| - | | | | | |
|---|----|-----------|----|----|-----|
| | FN | 1FR | ΔΙ | NO | TES |
| ~ | 8 | 9 | | | |

AT&T

VERIZON

SUBJECT PROPERTY ZONED B-1 PER THE 10/06/2013 COMPREHENSIVE ZONING PLAN.
 PROPERTY ADDRESS:

PARCEL 589 - 5782 MAIN STREET, ELKRIDGE, MARYLAND 21075

PARCEL 590 - 5766 MAIN STREET, ELKRIDGE, MARYLAND 21075 TOTAL AREA OF PROPERTY 16,153 SF OR 0.3708 AC.±

 REFERENCE: LIBER 15394, FOLIO 218 AND LIBER 15394, FOLIO 244.
 THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS: STATE HIGHWAY ADMINISTRATION

BGE(CONTRACTOR SERVICES) BGE(UNDERGROUND DAMAGE CONTROL) MISS UTILITY

COLONIAL PIPELINE COMPANY HOWARD COUNTY, DEPT. OF PUBLIC WORKS, BUREAU OF UTILITIES HOWARD COUNTY HEALTH DEPARTMENT

410,850,4620 410,787,906 800.257.777 410.795.1390 410.313.4900 410.313.2640 800.252.1133 800,743,0033/410,224,9210

EXISTING PUBLIC WATER AND PUBLIC SEWER WILL BE USED ON SITE. THE BOUNDARY SHOWN HEREON IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY SHANABERGER & LANE, LLC ON FEBRUARY 26, 2015. THE TOPOGRAPHY SHOWN HEREON HAS BEEN FIELD RUN BY SHANABERGER & LANE, LLC. ON FEBRUARY 26, 2015. THE EXISTING TOPOGRAPHY SHOWN OUTSIDE THE SITE IS BASED ON HOWARD COUNTY AERIAL TOPOGRAPHY FLOWN IN 2004.

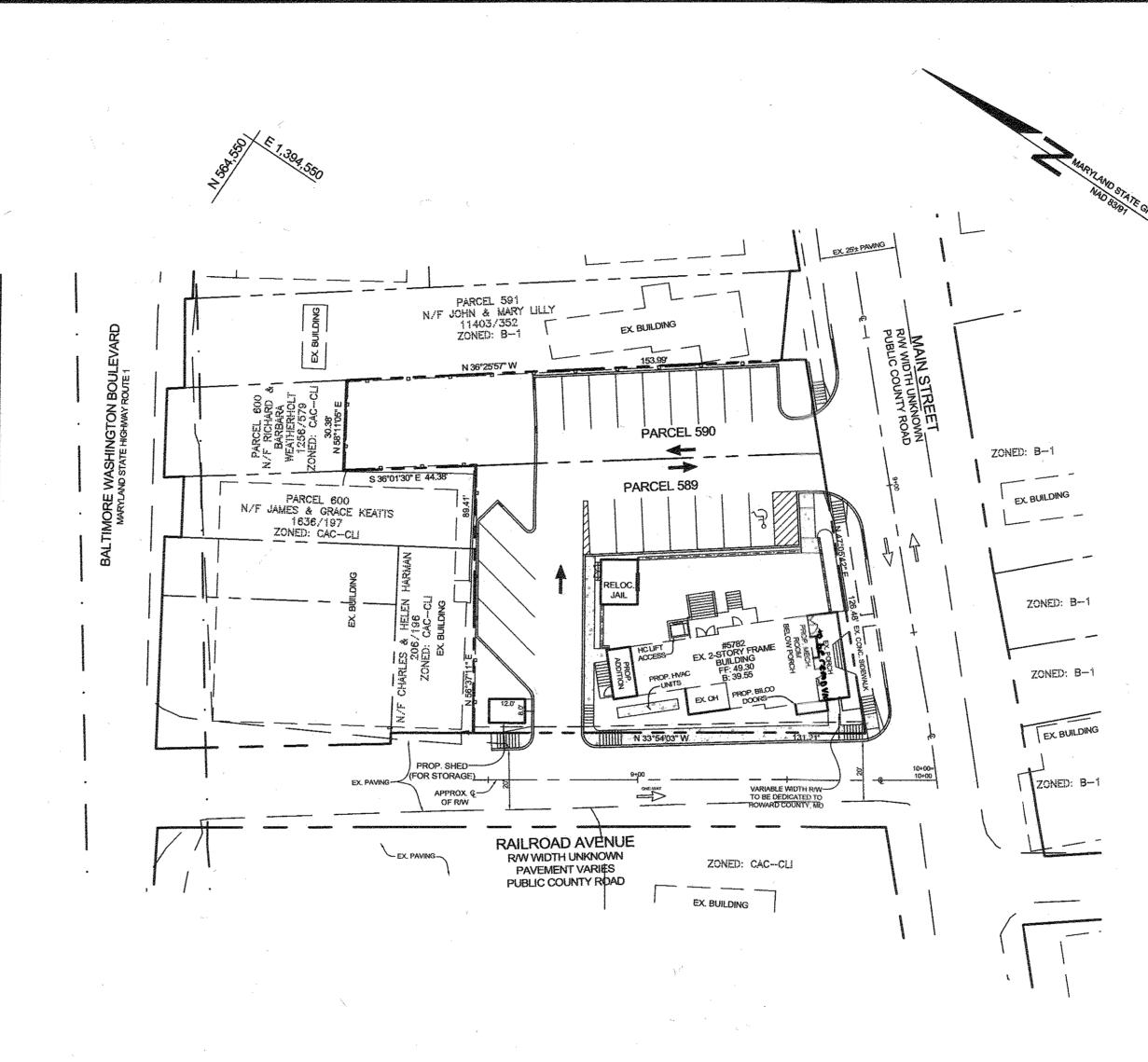
THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE. ANY DAMAGE TO PUBLIC RIGHT-OF WAYS, PAVING OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S

- EXPENSE. 10. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING CONSTRUCTION
- INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR THE START OF WORK. 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY IN ADDITION TO MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- 12. THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE B APPROVED.
- 13. THE SOILS SHOWN HAVE BEEN TAKEN FROM THE US DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE, WEB SOIL SURVEY WEBSITE, HOWARD COUNTY SOILS MAP, GRID 2, SUBGRID 296.
- 14. A WETLAND AND STREAM STUDY HAS BEEN PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. IN DECEMBER 2014. NO WETLANDS, STREAMS OR BUFFERS, FOREST OR SPECIMEN TREES ARE PRESENT ON SITE.
 15. THIS PROJECT IS EXEMPT FROM THE FOREST CONSERVATION REQUIREMENTS IN ACCORDANCE WITH SECTION
- THIS PROJECT IS EXEMPT FROM THE FOREST CONSERVATION REQUIREMENTS IN ACCORDANCE WITH SECTION 16.1202(b)(1)(i) OF THE HOWARD COUNTY CODE SINCE THE TOTAL SIZE OF THE DEVELOPMENT IS LESS THAN 40,000 SF.
 A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
 THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE
- LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING (4 SHADE TREES, 5 EVERGREEN TREES, 25LI OF WALL, AND 318LF OF FENCE) WILL BE POSTED AS PART OF THE GRADING PERMIT IN THE AMOUNT OF \$5,630.00.
 18. THE FREE FLOW SPEED DETERMINATION REPORT AND ADEQUATE ROAD FACILITIES TEST EVALUATION REPORT WAS PREPARED BY MARS GROUP ON JUNE 2015.
- 19. EXISTING UTILITIES ARE LOCATED BY THE USE OF ANY OR ALL OF THE FOLLOWING: ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND SEWER PLANS AND OTHER AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF THE EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO THE CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER. PAVING TO BE HOWARD COUNTY STANDARD P-2 PAVING SECTION (SEE DETAILS ON SHEET 2). GEOTECHNICAL ENGINEER TO CONFIRM ACCEPTABILITY OF PROPOSED PAVING SECTION, BASED ON SOIL TEST, PRIOR TO CONSTRUCTION.
- ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.
 ALL TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MdMUTCD).
- 23. ALL PROPOSED SPOT ELEVATIONS ALONG CURB AND GUTTER ARE SHOWN TO THE FLOW LINE UNLESS OTHERWISE NOTED.
 24. THE ENTRANCES SHALL BE PER HOWARD COUNTY DESIGN MANUAL VOLUME IV, DETAIL R-6.09, UNLESS WAIVERS HAN
- BEEN APPROVED. THE CONTRACTOR SHALL MATCH EXISTING PAVING AND CURB ELEVATIONS AT ENTRANCE FILLETS. •25. A DESIGN MANUAL WAIVER HAS BEEN APPROVED TO ALLOW THE CURB FILLET RADII TO BE REDUCED TO THOSE SHOWN ON THIS PLAN.
- ALL EXTERIOR LIGHT FIXTURES SHALL BE ORIENTED TO DIRECT LIGHT INWARDS AND DOWNWARDS ON-SITE AWAY FROM ALL ADJOINING PUBLIC ROADS IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.
 A KNOX BOX (FIRE DEPARTMENT ACCESS BOX) IS REQUIRED TO BE PLACED ON THE FRONT OF THE BUILDING. THE BOX SHALL BE ELECTRONICALLY SUPERVISED TO NOTIFY THE OWNER THAT IT IS BEING ACCESSED (INTEGRATED WITH THE
- FIRE ALARM SYSTEM). 28. SIGNAGE SHALL BE PLACED ON THE BUILDING IDENTIFYING THE BUILDING ADDRESS AND IDENTIFYING EACH SEPARATE SUITE BY A LETTER.
- 29. GEOTECHNICAL INFORMATION HAS BEEN TAKEN FROM THE US DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE, WEB SOIL SURVEY WEBSITE AND FIELD INVESTIGATIONS. IF FUTURE INVESTIGATIONS SHOW UNSATISFACTORY SOIL CONDITIONS FOR ANY OF THE STORMWATER MANAGEMENT TREATMENTS SHOWN, EITHER UNDERDRAINS WILL BE PROVIDED OR A DIFFERENT PRACTICE WILL BE SUBSTITUTED.
 30. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL. WHICH IS BASED OF
- 30. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS NUMBERS 0024 AND 38BB WERE USED FOR THIS PROJECT.
 31. NO ORADING REMOVAL OF VECCENTIVE COVER OR TREES, DAVING AND NEW STRUCTURES SHALL BE REPRINTED WITHIN
- 31. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS, UNLESS WAIVERS HAVE BEEN APPROVED OR ACTIVITIES HAVE BEEN DETERMINED ESSENTIAL BY THE DEPARTMENT OF PLANNING AND ZONING.
- 32. ALL SWALES TO HAVE EROSION CONTROL MATTING.
 33. THE STORMWATER MANAGEMENT OBLIGATIONS FOR THIS SITE WILL BE MET BY ONE MICRO-BIORETENTION FACILITY (M-6) AND FOUR RAIN BARRELS.
 34. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A
- 34. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED ("QUICK PUNCH"), SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3" LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO "QUICK PUNCH" HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
- 35. THE PROPOSED JAIL IS TO BE USED AS AN ENTRANCE INTO THE OUTDOOR DINNING AREA AND PAYS TRIBUTE TO THE 1-1/2 STORY FRAME JAIL BUILDING EXISTING ON-SITE. THE EXISTING STRUCTURE IS TO BE REMOVED DUE TO IT'S STATE OF DISREPAIR AND IS NOT AN HISTORICAL STRUCTURE.
- 36. HEALTH DEPARTMENT APPROVAL OF THIS SITE DEVELOPMENT PLAN (SDP) DOES NOT ENSURE APPROVAL OF BUILDING PERMIT APPLICATIONS ASSOCIATED WITH THIS PLAN. PERMIT PLANS FOR CERTAIN FACILITIES TO BE CONSTRUCTED WITHIN THE LIMITS DESCRIBED BY THIS SDP WILL REQUIRE REVIEW AND APPROVAL BY THE HEALTH DEPARTMENT. SUCH FACILITIES MAY INCLUDE, BUT ARE NOT LIMITED TO, THOSE WHICH HAVE SWIMMING POOLS, OR THAT SELL PREPARED OR PACKAGED FOODS, OR THAT MAY HAVE EQUIPMENT THAT EMITS RADIATION.



