AUTOMATIC FIRE SUPPRESSION SYSTEM DESIGNED IN ACCORDANCE WITH . BUILDING SQUARE FOOTAGE: 20,734 SF 410.872.8690 · metro 301.881.0148 · fax 410.872.8693 g. NUMBER OF STORIES: 3 TREES WITH MATURE HEIGHTS GREATER THAN 25' SHALL NOT BE PLANTED WITHIN 20' OF EITHER BASEMENT FLOOR: MEZZANINE: LOT/PARCEL SIDE OF THE UTILITY POLE LINES. TREES WITH MATURE HEIGHTS GREATER THAN 40' SHALL NOT BE STREET ADDRESS . NUMBER OF PARKING SPACES REQUIRED BY HOWARD COUNTY ZONING REGULATIONS: 117 PARKING SPACES PLACED WITHIN 45' OF THE UTILITY POLE LINES. TREES PLANTED OR RETAINED TO COMPLY WITH 10689 OWEN BROWN ROAD THE FOREST CONSERVATION PLAN OR OTHER PERPETUAL EASEMENT REQUIREMENTS SHALL MEET THE DOCUMENTS WERE PREPARED OR LOT 2 LOT I (ABIDING SAVIOR LUTHERAN CHURCH) - 150 SEATS PARKING REQUIRED (1 SPACE/3 SEATS): 50 SPACES 10685 OWEN BROWN ROAD ABOVE CONDITIONS. BGE SHALL HAVE THE PERPETUAL RIGHT TO TRIM OR REMOVE ANY PROTECTED APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE TREES IF IN THE SOLE OPINION OF BGE, THE TREE OR TREES ARE ENDANGERING THE OVERHEAD PARCEL A LOT 2 (PENTECOSTAL CHURCH OF GOD) - 200 SEATS PARKING REQUIRED (I SPACE/3 SEATS): 67 SPACES PERMIT INFORMATION CHART STATE OF MARYLAND. NO GRADING, REMOVAL OF VEGETATION COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE NUMBER OF PARKING SPACES PROVIDED ON SITE: 118 PARKING SPACES PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) AND THEIR BUFFERS, AND FOREST LOT/PARCEL NO. CENSUS TRACT . NUMBER OF HANDICAP ACCESSIBLE SPACES PROVIDED: 5(INCL. 2 VAN SPACES) CONSERVATION EASEMENT AREAS. 6-2.09 ABIDING SAVIOR LUTHERAN CHURCH LOTS 1, 2 & PAR. A k. BUILDING COVERAGE (NOT TO EXCEED 25%) 6026.02 PENTECOSTAL CHURCH OF GOD THIS SDP IS SUBJECT TO THE AMENDED FIFTH EDITION, OF THE SUBDIVISION AND LAND LOT I (±6,486 SF BLDG. FOOTPRINT): 8.3% GRID NO. ZONE DEVELOPMENT REGULATIONS PER COUNCIL BILL NO. 45-2003 AND THE AMENDED ZONING REGULATIONS LOT 2 (±10,142 SF BLDG. FOOTPRINT): 6.4% PLAT NO. TAX MAP . ELECTION DISTRICT PER COUNCIL BILL NO. 75-2003, DEVELOPMENT OR CONSTRUCTION ON THIS PROPERTY MUST COMPLY 20652:20653 R-SC APPLICABLE DPZ FILE REFERENCES: WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE WATER CODE SEWER CODE CONDITIONAL USE (ABIDING SAVIOR LUTHERAN CHURCH): BA-83-14E (GRANTED 07.19.1983) DEVELOPMENT PLAN, AND BUILDING/GRADING PERMIT APPLICATIONS. CONDITIONAL USE (PENTECOSTAL CHURCH OF GOD): BA-06-15C (GRANTED 08.08.2006, AND THE PLANNING DIRECTOR HAS DETERMINED THAT THIS PROJECT MEETS THE REQUIREMENTS OF FINAL PLAT (ABIDING SÁVIOR LUTHERAN CHURCH): F-08-123 TITLE: SECTION 128A,10 AND THEREFORE PARKING IS PERMITTED WITHIN THE USE SETBACKS AS SHOWN. . LIGHT TRESPASS ONTO ADJACENT PROPERTIES SHALL BE LIMITED TO 0.1 FOOT CANDLES. COVER SHEET THE EXISTING CHURCH (ABIDING SAVIOR LUTHERAN CHURCH) ON LOT I WAS CONSTRUCTED IN 1963. PROPOSED PENTECOSTAL CHURCH OF GOD WILL HAVE AN AUTOMATIC FIRE PROTECTION SPRINKLER SCALE: 1" = 1001 PROJECT: 064302.00 THE REQUIRED NUMBER OF SPACES FOR ABIDING SAVIOR LUTHERAN CHURCH (50) ARE ENITRELY DRAWN: AJK DATE: JUNE 2009 LOCATED ON LOT 1. THE REQUIRED NUMBER OF SPACES FOR THE PENTECOSTAL CHURCH OF GOD

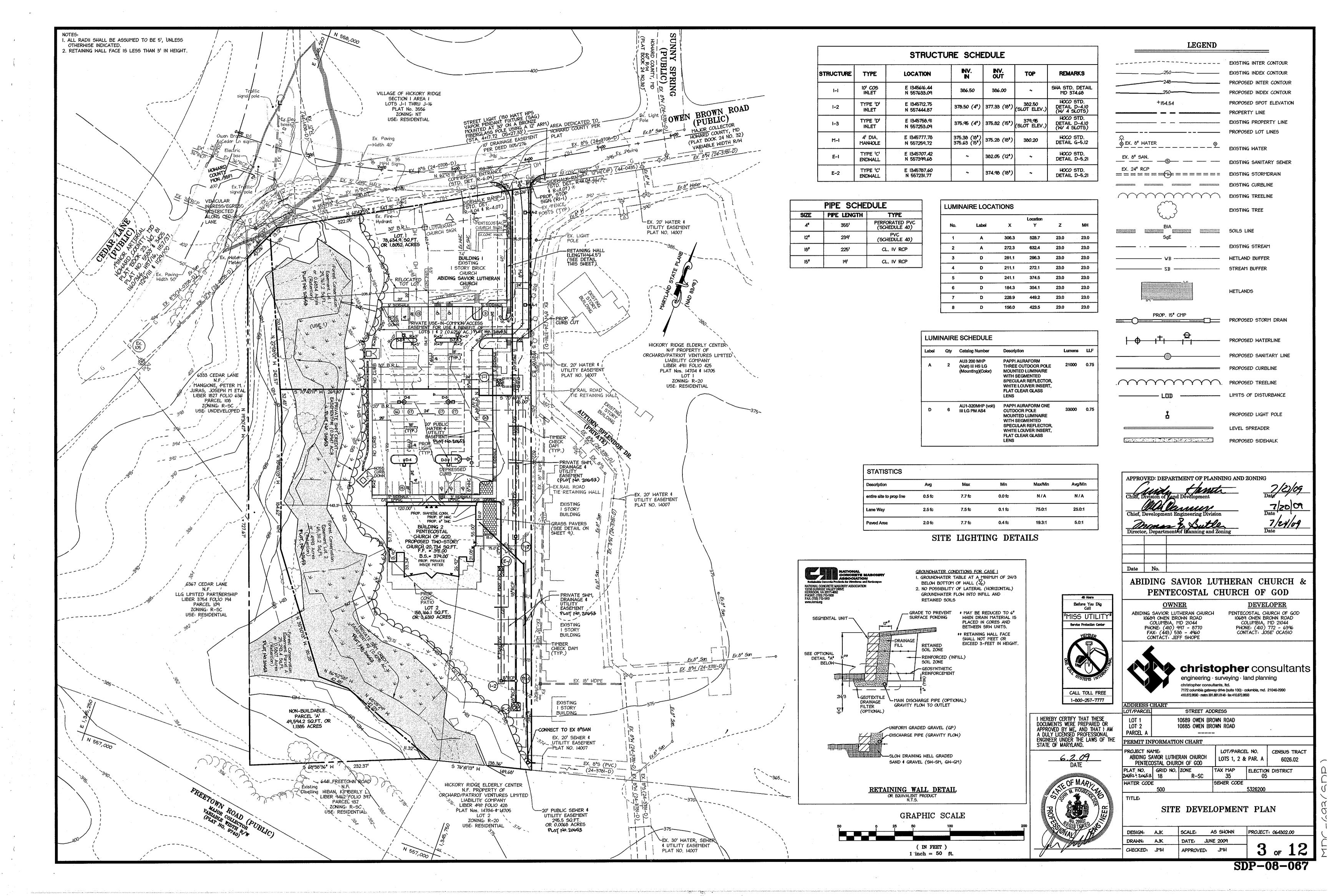
EAST BUILDING ELEVATION
SCALE: 1"=20"

