SITE DEVELOPMENT PLA CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA ANDARDS AND SPECIFICATIONS IF APPLICABLE THE CONTRACTOR SHALL NOTIFY THE BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST 48 HOURS PRIOR TO THE START OF WORK. NORTHING: 566,053.5979 NORTHING: 562,804.8537 THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT I-800-257-7777 AT LEAST 48-HOURS PRIOR TO ANY EXCAVATION WORK THE CONTRACTOR SHALL NOTIFY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF UTILITIES AT (410) 313-4900 AT EASTING: 1,349,906.1701 LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK ELEVATION: 359.151 (LATEST ADJ. NOV. 2008) (LATEST ADJ. NOV. 2008) MERRIWEATHER POST PAVILION & PROPERTY IS ZONED 'NEW TOWN' PER THE COMPREHENSIVE ZONING PLAN, ZONING AMENDMENTS AND MAPS EFFECTIVE OCTOBER, 6 2013. ADDITIONALLY, THE PROJECT AREA IS SUBJECT TO THE DOWNTOWN COLUMBIA PLAN - A GENERAL PLAN AMENDMENT ADC MAP 32 GRID A-I DOWNTOWN COLUMBIA LAND USE: DOWNTOWN PARKLAND, DOWNTOWN ARTS AND ENTERTAINMENT FIFTH ELECTION DISTRICT OT 13: 10.1984 AC. & LOT 23: 36.2326 AC. AREA OF BUILDABLE LOTS: 4305 \$ 4306 MERRIWEATHER PARK AT SYMPHONY WOODS FDP-4-A-V, F-79-149, SDP-70-58c, SDP-81-178c, SDP-82-106c, SDP-83-128 SDP-89-222, SDP-99-122, FDP-DC-MSW-1A, ECP-15-083, F-15-106, ECP-16-020, THE MALL ≦ AT COLUMBIA ≧ TOPOGRAPHIC AERIAL SURVEY WAS PERFORMED ON MARCH 2007 BY MCKENZIE SNYDER AND TOPOGRAPHIC FIELD SURVEY SUMMEI 2014 BY GUTSCHICK, LITTLE AND WEBER. TOWN CENTER, SECTION 1, LOTS 13 & 23 COORDINATES ARE BASED ON NAD '83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY STATION NUMBERS: 36AA AND 30GA HE EXISTING UTILITIES SHOWN HEREIN WERE DERIVED FROM AVAILABLE PUBLIC RECORDS AND FIELD LOCATIONS BY GUTSCHICK LITTLE & WEBER, P.A. THE CONTRACTOR MUST DIG TEST PITS BY HAND AT ALL UTILITY CROSSINGS AND CONNECTION POINTS TO PERIFY EXACT LOCATION AND NOTIFY THE ENGINEER OF ANY CONFLICTS. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.

SPOT ELEVATIONS SHOWN FOR CURB ARE BOTTOM OF CURB UNLESS OTHERWISE NOTED.

ALL PLAN DIMENSIONS ARE TO THE FACE OF BUILDING OR CURB UNLESS OTHERWISE NOTED. DIMENSIONS ARE MEASURED PERPENDICULAR OR RADIAL BETWEEN ITEMS UNLESS NOTED OTHERWISE.

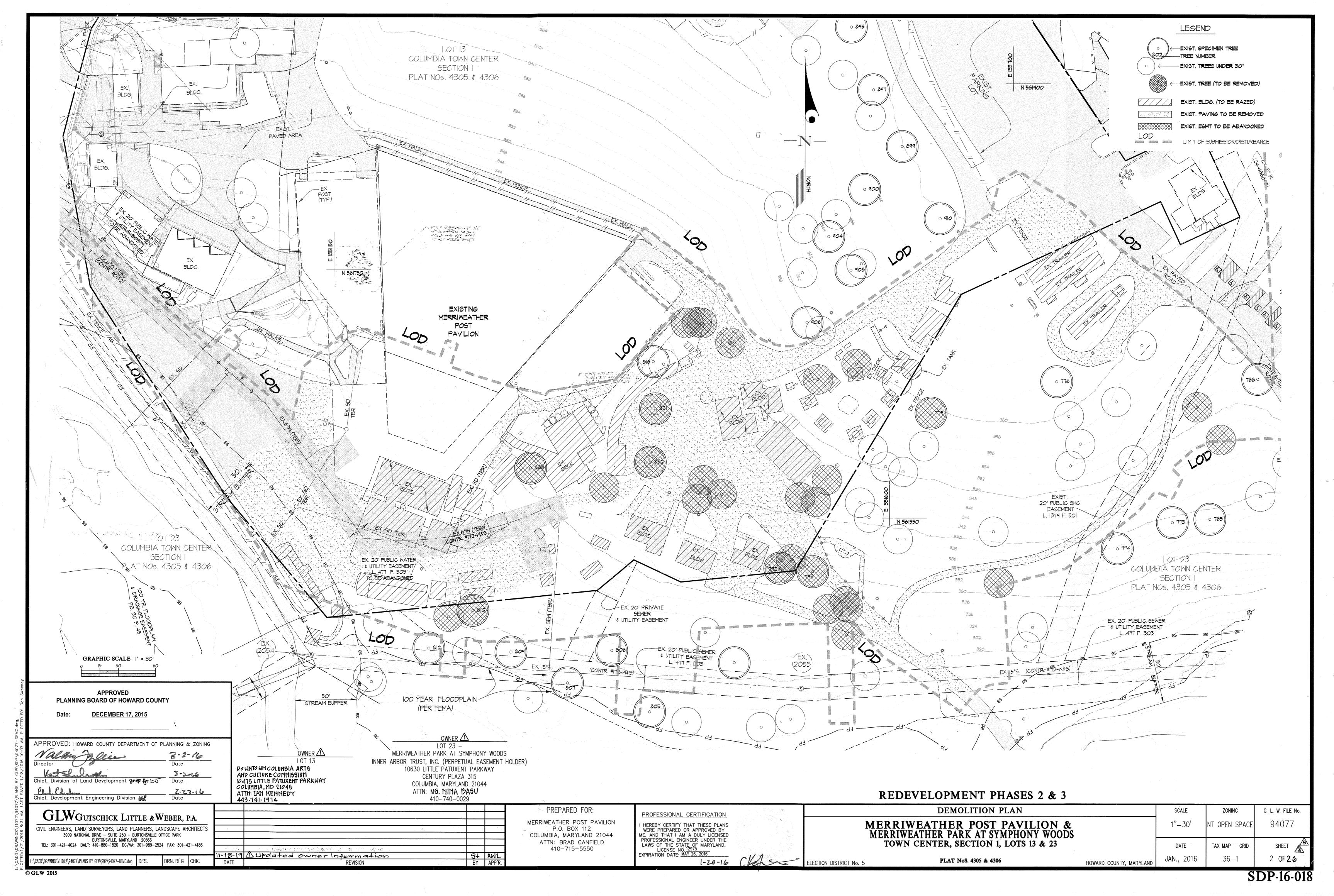
ALL CURB RADII ARE 5' UNLESS OTHERWISE NOTED.

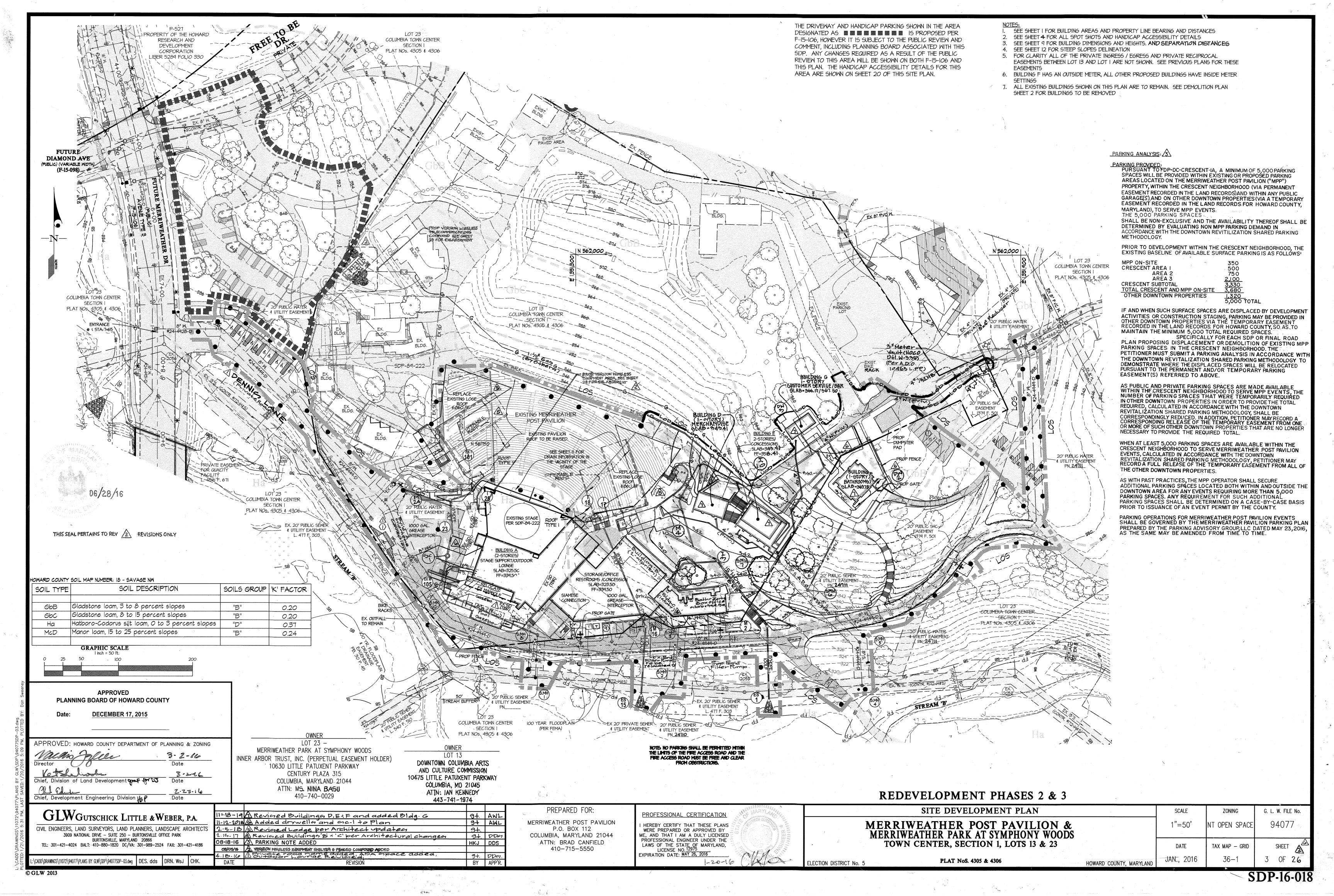
THE PROJECT IS WITHIN THE METROPOLITAN DISTRICT REDEVELOPMENT PHASE 2 & 3 、MERRIWEATHER `⊅ THE PROJECT IS WITHIN THE METROPOLITAN DISTRICT
WATER SERVICE & SEWER SERVICE ARE PUBLIC (CONTR. # 24-4949-D).
A TRAFFIC STUDY IS NOT REQUIRED SINCE THERE IS NO PROPOSED INCREASE TO THE VENUE CAPACITY.
THE CEMETERY INVENTORY MAP DOES NOT SHOW ANY CEMETERIES WITHIN THE PROJECT LIMITS.
THE SCENIC ROADS MAP DOES NOT INDICATE ANY SCENIC ROADS IN THE VICINITY.
THE HISTORIC SITES MAP DOES NOT SHOW ANY HISTORICAL SITES WITHIN THE PROJECT LIMITS.
THE GEO-TECHNICAL REPORT WAS PROVIDED BY THE ROBERT B. BALTER COMPANY DATED SEPTEMBER 2015.
A NOISE STUDY WAS PREPARED BY CERAMI & ASSOCIATES DATED OCTOBER 26, 2015 AND WAS APPROVED WITH THIS SITE PLAN. A SOUND MEASUREMENT AND SUBSEQUENT ACOUSTICAL MODELING EXERCISE HAS BEEN UNDERTAKEN BY CERAMI & ASSOCIATES TO DETERMINE THE SOUND PROPAGATION FROM THE NEW SCHEME WHICH WILL FORM THE NEW MERRIWEATHER POST PAVILION. IT HAS BEEN DEMONSTRATED THAT WITH THE APPROPRIATE AFOREMENTIONED SOUND SYSTEM MODIFICATIONS A REDUCTION IN OFE-SITE SOUND PROPAGATION CAN BE ACHIEVED UPON COMPILETION OF THE NEW GENERAL SITE DATA EXERCISE HAS BEEN UNDERTAKEN BY CERAMI & ASSOCIATES TO DETERMINE THE SOUND PROPAGATION FROM THE NEW SCHEME WHICH WILL FORM THE NEW MERRIMEATHER POST PAVILION. IT HAS BEE DEMONSTRATED THAT APPROPRIATE AFOREMENTIONED SOUND SYSTEM MODIFICATIONS, A REDUCTION IN OFF-SITE SOUND PROPAGATION CAN BE ACHIEVED UPON COMPLETION OF THE NEW ARCHITECTURAL SCHEME. IT HAS ALSO BEEN DEMONSTRATED THAT BETTER LAWN COVERAGE CAN LIKELY BE ACHIEVED ALLOWING DELAYS TO BE RUN AT LOWER POWER. APPROVAL OF THIS SITE DEVELOPMENT PLAN IS SUBJECT TO ALL NOISE MITIGATION MEASURES RECOMMENDED IN THE NOISE STUDY BEING IMPLEMENTED. IN ADDITION, THE MERRIMEATHER POST PAVILION OPERATOR SHALL WORK WITH THE HEALTH DEPARTMENT TO CONSIDER ADDITIONAL MITIGATION TO IMPLEMENT OVER THE NEXT 5 OPERATING SEASONS.