SITE DEVELOPMENT PLAN PATUXENT ENGINEERING PARCELS 589 AND 590

ELKRIDGE, HOWARD COUNTY, MARYLAND



| LOCATION MAP | |
|--------------|--|
| SCALE: 1=30' | |

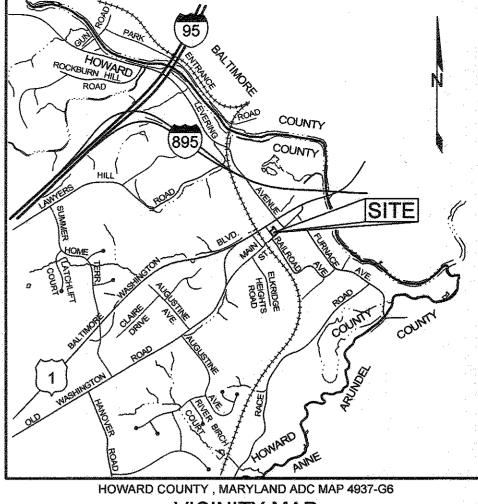
| PARKING TABULATION CHART | | | | | |
|--------------------------|----------|----------|---------------|--|--|
| USE | AREA | REQUIRED | PROVIDED | | |
| GENERAL OFFICE | 2,515 SF | N/A (1) | 6 SPACES | | |
| RESTAURANT/ CARRY OUT | 684 SF | N/A (1) | 3 SPACES | | |
| RESTAURANT/ STANDARD | 1,879 SF | N/A (1) | 10 SPACES | | |
| TOTAL | 5,078 SF | N/A (1) | 19 SPACES (2) | | |

NOTES: (1) PER SECTION 128.0.A.6.b(2) OF THE HOWARD COUNTY ZONING REGULATIONS, THE MINIMUM OFF-STREET PARKING REQUIREMENTS SHOWN IN SECTION 133.0.D ARE NOT APPLICABLE. REASONABLE AND APPROPRIATE PARKING HAS BEEN PROVIDED. (2) RAILROAD AVENUE AND MAIN STREET ARE ALLOWED TO HAVE ON-STREET PARKING. THIS PARKING IS NOT COUNTED TOWARDS OUR SITE'S PROVIDED SPACES.

| <i></i> | | |
|---|----------|---|
| · _ | | |
| an ya katala katala ya ya katala k | | and the second se |
| | | |
| | | |
| | | Antipension in the |
| | | |
| | | |
| | | |
| PTION | DATE | and a second |
| ONS | | MONTON/M |
| | | 二君 |

× € 1,394,300

| | LEGEND | | Υ. |
|---|--|-----|---|
| • | EXISTING CONTOUR | | |
| | PROPOSED CONTOUR | | 382 |
| | EXISTING SPOT ELEVATION | | 362.3 |
| | PROPOSED SPOT ELEVATION | | + 8253 |
| | DIRECTION OF FLOW | | |
| | EXISTING TREELINE | · | and many many |
| | PROPOSED TREELINE | | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |
| | PROPOSED BOARD-ON-BOARD FEN | ICE | 0 |
| | PROPOSED 2' HIGH MASONRY WALL WITH 4' HIGH IRON FENCE | L | |
| | EX. WATER HOUSE CONNECTION | | EX. WHC |
| | EX. SEWER HOUSE CONNECTION | | EX. SHC |



VICINITY MAP SCALE: 1"=2000'

| BENCHMARKS | | | | | | | |
|------------|-------------|---------------|-----------|---|--|--|--|
| NUMBER | NORTHING | EASTING | ELEVATION | DESCRIPTION | | | |
| 0024 | 565,065.481 | 1,395,212.085 | 26.959 | NORTH SIDE ROUTE 1 @ I-895 OFF-RAMP, 600'± NORTH OF LEVERING AVENUE | | | |
| 38BB | 564,007.675 | 1,393,649.842 | 63.661 | SOUTH SIDE ROUTE 1, 0.2 MI. SOUTH OF LEVERING AVE., 9.96' NORTH OF CURB PC | | | |

| ADDRESS CHART | | | | | | |
|---------------|--------------------------------------|--|--|--|--|--|
| PARCEL | STREET ADDRESS | | | | | |
| 589 | 5782 MAIN STREET, ELKRIDGE, MD 21075 | | | | | |
| 590 | 5766 MAIN STREET, ELKRIDGE, MD 21075 | | | | | |

| SHEET INDEX | | | | | | |
|-------------|---|---|--|--|--|--|
| SHEET NO. | DESCRIPTION | | | | | |
| 1 | COVER SHEET | | | | | |
| 2 | EXISTING CONDITIONS AND SITE DEVELOPMENT PLAN | | | | | |
| 3 | GRADING, SEDIMENT AND EROSION CONTROL AND PAVING PLAN | | | | | |
| 4 | SEDIMENT AND EROSION CONTROL NOTES AND DETAILS | ÷ | | | | |
| 5 | STORMWATER MANAGEMENT PLAN AND DETAILS | | | | | |
| 6 | LANDSCAPING PLAN | | | | | |

| FLOOR SPACE USE CHART | | | | | | | |
|-----------------------|------------------|------------------|-------------------|------------------|--|--|--|
| USE | LOWER FLOOR AREA | FIRST FLOOR AREA | SECOND FLOOR AREA | TOTAL FLOOR AREA | | | |
| GENERAL OFFICE | N/A | 922 SF± | 1,593 SF± | 2,515 SF± | | | |
| RESTAURANT-CARRY OUT | N/A | 684 SF± | N/A | 684 SF± | | | |
| RESTAURANT-STANDARD | 1,879 SF± | N/A | N/A | 1,879 SF± | | | |

| SITE ANALYSIS DATA CHART | | | | | | |
|--------------------------|----------------------|-------------------------------|----------------------|--|--|--|
| TOTAL PROJECT AREA | AREA OF SUBMISSION | DISTURBED AREA | PRESENT ZONING | | | |
| 0.37 AC± | 0.37 AC.± | 0.40 AC± | B-1 | | | |
| PROPOSED USE | FLOOR SPACE PER USE | TOTAL UNITS ALLOWED | TOTAL UNITS PROPOSED | | | |
| OFFICE / RESTAURANT | SEE CHART THIS SHEET | NA | NA | | | |
| MAX. # EMPLY/TENANTS | PARKING SPACES REQ. | PARKING SPACES PROV. | HC SPACES PROVIDED | | | |
| NA | N/A* | 19 | | | | |
| OPEN SPACE REQUIRED | OPEN SPACE PROVIDED | REC. O.S. REQUIRED | REC. O.S. PROVIDED | | | |
| NA | NA | NA | NA | | | |
| BUILDING COVERAGE | FLOOR AREA RATIO | DPZ FILE REFERENCES | | | | |
| 1,890 SF± | 9%± | ECP-16-012, W108B-30347, 22-S | | | | |

* PER SECTION 128.0.A.6.b(2) OF THE HOWARD COUNTY ZONING REGULATIONS, THE MINIMUM OFF-STREET PARKING REQUIREMENTS SHOWN IN SECTION 133.0.D ARE NOT APPLICABLE. REASONABLE AND APPROPRIATE PARKING HAS BEEN PROVIDED.

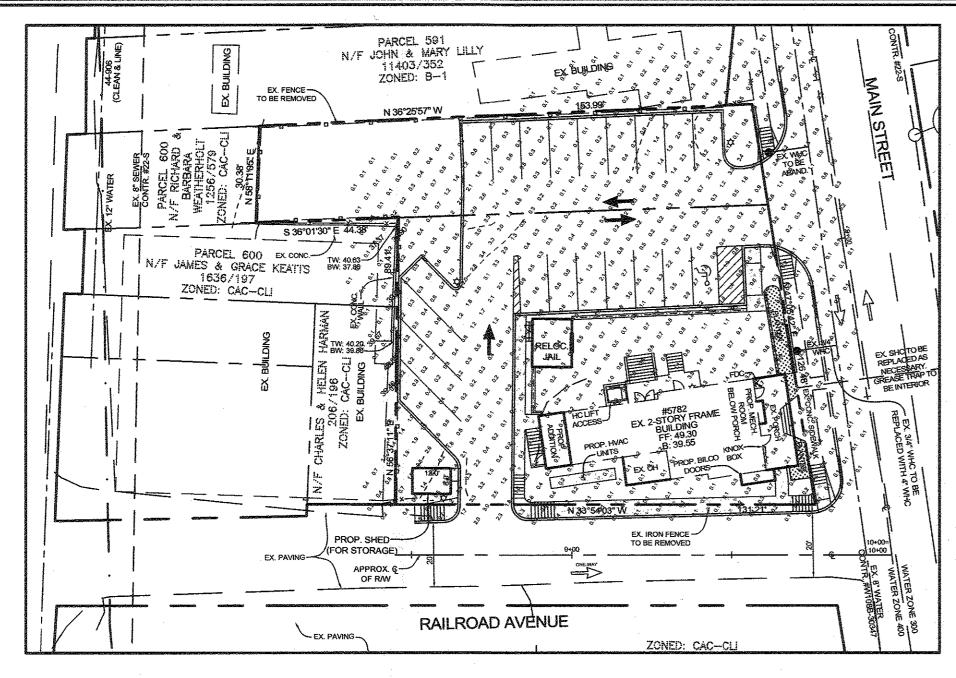
| PE | ERMIT | INFOR | MATIO | N CHART | - · · | |
|------------------------------|--------|--------|-----------|-------------|------------------|--|
| SUBDIVISION NAME | | | SECTION | | PARCEL # / LOT # | |
| N/A | | | NA | | 589 / 590 | |
| DEED NO. | GRID # | ZONING | TAX MAP # | ELECT. DIS. | CENSUS TRACT | |
| L.15988 F.412; L.16189 F.406 | 04 | B-1 | 37 | 1ST | 6012.02 | |

| | COVER SHEET | | | | | |
|--|---|---|--|--|--|--|
| PATUXENT ENGINEERING OFFICE AND COMMERCIAL BUILDING | | | | | | |
| TAX MAP 38 GRID 04 1ST ELECTION DISTRICT | Г НОЖА | PARCEL 589 AND 590 RD_COUNTY, MARYLAND | | | | |
| MARY A SSIGNAL | SILL ENGINEERING GROUP, LLC 11130 Dovedale, Suite 200 Marriottsville, Maryland 21104 Phone: 443.325.5076 Fax: 410.696.2022 Email: info@sillengineering.com Civil Engineering for Land Development | DESIGN BY: PS DRAWN BY: PS/KSZ CHECKED BY: PS SCALE: AS SHOWN DATE: DECEMBER 12, 2016 PROJECT #: 14-050 SHEET #: 1 of 6 | | | | |
| | REBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APP IN UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 320 | | | | | |