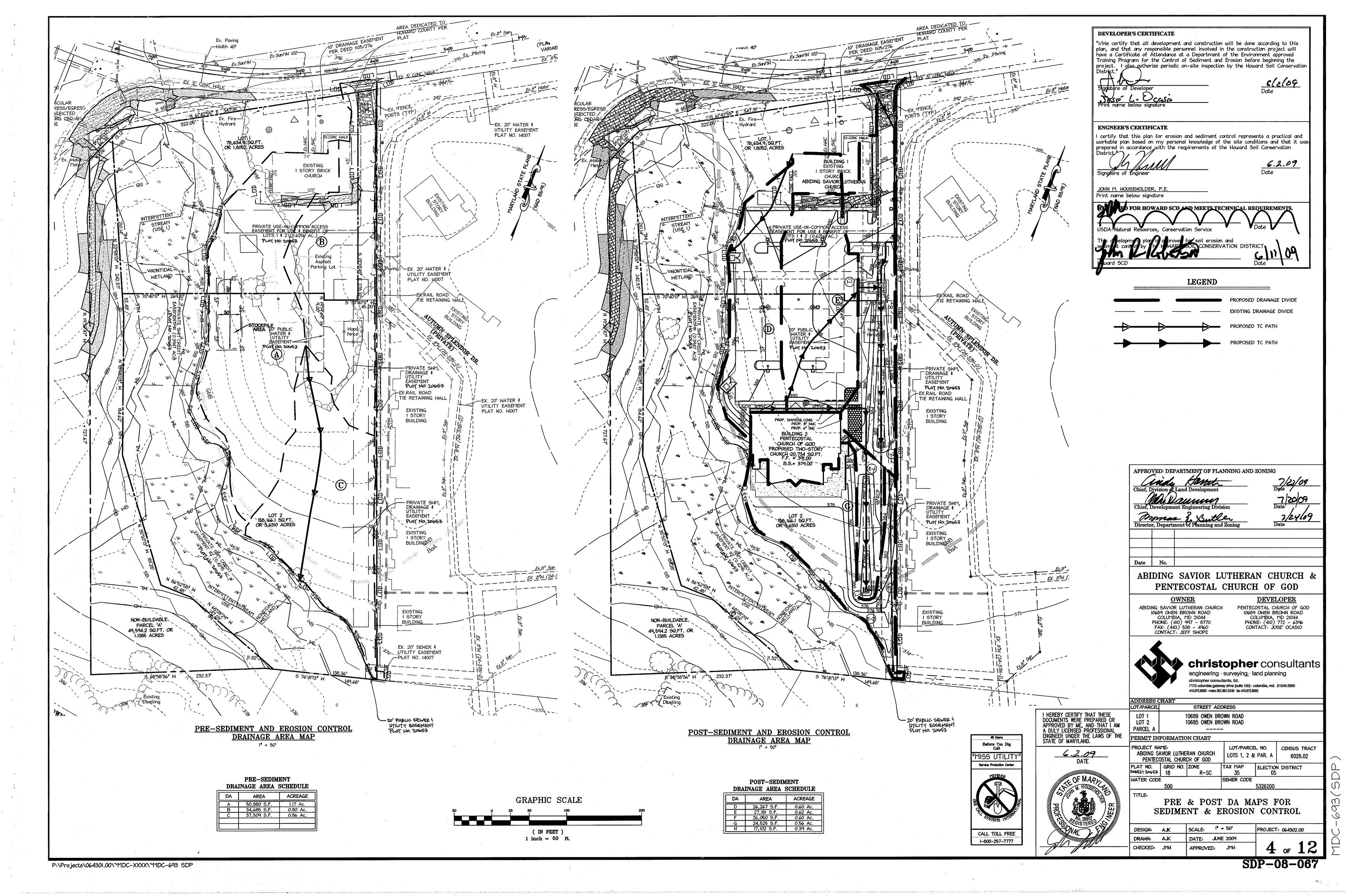
(67) ARE LOCATED ON ENTIRELY LOT 2.

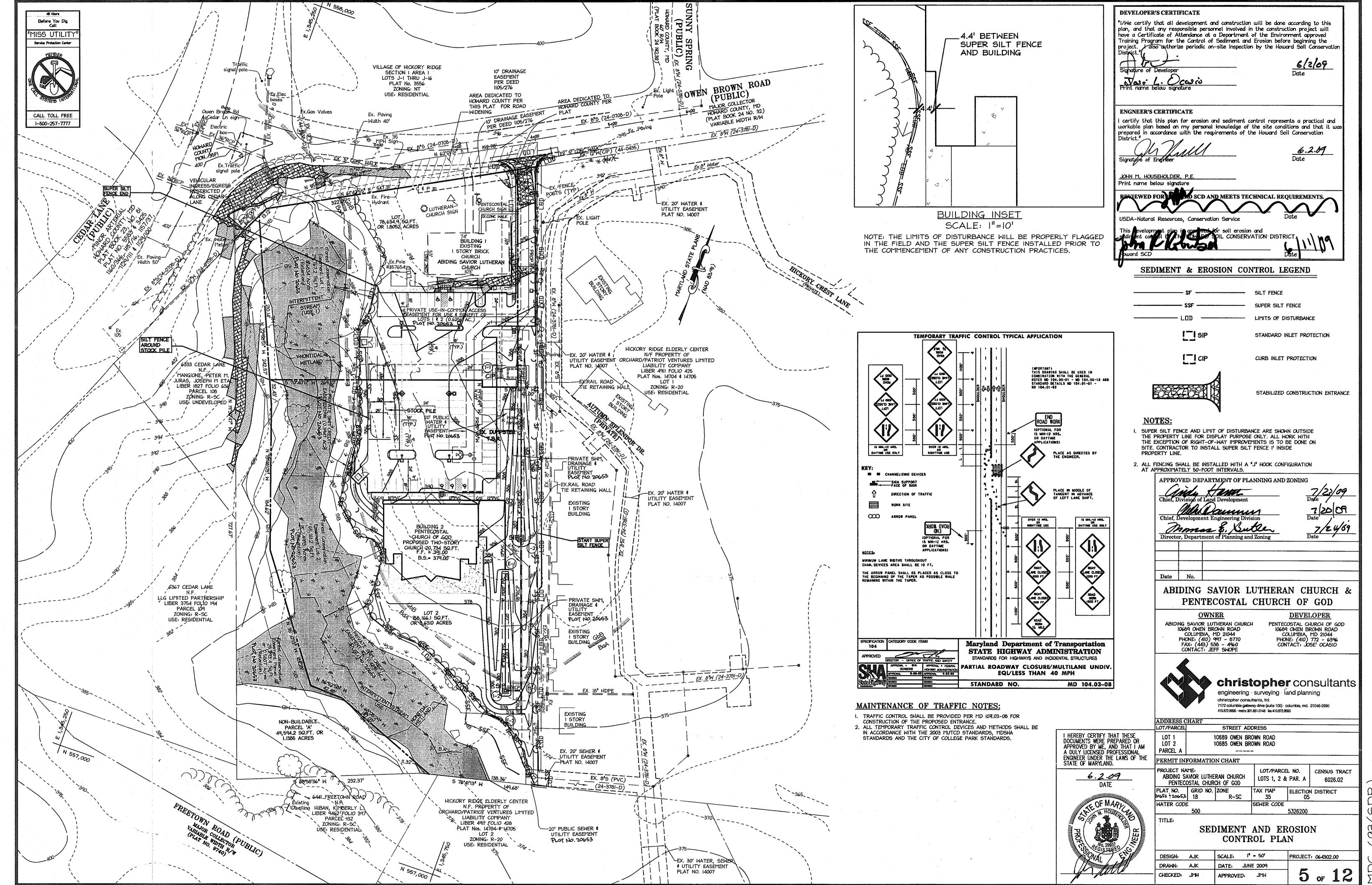
APPROVED: JMH

CHECKED: JMH









Definitions

Reshaping of the existing land surface in accordance with a plan as determined by engineering survey and layout.

<u>Purpose</u>

The purpose of a land grading specification is to provide for erosion control and vegetative establishment on those areas where the existing land surface is to be reshaped by grading according to plan.

Design Criteria

The grading plan should be based upon the incorporation of building designs and street layouts that fit and utilize existing topography and desirable natural surrounding to avoid extreme grade modifications. Information submitted must provide sufficient topographic surveys and soil investigations to determine limitations that must be imposed on the grading operation related to slope stability, effect on adjacent properties and drainage patterns, measured for drainage and water removal and vegetative treatment, etc.

Many countries have regulations and design procedures already established for land grading and cut and fill slopes. Where these requirements exist, they should be followed. The pian must show existing and proposed contours of the area(s) to be graded. The plan shall also include practices for erosion control, slope stabilization, safe disposal of runoff water and drainage, such as waterways, lined ditches, reverse slope benches (including grade and cross-section), grade stabilization structures, retaining walls, and surface and subsurface drains. The plan shall also include phasing of these practices. The following shall be incorporated into the plan:

I. Provisions shall be made to safety conduct surface runoff to storm drains, protected outlets or to stable water courses to insure that surface runoff will not damage slopes or other graded areas.