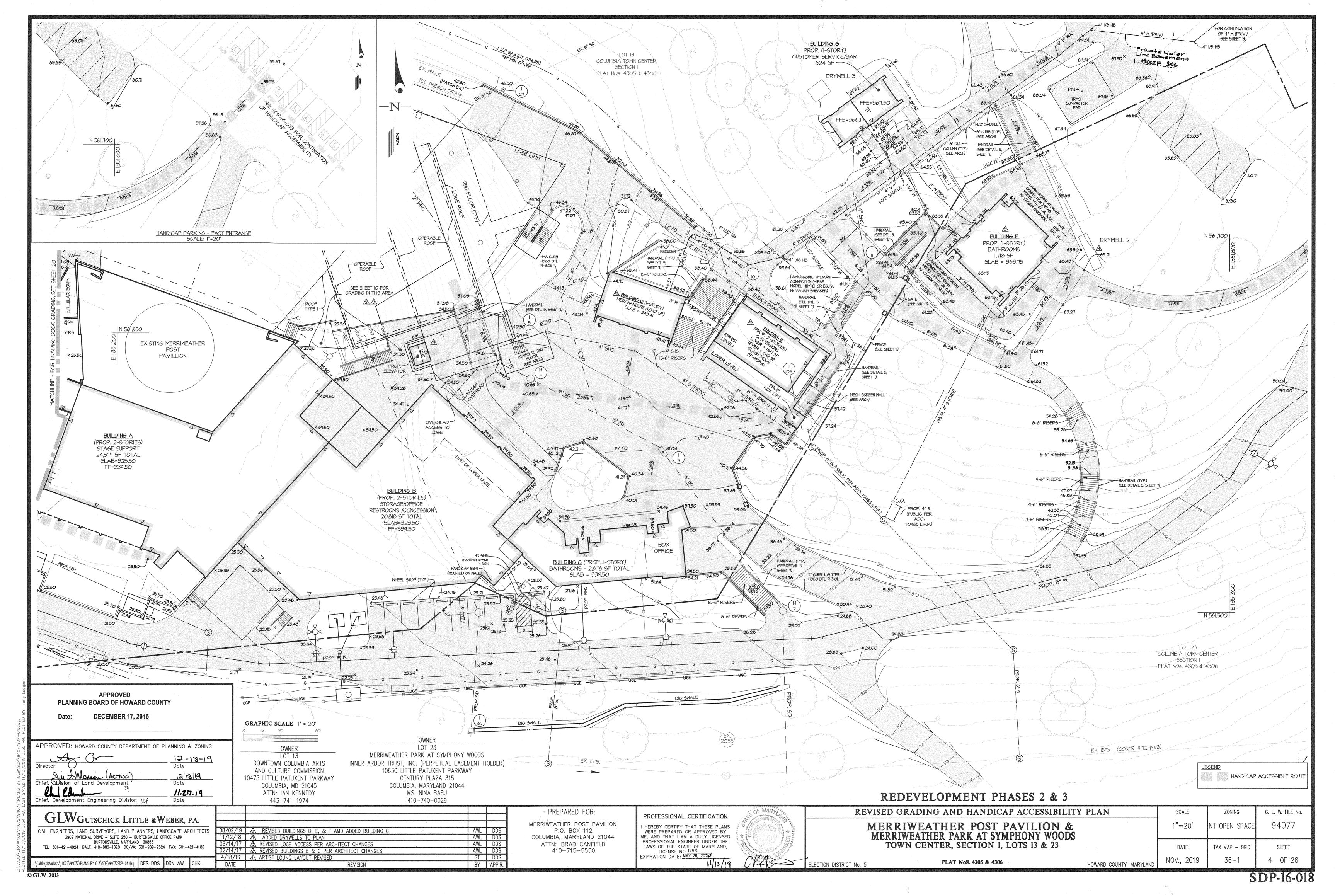
SOILS DATA WAS TAKEN FROM THE SOIL SURVEY OF HOWARD COUNTY, MARYLAND ISSUED MARCH, 2008.
BOUNDARY INFORMATION IS FROM BOUNDARY SURVEYS BY GUTSCHICK, LITTLE, AND WEBER, P.A., DATED FEBRUARY, 2014

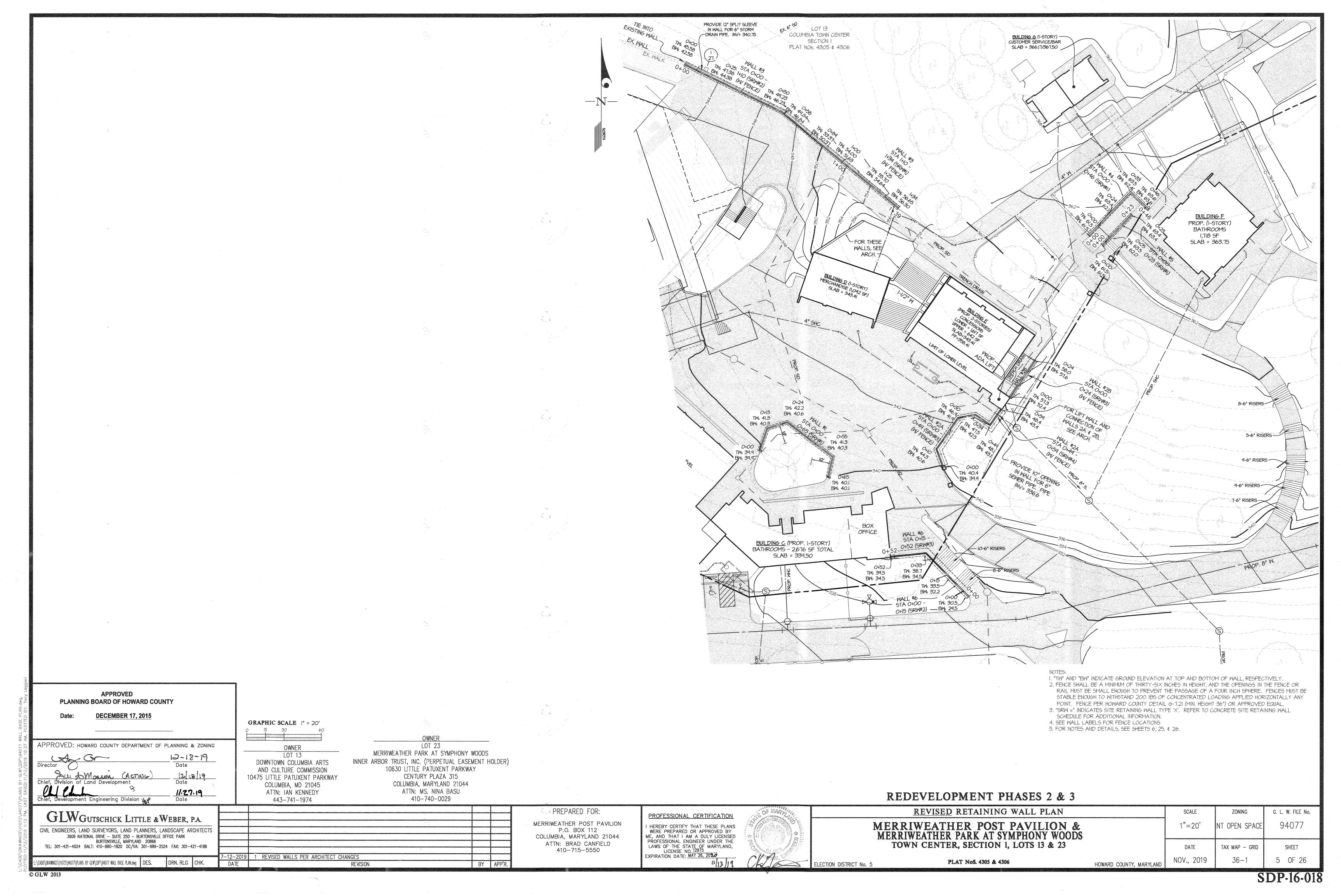
THE 100-YEAR FLOODPLAIN LIMITS FOR STREAM B WERE TAKEN FROM THE HOWARD COUNTY DIGITAL FLOOD INSURANCE RATE MAP. THE FEMA FLOODPLAIN ELEVATIONS WERE DELINEATED USING THE EXISTING TOPOGRAPHY A. TOTAL PROJECT AREA: 46.431 AC VICINITY MAP B. LIMIT OF DISTURBED AREA: 5.7 AC . PRESENT ZONING: NT (OPEN SPACE) LITTLE PATUXENT PARKWAY SCALE: 1" = 2,000D. PROPOSED USE OF SITE: CONCESSIONS, RESTROOMS, OFFICE, STOP STORAGE AND BOX OFFICE FLOOR SPACE 9,887 SF IST FLOOR, 11,270 SF 2NDFLOOR BUILDING A: METLANDS DELINEATION STUDY FOR THIS PROJECT WAS PREPARED BY DAFT-MCCUNE-WALKER, INC., DATED NOVEMBER 1, 2013 - - - 600 - EXISTING CONTOUR 3,442 SF OUTDOOR LOUNGE; 24,599 SF TOTAL N 85 00'00" E 281.14" ENVIRONMENTAL FEATURES LOCATED ON LOT 13 CONSIST OF A 100-YEAR FLOODPLAIN AND A 50' STREAM BUFFER. <u>5 82° 30'00" E 364.82'</u> PROPOSED CONTOUR THE PROJECT IS EXEMPT FROM FOREST CONSERVATION REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE SECTION 16.1202(B)(1)(IV) (PUD WITH A PDP APPROVED PRIOR TO 12/31/92). TING TREES SHOWN ON THESE PLANS ARE FROM SURVEYS FROM THE CARE OF TREES (11/2010) BIOHABITATS (3/2014) AND GUTSCHICK, LITTLE AND WEBER (6/2014) AND DO NOT REFLECT ANY STAGE SUPPORT* 21,157 SF 8800 PROPOSED SPOT ELEV. HANGES THAT MAY HAVE OCCURRED SINCE THESE SURVEYS WERE PERFORMED 3,442 SF OUTDOOR LOUNGE** GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, OR PLACEMENT OF NEW STRUCTURES IS PERMITTED WITHIN LIMITS OF WETLANDS, STREAMS OR THEIR REQUIRED BUFFERS, 100 YEAR 2000 STREAMS OR STEEP SLOPE AREAS WITH ON-SITE AND OFF-SITE CONTIGUOUS AREAS GREATER THAN 20,000 SF, UNLESS PERMITTED UNDER AN APPROVED WAIVER PETITION OR DETERMINED BE ESSENTIAL OR NECESSARY BY DPZ. DPZ HAS DETERMINED THAT THE DISTURBANCE TO THE STREAM BUFFER TO CONSTRUCT THE FIRE ACCESS ROAD, INSTALL A WATER LINE, AND EXPAND OF PROPERTY OF THE HOWARD LOT 23 RESEARCH AND DEVELOPMENT COLUMBIA TOWN CENTER SUBDIVISION SECTION I R=629.67'-CORPORATION - WETLANDS 10,552 SF IST FLOOR,13,688SF 2ND FLOOR; **BUILDING B**: STING FOOTPRINT WHERE NO REASONABLE ALTERNATIVE EXISTS WITHOUT IMPACTING A CULTURALLY SIGNIFICANT SITE, IS A NECESSARY DISTURBANCE. SEE NOTE 45 FOR ADDITIONAL PLAT NOs. 13535 L=67.08' LIBER 5289 FOLIO 330 PLAT BOOK 12 FOLIO 64 25' WETLAND BUFFER (WB) 24,240 SF TOTAL £ 13536 IN CASE OF DISCREPANCIES BETWEEN THE PLAT AND THE PLANS, THE PLAT SHALL GOVERN 11,291 SF STORAGE LOGES 4 TRASH COLLECTION WILL BE PRIVATE East Loge 1st Floor: 2,500 SF West Loge 1st Floor: 2,000 SF 985 SF 天9 N 562,4001 RESTROOMS: N 562,400 OUTDOOR LIGHTING SHALL BE ORIENTED TO DIRECT LIGHT INWARDS AND DOWNWARDS ON-SITE AWAY FROM ALL ADJOINING PUBLIC ROADS AND IN ACCORDANCE WITH SECTION 134.0 OF THE 9,806 SF 5,8005F 5,9005F East Box Level: PARK AT THE LANDSCAPE PLAN WAS PREPARED ACCORDING TO THE ALTERNATIVE COMPLIANCE SECTION OF THE LANDSCAPE MANUAL. THE LANDSCAPE PLANS HAVE BEEN PREPARED BY A REGISTERED LANDSCAPE ARCHITECT AND IS CERTIFIED TO MEET THE DESIGN INTENT OF THE MERRIWEATHER-SYMPHONY WOODS NEIGHBORHOOD DESIGN GUIDELINES. SURETY FOR THE REQUIRED LANDSCAPING, 2,158 SF CONCESSIONS: West Box Level: ----- STREAM (N 39°00'00" E East Lage Roof Lawn: 7500 Sf STREAM BANK 616,800 SHALL BE POSTED WITH THE DEVELOPER'S AGREEMENTS 3,195 SF TOTA West Loge Roof Lawn: 7,50051 3 BUILDING C: MINIMUM BUILDING SETBACKS RESTRICTIONS FROM PROPERTY LINES AND PUBLIC ROAD RIGHTS OF WAY ARE TO BE IN ACCORDANCE WITH FDP-DC-MSW-IA RECORDED ON 12/10/2015 AS PLAT STREAM BUFFER (SB) 21865F RESTROOMS: 13559 THROUGH 23562 AND THE MERRIWEATHER -SYMPHONY WOODS NEIGHBORHOOD DESIGN GUIDELINES RECORDED AS LIBER 16592 FOLIO 035. 'ROPOSED BUILDINGS A & B WILL HAVE AUTOMATIC FIRE SUPPRESSION SPRINKLER SYSTEMS. BOX OFFICE: 739 SF EXISTING UTILITY/LIGHT POLE I ACCORDANCE WITH FDP-DC-MSW-IA, THERE IS A 4 STORY BUILDING HEIGHT LIMIT (NOT TO EXCEED 60 FEET) AND A MAXIMUM PAVILION HEIGHT I MECHANICAL: 270 SF HERE ANY SPECIFIED BUILDING SETBÄCKS FOR THIS SITE IHIS PROPERTY IS SUBJECT TO THE NEIGHBORHOOD SPECIFIC DESIGN GUIDELINES (NSDG), RECORDED IN LIBER 16592, FOLIO 035, THE NEIGHBORHOOD SPECIFIC IMPLEMENTATION PLAN (NSIP), RECORD 1.293 SF TOTAL BUILDING D: PLAT NO. 23562, THE NEIGHBORHOOD CONCEPT PLAN (NCP) RECORDED AS PLAT NO. 23560 AND THE FINAL DEVELOPMENT PLAN (FDP-DC-MSM-IA), RECORDED AS PLAT NOS. 23559 THRU 23562.