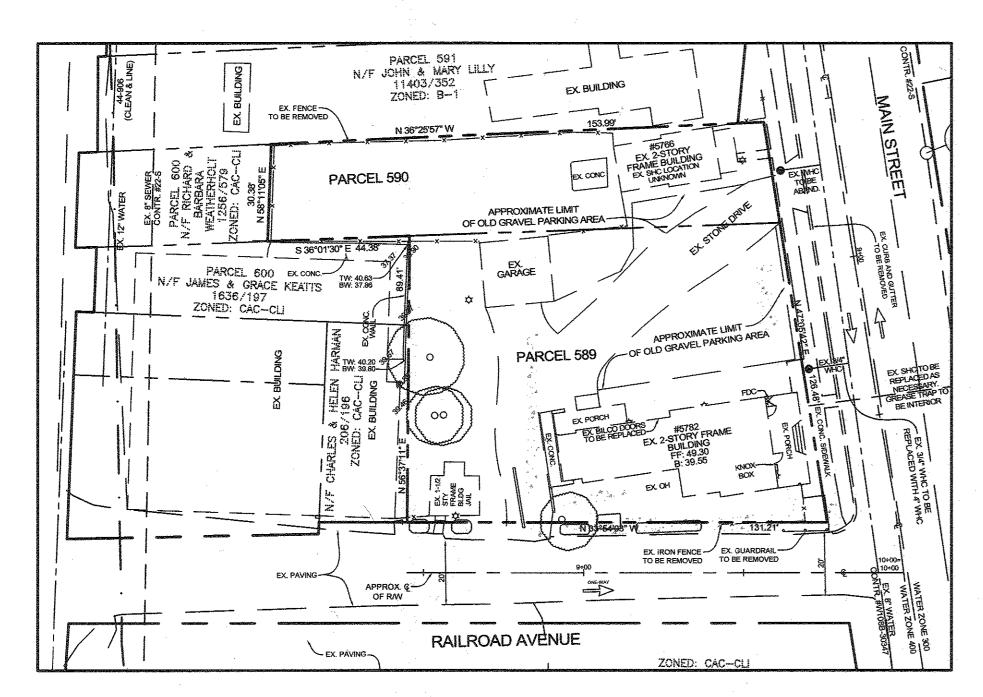
SDP- 16-034

OWNER/DEVELOPER

5782 MAIN STREET, LLC c/o JOHN O'CONNOR 5741 MAIN STREET ELKRIDGE, MD 21075 410.796.8130

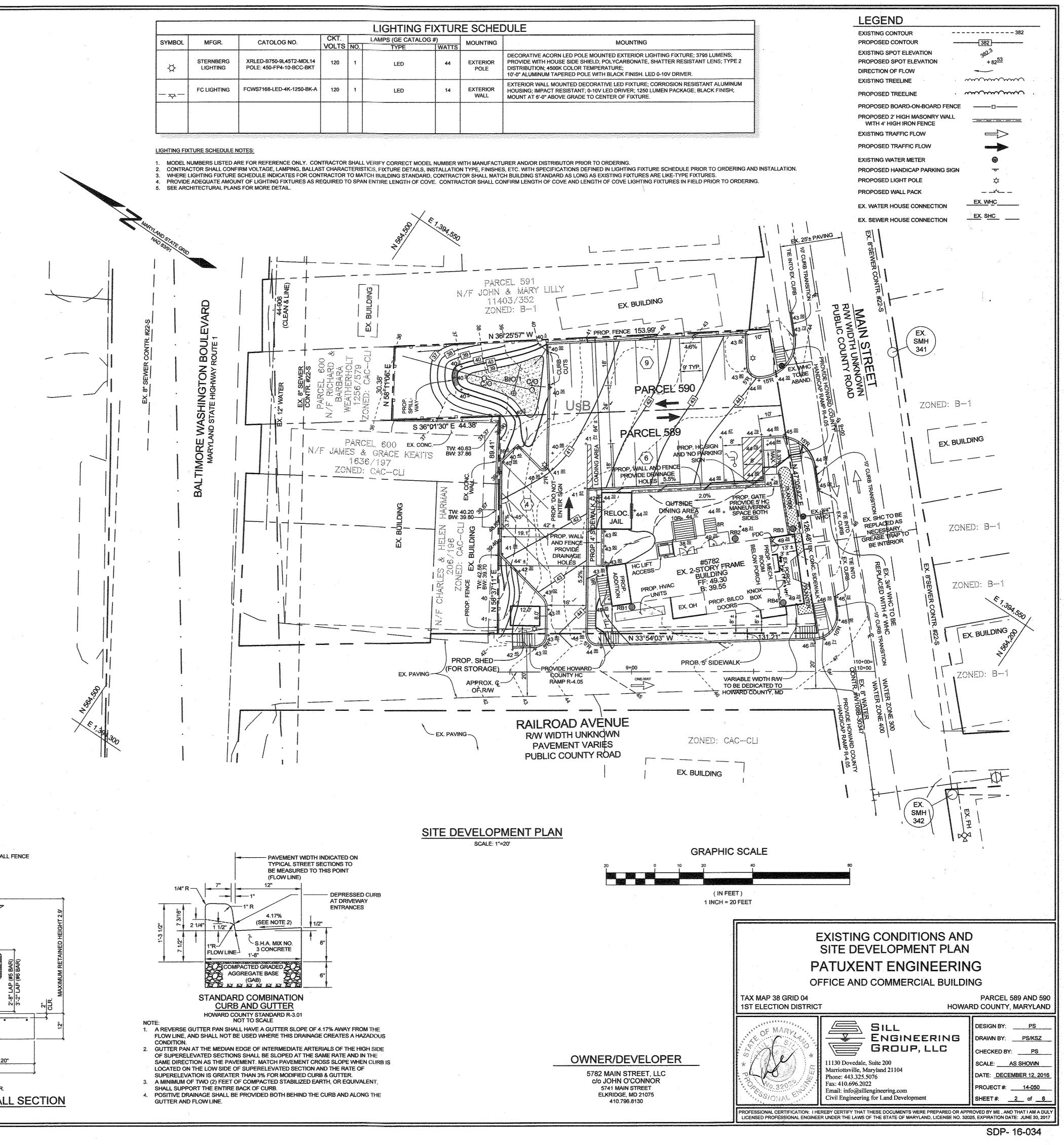


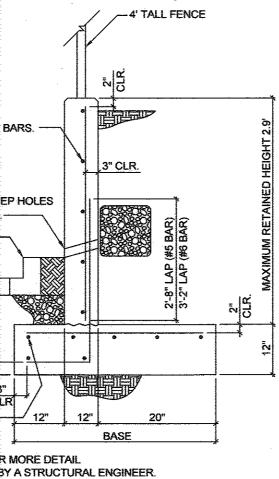
SITE LIGHTING DETAIL SCALE: 1=20'