2. Cut and fill stopes that are to be stabilized with grasses shall not be steeper then 2:1. (Where the slope id to be moved the slope should be no steeper then 3:1: 4:1 is preferred because of safety factors related to mowing steep slopes.

3. Reverse benches shall be provided whenever the vertical interval (height) of any 2:Islopes exceeds 20 feet; for 3:I slopes it shall be increased to 30 feet and for 4:1 to 40 feet. Benches shall be located to divide the slopes face as equally as possible fertilizer and lime amendments required to bring the soil into and shall convey the water to a stable outlet. Soils, seeps, rock outcrops, etc., shall also be taken into consideration when designing benches.

- a. Benches shall be a minimum of six-feet wide to provide ease of maintenance.
- b. Benches shall be designed with a reverse slope of 6:1 of flatter to the toe of the upper slope and with a minimum of one foot in depth. Bench gradient to the outlet shall be between 2 percent and 3 percent, unless accompanied by appropriate design and
- c. The flow length within a bench shall not exceed 800" unless accompanied by appropriate design and computations. For flow channel stabilization see temporary swales.

4. Surface water shall be diverted from the face of all cut and/or fill slopes by the use of earth dikes, ditches and swales or conveyed downslope by the use of a designated structure, except where:

- a. The face of the slope is or shall be stabilized and the face of all graded slopes shall be protected for surface runoff until they are
- b. The face of the slope shall not be subjected to any concentrated slows of surface water such as from natural drainways, graded swales, downspouts, etc.
- c. The face of the slope will be protected by special erosion control materials, to include, but not limited to: approved vegetative stabilization practices (see section G), rip-rap or other approved

5. Cut slopes occurring in ripable rock shall be serrated as shown on the following diagram. These serrations shall be made with conventional equipment as the excayation is made. Each step or serration shall be constructed on the contour and will have steps cut as nominal two-foot intervals with nominal three-foot horizontal shelves. These steps will vary depending on the slope ratio or the cut slope. The nominal slope line is 1:1. These steps will weather and act to hold moisture, lime, fertilizer and seed thus producing a much quicker and longer lived vegetative cover and Topsoil shall not be place while the topsoil or subsoil is in a frozen or muddy better slope stabilization. Over land flow shall be diverted from the top of all serrated cut slopes and carried to a suitable outlet.

6. Surface drainage shall be provided where necessary to intercept seepage that would Alternative for Permanent Seeding - Instead of applying the full amounts of like and otherwise adversely affect slope stability or create excessively wet site conditions.

7. Slopes shall not be created to close to property lines as the endanger adjoining properties without adequately protecting such properties against sediment, erosion, slippage, settlement, subsidence or other related damages.

8. Fill material shall be free of brush, rubbish, rocks, logs, stumps, building debris, and other objectionable material. It should be free of stones over two (2) inches in diameter where compacted by hand or mechanical tempers over eight (8) inches in diameter where compacted by rollers or other equipment. Frozen material shall not be placed in the fill nor shall the fill material be placed on a frozen foundation.

9. Stockpiles, borrow areas and spoil shall be shown on the plans and shall be subjected to the provisions of the Standard and Specifications.

All disturbed areas shall be stabilized structurally or vegetatively in compliance with 20.0 Standards and Specifications for Veaetative Stabilization.

21.0 Standard and Specifications For Topsoil

Definitions

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

To provide a suitable soil medium for vegetative growth. Soild of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

Conditions Where Practice Applies

This practice is limited to areas having 2:1 or flatter slopes where:

- a. The texture of the exposed subsoil/parent material in not
- adequate to produce vegetative growth.
- b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
- c. The original soil to be vegetated contains materials toxic to plant growth
- d. The soil is so acidic that treatment with timestone is not feasible

For the purpose of these Standards and Specification, areas having slopes steeper that 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper that 2:1 shall have the appropriate stabilization shown on the

Construction and Material Specifications

Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.

Topsoil Specifications - Soil to be used as topsoil must meet the following:

- i. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall bot be a mixture of contrastinf textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials large than 1 1/4" in diameter.
- ii. Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or other as specified.
- iii. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread to the rate of 4-8 tons/acre (200-400 pounds per 1,000square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked in to the soil in conjunction with tillage operations as described in the following procedures.

For sites having disturbed areas under 5 acres:

Place topsoil (if required) and apply soil amendments as specified in 20.0 vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

For sites having disturbed areas over 5 acres:

On soil meeting Topsoil specifications, obtain test results dictating compliance with the following.

- a, pH for topsoil shall be between 6.0 and 7.5. If tested soil demonstrates a pH of less the 6.0, sufficient lime shall be prescribed to raise pH to 6.5 or higher.
- b. Organic content of topsoil shall be not less then 1.5 percent by weiaht
- c. Topsoil having soluble salt content grater then 500 parts per million shall not be used.
- d. No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 day min.) to permit dissipation of phyto-toxic materials.

Note: Topsoil substitutes or amendments as recommended be a qualified agronomist or soil scientist approved by the appropriate approval authority, may be used in lieu of natural topsoil.

Place topsoil (if required) and apply soil amendments as specified on 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.

When topsoiling, maintain needed erosion and sediment control practiced such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fences and Sediment Traps and Basins.

Grades in the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.

Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4th. Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.

condition, when the subsoil id excessively wet in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

commercial fertilizer, composted sludge and amendments mat be applied as specified

Composted Studge Materials for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:

- a. Composted sludge shall be supplied by, or originated from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
- b. Composted sludge shall contain as least I percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements
- c. Composted sludge shall be applied at a rate of 1 ton/1,000

Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.

References: Guideline Specifications, Soil Preparation and Sodding. MD-VA, Pub #1, Cooperative Extention Service, University of Maryland and Virginia Polytechnic Institutes. Revised 1973.

30.0 Dust Control

Topsoil Application

Controlling dust blowing and movement on construction sites and roads.

<u>Purpose</u>

To prevent blowing and movement of dust from exposed soil surfaces, reduce on and off-site damage, health hazards, and improve traffic safety.

Conditions Where Practice Applies

This practice is applicable to areas subject to dust blowing and movement when in and off-site damage is likely without treatment.

<u>Specifications</u>

Temporary Methods

1. Mulches - See standards for vegetative stabilization with mulches only. Mulch should be crimped or tacked to prevent blowing.

2. Vegetative Cover - See standards for temporary vegetative cover.

3. Tillage - To roughen surface and bring clods to the surface. This is an emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12" apart, spring-toothed harrows, and similar plows are examples of equipment whicj may produce the desired

4. 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 that runoff begins to flow.

5. Barriers - Soild board fences, silt fences, snow fences, burlap fences, staw bales and similar materials can be used to control air currents and soil blowing. Barriers placed at right angles to [revailing currents at intervals of about 10 times their height are effective in controlling soil blowing. 6. Calcium Chloride - Apply at rates that will keep surface moist. May need

Permanent Methods

1bs/acre 10-10-10

retreatment.

1. Permanent Vegetation - See standards for permanent vegetative cover, and permanent stabilization with sod. Existing trees or large shrubs may afford valuable protection if left in place.]

2. Topsoil - Covering with less erosive materials. See Standards for topsoilding.

References

1. Agriculture Handbook 346. Wind Erosion Forces in the United State and Their Use in Predicting Soil Loss.

2. Agriculture Information Bulletin 354. How to Control Wind Erosion, USDA - ARS.

PERMANENT SEEDING NOTES

3. Stone - Cover surface with crushed stone or coarse gravel.

Apply to graded or cleared areas not subject to immediate further disturbance when a permanent long-lived vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

<u>Soil Amendments:</u> In lieu of soil test recommendations, use one of the following 1. Preferred--Apply 2 tons/acre dolomitic limestone (92 lbs/1000 sq. ft.) and 600 1bs/acre 10-10-10

fertilizer (14 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil. At time of seeding apply 400 lbs/acre 30-0-0 urea form fertilizer (9 lbs/1000 sq

2. Acceptable--Apply 2 tons/acre dolamitic limestane (92 lbs/1000 sq. ft.) and 1000

fertilizer (23 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three Seeding -- For the periods March I -- April 30, and August I -- October 15, seed with 60 lbs/acre (1.4 lbs/1000 sq, ft.) of Kentucky 31 Tall Fescue. For the period May 1 -- July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs/acre

February 28, protect site by: Option I - Two tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option 2 - Use sod, Option 3 -- Seer: with 60 lbs/acre Kentucky 30 Tall Fescue and mulch with

(.05 lbs/1000 sq. ft.) of weeping lovegrass. During the period of October 16 --

2 tons/acre well anchored straw.