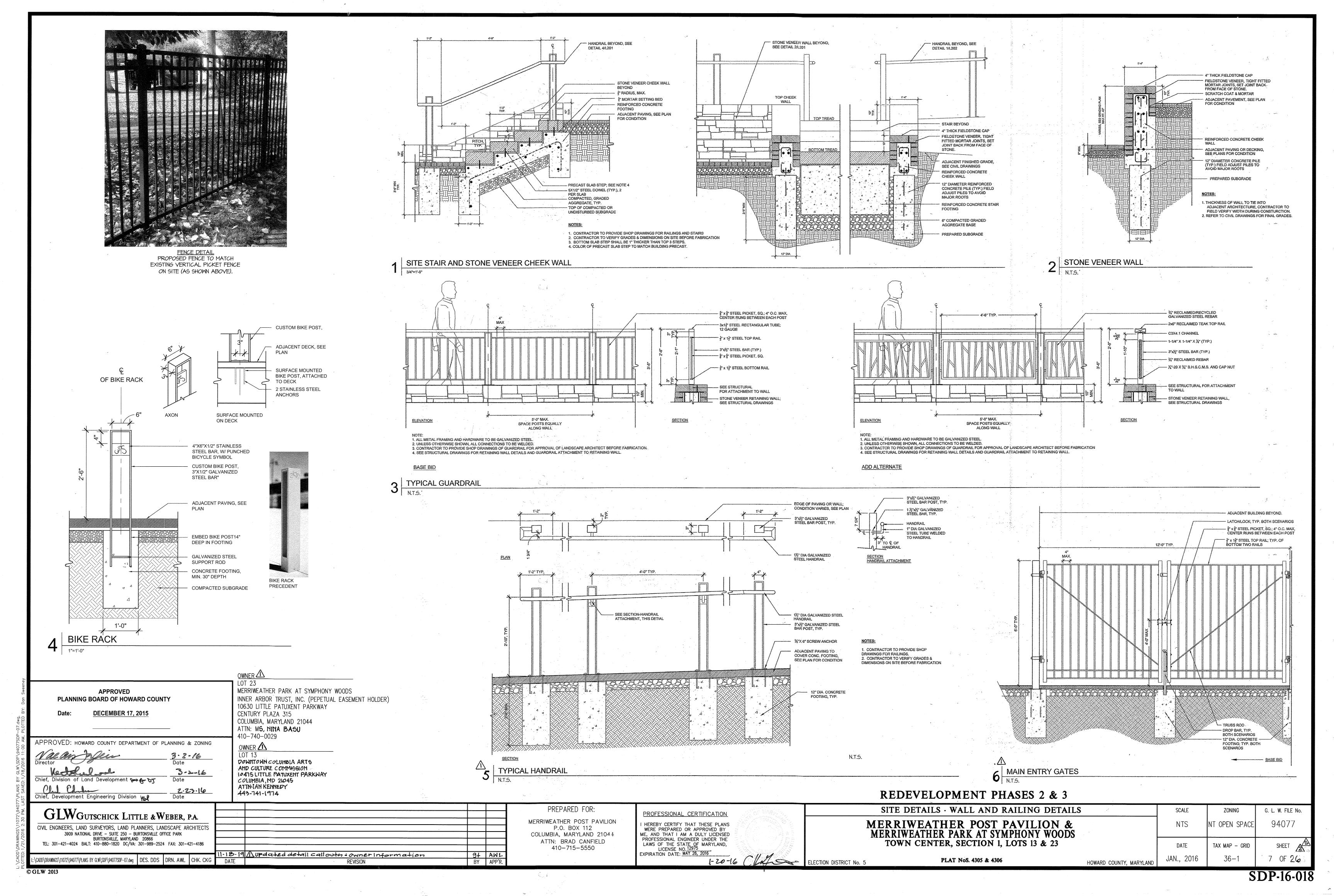
DISTRIPTION OF FATS, OILS AND GREASES MUST BE ISOLATED FROM DIVIDED 1,2935F MERCHANDISE: EXISTING STORM DRAIN THER SOURCES OF WASTEWATER AND SHALL PASS THROUGH A GREASE INTERCEPTOR PRIOR TO ENTERING THE SANITARY SEVER. WASTEWATER FROM REST ROOMS AND GARBAGE GRINDERS SHAL SKY LANE BYPASS THE GREASE INTERCEPTOR. THE GREASE INTERCEPTOR SHALL BE DESIGNED FOR EFFICIENT REMOVAL OF GREASE AT THE MAXIMUM FLOW RATE. GREASE INTERCEPTORS THAT ARE LOCAT **6** BUILDING E: 2,131 SF IST FLOOR,1248 SF 2ND FLOOR ----- PROPOSED SEWER LINE OUTSIDE THE BUILDING SHALL. BE PLACED IN AN AREA ACCESSIBLE FOR CLEANING THE GREASE BY MOTOR VEHICLE (MASTE HAULER), AND SHALL HAVE A MINIMUM SIZE OF 750 GALLONS. GREA INTERCEPTORS LOCATED INSIDE THE FOOD SERVICE FACILITY MUST BE ISOLATED FROM FOOD PREPARATION AREAS AND MUST BE APPROVED BY THE HOWARD COUNTY HEALTH DEPARTMENT. I APPROVAL FOR AN INSIDE GREASE INTERCEPTOR IS NOT GRANTED BY THE HOWARD COUNTY HEALTH DEPARTMENT, THEN AN EXTERIOR GREASE INTERCEPTOR WILL BE REQUIRED. O—EXISTING SEWER MAIN 医乳腺性脓性 经现代股份 LOT 13 3,429 SF TOTAL 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 HAVE EQUIPMENT THAT SECTION I - $\frac{7}{2}$ EX. 8"W. EXISTING PUBLIC WATER CONCESSIONS: PLAT NOs. 13535 £ 13536 ∠n 61°40'00" W PRIOR TO SUBMITTING THIS SITE DEVELOPMENT PLAN, A PRE-SUBMISSION COMMUNITY MEETING WAS HELD ON SEPTEMBER 8, 2015 AT MERRIWEATHER POST PAVILION. NOTICE OF THE MEETING WAS PROVIDED IN ACCORDANCE WITH SECTION 16.128(b) THRU (q) AND SECTION 125.E.2.a OF THE ZONING REGULATIONS.
PRIOR TO SUBMITTING THIS SITE DEVELOPMENT PLAN, A SUBMISSION TO THE HOWARD COUNTY DESIGN ADVISORY PANEL WAS MADE IN ACCORDANCE WITH SECTION 125.H.1.b. THE DESIGN ADVISORY PANEL CONSIDERED THE PROJECT AS NOTED IN THE DAP ADOPTED FIVE RECOMMENDATIONS TO THE PLANNING BOARD FOR THE PROJECT AS NOTED IN THE MINUTES. **BUILDING F** RESTROOMS: 1,848 SF 1 BUILDING G <u>building g</u> Customer Bervice Konkessions 285 SF (cust. Berv.), 370 SF (concessions) 5. 65° 05' 43" E. DEVELOPMENT DATA 3 HE APPLICANT WILL TAKE INTO CONSIDERATION PRECEDENT MID-CENTURY GRAPHICS AND FORMS IN DEVELOPING A COMPREHENSIVE SIGNAGE PACKAGE LIMIT°OF SUBMISSION (LOS) A. STAGE SUPPORT*: 21,157 SF • • • • LIMIT OF DISTURBANCE B. STORAGE: 11,291SF THERE ARE NO REQUIREMENTS FOR COMMUNITY COMMON OPEN SPACES IN MERRIMEATHER-SYMPHONY WOODS NEIGHBORHOOD. ALL LAND IS DESIGNATED AS AMENITY OR NATURAL AREAS. 5.0195 RESTROOMS D. BOX OFFICE IS SITE QUALIFIES FOR REDEVELOPMENT UNDER MDE CRITERIA. STORMWATER MANAGEMENT FOR THIS SITE WILL BE PROVIDED IN ACCORDANCE WITH CHAPTER 5 OF THE MDE STORMWATER DESIGN 80.00' ----- FP ----- 100 YEAR FLOODPLAIN 9806 SF MANUAL. IN ORDER TO FULFILL THE STORMMATER MANAGEMENT REQUIREMENTS PERMEABLE PAVEMENTS (A-2) WILL BE USED. ALL PERMEABLE PAVEMENT WILL BE PRIVATELY OWNED AND MAINTAINED ALL PARKING SPACES PLACED ON DOWNTOWN PARKLAND SHALL BECOME NON-CREDITED DOWNTOWN PARKLAND AND SHALL BE REPLACED, AT A MINIMUM, WITH AN EQUIVALENT AMOUNT OF DOWNTOWN LAND AREA AS NEW DOWNTOWN PARKLAND FROM WITHIN THE CRESCENT NEIGHBORHOOD. TO QUALIFY AS SUITABLE REPLACEMENT LAND, THE AREA SHALL BE ABSENT OF ANY DOWNTOWN ENVIRONMENTALLY SENSITIVE LAND, AS NEW DOWNTOWN PARKLAND, SHALL OCCUR WITH THE RECORDING OF THE PLAT E. OFFICE 5,957 SF F. CONCESSIONS: ====== EXISTING CURB & GUTTER G. MERCHANDISE: 1.2935F 5. 65° 05' 43" E. PROPOSED CURB & GUTTER 270 SF H. MECHANICAL -52.47 OF SUBDIVISION FOR THE CRESCENT NEIGHBORHOOD (F 15-106) CUSTOMER GERVICE **185**5F OTAL AREA OF PARKING SPACES PLACED ON DOWNTOWN PARKLAND SHOWN ON THIS SITE PLAN TO BE REPLACED WITH NON-ENVIRONMENTALLY SENSITIVE LAND AREA FROM THE CRESCENT IS 3,442 SF EXISTING TREE TO REMAIN 0.28 ACRES (12.257 SF.). THE ANTICIPATED TOTAL NON-CREDITED AREA ON DOWNTOWN PARKLAND SHOWN ON ALL SITE PLANS AND ROAD PLANS IS 1.7 ACRES. THE ANTICIPATED TOTAL AREA OF NON-ENVIRONMENTALLY SENSITIVE LAND AREA FROM THE CRESCENT TO BE TRANSFERRED TO THE COLUMBIA ASSOCIATION IS 5.8 ACRES. J. OUTDOOR LOUNGE** K. LOGE AREA 71,200 GF 90,459 OF N 82°38'02" W 315.9 DEMOLITION DATA PROPOSED BUILDING 9,033 SF A. CONCESSION 1,131 SF B. RETAIL: C. RESTROOMS 1,436 SF EXISTING BUILDING D. BOX OFFICE 642 SF ACCESS ROAD. THE WATER MAIN IS ALSO BEING REQUIRED TO PROVIDE PROPER PRESSURE FOR FIREFIGHTING, BUT IT DOES NOT CAUSE FURTHER INTRUSION SINCE IT LIES WITHIN THE FIRE ROAD BED E. STORAGE 864 SF HE DOWNTOWN COLUMBIA PLAN RECOGNIZES THE IMPORTANCE OF MERRIWEATHER POST PAVILION AS A MAJOR COMMUNITY ASSET AND ANTICIPATES ITS TRANSFER TO THE DOWNTOWN ARTS AND F. OFFICE -EXISTING PAVING CULTURAL COMMISSION TO ASSURE ITS CONTINUED USE AS A PERFORMING ARTS CENTER AND PREMIER CONCERT VENUE. THE DOWNTOWN COLUMBIA ARTS AND CULTURAL COMMISSION (DCACC) WAS CREATED IN 2013 AS A CHARITABLE NON-PROFIT ORGANIZATION WHOSE PURPOSES INCLUDE THE PROMOTION AND SUPPORT OF THE POTENTIAL REVITALIZATION OF MERRIWEATHER POST PAVILION IN STOP G. STAGE SUPPORT: P-527 ACCORDANCE WITH THE DOWNTOWN COLUMBIA PLAN AS AN ARTISTIC AND CULTURAL CENTER. CEPPA #24 REQUIRES MERRIMEATHER POST PAVILION TO BE TRANSFERRED TO THE DCACC PRIOR TO TH PROPERTY OF THE HOWARD HANDICAPPED PARKING ' √9 64°5I'II" E UANCE OF A BUILDING PERMIT FOR THE 5,000,000 SF OF DEVELOPMENT. STAGE SUPPORT INCLUDES DRESSING ROOMS, PRODUCTION RESEARCH AND DEVELOPMENT SITE FURNISHINGS WILL BE COORDINATED WITH SURROUNDING NEIGHBORHOOD USES TO ENSURE A UNIFIED EXPRESSION IN THE CHARACTER OF MERRIMEATHER-SYMPHONY WOODS AS A CULTURAL PARK DESIGNATION CORPORATION KITCHEN/DINING, ETC. LIBER 5289 FOLIO 330 NUMBER OF PARKING SPACES ** WITHIN IN THE OUTDOOR LOUNGE THERE IS 432 SF OF GAZEBOS AND A 675 SF POOL SOIL BOUNDARY LOT 23 PARKING ANALYSIS GnA → SOIL TYPE SECTION I PEDESTRIAN AND BICYCLE PLAT NOs. 13535 I SPACE PER 3 FIXED SEATS, IF THERE ARE NO FIXED SEATS: 10 SPACES PER 1,000 SF OF ASSEMBLY AREA. THE ZONING CODE PERMITS SHARED PARKING **# 13536** SCENARIOS. THE ZONING CODE ALSO PERMIT A PARKING NEEDS STUDY TO PROPOSE AN ALTERNATIVE TO THE ENUMERATED PARKING REQUIREMENTS WITHIN THE CODE. CONNECTIONS LEGEND ADDRESS CHART SEE PARKING ANALYS ON SHEET 3 /3 PER: FDP-DC-MSW-IA BUILDING STREET ADDRESS PRIMARY BICYCLE ROUTES & PRIMARY PEDESTRIAN ROUTES 10473 LITTLE PATUXENT PARKWAY 10471 LITTLE PATUXENT PARKWAY SHARED-USE PATHWAY GRAPHIC SCALE |" = 150' KEY MAP LIMIT OF DISTURBANCE 10469 LITTLE PATUXENT PARKWAY SCALE: |" = 150" LANDSCAPING IS REQUIRED BY THE HRD ARCHITECTURAL REVIEW BOARD AROUND THE VERIZON TOURPHENT COMPOUND. THERE WILL BE NO DPZ LANDSCAPING SURETY REQUIRED; HRD ARB HAS APPROVED THE FROPOSED LANDSCAPING ON 10467 LITTLE PATUXENT PARKWAY APPROVED SHEET INDEX PLANNING BOARD OF HOWARD COUNTY So The maximum venue capacity (19,413 per the Department of Fire and Reacue pervioled) will not be increased by the improvementa abown on these Plane 10465 LITTLE PATUXENT PARKWAY COVER SHEET 16. PRIVATE WATER & SEWER PROFILES bi. In an email dated 10/19/17, the DPZ Director has determined that the increased Loge roof and lawn greating area does not require Planning Board Approval as the footbrint and overally venue capacity remain unchanged. **DECEMBER 17, 2015** 2. DEMOLITION PLAN 17. SITE TREE PRESERVATION, DEMOLITION AND PLANTING PLAN 10463 LITTLE PATUXENT PARKWAY 10461 LITTLE PATUXENT PARKWAY 3. SITE DEVELOPMENT PLAN 18. SITE PLANTING DETAILS 4. GRADING AND HANDICAP ACCESSIBILITY PLAN 19. SITE TREE PROTECTION & PRESERVATION LOT 23 -PERMIT INFORMATION CHART 06/28/165. RETAINING WALL LOCATION PLAN AND GENERAL NOTES 20. HANDICAP ACCESSIBILITY PLAN DOWNTOWN COLUMBIA ARTS MERRIWEATHER PARK AT SYMPHONY WOODS RETAINING WALL SECTIONS AND DETAILS **# PARKLAND PARKING** AND CULTURE COMMISSION SUBDIVISION NAME: DOWNTOWN COLUMBIA APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING PARCEL SECTION/AREA INNER ARBOR TRUST, INC. (PERPETUAL EASEMENT HOLDER) 7. SITE DETAILS 21. PHASE 2A TEMPORARY GRADING PLAN MERRIWEATHER POST PAVILION & 10475 LITTLE PATUXENT PARKWAY 10630 LITTLE PATUXENT PARKWAY LOTS 13 \$ 23 8. SITE DETAILS MERRIWEATHER-SYMPHONY WOODS NEIGHBORHOOD 22. SOP - SITE DETAILS THIS SEAL PERTAINS TO REV A REVISIONS ONLY COLUMBIA, MD 21045 CENTURY PLAZA 315 9. BUILDING ELEVATIONS AND DIMENSIONS @ 25. SDP - SITE DETAILS Date ATTN: IAN KENNEDY CENSUS TRACT IO. PAVING DELINEATION PLAN TAX MAP BLOCK COLUMBIA, MARYLAND 21044 5 24. GTORMWATER MANAGEMENT DETAILS 4305/4306 HOWARD COUNTY HEALTH DEPARTMENT APPROVED: HOWARD COOKT HILLIAM SEWER SYSTEMS II. UNDERDRAIN DETAILS & STORMWATER MANAGEMENT NOTE: NT 443-741-1974 ATTN: MS. NINA BASU 3-2-16 25. GECTIONS
26. GECTIONS 12. SEDIMENT CONTROL PLAN 410-740-0029 Division of Land Development OMF & DJ 13. SEDIMENT CONTROL NOTES AND DETAILS 2/11/2016 Spylan for Maura Rossman 14. STORM DRAIN DRAINAGE AREA MAP 5521000 7.23.16 Date REDEVELOPMENT PHASES 2 & 3 SEWER CODE: County Health Officer 15. STORM DRAIN PROFILES Chief, Development Engineering Division REVISED COVER SHEET G. L. W. FILE No. PREPARED FOR: SCALE GLWGUTSCHICK LITTLE &WEBER, P.A. PROFESSIONAL CERTIFICATION 1-18-19/6 Updated Building arzeaper Architect Reviaiona 94 AWL -12-2018 SAdded wheet 24 MERRIWEATHER POST PAVILION MERRIWEATHER POST PAVILION & 94077 19+ AWL AS SHOWN T OPEN SPACI HFREBY CERTIFY THAT THESE PLANS 9+ P.O. BOX 112 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS -1-2018 (4) Revined LOD Per Architect. Revined General Noten WERE PREPARED OR APPROVED BY MERRIWEATHER PARK AT SYMPHONY WOODS 2-14-2017 3 Revised Building of per Architecture change 08-18-16 PARKING NOTE REVISED 3 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK 9+ 000 COLUMBIA, MARYLAND 21044 ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE BURTONSVILLE, MARYLAND 20866 HKJ DDS TOWN CENTER, SECTION 1, LOTS 13 & 23 ATTN: BRAD CANFIELD LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12975 EXPIRATION DATE: MAY 26, 2016 SHEET TAX MAP - GRID 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186 410-715-5550 05/05/16 A VERIEON WIRELESS EQUIPMENT SHELTER & FENCED COMPOUND ADDED 4/2016 DENNIS LANE ROAD NAME ADDED ICMD DDS JAN., 2016 36 - 1OF 26 PLAT NoS. 4305 & 4306 \CADD\DRAWINGS\11072\94077\PLANS BY GLW\SDP\94077-CS.dwg | DES. dds | DRN. dds | CHK HOWARD COUNTY, MARYLAND ELECTION DISTRICT No. 5 BY APP'R