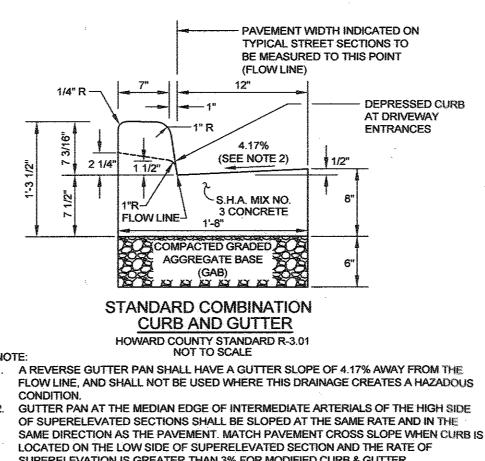
EXISTING CONDITIONS

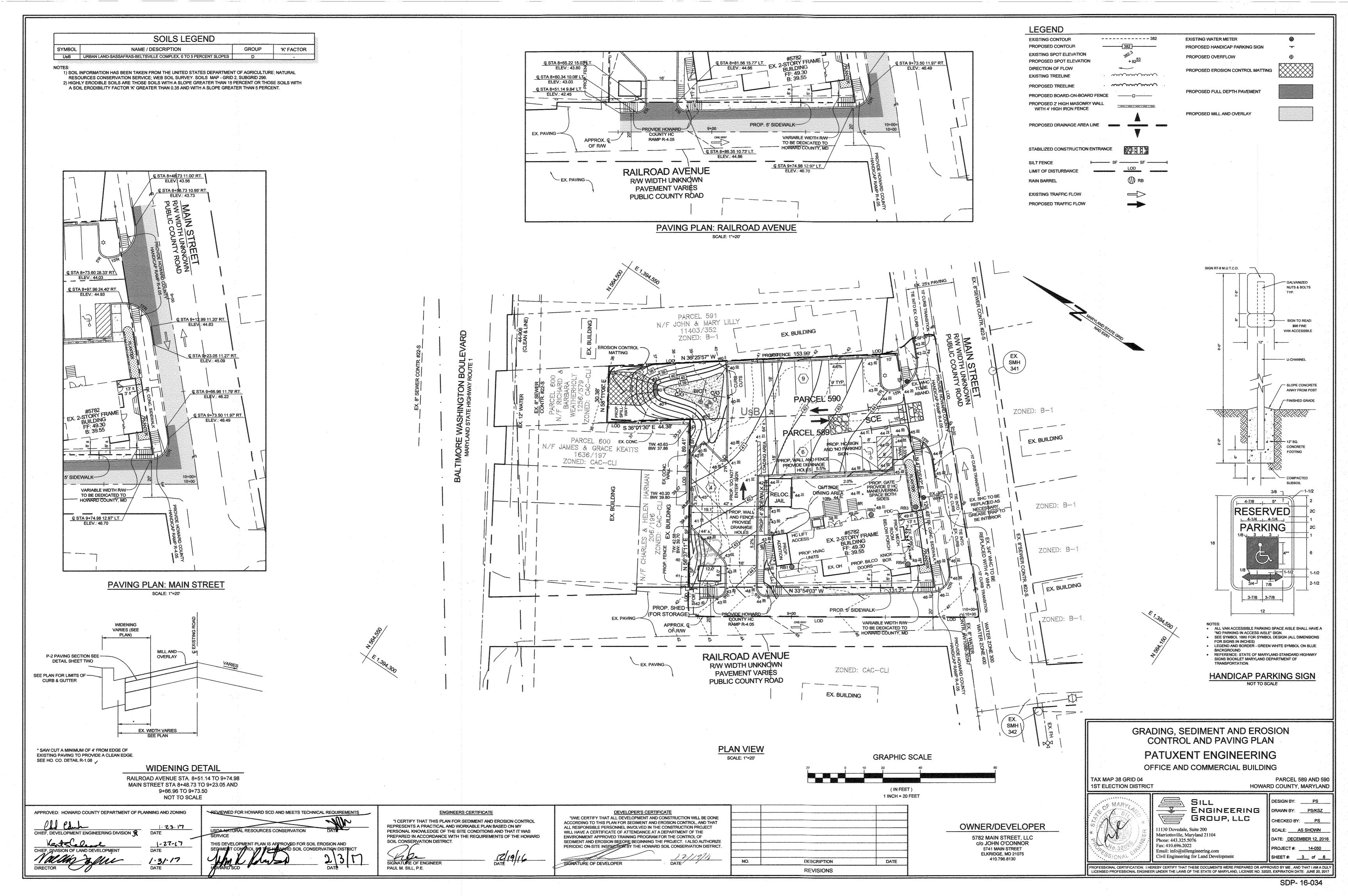
| | | | | - - | | | SC | ALE: 1=20' | |
|----------------------|--|--|----------------------------|--|---------------------------------------|-----------|---------|--|---|
| | y <u>an an a</u> | PAVING SECTIC | NS | | س را روی را در ا | | | | |
| SEC. | ROAD AND STREET | CALIFORNIA BEARING RATIO (CBR) | 3 TO <5 5 | TO <7 | <u>></u> 7 з то | <5 5 TO < | 7 ≥7 | | |
| | CLASSIFICATION | PAVEMENT MATERIAL (INCHES) | MIN HM | A WITH G | AB (| HMA WI | | | |
| | PARKING DRIVE AISLES: RESIDENTIAL AND | HMA SUPERPAVE FINAL SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL) | 1.5 | 1.5 1 | .5 1.5 | 5 1.5 | 1.5 | | |
| P-2 | NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY | HMA SUPERPAVE INTERMEDIATE SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL) | 1.0 | 1.0 1 | 1.0 1.0 |) 1.0 | 1.0 | | |
| | LOCAL ROADS: ACCESS PLACE, ACCESS STREET | HMA SUPERPAVE BASE 19.0 MM, PG 64-22, LEVEL 1 (ESAL) | 2.0 | 2.0 2 | 2.0 3.0 | 5 2.0 | 2.0 | | |
| | CUL-DE-SACS: RESIDENTIAL | GRADED AGGREGATE BASE (GAB) | 8.0 | 4.0 3 | 3.0 4.0 | 4.0 | 4.0 | | |
| 2. 3. 4. 5. | COMPACTED LIFT THICKNESS 12.5 MM SURFACE (1.5" MIN TO MIN TO 2.0" MAX) GRADED AGGREGATE BASE (1 IN 6" MAX COMPACTED THICK THE INTERMEDIATE SURFACE WITHIN 2 WEEKS OF PLACEMI REQUIRED PRIOR TO SUBSTA BOND REDUCTION. IN LIEU OF PLACING THE INTE FOR COMMERCIAL / INDUSTRI COUNTY RIGHT-OF-WAY WHE REQUIRED, THE THICKNESS OF LAYER CAN BE ADDED TO THE ASPHALT LAYER. THE CONSTRUCTION DRAWIN | ALL BE PLACED IN APPROPRIATE 1: 19.0 MM BASE (2.0" MIN TO 4.0" MAX), 3.0" MAX), AND 9.5 MM SURFACE (1.0 GAB) TO BE PLACED AND COMPACTEL | | | hma supi | | ASE | | CONTINUOUS "H" BA LAP 2'-8" (TYP.) 2"Ø PVC WEEP @ 10'-0" O.C. HOWARD COUNTY STANDARD CURB AND GUTTER V V V V V V V V V V V V V V V V V V V |
| APPRC | | PARTMENT OF PLANNING AND ZC | | | | | | · · · · · · · · · · · · · · · · · · · | 3" CLR |
| CHIEF | DEVELOPMENT ENGINEERI | NG DIVISION JP DATE | 17 | | | | | | CONTINUOUS "FL" BARS. LAP 3'-0" (TYP.). |
| | DIVISION OF LAND DEVELOR | | -17 | - | | | · · · · | ······································ | *SEE ARCHITECTURAL PLANS FOR M **WALL DESIGN TO BE VERIFIED BY A |
| 11 | alding fall | ······································ | 1-17 | 7 | NO. | | | DESCRIPTION DATE | TYPICAL RE |
| DIRECT | | DATE | and an and an and a second | THE OWNER OF THE OWNER | · · · · · · · · · · · · · · · · · · · | | | REVISIONS | |

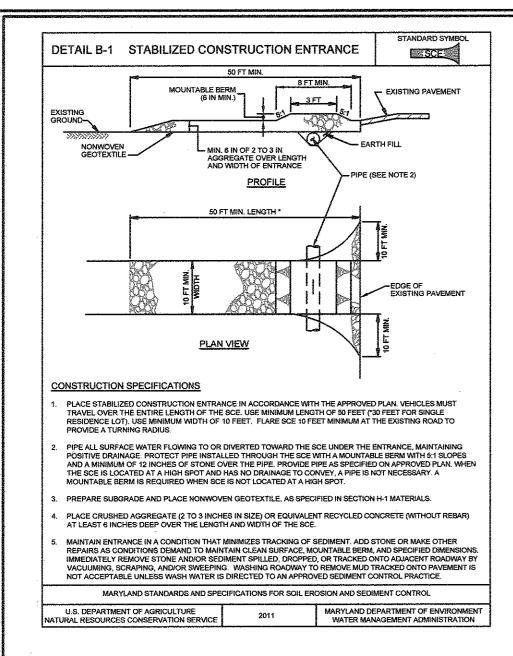




RETAINING WALL SECTION NOT TO SCALE







SEDIMENT CONTROL NOTES

A PRE-CONSTRUCTION MEETING MUST OCCUR WITH THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, CONSTRUCTION INSPECTION DIVISION (CID), 410-313-1855 AFTER THE FUTURE LOD AND PROTECTED AREAS ARE MARKED CLEARLY IN THE FIELD. A MINIMUM OF 48 HOUR NOTICE TO CID MUST BE GIVEN AT THE FOLLOWING STAGES:

- A. PRIOR TO THE START OF EARTH DISTURBANCE,
- B. UPON COMPLETION OF THE INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING, C. PRIOR TO THE START OF ANOTHER PHASE OF CONSTRUCTION OR OPENING OF ANOTHER
- GRADING UNIT. D. PRIOR TO THE REMOVAL OR MODIFICATION OF SEDIMENT CONTROL PRACTICES. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE, OTHER RELATED STATE AND FEDERAL PERMITS SHALL BE REFERENCED, TO ENSURE COORDINATION AND TO AVOID
- CONFLICTS WITH THIS PLAN. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERETO
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION IS REQUIRED WITHIN THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1): AND SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED AREAS ON THE PROJECT SITE EXCEPT FOR THOSE AREAS UNDER ACTIVE GRADING. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN
- ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION SEDIMENT CONTROL FOR TOPSOIL (SEC. B-4-2), PERMANENT SEEDING (SEC. B-4-5), TEMPORARY SEEDING (SEC. B-4-4) AND MULCHING (SEC. B-4-3). TEMPORARY STABILIZATION WITH MULCH ALONE
- CAN ONLY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES IF THE GROUND IS FROZEN, INCREMENTAL STABILIZATION (SEC. B-4-1) SPECIFICATIONS SHALL BE ENFORCED IN AREAS WITH >15' OF CUT AND/OR FILL, STOCKPILES (SEC. B-4-8) IN EXCESS OF 20 FT, MUST BE BENCHED WITH STABLE OUTLET. ALL CONCENTRATED FLOW, STEEP SLOPE, AND HIGHLY ERODIBLE AREAS
- SHALL RECEIVE SOIL STABILIZATION MATTING (SEC. B-4-6). ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE, AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE

| SITE ANALYSIS: | |
|-------------------------------------|--------------|
| TOTAL AREA: | 0.3708 ACRES |
| AREA DISTURBED: | 0.4515 ACRES |
| AREA TO BE ROOFED OR PAVED: | 0.3965 ACRES |
| AREA TO BE VEGETATIVELY STABILIZED: | 0.0550 ACRES |
| TOTAL CUT: | * 270 CY |
| | * 407 OV |

OFFSITE WASTE/BORROW AREA LOCATION: ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE CID. THE SITE AND ALL CONTROLS SHALL BE INSPECTED BY THE CONTRACTOR WEEKLY; AND THE NEXT DAY AFTER EACH RAIN EVENT. A WRITTEN REPORT BY THE CONTRACTOR, MADE AVAILABLE UPON REQUEST, IS PART OF EVERY INSPECTION AND SHOULD INCLUDE: INSPECTION DATE

- INSPECTION TYPE (ROUTINE, PRE-STORM EVENT, DURING RAIN EVENT) NAME AND TITLE OF INSPECTOR
- · WEATHER INFORMATION (CURRENT CONDITIONS AS WELL AS TIME AND AMOUNT OF LAST RECORDED PRECIPITATION)
- BRIEF DESCRIPTION OF PROJECT'S STATUS (E.G., PERCENT COMPLETE) AND/OR CURRENT ACTIVITIES
- EVIDENCE OF SEDIMENT DISCHARGES IDENTIFICATION OF PLAN DEFICIENCIES IDENTIFICATION OF SEDIMENT CONTROLS THAT
- REOURE MAINTENANCE IDENTIFICATION OF MISSING OR IMPROPERTY INSTALLED SEDIMENT CONTROLS COMPLIANCE STATUS REGARDING THE SEQUENCE OF CONSTRUCTION AND STABILIZATION
- REQUIREMENTS PHOTOGRAPHS
- MONITORING/SAMPLING MAINTENANCE AND/OR CORRECTIVE ACTION PERFORMED OTHER INSPECTION ITEMS AS REQUIRED BY THE GENERAL PERMIT FOR STORMWATER
- ASSOCIATED WITH CONSTRUCTION ACTIVITIES (NPDES, MDE). TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN AND SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY,
- WHICHEVER IS SHORTER ANY MAJOR CHANGES OR REVISIONS TO THE PLAN OR SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE HSCD PRIOR TO PROCEEDING WITH CONSTRUCTION. MINOR REVISIONS MAY ALLOWED BY THE CID PER THE LIST OF HSCD-APPROVED FIELD CHANGES. DISTURBANCE SHALL NOT OCCUR OUTSIDE THE LO.D. A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 AC. PER GRADING
- UNIT) AT A TIME. WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PRECEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE CID. UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE CID, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME. WASH WATER FROM ANY EQUIPMENT, VEHICLES, WHEELS, PAVEMENT, AND OTHER SOURCES MUST
- BE TREATED IN A SEDIMENT BASIN OR OTHER APPROVED WASHOUT STRUCTURE. TOPSOIL SHALL BE STOCKPILED AND PRESERVED ON-SITE FOR REDISTRIBUTION ONTO FINAL
- ALL SILT FENCE AND SUPER SILT FENCE SHALL BE PLACED ON-THE-CONTOUR, AND BE IMBRICATED AT 25' MINIMUM INTERVALS, WITH LOWER ENDS CURLED UPHILL BY 2' IN ELEVATION. STREAM CHANNELS MUST NOT BE DISTURBED DURING THE FOLLOWING RESTRICTED TIME PERIODS (INCLUSIVE):
- USE I AND IP MARCH 1 JUNE 15 USE III AND IIIP OCTOBER 1 - APRIL 30 USE IV MARCH 1 - MAY 31
- A COPY OF THIS PLAN, THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND ASSOCIATED PERMITS SHALL BE ON-SITE AND AVAILABLE WHEN THE
- SITE IS ACTIVE. EARTHWORK QUANTITIES ARE SOLELY FOR THE PURPOSE OF CALCULATING FEES. CONTRACTOR TO VERIFY ALL QUANTITIES PRIOR TO THE START OF CONSTRUCTION.
- ** TO BE DETERMINED BY CONTRACTOR, WITH PRE-APPROVAL OF THE SEDIMENT CONTROL INSPECTOR WITH AN APPROVED AND ACTIVE GRADING PERMIT.