Mulching -- Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slope 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq. ft.) for anchoring.

Maintenance -- Inspect all seeding areas and make needed repairs, replacements and

TEMPORARY SEEDING NOTES.

Apply to graded or cleared areas likely to be re-disturbed where a short-term vegetative cover is needed:

acceptable means before seeding, if not previously loosened.

Seedbed preparation: -- Loosen upper three inches of soil by raking, disking or other

Soil Amendments: -- Apply 600 lbs/acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.).

Seeding: -- For periods March I -- April 30 and from August 15 -- October 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs/1000 sq. ft.). For the period May 1 -- August 14, seed with 3 lbs/acre of weeping lovegrass (.07 lbs/1000 sq. ft.). For the period November 16 -- February 28 protect the site by applying 2 tons/acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: -- Apply 1-1/2 to 2 tons/acre (70 to 90 lbs/1000 sq, ft.) of unrotted weed-free, small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal/1000 sq. ft., of emulsified asphalt on flat areas. On slope 8 ft. or higher, use 348 gal. per acre (8 gal/1000 sq. ft.)for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL for additional rates and methods not covered.

DEVELOPER'S CERTIFICATE

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

dignature of

6/2/09

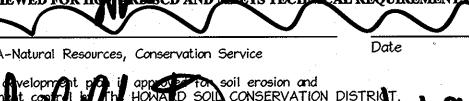
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ENGNEER'S CERTIFICATE

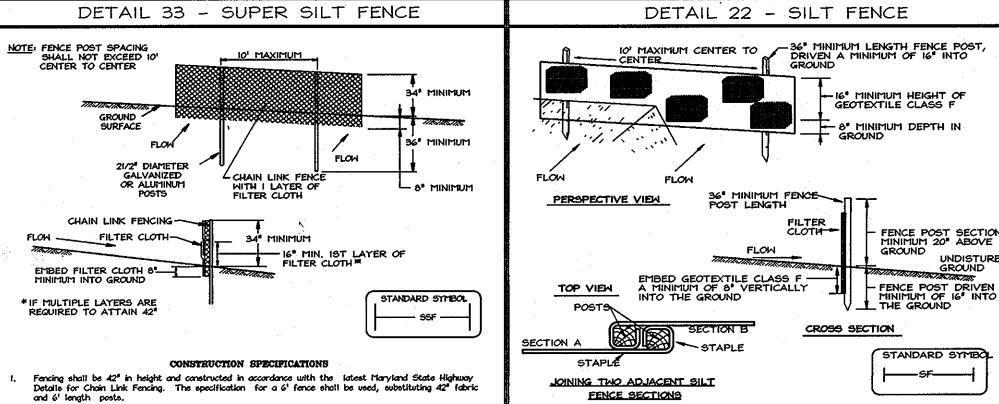
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certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation

ROSCO AND MEETS TECHNICAL REQUIREMENTS.



stabilized any construction as shown on these plans by the end of each work day, whichever is shorter.



Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, Fence posts shall be a minimum of 36° lang driven 16° minimum into the ground. Hood posts shall be $11/2^8 \times 11/2^9$ square (minimum) out, or $13/4^8$ diameter (minimum) round and shall be of sound quality handwood. Steel posts will be standard T or U section weighting not less than Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and

Filter cloth shall be embedded a minimum of 8° into the ground. 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: 5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6° and folded. Maintenance shall be performed as needed and slit buildups removed when "bulges" develop in the slit fence, or when slit reaches 50% of fence height

Test: MSMT 509 20 lbe/in (min.) 0.3 gal/ft /minute (max.) Test: MSMT 509 Tensile Modulus

50 lbs/in (min.) Test: MSMT 509
20 lbs/in (min.) Test: MSMT 509
0.3 gal ft²/ minute (max.) Test: MSMT 322 Tensile Strength Filtering Efficiency 75% (min.) Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass. Sitt Fence shall be inspected after each rainfall event and maintained when bulges occur or when

DETAIL 23A - STANDARD INLET PROTECTION -2" X 4" FRAMING 6º MINIMUM - NOTCH ELEVATION STANDARD SYMBOL SIP MAX. DRAINAGE AREA = 1/4 ACRE CONSTRUCTION SPECIFICATIONS Excavate completely around the inlet to a depth of 18° below the notch Drive the 2"x 4" construction grade lumber posts 1' 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 23A. The top of the frame (weir) must be

5"below adjacent roadways where flooding and safety issues may arise.

Stretch the $1/2' \times 1/2'$ 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 geotixtile 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 fastened 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

If the inlet is not in a sump, construct a compacted earth dike across the ditch line directly below it. The top of the earth dike 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.

EXISTING PAVEMENT-EARTH FILL PIPE AS NECESSARY ** GEOTEXTILE CLASS 'C'-MINIMUM 6" OF 2"-3" AGGREGATE OVER LENGTH AND WIDTH OF STRUCTURE OR BETTER LEXISTING GROUND PROFILE PLAN VIEW STANDARD SYMB **SASCE** Construction Specification

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE

Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid

1. Length - minimum of 50' (#30' for single residence tot).

HOWARD COUNTY

SOIL CONSERVATION DISTRICT

Width - 10' minimum, should be flared at the existing road to provide a turning radius.

Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placin stone. **The plan approval authority may not require single family residences to use 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:

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

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.

MARYLAND DEPARTMENT OF ENVIRONMEN WATER MANAGEMENT ADMINISTRATION

1. The contractor is responsible for obtaining all required permits prior to commencing any land disturbance activities. (1 day)

SEQUENCE OF CONSTRUCTION

2. An on-site preconstruction meeting shall be conducted with the contractor and the Howard County Inspector at least 48 hours prior to the start of construction. Contact the Howard County Department of Inspections, Licenses and Permits at (410) 313-1880 to schedule. (1 day)

3. Install the perimeter sediment control devices including silt fence, super silt fence and the stabilized construction entrance (2 days)

4. Remove the existing structures, and other site features which are located within the limt of disturbance. Clear \$ grub area of site within limit of disturbance. (5 days)

5. Begin site grading (20 days). 6. Begin installation of storm drain, water and sewer and all other underground utility lines. (15 days)

7. Provide inlet protection as soon as inlets 1-1, 1-2 and 1-3 are constructed. (2 days)

8. Begin site curb \$ gutter, parking lot, and entrance construction from Owen

Brown Road. (25 days) 9. Begin building construction. (160 days).

10. Base pave and install the remainder of the driveway entrance and associated 11. Install all light poles, traffic signs, and landscaping. Complete all other onsite improvements. (15 Days)

12. Stabilize all remaining disturbed areas per the permanent seeding notes.

13. With the permission of the sediment control inspector remove any remaining sediment control devices. (3 days)

Total Construction Time: 257 Days

I. A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (410-313-1855). 2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most

current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto. 3. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas

on the project site. 4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol I, Chapter 12 of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.

5. All disturbed areas must be stabilized within the time period specific above in accordance with the 1995 MARYLAND STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (Sec. 51), sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Section 52). Temporary stabilization with mulch along can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.

6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained by the Howard County Sediment Control Inspector.

7. Site Analysis: Total Area of Site <u>6.5747</u> Acres Area Disturbed _____2.71 __Acres Area to be roofed or paved _L6L_ Area to be vegetatively stabilized ____1.10____Acres Total Cut 7684 Cu. Yds. Total Fill 500 Cu. Yds.

Offsite waste/borrow area location:

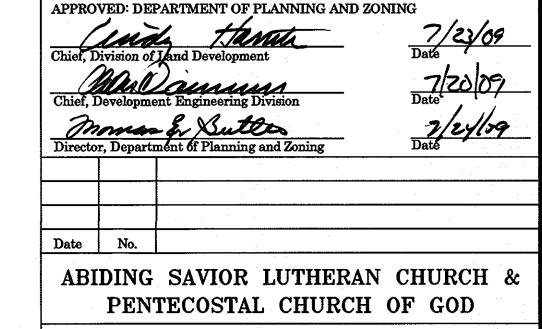
approval by the inspection agency is made.

8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.

9. Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control 10. On all site with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of instillation of perimeter erosion and sediment controls, but before proceeding with any other earth

11. Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and

disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial



DEVELOPER ABIDING SAVIOR LUTHERAN CHURCH PENTECOSTAL CHURCH OF GOD 10689 OWEN BROWN ROAD 10689 OWEN BROWN ROAD COLUMBIA, MD 21044 PHONE: (410) 997 - 8770 COLUMBIA, MD 21044 PHONE: (410) 772 - 6396 CONTACT: JOSE CASIO FAX: (443) 538 - 4960 CONTACT: JEFF SWOPE

christopher consultants



HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM LOT 2 10685 OWEN BROWN ROAD PARCEL A A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THI STATE OF MARYLAND. PERMIT INFORMATION CHART PROJECT NAME: LOT/PARCEL NO. 6-2.09 ABIDING SAVIOR LUTHERAN CHURCH LOTS 1, 2 & PAR. A PENTECOSTAL CHURCH OF GOD PLAT NO. GRID NO. ZONE 20652 20653 18 35 R-SC OF MARI WATER CODE SEWER CODE

DATE

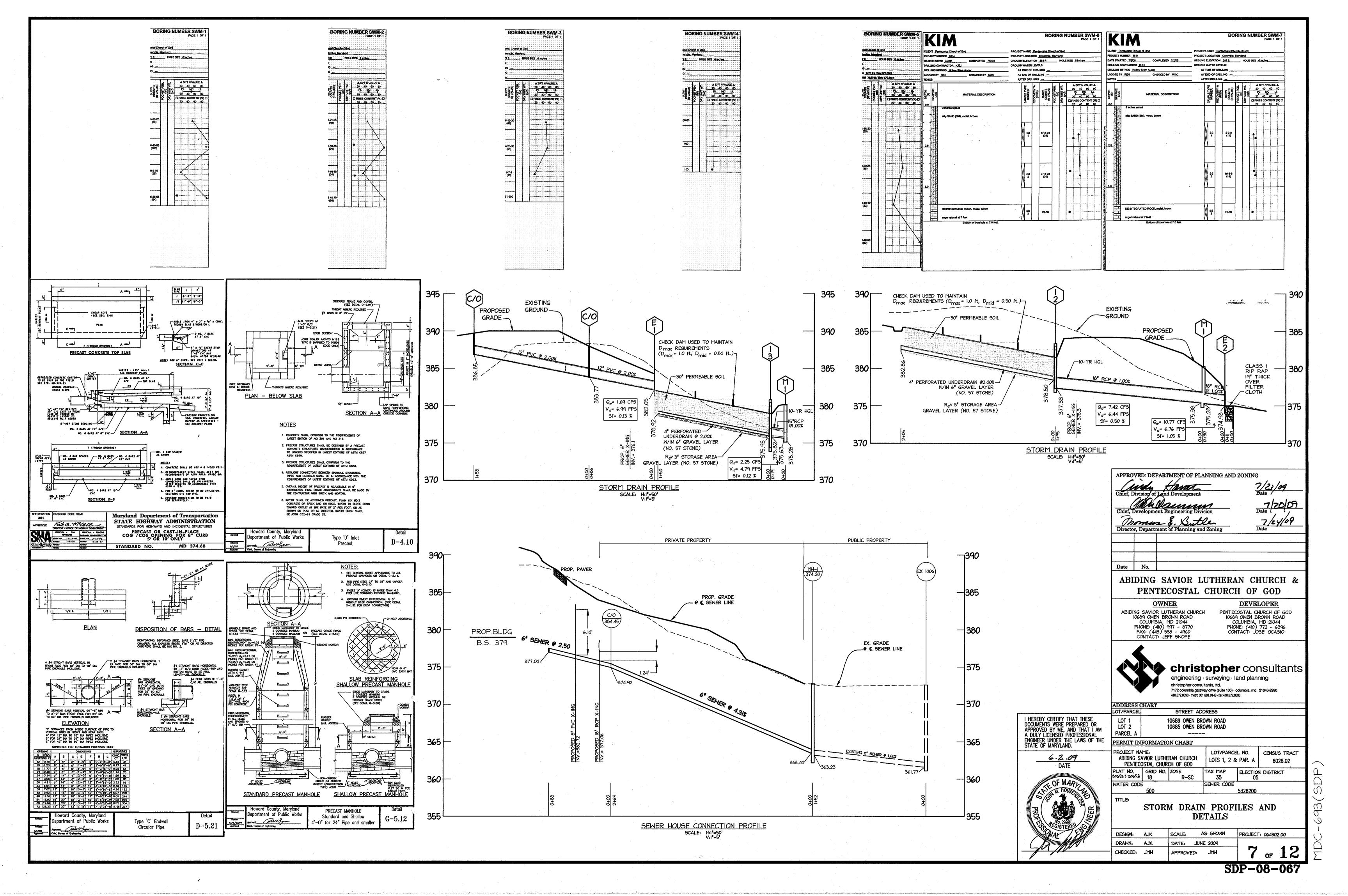
EROSION AND SEDIMENT CONTROL NOTES & DETAILS

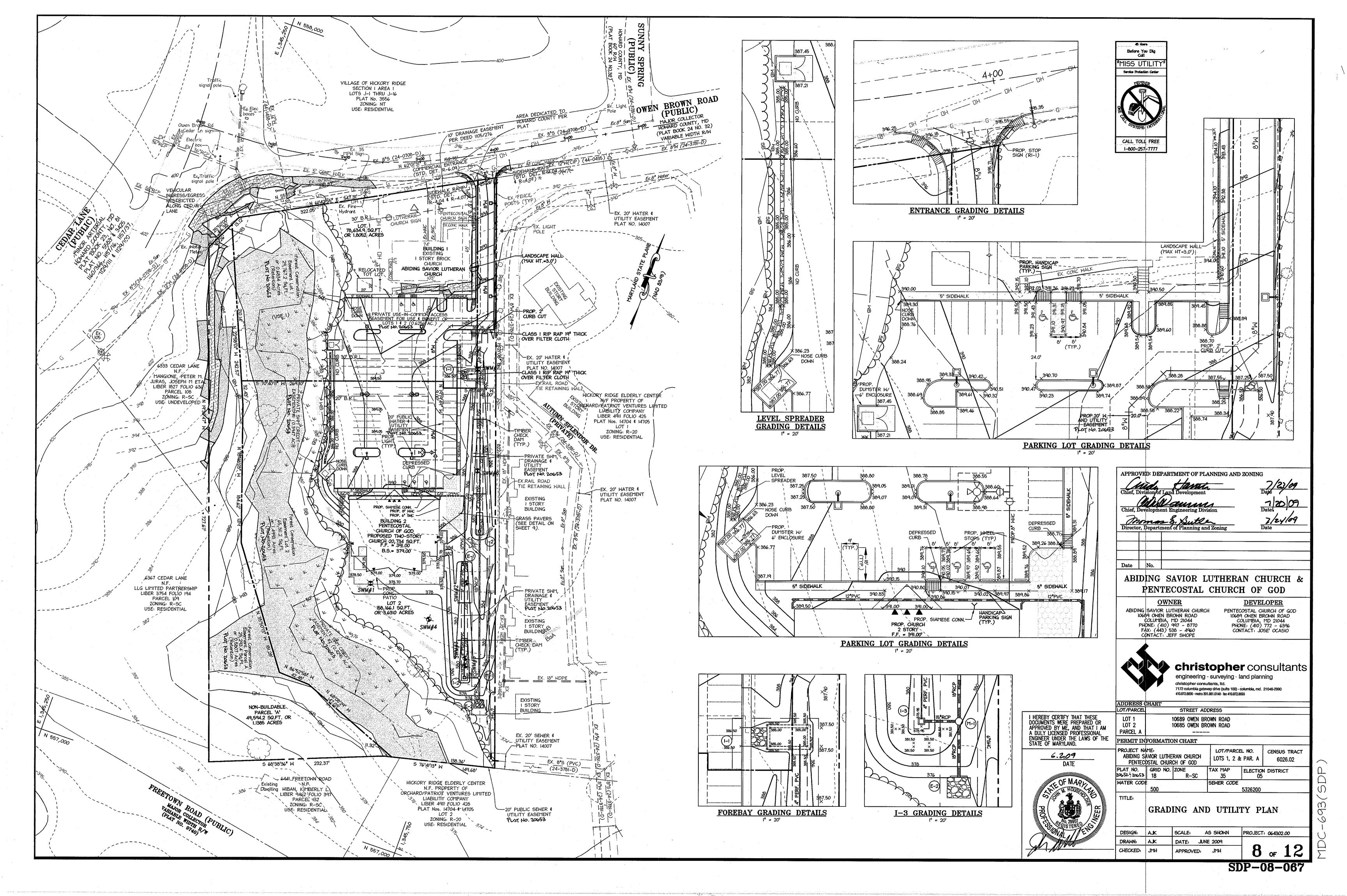
SCALE: PROJECT: 064302.00 DESIGN: AJK DRAWN: AJK DATE JUNE 2009 CHECKED: JMH APPROVED: JMH 6 of 12