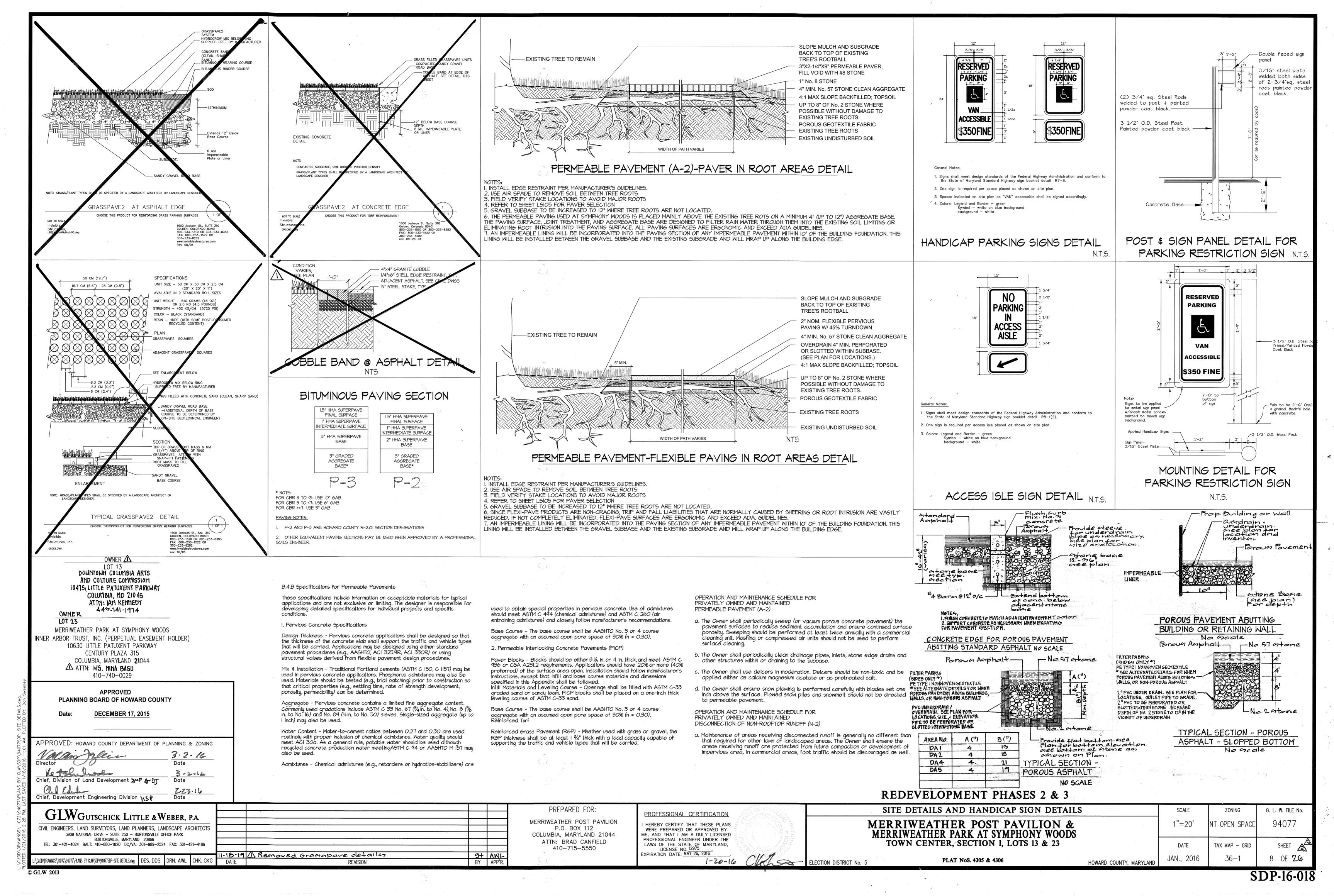


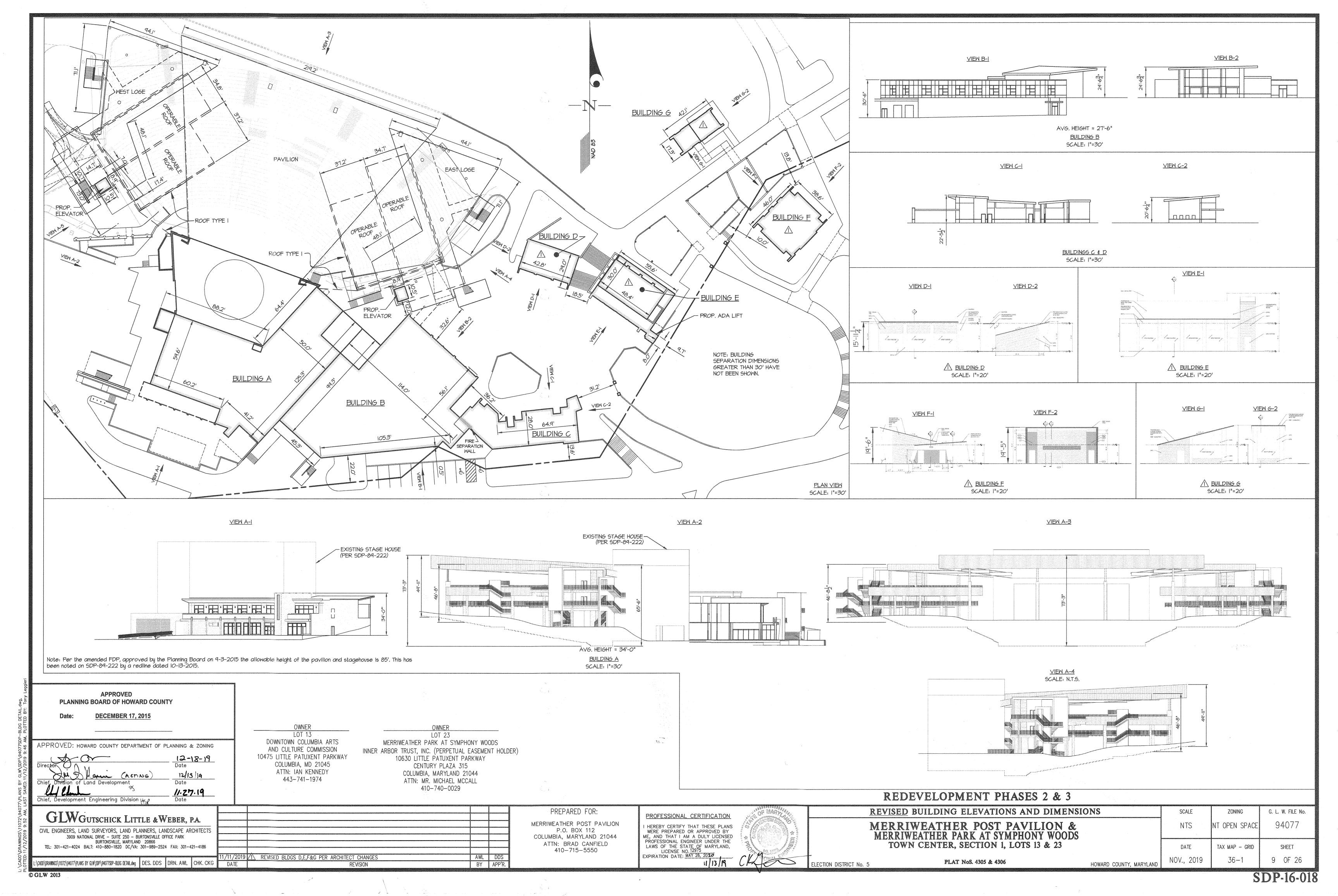


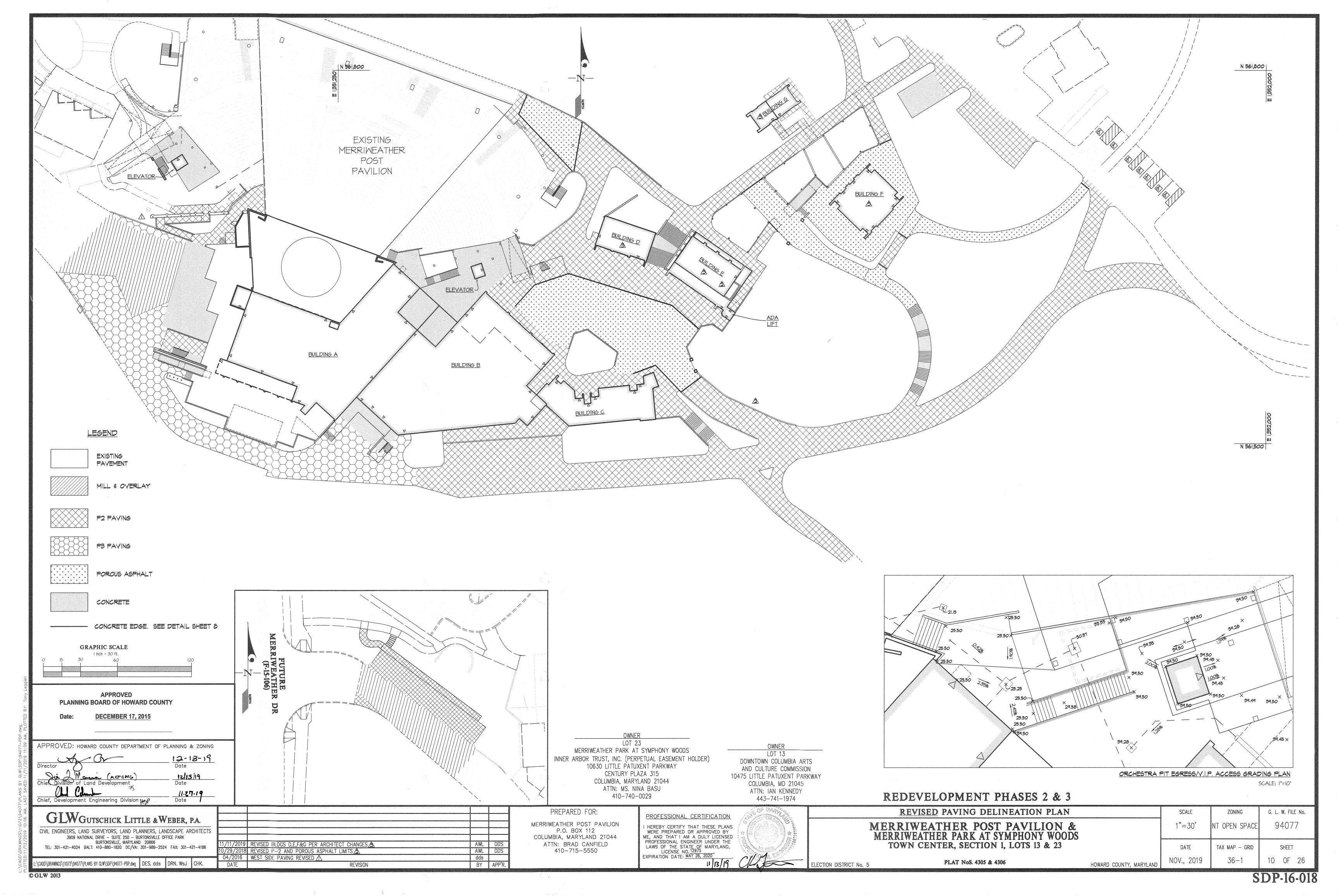


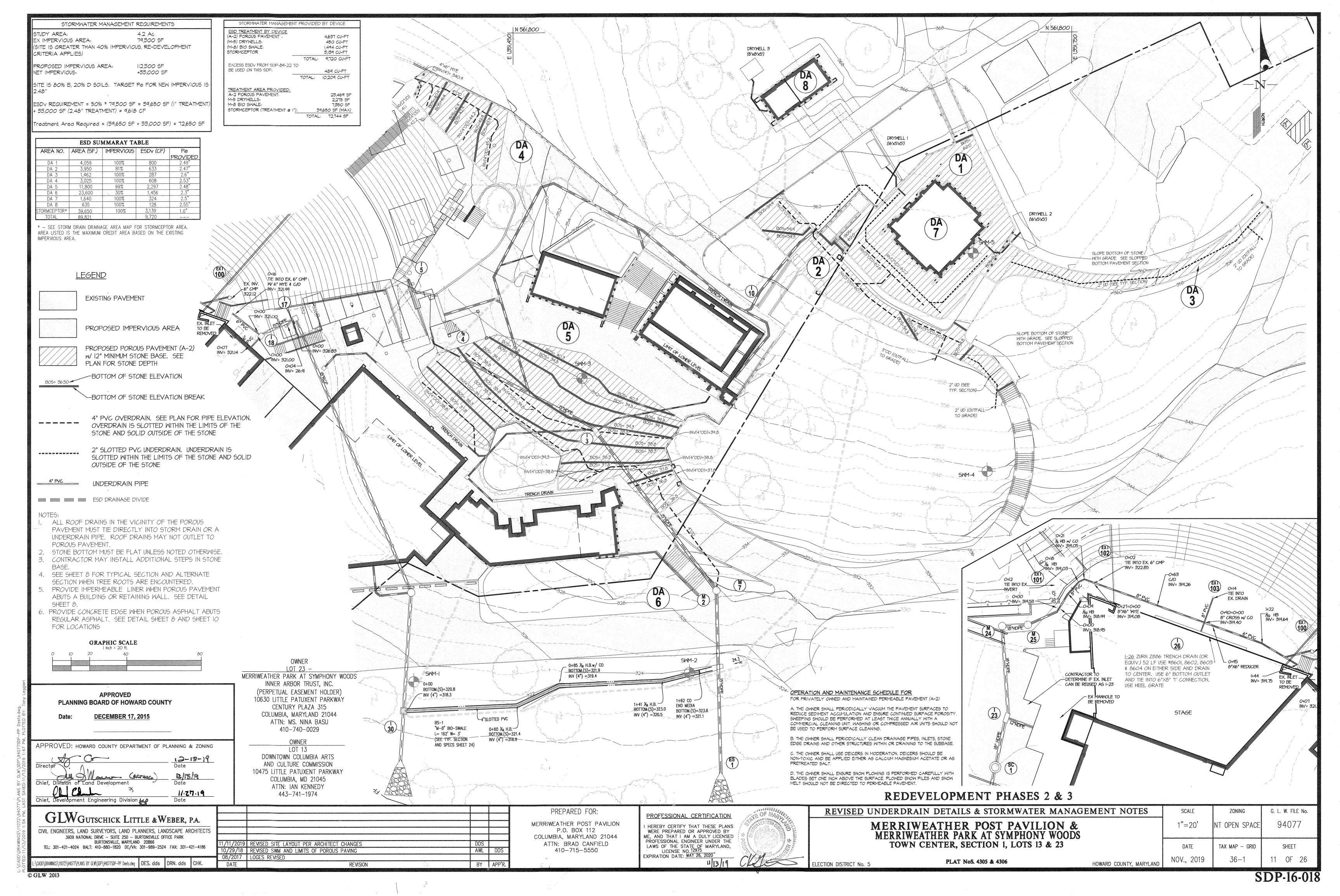


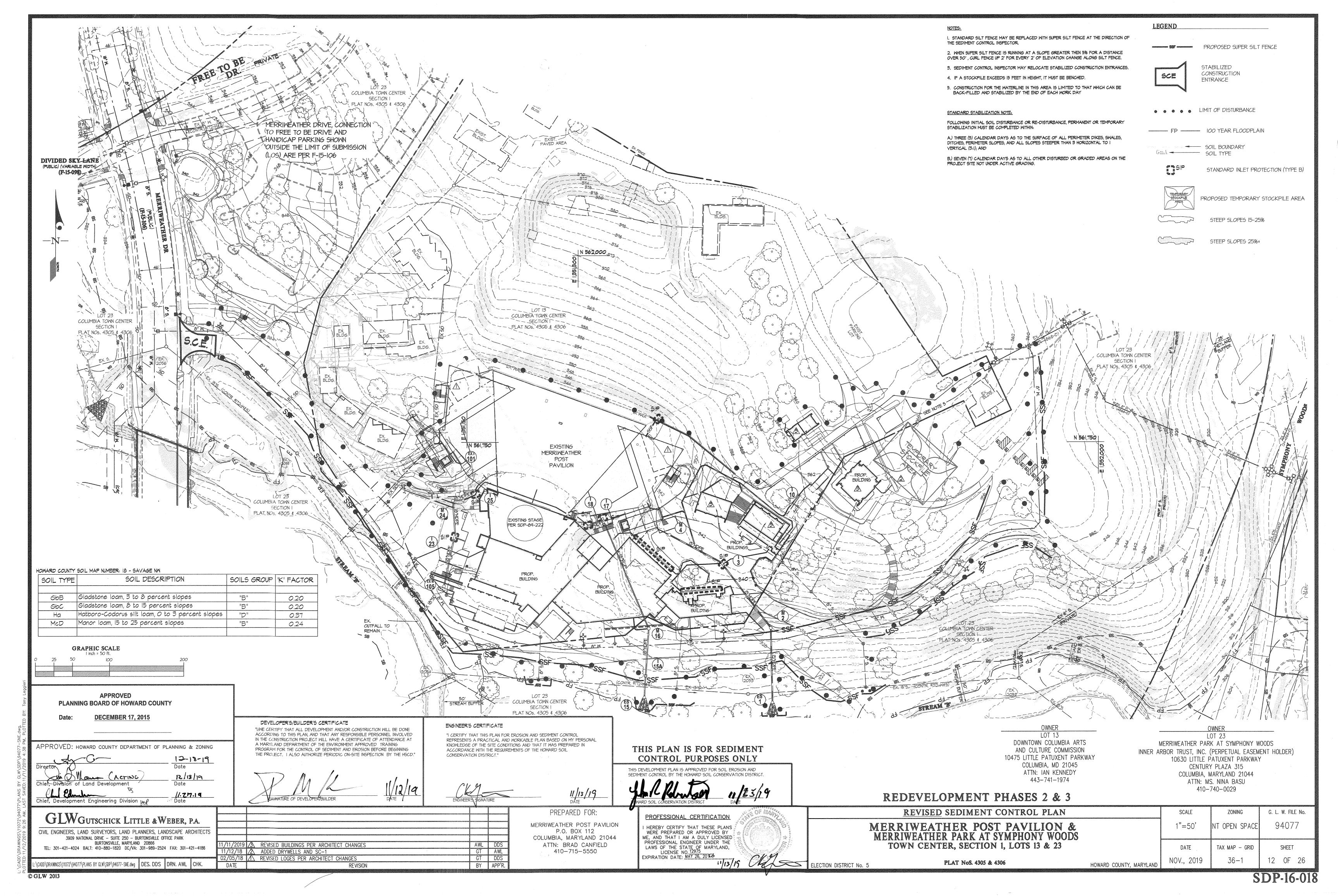












<u>DEFINITION</u> A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT

CONTROL MEASURES. <u>PURPOSE</u>

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

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

THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN THE FOOTPRINT OF THE STOCKPILE MUST BE SIZED TO ACCOMMODATE THE ANTICIPATED VOLUME OF 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.

RUNOFF FROM THE STOCKPILE AREA MUST DRAIN TO A SUITABLE SEDIMENT CONTROL ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE. CLEAR WATER RUNOFF INTO THE STOCKPILE AREA MUST BE MINIMIZED BY USE OF A DIVERSION DEVICE SUCH AS AN EARTH DIKE. TEMPORARY SWALE OR DIVERSION FENCE

PROVISIONS MUST BE MADE FOR DISCHARGING CONCENTRATED FLOW IN A NON-EROSIVE WHERE RUNOFF CONCENTRATES ALONG THE TOE OF THE STOCKPILE FILL, AN APPROPRIATE EROSION/SEDIMENT CONTROL PRACTICE MUST BE USED TO INTERCEPT THE

STOCKPILES MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 DAY STABILIZATION REQUIREMENT AS WELL AS STANDARD B-4-1 INCREMENTAL STABILIZATION AND TANDARD R-4-4 TEMPORARY STARILIZATION. THE STOCKPILE IS LOCATED ON AN IMPERVIOUS SURFACE. A LINER SHOULD BE PROVIDED BELOW THE STOCKPILE TO FACILITATE CLEANUP. STOCKPILES CONTAINING

CONTAMINATED MATERIAL MUST BE COVERED WITH IMPERMEABLE SHEETING.

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 FE FOR 2:1 SLOPES, 30 FEET FOR 3:1 SLOPES, OR 40 FEET FOR 4:1 SLOPES. BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING.

SEQUENCE OF CONSTRUCTION

I. Arrange pre-construction meeting with the Sediment Control Inspector and obtain the Grading Permit. I DAY

2. Install stabilized construction entrance and super silt fence. I DAY

3. Fine grade site. I WEEKS

4. Begin building construction. I WEEK

5. Stabilize the building area with the finished floor slab. 2 MONTHS

6. Install utilities and sidewalks. Stabilize areas with grass seed and mulch. I MONTH.

7. When all areas draining to the sediment controls have been stabilized and permission has been granted by the Sediment Control Inspector, those sediment control devices may be removed. Stabilize the remaining areas, install landscaping, seed and mulch. I WEEK

8. Finish building construction. Remove any remaining sediment controls and stabilize. | WEEK

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation

"I CÉRTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT

1-20-16

DEVELOPER'S/BUILDER'S CERTIFICATE "I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION

SIGNATURE OF DEVELOPER/BUILDER

-21-16

APPROVED PLANNING BOARD OF HOWARD COUNTY

DECEMBER 17, 2015

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING 3-2-66 2.23.16 Chief, Development Engineering Division 🞇

GLWGUTSCHICK LITTLE &WEBER, P.A

CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS

3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK

BURTONSVILLE, MARYLAND 20866

TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

B-4-4 STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

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

<u>PURPOSE</u>

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, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

CRITERIA

I. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.I. FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE 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.I 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

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.I.B AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

TEMPORARY SEEDING SUMMARY

- 4,	HARDINESS : SEED MIXTUR	FERTILIZER RATE				
No.	SPECIES	APPLICATION RATE (lb/ac.)	SEEDING DATES	SEEDING DEPTHS	(10-10-10)	LIME RATE
1	ANNUAL RYEGRASS	40 lb/ac	Mar. 1 to May 15, Aug. 1 to Oct. 15	0.5 INCHES	436 lb./ac.	2 tons/ac
2	PEARL MILLET	20 lb/ac	May 16 to July 31	0.5 INCHES	1,000 sf)	1,000 sf)

HOWARD SOIL CONSERVATION DISTRICT (HSCD) STANDARD SEDIMENT CONTROL NOTES

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

PRIOR TO THE START OF EARTH DISTURBANCE, UPON COMPLETION OF THE INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING,

PRIOR TO THE START OF ANOTHER PHASE OF CONSTRUCTION OR OPENING OF ANOTHER GRADING 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 IND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERETO.

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY GTABILIZATION 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 I 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 AND SEDIMENT CONTROL FOR TOPSOIL (SEC. B-4-2), PERMANENT SEEDING (SEC. B-4-5), TEMPORARY SEEDIN SEC. B-4-4) AND MULCHING (SEC. B-4-3). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE APPLIED BETMEEN THE FALL AND SPRING SEEDING DATES IF THE GROUND IS FROZEN. INCREMENTAL STABILIZATION (SEC. B-4-I) SPECIFICATIONS SHALL BE ENFORCED IN AREAS WITH X15' 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 TABILIZATION 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 CID.

SITE ANALYSIS: TOTAL AREA OF SITE ACRES * FOR FSTIMATING 5.71 ACRES AREA DISTURBED: 3.51 ACRES PURPOSES ONLY. AREA TO BE ROOFED OR PAVED: CONTRACTOR TO VERIEY 2.21 ACRES AREA TO BE VEGETATIVELY STABILIZED: ACTUAL VALUES. TOTAL CUT: _7,000*_ CU. YDS. TOTAL FILL _7,000*_ CU. YDS. 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 TE 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

BRIEF DESCRIPTION OF PROJECT'S STATUS (E.G., PERCENT COMPLETE) AND/OR CURRENT ACTIVITIES # EVIDENCE OF SEDIMENT DISCHARGES IDENTIFICATION OF PLAN DEFICIENCIES DENTIFICATION OF SEDIMENT CONTROLS THAT REQUIRE MAINTENANCE

IDENTIFICATION OF MISSING OR IMPROPERLY INSTALLED SEDIMENT CONTROLS COMPLIANCE STATUS REGARDING THE SEQUENCE OF CONSTRUCTION AND STABILIZATION REQUIREMENT 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 EVIEWED AND APPROVED BY THE HSCD PRIOR TO PROCEEDING WITH CONSTRUCTION. MINOR REVISION:

IAY ALLOWED BY THE CID PER THE LIST OF HSCD-APPROVED FIELD CHANGES. DISTURBANCE SHALL NOT OCCUR OUTSIDE THE L.O.D. A PROJECT IS TO BE SEQUENCED SO THAT FRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 AC: PER GRADING UNIT. IT A TIME. WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF TH

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.

PISTURBED AREA IN THE PRECEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE CIL

INLESS OTHERWISE SPECIFIED AND APPROVED BY THE CID, NO MORE THAN 30 ACRES CUMULATIVELY