TABLE B.1: TEMPORARY SEEDING FOR SITE STABILIZATION

| | SEED | ING RATE | SEEDING | RECOMMENDED SEE | EDING D |
|--|-------|-------------------------|----------|--|--------------|
| PLANT SPECIES | LB/AC | LB/1000 FT ² | (INCHES) | 5b & 6a | |
| COOL-SEASON GRASSES | | | | • | |
| ANNUAL RYEGRASS (LOLIUM PERENNE SSP. MULTIFLORUM) | 40 | 1.0 | 0.5 | MARCH 15 TO MAY 31; AUG 1 TO SEP 30 | MARCH |
| BARLEY (HORDEUM VULGARE) | 96 | 2.2 | 1.0 | MARCH 15 TO MAY 31; AUG 1 TO SEP 30 | MARCH AUG |
| OATS (AVENA SATIVA) | 72 | 1.7 | 1.0 | MARCH 15 TO MAY 31; AUG 1 TO SEP 30 | MARCH AUG |
| WHEAT (TRITICUM AESTIVUM) | 120 | 2.8 | 1,0 | MARCH 15 TO MAY 31; AUG 1 TO SEP 30 | MARCH AUG |
| CEREAL RYE (SECALE CEREALE) | 112 | 2.8 | 1.0 | MARCH 15 TO MAY 31; AUG 1 TO OCT 31 | MARCH |
| WARM-SEASON GRASSES | | | | | |
| FOXTAIL MILLET (SETARIA ITALICA) | 30 | 0.7 | 0.5 | JUN 1 TO JUL 31 | MAY |
| PEARL MILLET (PENNISETUM GLAUCUM) | 20 | 0.5 | 0.5 | JUN 1 TO JUL 31 | MAY |

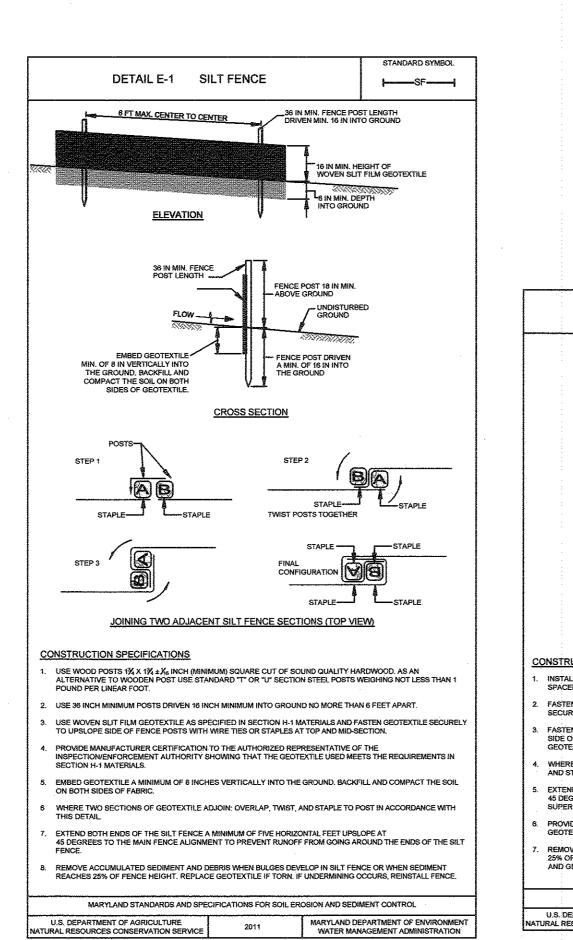
1. SEEDING RATES FOR THE WARM-SEASON GRASSES ARE IN POUNDS OF PURE LIVE SEED (PLS). ACTUAL PLANTING RATES SHALL BE ADJUSTED TO REFLECT PERCENT SEED GERMINATION AND PURITY, AS TESTED. ADJUSTMENTS ARE USUALLY NOT NEEDED FOR THE COOL-SEASON GRASSES SEEDING RATES LISTED ABOVE ARE FOR TEMPORARY SEEDINGS. WHEN PLANTED ALONE, WHEN PLANTED AS A NURSE CROP WITH PERMANENT SEED MIXES, USE 1/3 OF THE SEEDING RATE LISTED ABOVE FOR BARLEY, OATS, AND WHEAT. FOR SMALLER-SEEDED GRASSES (ANNUAL RYEGRASS PEARL MILLET, FOXTAIL MILLET), DO NOT EXCEED MORE THAN 5% (BY WEIGHT) OF THE OVERALL PERMANENT SEEDING MIX. CEREAL RYE GENERALLY SHOULD NOT BE USED AS A NURSE CROP. UNLESS PLANTING WILL OCCUR IN VERY LATE FALL BEYOND THE SEEDING DATES FOR OTHER TEMPORARY SEEDINGS, CEREAL RYE HAS ALLELOPATHIC PROPERTIES THAT INHIBIT THE GERMINATION AND GROWTH OF OTHER PLANTS, IF IT MUST BE USED AS A NURSE CROP, SEED AT 1/3 OF THE RATE LISTED ABOVE. OATS ARE THE RECOMMENDED NURSE CROP FOR WARM-SEASON GRASSES. FOR SANDY SOILS, PLANT SEEDS AT TWICE THE DEPTH LISTED ABOVE. THE PLANTING DATES LISTED ARE AVERAGES FOR EACH ZONE AND MAY REQUIRE ADJUSTMENT TO REFLECT LOCAL CONDITIONS, ESPECIALLY NEAR

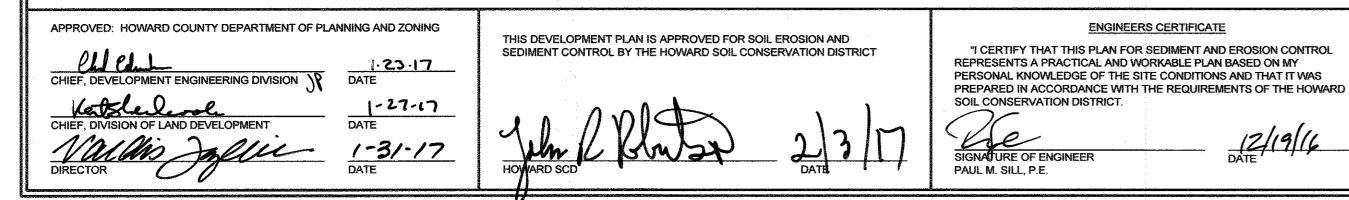
THE BOUNDARIES OF THE ZONE.

TABLE B.5: RECOMMENDED PLANTING DATES FOR PERMANENT COVER IN MARYLAND

| | PLANT HARDINESS ZONES | | | | |
|--|-------------------------------------|------------------------------------|--|--|--|
| TYPE OF PLANT MATERIAL | 5b & 6a | 6b | 7a & 7b | | |
| SEEDS- COOL-SEASON GRASSES (INCLUDES MIXES WITH FORBS AND/OR LEGUMES) | MAR 15 TO MAY 31 AUG 1 TO SEP 30 | MAR 1 TO MAY 15 AUG 1 TO OCT 15 | FEB 15 TO APR 30 AUG 15 TO OCT 31 NOV 1 TO NOV 30+ | | |
| SEEDS- WARM-SEASON/ COOL-SEASON GRASS MIXES | MAR 15 TO MAY 31++ | MAR 1 TO MAY 15++ | FEB 15 TO APR 30++ | | |
| (INCLUDES MIXES WITH FORBS AND/OR LEGUMES) | JUN 1 TO JUN 15* | MAY 16 TO JUN 15* | MAY 1 TO MAY 31* | | |
| SOD - COOL-SEASON | MAR 15 TO MAY 31 | MAR 1 TO MAY 15 | FEB 15 TO APR 30 | | |
| | JUN 1 TO AUG 31° | MAY 16 TO SEP 14* | MAY 1 TO SEP 30* | | |
| | SEP 1 TO NOV 1* | SEP 15 TO NOV 15* | OCT 1 TO DEC 1* | | |
| UNROOTED WOODY MATERIALS; BARE-ROOT PLANTS; | MARCH 15 TO MAY 31 | MARCH 1 TO MAY 15 | FEB 15 TO APR 30 | | |
| BULBS, RHIZOMES, CORMS AND TUBERS ² | JUN 1 TO JUN 30* | MAY 16 TO JUN 30* | MAY 1 TO JUN 30* | | |
| CONTAINERIZED STOCK; BALLED-AND-BURLAPPED STOCK | MAR 15 TO MAY 31 | MAR 1 TO MAY 15 | FEB 15 TO APR 30 | | |
| | JUN 1 TO JUN 30* | MAY 16 TO JUN 30° | MAY 1 TO JUN 30* | | |
| | SEP 1 TO NOV 15* | SEP 15 TO NOV 30° | OCT 1 TO DEC 15* | | |