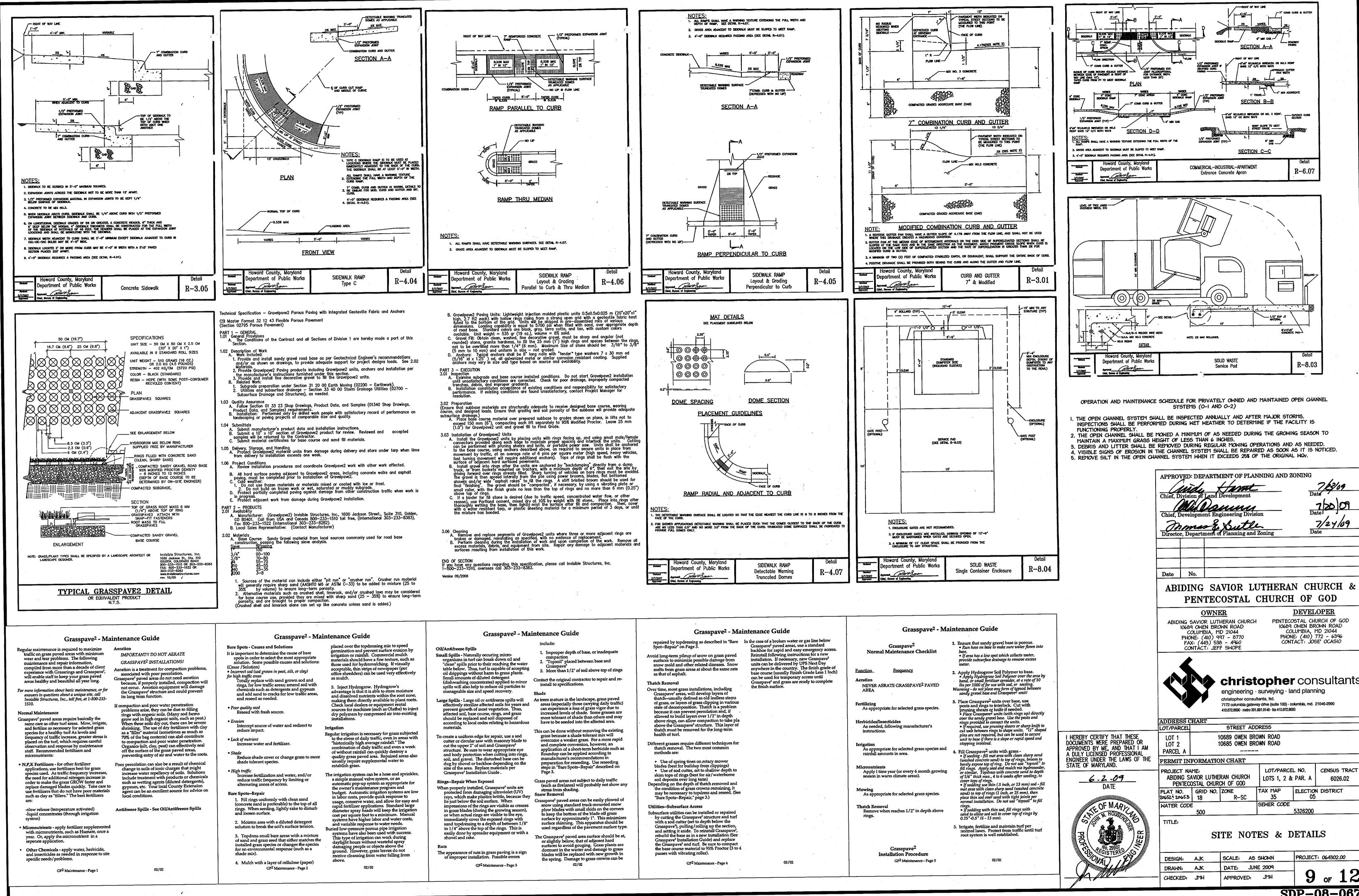
CENSUS TRACT

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ELECTION DISTRICT







PROJECT: 064302.00

OF

ELECTION DISTRICT

CENSUS TRACT

6026.02

R-6.07

8"x10"x6" CONCRETE PAD

R-8.03

7/3/09 Date

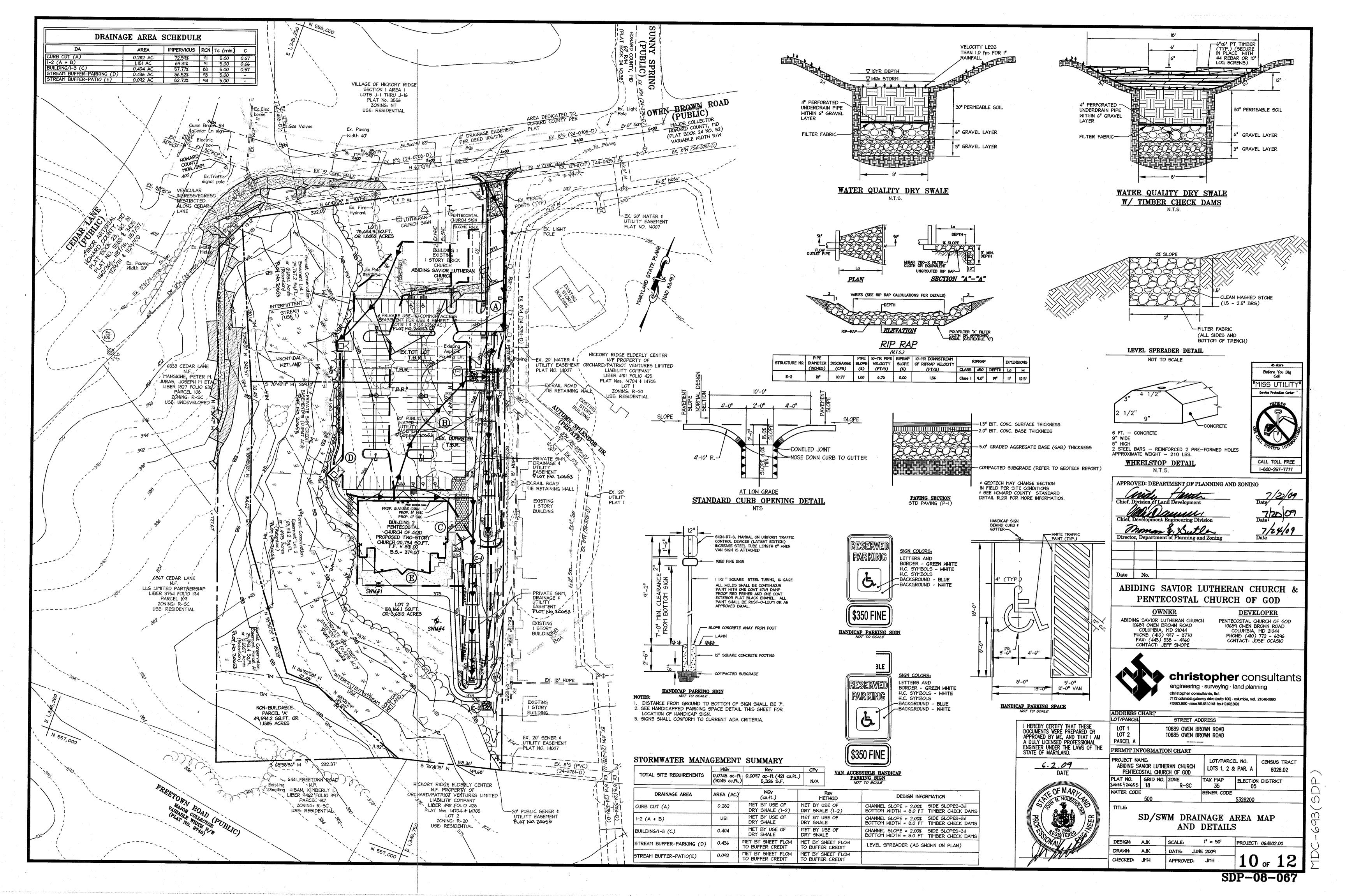
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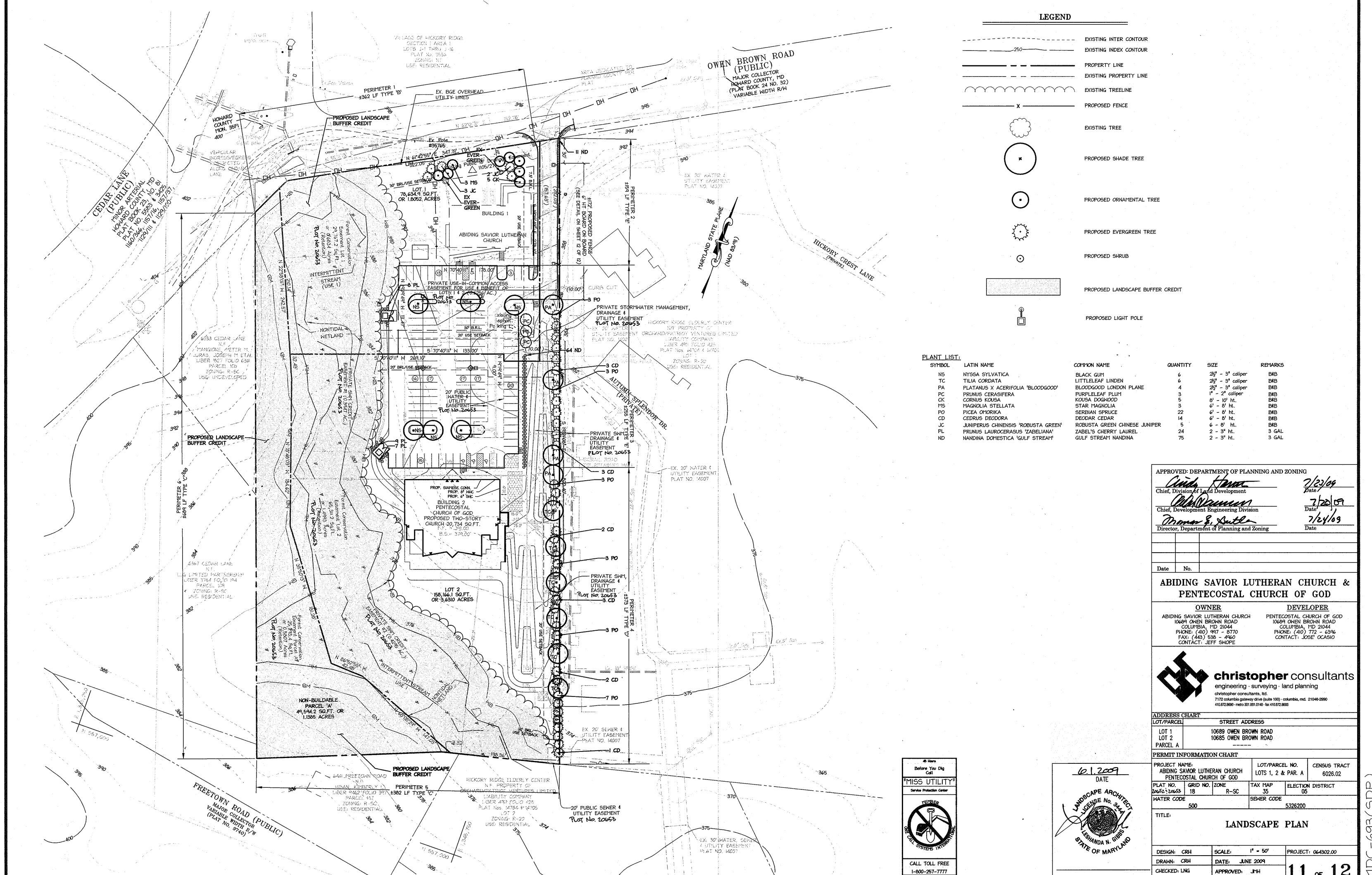
7/24/09