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 IMBRICATE! 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): FUSE LAND IP MARCH L - JUNE 15 * USE III AND IIIP OCTOBER I - APRIL 30

USE IV MARCH I - 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

B-4-2 STANDARD AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

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

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. CONDITIONS WHERE PRACTICE APPLIES WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED.

CRITERIA

A. SOIL PREPARATION

I. TEMPORARY STABILIZATION a. SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 NCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS-1015C 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 RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.

APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.

c. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.

2. PERMANENT STABILIZATION

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

PLUS CLAY) WOULD BE ACCEPTABLE.

II. SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM). III. SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED

IV. SOIL CONTAINS I.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.

b. APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT

GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED OF THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3

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 FOURMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP I TO 3 INCHES OF SOIL LOOSE AND FRIABLE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS

B. TOPSOILING

TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE

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 IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY

3. TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:

a. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH O SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT

4. AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND

COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS

AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.

a. EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING

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 FROM TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS 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 AND SEEDBED

APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES. FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTE!

ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTY OF THE PRODUCER. LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN 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 SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #20 MESH SIEVE.

LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. WHERE TH SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE AT THE RATE OF 4 TO 8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL.

PREPARED FOR:

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B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING and MULCHING

THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.

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.

CRITERIA

A. SEEDING I. 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. SEE 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. 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 KEEP INOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 15 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

2. APPLICATION

a. DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS. INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE B.I, PERMANENT SEEDING TABLE B.3, OR SITE-SPECIFIC SEEDING SUMMARIES. 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

O. DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL CULTIPACKING SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE AT LEAS 1/4 INCH OF SOIL COVERING. SEEDBED MUST BE FIRM AFTER PLANTING APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.

. HYDROSEEDING: APPLY SEED UNIFOUNLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER). IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED THE FOLLOWING: NITROGEN, IOC POUNDS PER ACRE TOTAL OF SOLUBLE NITROGEN; P205 (PHOSPHOROUS), 200 POUNDS PER ACRE; K20 (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 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 IV. WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.

B. MULCHING

I. MULCH MATERIALS (IN ORDER OF PREFERENCE)

A STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT RYE DAT OR BARLE AND REASONABLY BRIGHT IN COLOR STRAW IS TO BE ERFE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY MOLDY, CAKED, DECAYED, OR EXCESSIVELY DUSTY. NOTE: USE ONLY STERIL 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

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

GROUND COVER, ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES AND MUST COVER AND HOLD GRASS SEED I CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE PHYTO-TOXIC WCFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH OF APPROXIMATELY IO MILLIMETERS. DIAMETER APPROXIMATELY I MILLIMETER, PH RANGE OF 4.0 TO 8.5, ASH CONTENT

OF 1.6 PERCENT MAXIMUM AND WATER HOLDING CAPACITY OF 90

SLURRY, THE MULCH MATERIAL MUST FORM A BLOTTER-LIKE

2. APPLICATION

PERCENT MINIMUM.

a. APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDIN b. WHEN STRAW MULCH IS USED, SPREAD IT OVER ALL SEEDED AREAS AT THI RATE OF 2 TONS PER ACRE TO A UNIFORM LOOSE DEPTH OF LTO 2 INCHES APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO 1 SOIL SURFACE IS NOT EXPOSED. WHEN USING A MULCH ANCHORING TOOL. INCREASE THE APPLICATION RATE TO 2.5 TONS PER ACRE. WOOD CELLULOSE FIBER USED AS MULCH MUST BE APPLIED AT A NET DR' 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

a. 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: . A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE A MINIMUM OF : INCHES. THIS PRACTICE IS MOST EFFECTIVE ON LARGE AREAS. BUT IS LIMITED TO FLATTER SLOPES WHERE FOUIPMENT CAN OPERATE SAFELY USED ON SLOPING LAND, THIS PRACTICE SHOULD FOLLOW THE 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. MI) 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 MANUFACTURER. APPLICÁTION 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 ASPHAL 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-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

DEFINITION

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 NEEDÉD FOR 6 MONTHS OR MORE. CRITERIA

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 THE PLAN.