- 1. THE PLANTING DATES LISTED ARE AVERAGES FOR EACH ZONE. THESE DATES MAY REQUIRE ADJUSTMENT TO REFLECT LOCAL CONDITIONS, ESPECIALLY NEAR THE BOUNDARIES OF THE ZONES, WHEN SEEDING TOWARD THE END OF THE LISTED PLANTING DATES, OR WHEN CONDITIONS ARE EXPECTED TO BE LESS THAN OPTIMAL, SELECT AN APPROPRIATE NURSE CROP FROM TABLE B.1 TEMPORARY SEEDING FOR SITE STABILIZATION AND PLANT TOGETHER WITH B. SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER). THE PERMANENT SEEDING MIX.
- 2. WHEN PLANTED DURING THE GROWING SEASON, MOST OF THESE MATERIALS MUST BE PURCHASED AND KEPT IN A DORMANT CONDITION UNTIL PLANTING. BARE-ROOT GRASSES ARE THE EXCEPTION-THEY MAY BE SUPPLIED AS GROWING (NON-DORMANT) PLANTS, ♦ ADDITIONAL PLANTING DATES FOR THE LOWER COASTAL PLAIN, DEPENDENT ON ANNUAL RAINFALL AND TEMPERATURE TRENDS. RECOMMEND ADDING A
- NURSE CROP, AS NOTED ABOVE, IF PLANTING DURING THIS PERIOD. ** WARM-SEASON GRASSES NEED A SOIL TEMPERATURE OF AT LEAST 50 DEGREES F IN ORDER TO GERMINATE. IF SOIL TEMPERATURES ARE COLDER THAN 50 DEGREES, OR MOISTURE IS NOT ADEQUATE. THE SEEDS WILL REMAIN DORMANT UNTIL CONDITIONS ARE FAVORABLE. IN GENERAL, PLANTING DURING THE LATTER PORTION OF THIS PERIOD ALLOWS MORE TIME FOR WEED EMERGENCE AND WEED CONTROL PRIOR TO PLANTING. WHEN SELECTING A PLANTING DATE, CONSIDER THE NEED FOR WEED CONTROL VS. THE LIKELIHOOD OF HAVING SUFFICIENT MOISTURE FOR LATER PLANTINGS, ESPECIALLY ON DROUGHTY SITES.
- * ADDITIONAL PLANTING DATES DURING WHICH SUPPLEMENTAL WATERING MAY BE NEEDED TO ENSURE PLANT ESTABLISHMENT. FREQUENT FREEZING AND THAWING OF WET SOILS MAY RESULT IN FROST-HEAVING OF MATERIALS PLANTED IN LATE FALL, IF PLANTS HAVE NOT SUFFICIENTLY ROOTED IN PLACE. SOD USUALLY NEEDS 4 TO 6 WEEKS TO BECOME SUFFICIENTLY ROOTED. LARGE CONTAINERIZED AND BALLED-AND-BURLAPPED STOCK MAY BE PLANTED INTO THE WINTER MONTHS AS LONG AS THE GROUND IS NOT FROZEN AND SOIL MOISTURE IS ADEQUATE.





DATES BY PLANT HARDINESS ZONE 6b 7a & 7b 1 1 TO MAY 15; FEB 15 TO APR 30; 1 TO OCT 15 AUG 15 TO NOV 30 FEB 15 TO APR 30; AUG 15 TO NOV 30 H 1 TO MAY 15: 1 TO OCT 15 H 1 TO MAY 15: FEB 15 TO APR 30; AUG 15 TO NOV 30 1 TO OCT 15 FEB 15 TO APR 30; AUG 15 TO NOV 30 CH 1 TO MAY 15: 1 TO OCT 15 H 1 TO MAY 15: FEB 15 TO APR 30; 1 TO NOV 15 AUG 15 TO DEC 15 16 TO JUL 31 MAY 1 TO AUG 14 16 TO JUL 31 MAY 1 TO AUG 14

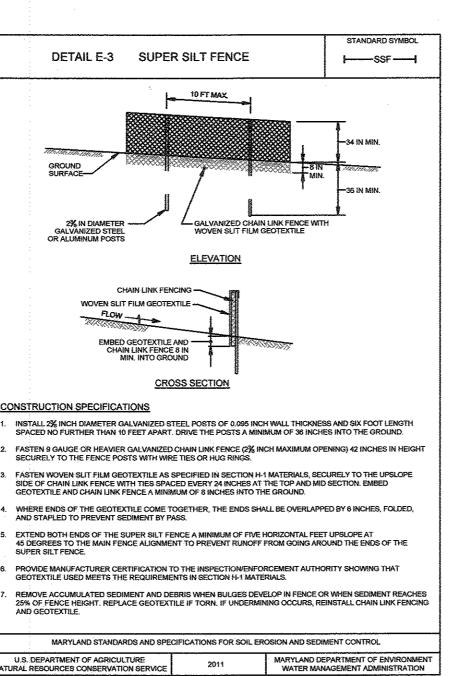
TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION.

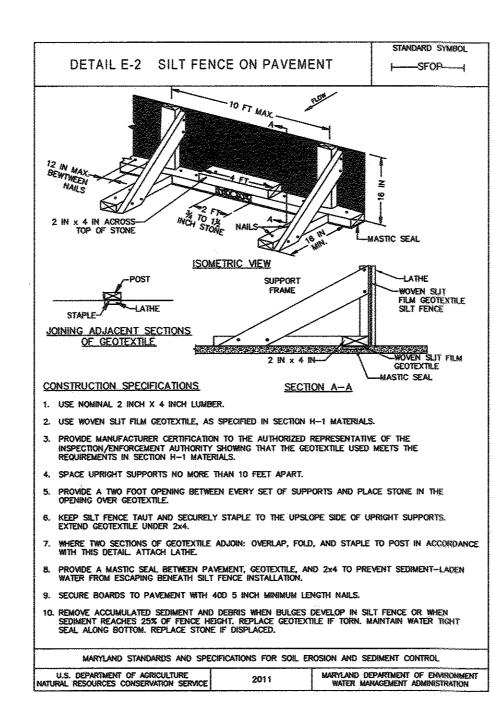
TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER ON DISTURBED SOILS.

CONDITIONS WHERE PRACTICE APPLIES • EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE.

A. SEED MIXTURES 1. GENERAL USE

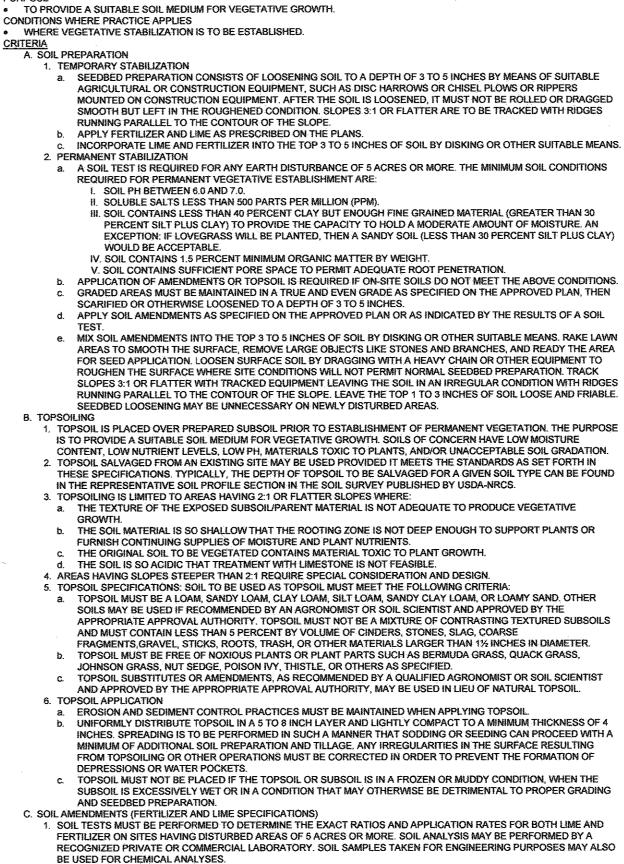
- A. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE B.2. ENTER SELECTED MIXTURE(S),
- APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON TH PLAN. B. ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS, OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD OFFICE GLIDE SECTION 342 - CRITICAL AREA PLANTING. C. FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY.
- D. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3 ½ POUNDS PER 1000 SQUARE FEET (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING 2. TURFGRASS MIXTURES
- A. AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL. RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE. B. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMAR THE SUMMARY IS TO BE PLACED ON THE PLAN.
 - 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 RATE: 1.5 TO 2.0 POUNDS PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT. I. KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE: FOR USE IN FULL SUN AREAS WHE
 - B.22 RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT, CERTIFIED PERENNIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT
- III. 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 TALL FESCUE CULTIVARS 95 TO 100 PERCENT CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET, ONE OR MORE CULTIVARS MAY BE BLENDED.
- IV KENTLICKY BI LIEGRASS/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 TO 40 PERCENT AND CERTIFIED FINE FESCUE AND 60 TO 70 PERCENT SEEDING RATE: 11/2 TO 3 POUNDS PER 1000 SQUARE FEET. NOTES: SELECT TURFGRASS VARIETIES FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND
- PUBLICATION, AGRONOMY MEMO #77, "TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND" CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. THE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION, PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC LINE C. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES: WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1 (HARDINESS ZONES: 5B, 6A)
- CENTRAL MD: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 6B) SOUTHERN MD. EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONES: 7A, 7B) D. TILL AREAS TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES, LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDBED. REMOVE STONES AND DEBRIS OVER 1½ INCHES IN
- DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICI II TY E. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (% TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON ADVERSE SITES.
- GENERAL SPECIFICATIONS A. CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED, SOD LABELS MUST BE MADE AVAILABLE TO THE JOB
- FOREMAN AND INSPECTOR. B. SOD MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF % INCH. PLUS OR MINUS % INCH. AT THE TIME OF CUTTING
- MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH. BROKEN PADS AND TORN OR UNEVEN ENDS WILL NOT BE ACCEPTABLE. C. STANDARD SIZE SECTIONS OF SOD MUST 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. D, SOD MUST NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL. E. SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS
- PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION. 2. SOD INSTALLATION A. DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
- B. LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO IT AND TIGHTLY WEDGED AGAINST EACH OTHER. STAGGER LATERAL JOINTS TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE AIR DRYING OF THE ROOTS. WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. ROLL AND TAMP, PEG OR OTHERWISE SECURE THE SOD TO PREVENT SLIPPAGE ON SLOPES, ENSURE
- SOLID CONTACT EXISTS BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE. D. WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY
- PIECE OF SOD WITHIN EIGHT HOURS. 3. SOD MAINTENANCE A. IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. WATER SOD DURING THE HEAT OF THE DAY TO PREVENT WILTING.
- B. AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT. C. DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN % OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL UTTING OR SUBSEQUENT CUTTINGS, MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED





3-4-2 STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL MENDMENTS DEFINITION

PURPOSE



PRODUCER. 3. LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #20 MESH SIEVE.

DISKING OR OTHER SUITABLE MEANS.

B-4-8 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREA DEFINITION MEASURES.

PURPOSE TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR EROSION, SEDIMENTATION, AND CHANGES TO DRAINAGE PATTERNS. CONDITIONS WHERE PRACTICE APPLIES

- THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN.
- MATERIAL AND BASED ON A SIDE SLOPE RATIO NO STEEPER THAN 2:1. BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING
- ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE 5. CLEAR WATER RUNOFF INTO THE STOCKPILE AREA MUST BE MINIMIZED BY USE OF A DIVERSION DEVICE SUCH
- DISCHARGING CONCENTRATED FLOW IN A NON-EROSIVE MANNER 6. WHERE RUNOFF CONCENTRATES ALONG THE TOE OF THE STOCKPILE FILL, AN APPROPRIATE
- STOCKPILE TO FACILITATE CLEANUP, STOCKPILES CONTAINING CONTAMINATED MATERIAL MUST BE COVERED WITH IMPERMEABLE SHEETING.
- 4:1 SLOPES, BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING

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 NO. DESCRIPTION DATE IGNATURE OF DEVELOPER REVISIONS

THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION.

a. SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENED, IT MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES

a. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS

III. SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION: IF LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY)

APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN

e. MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWN AREAS TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE

1 TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE S TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION. TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED 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

THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE b. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR

TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS

FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1% INCHES IN DIAMETER. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK GRASS TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST

UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO A MINIMUM THICKNESS OF 4 INCHES SPREADING IS TO 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.

TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING

1. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A

2. FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTY OF THE

HYDROSEEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE) LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A #100 MESH 4. LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY

WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS. SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS/ACRE (200-400 POUNDS PER 1.000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL

A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL

STOCKPILE AREAS ARE UTILIZED WHEN IT IS NECESSARY TO SALVAGE AND STORE SOIL FOR LATER USE

THE FOOTPRINT OF THE STOCKPILE MUST BE SIZED TO ACCOMMODATE THE ANTICIPATED VOLUME OF

RUNOFF FROM THE STOCKPILE AREA MUST DRAIN TO A SUITABLE SEDIMENT CONTROL PRACTICE.

AS AN EARTH DIKE, TEMPORARY SWALE OR DIVERSION FENCE. PROVISIONS MUST BE MADE FOR

EROSION/SEDIMENT CONTROL PRACTICE MUST BE USED TO INTERCEPT THE DISCHARGE. STOCKPILES MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 DAY STABILIZATION REQUIREMENT AS WELL AS STANDARD B-4-1 INCREMENTAL STABILIZATION AND STANDARD B-4-4 TEMPORARY STABILIZATION. 8. IF THE STOCKPILE IS LOCATED ON AN IMPERVIOUS SURFACE, A LINER SHOULD BE PROVIDED BELOW THE

MAIN LENANCE: THE STOCKPILE AREA MUST CONTINUOUSLY MEET THE REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. SIDE SLOPES MUST BE MAINTAINED AT NO STEEPER THAN A 2:1 RATIO. THE STOCKPILE AREA MUST BE KEPT FREE OF EROSION. IF THE VERTICAL HEIGHT OF A STOCKPILE EXCEEDS 20 FEET FOR 2:1 SLOPES, 30 FEET FOR 3:1 SLOPES, OR 40 FEET FOR **B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING**

DEFINITION THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.

<u>PURPOSE</u>. TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION.

CONDITIONS WHERE PRACTICE APPLIES TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE GRADING.

1. SPECIFICATIONS a. ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY, ALL SEED USED MUST HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON ANY PROJECT. REFER TO TABLE B.4 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO VERIFY TYPE OF SEED AND SEEDING RATE b. MULCH ALONE MAY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES ONLY IF THE GROUND IS

FROZEN, THE APPROPRIATE SEEDING MIXTURE MUST BE APPLIED WHEN THE GROUND THAWS. C. INOCULANTS: THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST BE A PURE CULTURE OF NITROGEN FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIES. INOCULANTS MUST NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER. ADD FRESH INOCULANTS AS DIRECTED ON THE PACKAGE. USE FOUR TIMES THE RECOMMENDED RATE. WHEN HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE d. SOD OR SEED MUST NOT BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.

- 2. APPLICATION a. DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS. I INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE B.1. PERMANENT
- SEEDING TABLE B.3, OR SITE-SPECIFIC SEEDING SUMMARIES. II. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION. ROLL THE SEEDED AREA WITH A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL CONTACT. b. DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.
- I. CULTIPACKING SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE AT LEAST 1/4 INCH OF SOIL COVERING. SEEDBED MUST BE FIRM AFTER PLANTING. II. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.
- c. HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER). I. IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED THE FOLLOWING: NITROGEN, 100 POUNDS PER ACRE TOTAL OF SOLUBLE NITROGEN; P205 (PHOSPHOROUS), 200 POUNDS PER ACRE: K2O (POTASSIUM), 200 POUNDS PER ACRE.
- II. LIME: USE ONLY GROUND AGRICULTURAL LIMESTONE (UP TO 3 TONS PER ACRE MAY BE APPLIED BY HYDROSEEDING). NORMALLY, NOT MORE THAN 2 TONS ARE APPLIED BY HYDROSEEDING AT ANY ONE TIME. DO NOT USE BURNT OR HYDRATED LIME WHEN HYDROSEEDING. III. MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT INTERRUPTION.

B. MULCHING 1. MULCH MATERIALS (IN ORDER OF PREFERENCE)

a. STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, RYE, OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR. STRAW IS TO BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY, MOLDY, CAKED, DECAYED, OR EXCESSIVELY DUSTY, NOTE: USE ONLY STERILE STRAW MULCH IN AREAS WHERE ONE SPECIES OF GRASS IS DESIRED. b. WOOD CELLULOSE FIBER MULCH (WCFM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATE.

I. WCFM IS TO BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PACKAGE THAT WILL PROVIDE AN APPROPRIATE COLOR TO FACILITATE VISUAL INSPECTION OF THE UNIFORMLY SPREAD SLURRY.

IV. WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.

- II. WCFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS. III. WCFM MATERIALS ARE TO 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 BLEND WITH SEED, FERTILIZER AND OTHER ADDITIVES TO FORM A HOMOGENEOUS SLURRY. THE MULCH
- MATERIAL MUST FORM A BLOTTER-LIKE GROUND COVER, ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES AND MUST COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS. IV. WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE
- PHYTO-TOXIC V WCEM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH OF APPROXIMATELY 10 MILLIMETERS, DIAMETER APPROXIMATELY 1 MILLIMETER, PH RANGE OF 4.0 TO 8.5.
- ASH CONTENT OF 1.6 PERCENT MAXIMUM AND WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM. 2. APPLICATION a. APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING.

5. WHEN STRAW MULCH IS USED, SPREAD IT OVER ALL SEEDED AREAS AT THE RATE OF 2 TONS PER ACRE TO A UNIFORM LOOSE DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED, WHEN USING A MULCH ANCHORING TOOL, INCREASE THE APPLICATION RATE TO 2.5 TONS PER ACRE. C. WOOD CELLULOSE FIBER USED AS MULCH MUST BE APPLIED AT A NET DRY WEIGHT OF 1500 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER TO ATTAIN A MIXTURE WITH A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER 3. ANCHORING

2. PERFORM MULCH ANCHORING IMMEDIATELY FOLLOWING APPLICATION OF MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS (LISTED BY PREFERENCE), DEPENDING UPON THE SIZE OF THE AREA AND EROSION HAZARD:

- I. A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE A MINIMUM OF 2 INCHES. THIS PRACTICE IS MOST EFFECTIVE ON LARGE AREAS BUT IS LIMITED TO FLATTER SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY, IF USED ON SLOPING LAND, THIS PRACTICE SHOULD FOLLOW THI CONTOUR.
- II. WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER
- III. SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRO-TACK), DCA-70, PETROSET, TERRA TAX II, TERRA TACK AR OR OTHER APPROVED EQUAL MAY BE USED. FOLLOW APPLICATION RATES AS SPECIFIED BY THE MANUFACTURER. APPLICATION OF LIQUID BINDERS NEEDS TO BE HEAVIER AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS, USE OF ASPHALT BINDERS IS STRICTLY PROHIBITED IV. LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO 15 FEET WIDE AND 300 TO 3,000 FEET LONG.

B-4-4 STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS.

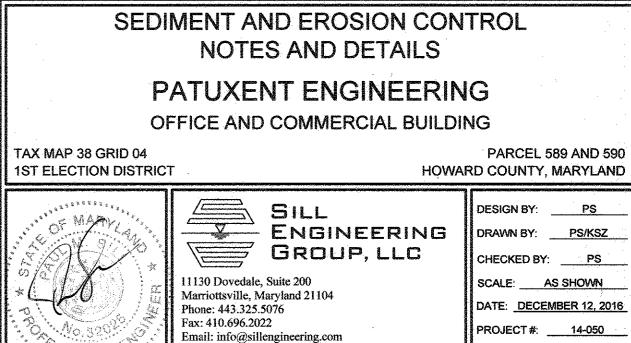
- TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS.
- CONDITIONS WHERE PRACTICE APPLIES
- EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER DURATION OF TIME.
- 1 SPLECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B 1 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM IGURE B.3), AND ENTER THEM IN THE TEMPORARY SEEDING SUMMARY BELOW ALONG WITH APPLICATION RATES, SEEDING DATES AND SEEDING DEPTHS. IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN TABLE B.1 PLUS FERTILIZER AND LIME RATES
- MUST BE PUT ON THE PLAN. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
- 3. WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3.A.1.B AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

STANDARD STABILIZATION NOTE

- NENT TER
- RADED SPECT

SEQUE

- NOTIFY HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSE AND PERMITS AT (410) 313-1880 AT LEAST 24 HOURS BEFORE STARTING ANY WORK.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE, SUPER SILT FENCE AND SILT FENCE. (1 WEEK). ROUGH GRADE SITE. (2 WEEKS)
- BEGIN BUILDING CONSTRUCTION. (6 MONTHS) INSTALL CURB AND GUTTER. (1 MONTH)
- INSTALL SILT FENCE ON PAVEMENT AND CONSTRUCT ROAD IMPROVEMENTS. PROVIDE TEMPORARY TRAFFIC CONTROL PER THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ONCE ROAD IMPROVEMENTS ARE COMPLETED, AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, REMOVE THE SILT FENCE ON PAVEMENT. (2 WEEKS) FINISH BUILDING CONSTRUCTION AND BASE PAVE DRIVE AISLES AND PARKING AREAS. (6 MONTHS)
- WITH THE APPROVAL OF SEDIMENT CONTROL INSPECTOR INSTALL MICRO-BIORETENTION FACILITY. (2 🗸 WEEKS). 10. FINE GRADE SITE AND SURFACE. TOP COAT DRIVE ISLES AND PARKING AREAS. (2 WEEKS).
- 11. UPON STABILIZATION OF ALL DISTURBED AREAS AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL MEASURES AND STABILIZE ANY REMAINING DISTURBED AREA WITHIN THE LIMIT OF DISTURBANCE. (2 WEEKS)