DEVELOPER

10689 OWEN BROWN ROAD

COLUMBIA, MD 21044 PHONE: (410) 772 - 6396 CONTACT: JOSE' OCASIO



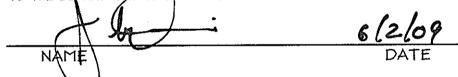


GENERAL PLANTING NOTES

- I. ALL PLANT MATERIAL TO MEET A.A.N. STANDARDS.
- 2. LANDSCAPING CONTRACTOR TO FOLLOW LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE WASHINGTON METRO AREA APPROVED BY LCAMW.
- 3. NO SUBSTITUTIONS TO BE MADE WITHOUT CONSENT OF LANDSCAPE ARCHITECT OR OWNER.
- 4. IN THE EVENT OF VARIATION BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND THE PLANS, THE PLANS SHALL CONTROL. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES PRIOR TO THE COMMENCEMENT OF WORK, SOD QUANTITY TAKE-OFFS ARE THE RESPONSIBILITY OF THE CONTRACTOR. ALL DISCREPANCIES SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT FOR CLARIFICATION PRIOR TO BIDDING. THE CONTRACTOR SHALL FURNISH PLANT MATERIAL IN SIZES AS SPECIFIED IN THE PLANT LIST.
- 5. ALL BEDS TO BE TOPPED WITH THREE INCHES OF HARDWOOD MULCH.
- 6. LANDSCAPE CONTRACTOR TO VERIFY LOCATION OF UTILITIES WITH OWNERS BEFORE PLANTING.
- 7. LANDSCAPE ARCHITECT/OWNER SHALL SELECT, VERIFY AND/OR APPROVE ALL PLANT MATERIAL. AT OWNER'S DISCRETION, SPECIMEN AND OTHER PLANT MATERIAL WILL BE SELECTED.
- 8. 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.
- 9. CONTRACTOR SHALL NOTIFY MISS UTILITY 72 HOURS PRIOR TO CONSTRUCTION.
- 10. THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENTANCE 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.
- A. PLANTING MIX SHALL BE PREPARED AT APPROVED ON-SITE STAGING AREA USING APPROVED ON-SITE EXISTING SOIL. MIX MINIMUM QUANTITIES OF 20 CUBIC YARDS OR SUFFICIENT MIX FOR ENTIRE JOB IF LESS THAN 20 CUBIC YARDS IS REQUIRED.
- B. THOROUGHLY MIXED IN THE FOLLOWING PROPORTIONS FOR TREE AND SHRUB PLANTING MIX: .5 CY EXISTING SOIL .2 CY SHARP SAND .3 CY WOOD RESIDUALS 4.5 LBS TREBLE SUPERPHOSPHATE 5 LBS DOLMONITE LIMESTONE (ELIMINATE FOR ACID LOVING PLANTS)
- C. FOR BED PLANTING, SHRUBS AND GROUNDCOVER SPACES 24 INCHES OR CLOSER, INCORPORATE THE FOLLOWING INGREDIENTS PER 20 SF AND INCORPORATE INTO TOP 8 INCHES OF EXISTING SOILS BY ROTOTILLING OR SIMILAR METHOD OF INCORPORATION. .2 CY SHARP SAND .3 CY ORGANIC MATERIAL 4.5 LBS TREBLE SUPERPHOSPHATE 5 LBS DOLMONITE LIMESTONE (ELIMINATE FOR ACID LOVING PLANTS)
- 12. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL WITH 24 SHADE TREES, 28 EVERGREEN TREES 96 SHRUBS AND 129 LINEAR FEET OF SOLID FENCE PROVIDED WITH LANDSCAPE SURETY IN THE AMOUNT OF \$15,570.00 WITH THE DPW DEVELOPER'S AGREEMENT. LANDSCAPE SURETY IS BASED ON THE NUMBER OF REQUIRED PLANTS AND FENCING PER THE LANDSCAPE MANUAL (24 SHADE TREES x \$300.00 EA., 28 EVG. TREES x \$150.00 EA. x 96 SHRUBS X \$30 AND \$10.00 PER LINEAR FOOT (129 LF) FOR FENCING).
- 13. AT THE TIME OF PLANT INSTALLATION, ALL SHRUBS AND TREES LISTED AND APPROVED ON THE LANDSCAPE PLAN, SHALL COMPLY WITH THE PROPER HEIGHT REQUIREMENT IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATIONS OF THE REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THE 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 THE APPLICABLE PLANS.
- 14. SHOULD ANY TREE DESIGNATED FOR PRESERVAION FOR WHICH LANDSCAPING IS GIVEN, DIE PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE HOWARD COUNTY LANDSCAPE MANUAL.

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 LANDSCAPING MANUAL. I/WE FURTHER CERTIFY THAT UPON TREES COMPLETION, A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE-YEAR-GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.



SCHEDULE A

SHADE TREES

EVG. TREES

SHRUBS

OTHER TREES

CATEGORY PERIMETER	ROADWAYS ER I APE TYPE "B" TREE PER 50 L.F. #362 LF	ADJACENT TO PERIMETER PROPERTIES					DUMPSTER SCREENING	
		2***	3***	4***	5	6		
LANDSCAPE TYPE "B" I SHADE TREE PER 50 L.F. I EVERGREEN TREE PER 40 L.F.							N/A	
LANDSCAPE TYPE "C" I SHADE TREE PER 40 L.F. AND I EVERGREEN TREE PER 20 L.F.			:		±382 LF	±689 LF	N/A	
LANDSCAPE TYPE "D" I SHADE TREE PER 60 L.F. AND I EVERGREEN TREE PER 10 L.F.				±373 LF			N/A	
LANDSCAPE TYPE "E" 1 SHADE TREE PER 40 L.F. AND 1 SHRUB PER 4 LF		±159 LF	±255 LF			N/A		
CREDIT FOR EX. VEG. BELOW IF NEEDED	YES, 162 LF	NO	NO	NO	YES, (100%), 382 LF	YES, (100%), 689 LF	N/A	
CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	*YES, ±129 LF 6' BOARD ON BOARD FENCE	NO	NO	NO	NO	N/A	<u>Plant Totals</u>
NO. OF PLANTS REQ. SHADE TREES EVG. TREES SHRUBS	4 5 0	0 0 8	7 0 64	7 23** 0	0 0 0	0 0 0	0 0 24	18 SHADE TREES 28 EVG. TREES 96 SHRUBS
NO. OF PLANTS PROV.								