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 GUIDE, SECTION 342 - CRITICAL AREA PLANTING. FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES

RECOMMENDED BY THE SOIL TESTING AGENCY. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3 1/2 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. SEED MIXTURES

AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE

AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS,

SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. 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 ET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.

ii. KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE: FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT. CERTIFIED PERENNIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS 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

iii. TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN DROUGHT PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN RECOMMENDED MIXTURE INCLUDES; CERTIFIED TALL FESCUE CULTIVARS 95 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS O TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY

KENTUCKY BLUEGRASS/FINE FESCUE: SHADE MIXTURE: FOR USE IN AREAS WITH SHADE IN BLUEGRASS LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TURF AREA. MIXTURE INCLUDES; CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 30 TO 40 PERCENT AND CERTIFIED FINE FESCUE AND 60 TO 70 PERCENT. SEEDING RATE: 11/2 TO 3 POUNDS PER 1000 SQUARE FEET.

SELECT TURFGRASS VARIETIES FROM THOSE LISTED IN THE MOST CURRENT JNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MEMO #77, "TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND"

CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF

OF AGRICULTURE, TURF AND SEED SECTION, PROVIDES A RELIABLE MEANS OF

CULTIVAR PURITY. THE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT

CONSUMER PROTECTION AND ASSURES A PURE GENETIC LINE IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES WESTERN MD: MARCH IS TO JUNE I, AUGUST I TO OCTOBER I (HARDINESS ZONES: 5B, CENTRAL MD: MARCH I TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE:

SOUTHERN MD, EASTERN SHORE: MARCH I TO MAY 15, AUGUST 15 TO OCTOBER 15

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 LI/2 INCHES IN DIAMETER T RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY

IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (I/2 TO I INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL HEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE ATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON

ARDINESS ZONE: 6b E ED MIXTURE: #9 (Tall Fescue)		EEDING SUMMARY uegrass)		FERTILIZER	
SPECIES	APPLICATION RATE	SEEDING DATES	SEEDING DEPTHS	- RATE (10-20-20)	LIME RATE
*Certified Tall Fescue blend (95% by weight): Falcon IV, Penn 1901 & Rebel Exeda and Certified Kentucky Bluegrass blend (5% by weight): Courtyard, Raven & Yankee	6-8 lb/ 1000 s.f.	Mar. 1 to May 15, Aug. 15 to Oct. 15	1/4 - 1/2 IN.	1.0 lb/ 1000 s.f. (45 lb/acre)	90 lb/ 1000 s.f.

* Other cultivars listed as "proven" in the most current UMD TT-77 may also be used 3. SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER).

. GENERAL SPECIFICATIONS a. CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR. SOD MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4 INCH, PLUS OR MINUS 1/4 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

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

ACCEPTABLE

SOD MUST NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL. 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.

FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.

TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION.

a. DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD.

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

T STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD AUSE AIR DRYING OF THE ROOTS WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. ROLL AND

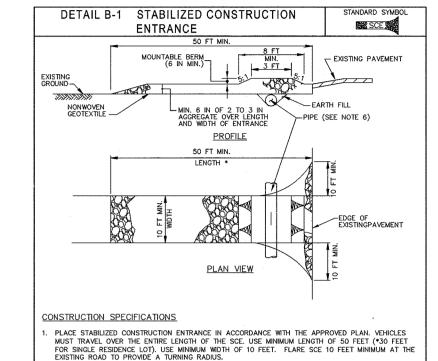
TAMP, PEG OR OTHERWISE SECURE THE SOD TO PREVENT SLIPPAGE ON SLOPES. ENSURE SOLID CONTACT EXISTS BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE. MATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY

3. SOD MAINTENANCE

PIECE OF SOD WITHIN EIGHT HOURS.

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

AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT. DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED.



2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT. 5. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS . PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOU REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE. 5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR

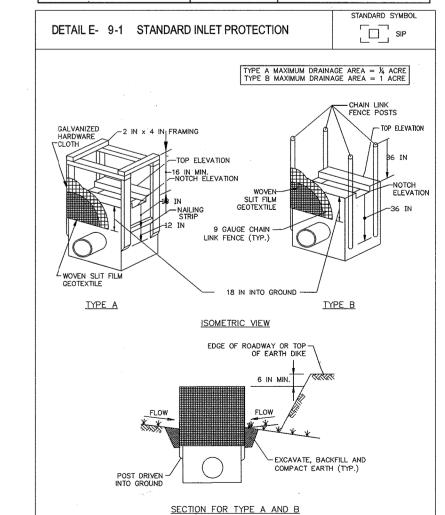
TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRÁPING, AND/OR SWEEPING, WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE. MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL 2011 STANDARD SYMBOL DETAIL E-3 SUPER SILT FENCE -SSF----34 IN MIN. 118118118118118 GROUND SURFACE— -36 IN MIN. GALVANIZED CHAIN LINK FENCE WITH WOVEN SLIT FILM GEOTEXTILE

ELEVATION CHAIN LINK FENCING -WOVEN SLIT FILM GEOTEXTILE-FLOW CROSS SECTION CONSTRUCTION SPECIFICATIONS . INSTALL 2% INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOO LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.

FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2% INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS. 5. FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.

EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL



REDEVELOPMENT PHASES 2 & 3

SEDIMENT CONTROL NOTES AND DETAILS MERRIWEATHER POST PAVILION &

PLAT NoS. 4305 & 4306

MERRIWEATHER PARK AT SYMPHONY WOODS TOWN CENTER, SECTION 1, LOTS 13 & 23

HOWARD COUNTY, MARYLAND

-18-19 1 REVISED LOD: Updated owner information

I. SOIL PH BETWEEN 6.0 AND 7.0. 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

V. SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT

MEET THE ABOVE CONDITIONS.

d. APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST.

PERMANENT VEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FO

C. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT d. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.

TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING I. 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 AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CINDERS, STONES, SLAG

. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS

TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL 6. TOPSOIL APPLICATION

b. INIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO

C. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)

FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY, FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED

OWNER 🗘 LOT 13 DOWNTOWN COLUMBIA ARTS AND CULTURE COMMISSION

10475 LITTLE PATUXENT PARKWAY

COLUMBIA, MD 21045

ATTN: IAH KEMMEDY

94 | AWL

BY APP'

449-741-1974

MERRIWEATHER PARK AT SYMPHONY WOODS INNER ARBOR TRUST. INC. (PERPETUAL EASEMENT HOLDER) 10630 LITTLE PATUXENT PARKWAY CENTURY PLAZA 315 COLUMBIA, MARYLAND 21044 ATTN: MS. NINA BASU 410-740-0029

OWNER

LOT 23 -

PROFESSIONAL CERTIFICATION

HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND,
LICENSE NO. 12975
EXPIRATION DATE: MAY 26, 2016

ELECTION DISTRICT No. 5

AS SHOWN

JAN., 2016

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

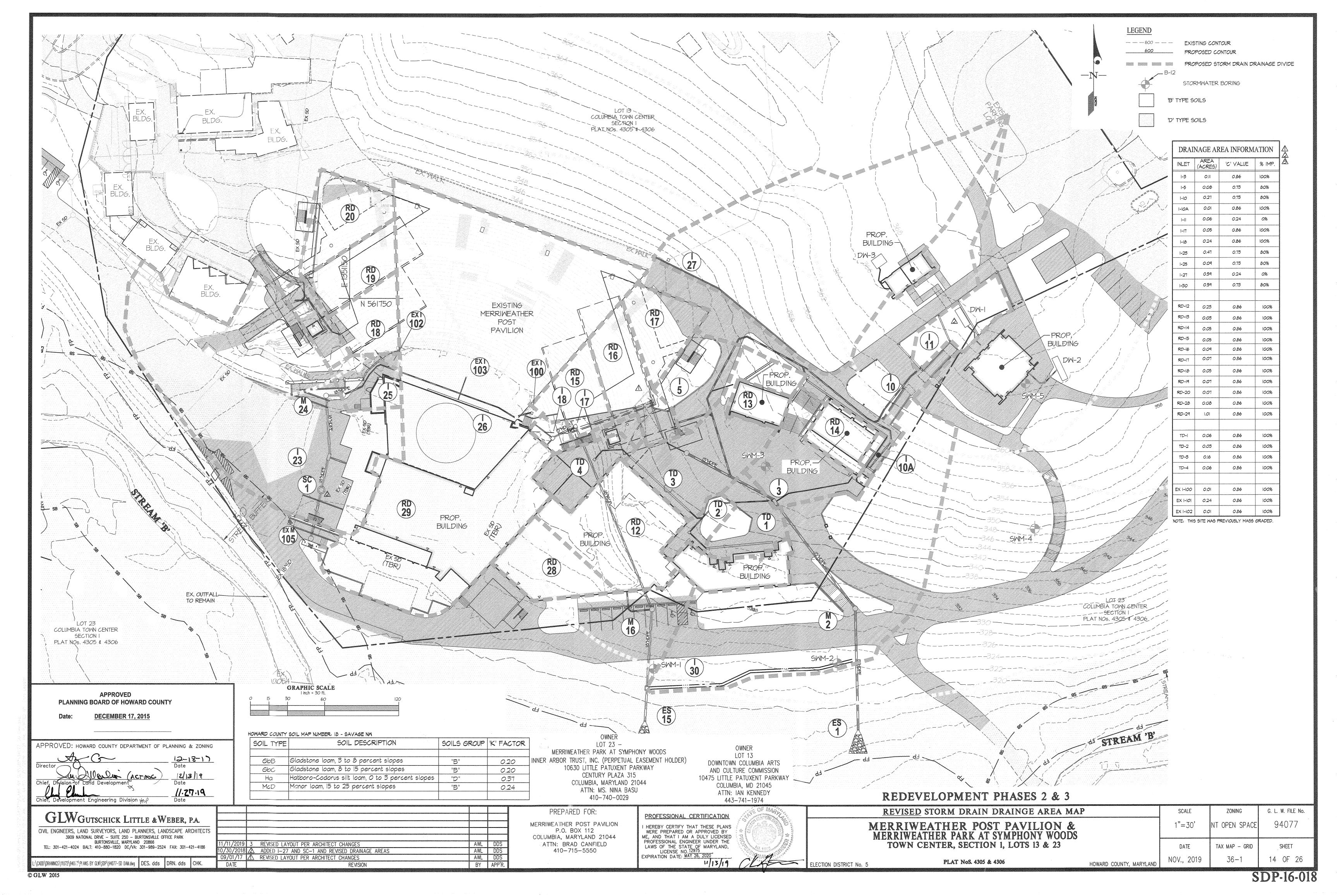
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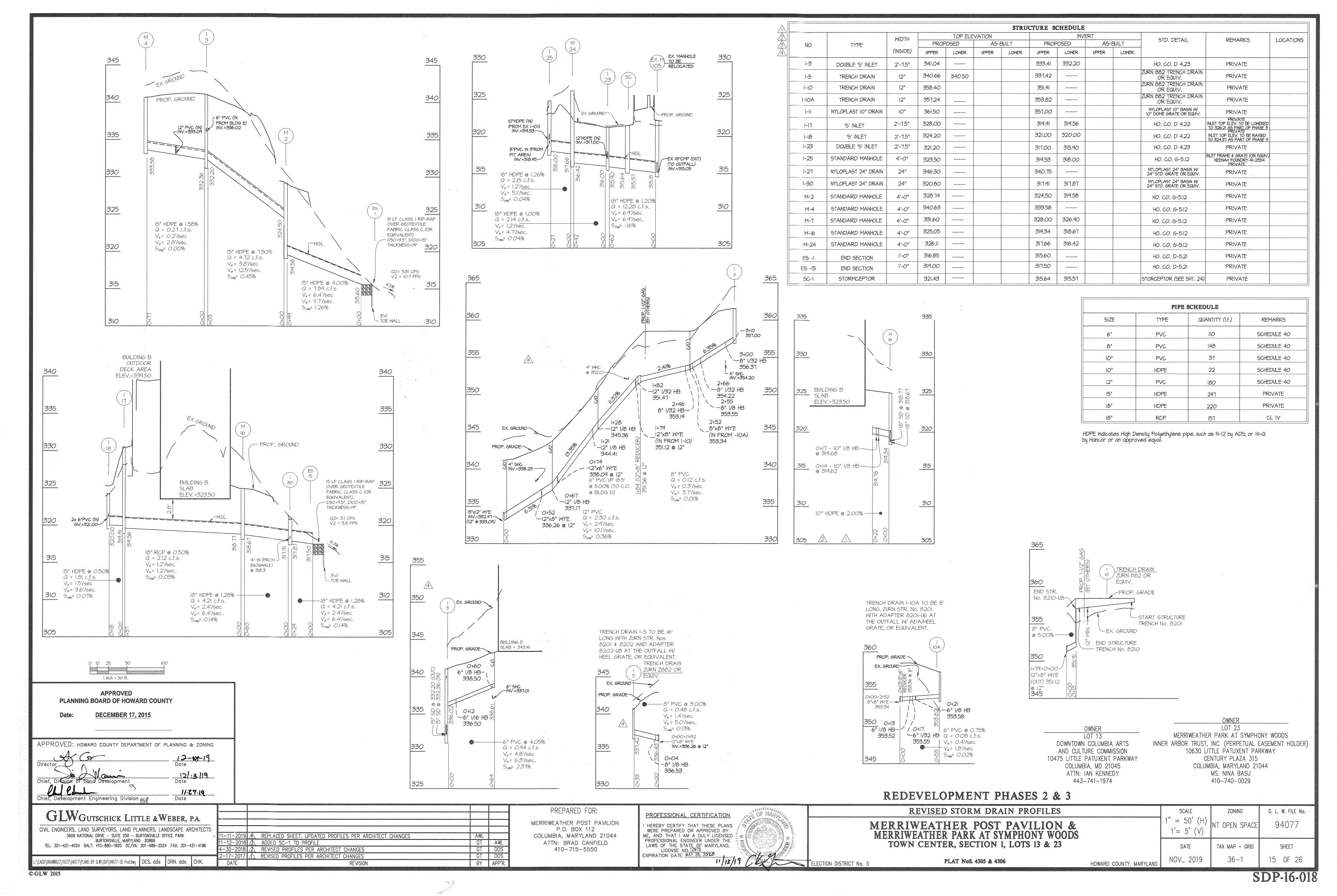
TAX MAP - GRID