OWNER/DEVELOPER

5782 MAIN STREET. LLC c/o JOHN O'CONNOR 5741 MAIN STREET ELKRIDGE, MD 21075 410.796.8130

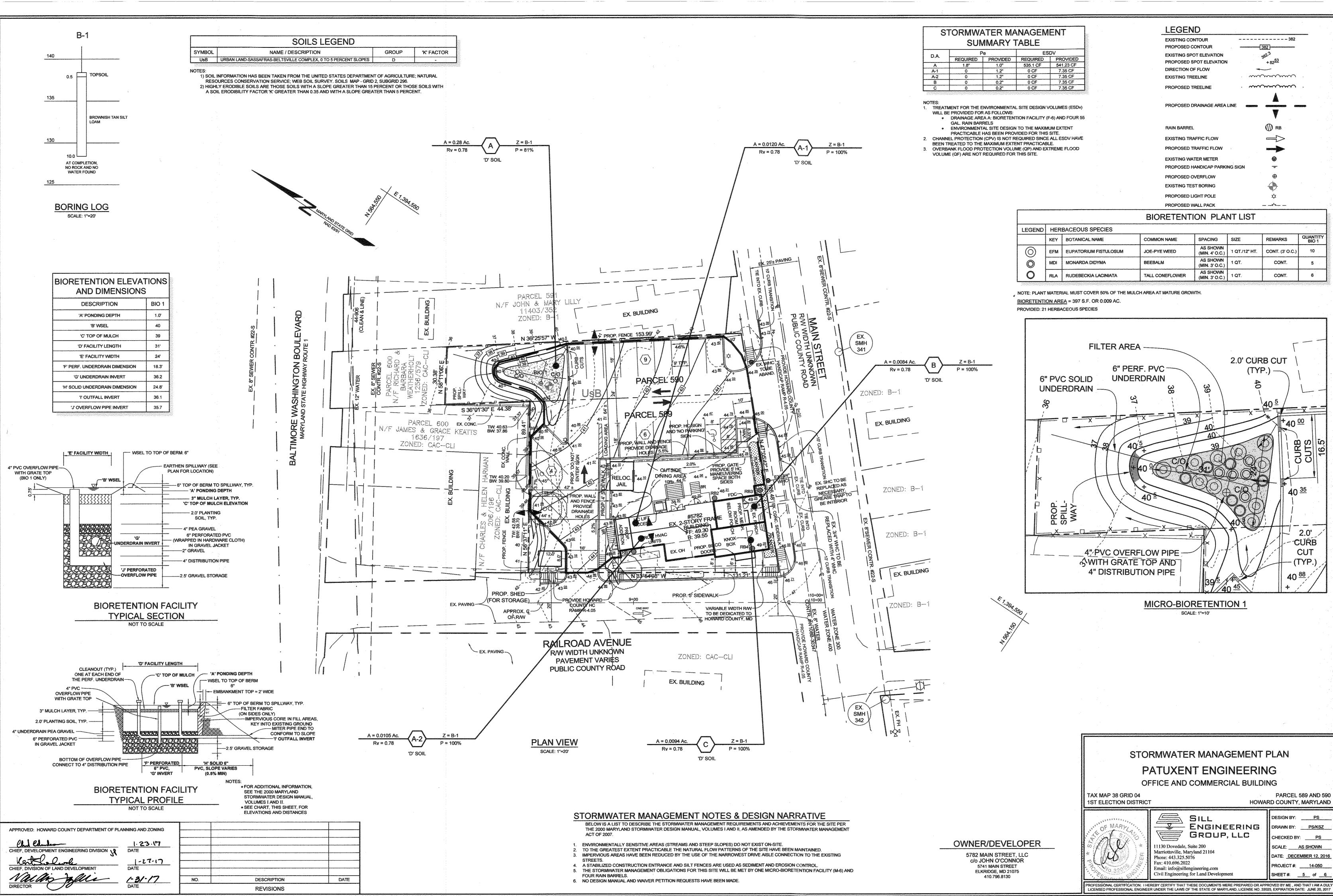
Civil Engineering for Land Developmen

ROFESSIONAL CERTIFICATION: LHEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME. AND THAT LAM A DUI LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE: JUNE 20, 2017

SDP- 16-034

SHEET #: _____4 of ___6

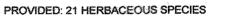
| | FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMAI |
|-------------|---|
| | OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN: |
| | a. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMET |
| | DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES |
| | STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND |
| | b. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GR |
| | AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING. |
| | DURING GRADING AND AFTER EACH RAINFALL, CONTRACTOR WILL INS |
| | AND PROVIDE NECESSARY MAINTENANCE TO THE SEDIMENT CONTROL |
| | MEASURES ON THIS PLAN. |
| | · · · · · · · · · · · · · · · · · · · |
| | |
| SEQUEN(| CE OF CONSTRUCTION |
| | |
| OBTAIN GRAD | |

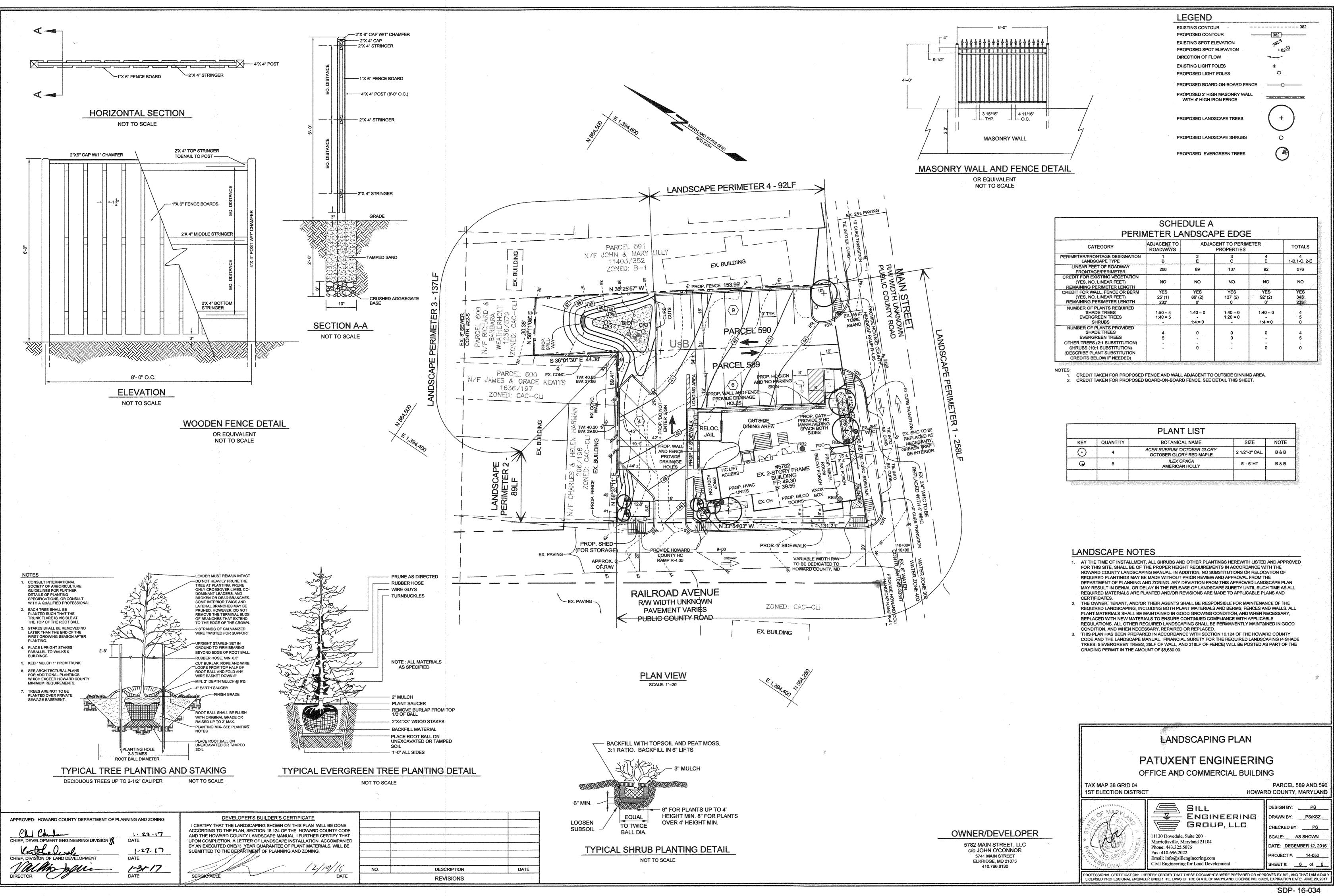


| D.A. | P | e | ESDV | | |
|------|----------|----------|----------|-----------|--|
| U.M. | REQUIRED | PROVIDED | REQUIRED | PROVIDED | |
| A | 1.8" | 1.0" | 535.1 CF | 541.23 CF | |
| A-1 | 0 | 1.2" | 0 CF | 7.35 CF | |
| A-2 | 0 | 1.2" | 0 CF | 7.35 CF | |
| 8 | 0 | 0.2" | 0 CF | 7.35 CF | |
| С | 0 | 0.2" | 0 CF | 7.35 CF | |

| | <u> </u> | | |
|--------|--------------------------------|--|-----|
| | LEGEND | | |
| | EXISTING CONTOUR | | |
| | PROPOSED CONTOUR | 382 | |
| | EXISTING SPOT ELEVATION | 382.3 | |
| | PROPOSED SPOT ELEVATION | + 82 ⁵³ | |
| | DIRECTION OF FLOW | - | . ' |
| | EXISTING TREELINE | \dots | |
| | PROPOSED TREELINE | ······································ | |
| | PROPOSED DRAINAGE AREA LINE | | |
| | RAIN BARREL | | · · |
| | EXISTING TRAFFIC FLOW | | |
| | PROPOSED TRAFFIC FLOW | | |
| | EXISTING WATER METER | Ø | |
| | PROPOSED HANDICAP PARKING SIGN | -0- | |
| | PROPOSED OVERFLOW | \oplus | |
| | EXISTING TEST BORING | | |
| | PROPOSED LIGHT POLE | \$ | |
| | PROPOSED WALL PACK | | |
| \sim | DETENITIONI DI ANITI I | CT. | ŀ |

| LEGEND | HER | BACEOUS SPECIES | | | | | |
|------------|-----|-----------------------|-----------------|----------------------------|---------------|-----------------|-------------------|
| | KEY | BOTANICAL NAME | COMMON NAME | SPACING | SIZE | REMARKS | QUANTITY BIO 1 |
| \bigcirc | EFM | EUPATORIUM FISTULOSUM | JOE-PYE WEED | AS SHOWN (MIN. 4' O.C.) | 1 QT./12" HT. | CONT. (3' O.C.) | 10 |
| õ | MDI | MONARDA DIDYMA | BEEBALM | AS SHOWN (MIN. 3' O.C.) | 1 QT. | CONT. | 5 |
| 0 | RLA | RUDEBECKIA LACINIATA | TALL CONEFLOWER | AS SHOWN (MIN. 3' O.C.) | 1 QT. | CONT. | 6 |





| | LEGEND | | |
|---|--|----------|---|
| | EXISTING CONTOUR | | |
| | PROPOSED CONTOUR | 382 | |
| | EXISTING SPOT ELEVATION | 382.3 | |
| | PROPOSED SPOT ELEVATION | + 8253 | |
| | DIRECTION OF FLOW | | |
| | EXISTING LIGHT POLES | * | |
| | PROPOSED LIGHT POLES | Å | 7 |
| | PROPOSED BOARD-ON-BOARD FENCE | | |
| | PROPOSED 2' HIGH MASONRY WALL WITH 4' HIGH IRON FENCE | | |
| | PROPOSED LANDSCAPE TREES | + | |
| ~ | PROPOSED LANDSCAPE SHRUBS | 0 | |
| | PROPOSED EVERGREEN TREES | | |
| | | | |

| KEY | QUANTITY | BOTANICAL NAME | SIZE | NOTE |
|---------|----------|--|----------------|-------|
| \odot | 4 | ACER RUBRUM 'OCTOBER GLORY' OCTOBER GLORY RED MAPLE | 2 1/2"-3" CAL. | B & B |
| | 5 | ILEX OPACA AMERICAN HOLLY | 5' - 6' HT | B & B |