*ALTERNATIVE COMPLIANCE PROPOSED FOR PERIMETER 2, BECAUSE THERE IS NOT SUFFICIENT SPACE TO PLANT VEGETATION THAT WILL THRIVE, BETWEEN THE DRIVEWAY AND THE EXISTING CHURCH. A 6' BOARD ON BOARD SIGHT TIGHT FENCE IS PROPOSED TO PROVIDE ADEQUATE SCREENING FOR THE ADJACENT PROPERTY. THE FENCE SHOULD BE CREDITED TOWARDS MEETING 100% OF THE REQUIRED LANDSCAPE PLANTING, PER CHAPTER IV OF THE HOWARD COUNTY LANDSCAPE MANUAL. THE FENCE (129 LF), REQUIRES AT LEAST I TREE PER 60 LINEAR FEET OF WALL OR ONE SHRUB OR VINE PER 10 LINEAR FEET OF WALL. THESE (3) EVERGREEN TREES HAVE BEEN RELOCATED TO PERIMETER 3, DUE TO SPACE RESTRICTION.

**THOUGH 38 EVERGREEN TREES ARE REQUIRED, DUE TO SPACE RESTRICTIONS, ONLY 23 EVERGREENS WERE PROPOSED. PER THE DEPARTMENT OF PLANNING AND ZONING, 7 SHADE TREES AND 23 EVERGREEN TREES SATISFY BOA CASE NO 06-015, IN PROVIDING ADEQUATE SCREENING FOR THE ADJACENT PROPERTY.

***PER BOA CASE NO. 06-015, A TYPE 'E' BUFFER IS REQUIRED FOR P2 AND P3 AND A TYPE 'D' BUFFER IS REQUIRED FOR P4.

- DO NOT CUT LEADER - BLACK RUBBER HOSES UNTIL TAUT 2" SQUARE HARDWOOD STAKES, MIN 8' LONG; EXTEND STAKES TO FIRM BEARING AS NEEDED — 2" - 3" MULCH - 2" - 3" HT SAUCER AROUND TREE PIT -FINISHED GRADE OR WIRE BASKET FROM TOP 1/ 3 OF ROOT BALL SCARIFY SUBSOIL TO 6" MIN DEPTH SET EVERGREEN TREES 2" HIGHER THAN GROWN IN NURSERY TO ALLOW FOR SETTLING

IO SHADE TREES.

II OTHER TREES

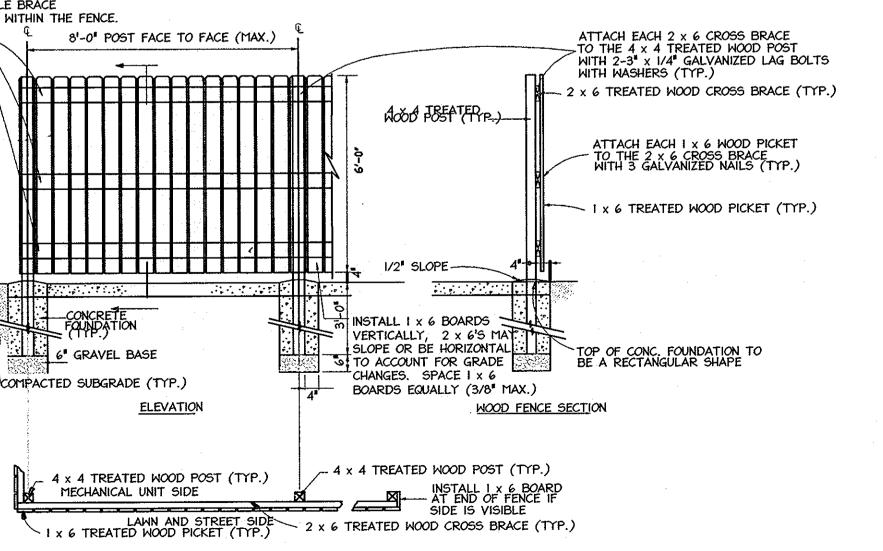
41 EVG. TREES

99 SHURBS

Evergreen Tree Planting Detail
Not To Scale

- DO NOT CUT LEADER BLACK RUBBER HOSES - 2 STRANDS GALVANIZED WIRE, TWISTED UNTIL TAUT PLAN VIEW TWO 2" SQUARE HARDWOOD STAKES, MIN 8' LONG; PLACE STAKES INTO PREVAILING WIND EXTEND STAKES TO FIRM BEARING AS NEEDED ___ 3" MULCH — 3" HT. SAUCER AROUND – BACKFILL MIX (SEE SPECS) - CUT AND REMOVE BURLAP AND/ OR WIRE BASKET FROM TOP I/ 3 OF ROOT BALL SCARIFY SUBSOIL TO 6" MIN DEPTH BELOW ROOTBALL SET TREES 2" HIGHER THAN GROWN IN NURSERY TO ALLOW FOR SETTLING

Tree Planting Detail
Not To Scale



Wood Fence Detail

1. FOR CONTAINER SHRUBS, COMPLETELY REMOVE ALL NON-BIODEGRADABLE CONTAINERS AND SCARIFY ROOTBALL BY USING A SHARP BLADE -3" MULCH AND MAKING 4 TO 5 ONE INCH CUTS THE LENGTH OF THE ROOTBALL. 2. FOR B\$B SHRUBS, CUT AND REMOVE — BACKFILL MIX (SEE SPECS) BURLAP FROM TOP 1/3 OF ROOT BALL ---- SPADE EDGING, TYP. GRADE SET 1 / 8" OF ROOT BALL ABOVE FINISH GRADE UNLESS OTHERWISE REQUIRED BY SOIL CONDITIONS. SCARIFY SUBSOIL TO 6" MIN DEPTH **ROOT** MIN, TYP

\Shrub Detail

SCHEDULE B
PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PROPOSED PARKING SPACES IIB

INTERNAL ISLANDS REQUIRED
(1 ISLAND 20 PARKING SPACES) 6

INTERNAL ISLANDS PROVIDED
(200 SO. FT./ISLAND) 6

NUMBER OF TREES REQUIRED
(1 SHADE TREES PROVIDED
SHADE TREES (2:1 SUBSTITUTION) 0

IB GA. CLEANE
& PAINTED ME
(BOX RIB)

BRICK WALL
(TO MATCH
BUILDING)

WALL FOOTING
(TO BE DESIGNED
BY STRUCTURAL
ENGINEER)

IB GA. CLEANED, PRIMED

\$ PAINTED METAL GATE.

(BOX RIB)

6' HIGH MASONRY

(TO MATCH BUILDING)

WALL FTG. BEYOND

(BY OTHERS)

7" THK. P.C.C. PAD W/ 6X6-10/10

W.M.M. ON 6" AGG. BASE \$ 12" WIDE
FTG. AROUND PERIMITER OF SLAB

FRONT GATE

10'-0"

5"X 5"X 1/4" STEEL
TUBE EMBEDDED 12"
INTO FOOTING.

Typical Dumpster Enclosure Detail

Date No.

ABIDING SAVIOR LUTHERAN CHURCH & PENTECOSTAL CHURCH OF GOD

OWNER

ABIDING SAVIOR LUTHERAN CHURCH OF GOD

OWNER

ABIDING SAVIOR LUTHERAN CHURCH IO689 OWEN BROWN ROAD
COLUMBIA, MD 21044
PHONE: (410) 997 - 8770
FAX: (443) 538 - 4960
CONTACT: JEFF SWOPE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

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410.872.8690 · metro 301.881.0148 · fax 410.872.8693

ADDRESS CHART

LOT/PARCEL STREET ADDRESS

LOT 1 10689 OWEN BROWN ROAD

LOT 2 10685 OWEN BROWN ROAD

PARCEL A ----

DATE

PERMIT INFORMATION CHART

PROJECT NAME:

ABIDING SAVOR LUTHERAN CHURCH
PENTECOSTAL CHURCH OF GOD

PLAT NO. GRID NO. ZONE

PLAT NO. GRID NO. ZONE

WATER CODE

500

TAX MAP
ELECTION DISTRICT

SEWER CODE

5326200

LANDSCAPE DETAILS

DESIGN: CRH SCALE: NOT TO SCALE PROJECT: 064302.00

DRAWN: CRH DATE: JUNE 2009

CHECKED: LNG APPROVED: 120F 12

SDP-08-067

7/24/09

Not To Scale

THE TOP AND BOTTOM WOOD CROSS BRACES SHALL BE PLACED 6" FROM THE END OF THE WOOD

PICKETS. THE MIDDLE BRACE

SHALL BE CENTERED WITHIN THE FENCE.