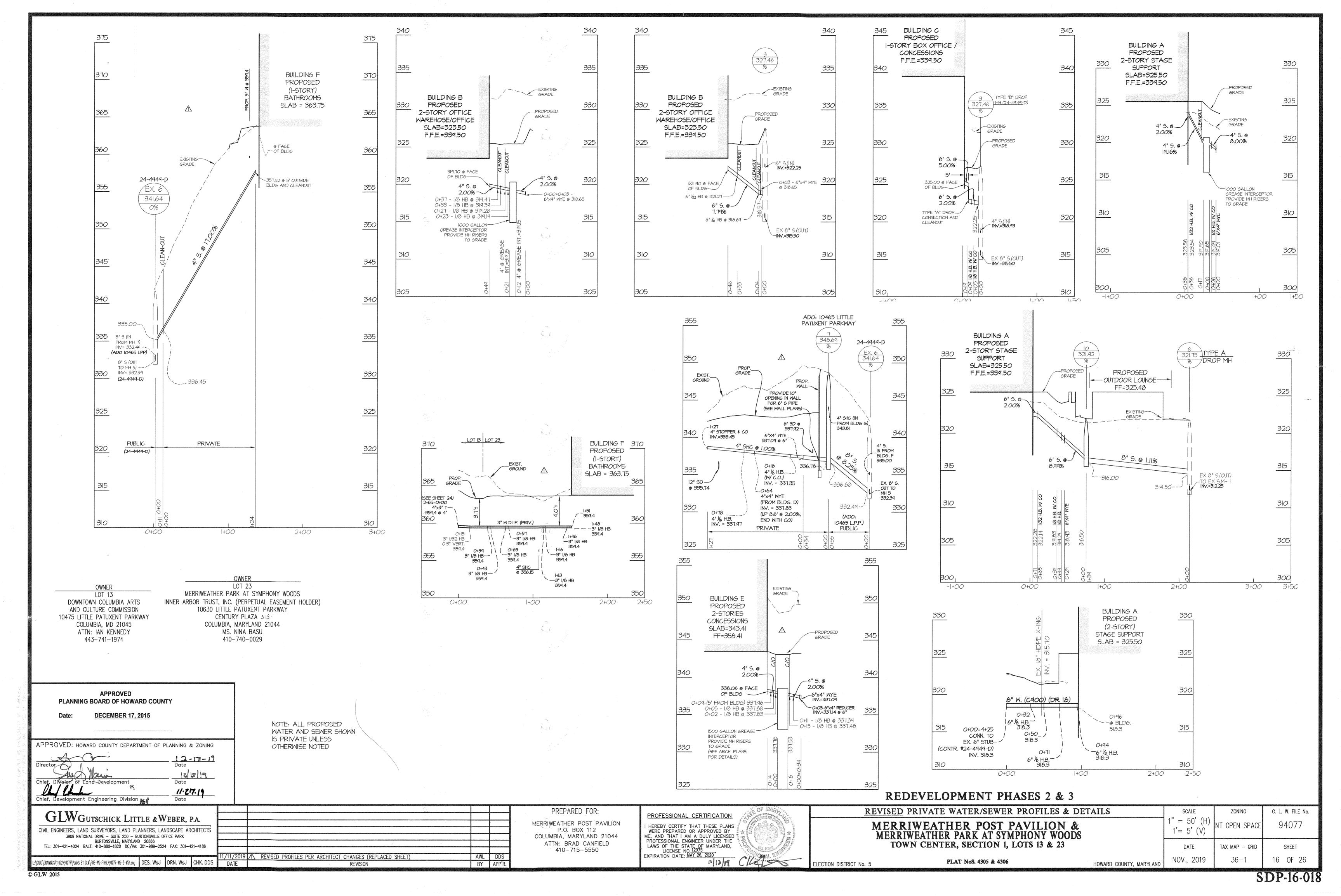
MARYLAND DEPARTMENT OF ENVIRONMEN WATER MANAGEMENT ADMINISTRATION

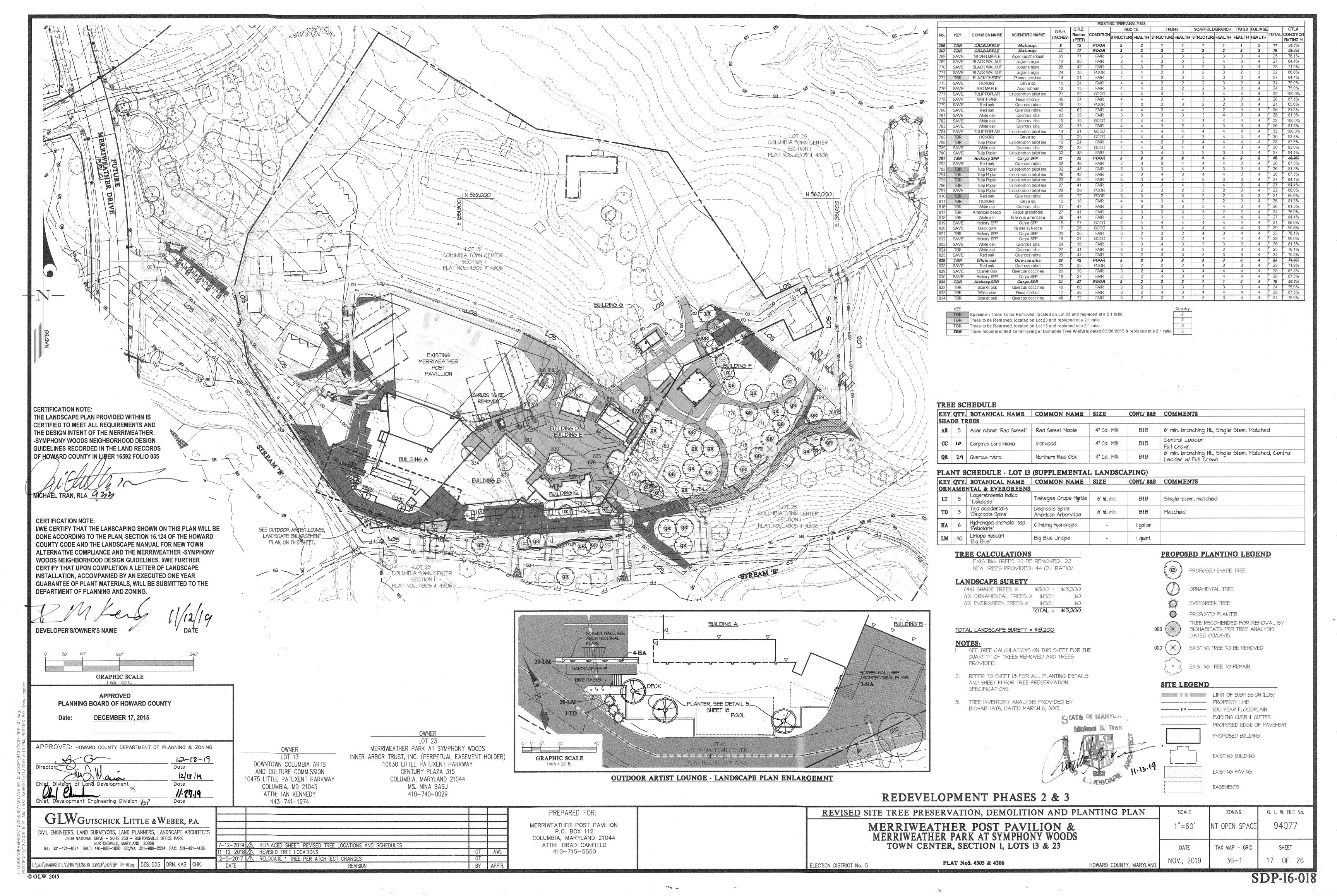
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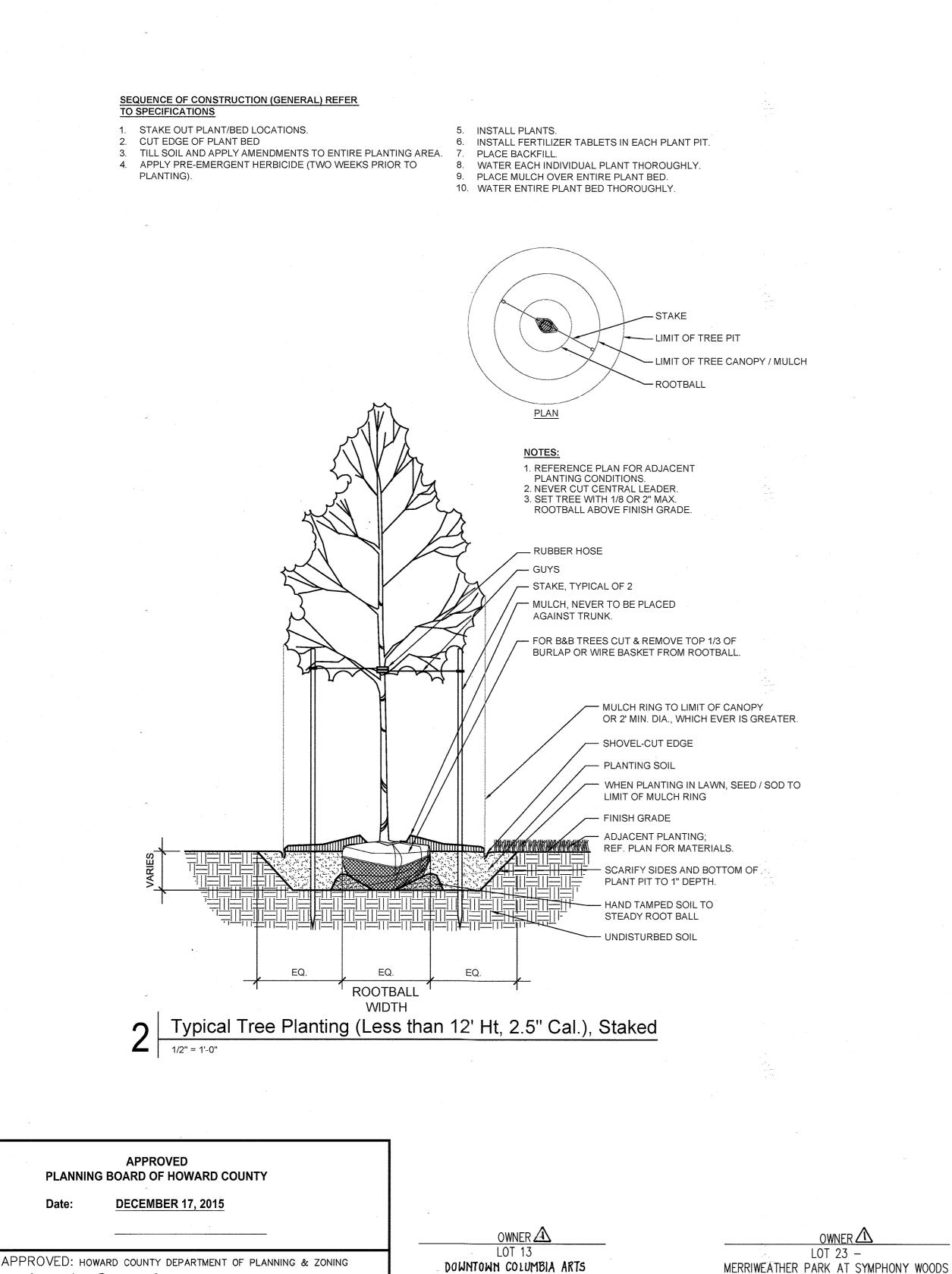
SHEET











AND CULTURE COMMISSION

10475 LITTLE PATUXENT PARKWAY

COLUMBIA, MD 21045

ATTH: IAM KENNEDY

443-741-1974

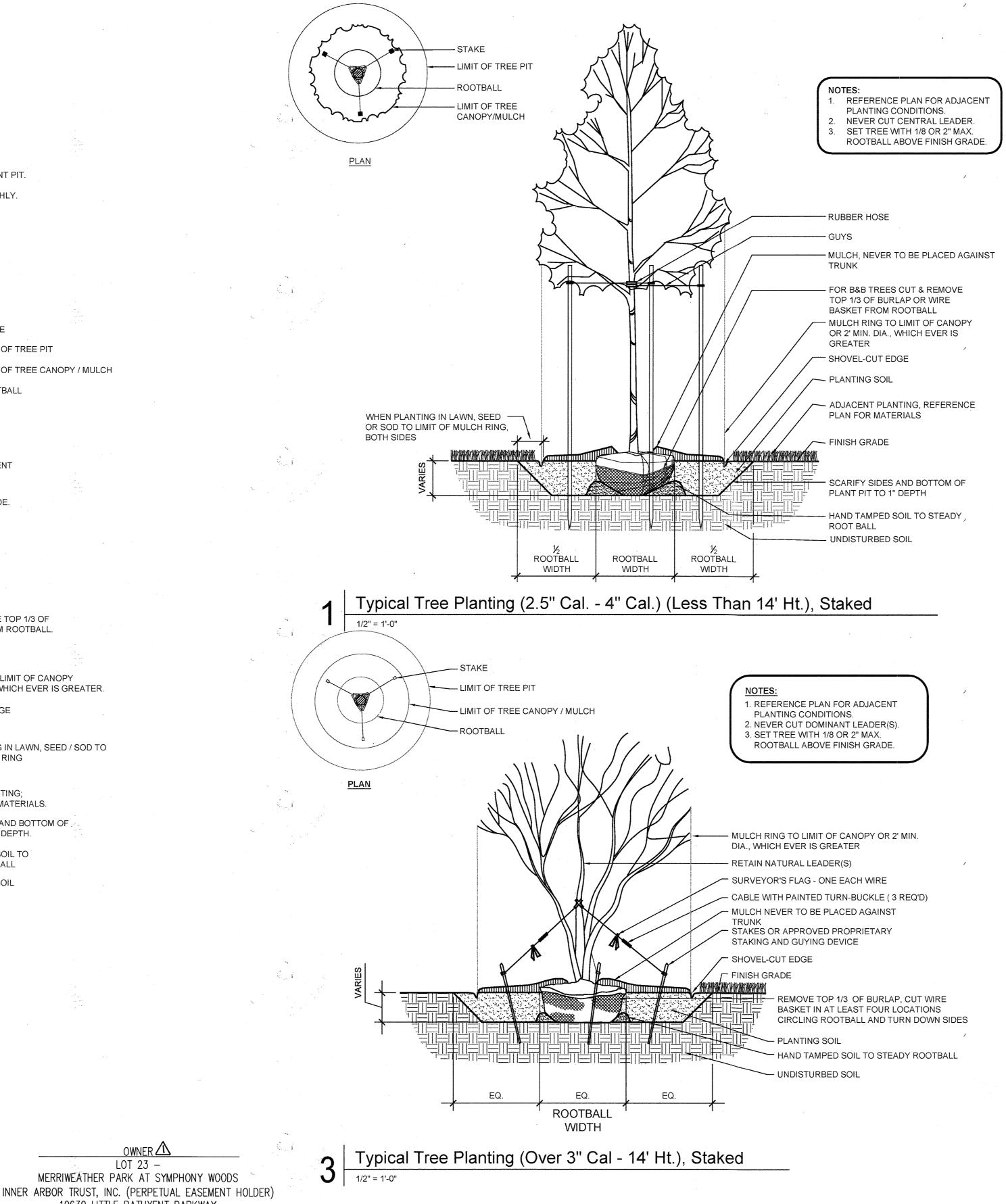
10630 LITTLE PATUXENT PARKWAY

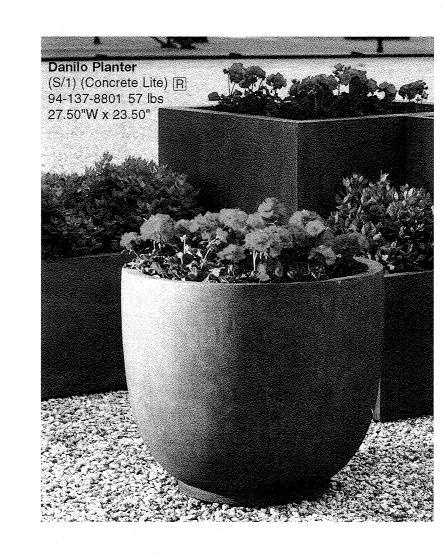
CENTURY PLAZA 315

COLUMBIA, MARYLAND 21044

3.2.16

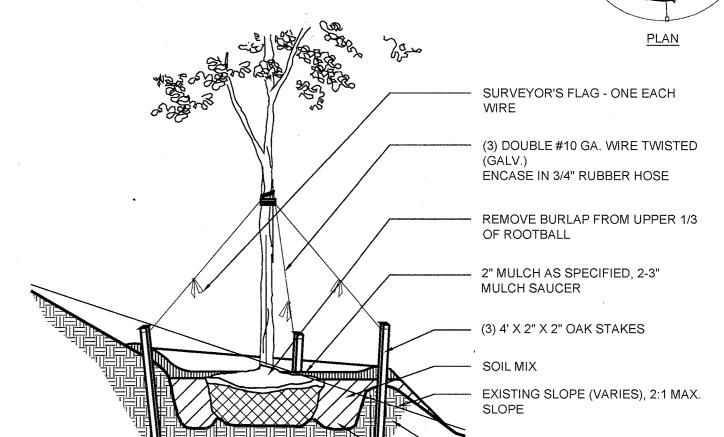
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Planter (typ.) or (approved equal)

- 1. NEVER CUT CENTRAL LEADER. 2. NEVER MULCH AGAINST TRUNK.
- 3. SET TREE WITH 1/8 OF ROOT BALL ABOVE GRADE.
- 4. STAKES, WIRES, AND HOSES SHALL BE REMOVED AFTER ONE YEAR.
- 5. SCARIFY SUBSOIL AND SIDES OF TREE PIT TO A MIN. OF 4" DEPTH. 6. TREES UNDER 2-1/2" CAL.: 10' x 2" x 2" STAKES SET
- VERTICAL, MIN. TWO FEET INTO COMPACTED SUBGRADE.
- 7. TREES TO HAVE SINGLE LEADER. 8. CUT AND REMOVE TOP HALF OF WIRE BASKETS.



Typical Tree Planting on Slope 4 | 1/2"= 1'-0"

ROOTBALL

1/2 (A) WIDTH (A)

CERTIFICATION NOTE: THE LANDSCAPE PLAN PROVIDED WITHIN IS CERTIFIED TO MEET ALL REQUIREMENTS AND THE DESIGN INTENT OF THE MERRIWEATHER-SYMPHONY WOODS DESIGN GUIDELINES RECORDED IN THE LAND RECORDS OF HOWARD COUNTY IN LIBER 14407 FOLIO 233.

DEDEVIELODMENT DILACEC 2 & 2

Chief, Division of Land Development 300 30 50 Date	449-741-1974	ATTN: MS. NINA BASU			RECORDED IN THE LAND RECORDS OF HOWARD	COUNTY IN LIBER 14407 FOLIO 233.			
Chief, Development Engineering Division Total Chief Development Engineering Division Total		410-740-0029			REDEVELOPMENT PHASES 2 & 3				
GLWGUTSCHICK LITTLE &WEBER, P.A.			PREPARED FOR:	PROFESSIONAL CERTIFICATION	SITE PLANTING DETAILS		SCALE	ZONING	G. L. W. FILE No.
CLVV GUISCHICK LITTLE & WEBER, P.A.			MERRIWEATHER POST PAVILION	I HEREBY CERTIFY THAT THESE PLANS	MERRIWEATHER POST PAVILION &		AS NOTED	NT OPEN SPACE	94077
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK			COLUMBIA, MARYLAND 21044	WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED	MERRIWEATHER PARK AT SYMPHONY WOODS		7.5 110125	IVI OF EN STROE	0 1077
BURTONSVILLE, MARYLAND 20866 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186			ATTN: BRAD CANFIELD 410-715-5550	PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12975	TOWN CENTER, SECTION 1, LOTS 13 & 23		DATE	TAX MAP — GRID	SHEET &
CADD\DRAWNGS\11072\94077\PLANS BY GLW\SDP\94077SDP-TPP-02-DTLdwg DES. DRN. CHK.	11-18-19/1) Updated owner information DATE REVISION	9+AWLBYAPP'R.		EXPIRATION DATE: MAY 26, 2016	ELECTION DISTRICT No. 5 PLAT Nos. 4305 & 4306	HOWARD COUNTY, MARYLAND	JAN., 2016	36–1	18 OF 26

SDP-16-018

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Chief, Division of Land Development & & ST

— UNDISTRURBED OR TAMPED SOIL

— 3" DRAINAGE PAN

PRODUCTS

2.1 TREE PROTECTION FENCING

MINIMUM SPECIFICATIONS - BLAZE ORANGE, HEAVY DUTY, PLASTIC MESH FENCE, A MINIMUM OF 4 FOOT (1.2M) HIGH, SECURELY ATTACHED TO 2 INCH (50MM) METAL POSTS 6 FEET (1.8M) HIGH, DRIVEN A MINIMUM OF 2 FEET (0.6M) INTO THE GROUND. POSTS SHALL BE SET A MAXIMUM OF 8 FEET (2.4M) ON CENTER.

2.2 TREE PROTECTION SIGNAGE

HEAVY-DUTY CARDBOARD OR METAL SIGNS 12 INCHES (304MM) BY 12 INCHES ATTACHED TO ¾ INCH (19MM) THICK EXTERIOR GRADE MDO PLYWOOD (OR OTHER SUBSTRATE AS RECOMMENDED BY THE SIGN SUPPLIER). SIGN SHALL HAVE A BLAZE ORANGE BACKGROUND WITH BLACK BLOCK LETTERS, I INCH (25MM) HIGH, WITH THE INSCRIPTION "NO CONSTRUCTION ACTIVITY - TREE PROTECTION ZONE".

SIGNAGE SHALL BE ATTACHED TO THE TREE PROTECTION FENCE AT INTERVALS NOT TO EXCEED 25 FEET (7.6M) ON CENTER.

2.3 MULCH

MULCH SHALL CONSIST OF HARDWOOD CHIPS, AGED A MINIMUM OF SIX MONTHS AND SHALL BE FREE OF LEAVES. CHIPS STOCKPILED FROM THE TREE REMOVAL OPERATION MAYBE USED.

IF MULCH CONSISTS OF HARDWOOD AGED LESS THAN 6 MONTHS, SPREAD NITROGEN FERTILIZER AT THE RATE OF 10 LBS. PER 1000 SQ. FT.

2.4 CONSTRUCTION MAT

CONSTRUCTION MATTING WILL CONSIST OF ¾ INCH PLYWOOD OR HEAVY GAUGE STEEL PLATES WITH AN UNDERLAYMENT OF A MINIMUM OF SIX INCHES OF WOOD CHIP MULCH. THE PLYWOOD OR STEEL TOP LAYER SHOULD ONLY BE APPLIED WHERE VEHICLE MOVEMENT IS ANTICIPATED AND SHOULD NOT BE KEPT IN PLACE FOR EXTENDED PERIODS OF TIME.

2.5 SOIL TENSIOMETER

TENSIOMETER SHALL BE DESIGNED TO ACCURATELY MEASURE SOIL MOISTURE TENSION THROUGH THE USE OF A POROUS MOISTURE HOLDING CUP AND A VACUUM PRESSURE GAUGE. TENSIOMETER SHALL BE PLACED WITHIN THE CRITICAL ROOT ZONE OF THE TARGET TREE AND MONITORED ON A NO LESS THAN WEEKLY BASIS DURING THE PERIOD OF CONSTRUCTION. MOISTURE CUP SHALL BE REGULARLY FILLED WITH WATER AND THE POROUS CUP ROUTINELY INSPECTED FOR CLOGGING AND/OR CRACKING.

2.6 AIR SPADE

AIR SPADE OR EQUIVALENT EXCAVATION TOOL DELIVERING A FOCUSED, HIGH EFFICIENCY, SUPERSONIC AIR JET DESIGNED TO REMOVE SOIL PARTICLES WITHOUT DAMAGING TREE ROOT STRUCTURES. NOZZLE SHALL BE FLOW RATED AT 150 SCFM AND PRESSURE RATED AT 90 PSIG. OPERATOR SHALL BE TRAINED AND EXPERIENCED IN PROPER USE OF EQUIPMENT

APPROVED PLANNING BOARD OF HOWARD COUNTY **DECEMBER 17, 2015** APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING 3.2.16 Date Vetslehmle

GLWGUTSCHICK LITTLE &WEBER, P.A

3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK

BURTONSVILLE, MARYLAND 20866

Division of Land Development > 4 DT

Chief, Development Engineering Division

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OWNER 🔼 LOT 13 DOWNTOWN GOLUMBIA ARTS AND CULTURE COMMISSION 10475 LITTLE PATUXENT PARKWAY COLUMBIA, MD 21045 ATTH: IAH KENNEDY 443-741-1974

LOT 23 -MERRIWEATHER PARK AT SYMPHONY WOODS INNER ARBOR TRUST, INC. (PERPETUAL EASEMENT HOLDER) 10630 LITTLE PATUXENT PARKWAY CENTURY PLAZA 315 COLUMBIA, MARYLAND 21044 ATTN: MS. MINA BASU 410-740-0029

TREE PRESERVATION APPROACH

MERRIWEATHER

TREE PRESERVATION DURING CONSTRUCTION REQUIRES AN INTEGRATED APPROACH THAT RECOGNIZES BOTH THE INHERENT BIOLOGICAL LIMITATIONS OF MATURE TREES AND THE PHYSICAL DEMANDS THAT HUMAN INFRASTRUCTURE PLACES UPON THE LANDSCAPE. THE FOLLOWING DESCRIBES THE COMPREHENSIVE TREE PRESERVATION METHODOLOGY THAT WILL BE UNDERTAKEN TO ENSURE THE HIGHEST POTENTIAL FOR MAINTAINING TREE HEALTH.

THE CRITICAL ROOT ZONE (CRZ) IS THE AREA AROUND THE BASE OF THE PLANT THAT CONTAINS THE VAST MAJORITY OF SMALL, ABSORBING ROOTS. AS OPPOSED TO THE LARGE, STRUCTURAL SUPPORT ROOTS, THE ABSORBING ROOTS ARE PRIMARILY RESPONSIBLE FOR THE UPTAKE OF BOTH WATER AND ESSENTIAL ELEMENTS. THEY REQUIRE ADEQUATE OXYGEN IN ORDER TO SURVIVE. AS SUCH, THEY ARE LOCATED CLOSE TO THE SURFACE (IN THE TOP 12 TO 18" OF SOIL). THEY ARE ALSO HIGHLY VULNERABLE TO SOIL COMPACTION AND THE ACCOMPANYING REDUCTION IN OXYGEN- CONTAINING PORE SPACES BETWEEN SOIL PARTICLES. THE PRIMARY STRATEGY TO BE EMPLOYED IN PRESERVING THE VALUABLE TREES IN MERRIWEATHER PARK WILL BE TO AVOID AND MITIGATE SOIL COMPACTION WITHIN THE CRZ. CRZ WILL BE ESTIMATED BASED ON TREE DIAMETER, AN APPROPRIATE INDICATOR OF POTENTIAL ROOTING AREA. FIELD STUDIES HAVE SHOWN THAT, FOR EVERY INCH OF TREE DIAMETER AT BREAST HEIGHT (DBH), A CORRESPONDING RADIUS OF 1.5 FEET (STARTING FROM THE TREE STEM) WILL CAPTURE MOST OF THE CRZ. FOR INSTANCE, A PLANT WITH A DBH OF 10 INCHES WILL HAVE A CRITICAL ROOT ZONE EDGE 15 FEET FROM THE STEM.

THE PLAN WILL INVOLVE TWO COMPLEMENTARY TECHNIQUES TO AVOID UNINTENDED TREE LOSS DURING THE CONSTRUCTION PROCESS:

- A) AVOID THE CRITICAL ROOT ZONE OF TREES SELECTED FOR PRESERVATION
- B) MODIFY CONSTRUCTION ACTIVITIES WHEN IT IS NECESSARY TO OPERATE WITHIN THE CRITICAL ROOT ZONE

AVOIDING THE CRITICAL ROOT ZONE

IN ORDER TO MAXIMIZE THE LEVEL OF TREE CANOPY AND FOREST INTEGRITY THAT IS PROTECTED AT THE PARK. IT IS IMPORTANT TO FIRST FIELD DETERMINE WHICH TREES ARE COMPATIBLE WITH THE PLANNED INFRASTRUCTURE EXPANSION, AND TO THEN DELINEATE THE CRITICAL ROOT ZONES FOR THESE PLANTS.

1 - IDENTIFY TREES FOR RETENTION

A TREE INVENTORY WAS PERFORMED IN 2010. DOMINANT, CANOPY-LEVEL TREES WITHIN THE TARGETED CONSTRUCTION ZONE WILL BE RE-EVALUATED WITHIN THE CONTEXT OF PLANNED ACTIVITIES AND CHARACTERIZED AS TO SPECIES, DBH, AND CONDITION. CHARACTERIZATION OF SPECIES AND CONDITION WILL ALLOW FOR INFORMED DETERMINATION OF WHICH PLANTS ARE COMPATIBLE WITH CONSTRUCTION. TREES IN POOR CONDITION, OR THAT ARE OF SPECIES LIKELY TO BE INTOLERANT OF DISTURBANCE AND PRONE TO HAZARD GENERATION, SHOULD BE REMOVED FROM CONSIDERATION FOR RETENTION.

2 - CRZ LOCATIONS

BASED ON EVALUATION, CRZ LOCATIONS WILL BE REFINED FROM PREVIOUS TREE INVENTORY.

3 - INTEGRATE TREE DATA INTO DESIGN PROCESS

TO DATE, THE DESIGN HAS GONE TO GREAT LENGTHS TO AVOID CRZ OF EXISTING TREES. BASED ON REFINED INFORMATION COLLECTED ABOVE, MINOR MODIFICATIONS MAY BE TAKEN TO RETAIN TREES AND TO MAXIMIZE THE OPPORTUNITY FOR PRESERVING THE TREE CANOPY AND FOREST INTEGRITY. ALL DESIGN SUBMISSIONS WILL INCLUDE A REVIEW AND COMMENTARY BY A QUALIFIED ARBORICULTURAL PROFESSIONAL EXPERIENCED IN TREE PRESERVATION TECHNIQUES

MODIFY CONSTRUCTION ACTIVITIES WITHIN THE CRZ

TREE PRESERVATION TECHNIQUES WILL BE IMPLEMENTED TO REDUCE SOIL COMPACTION AND THE SUBSEQUENT LOSS OF TREE COVER. THE FOLLOWING MEASURES WILL BE CONSIDERED TO AVOID IMPACTS TO TREES DESIGNATED FOR RETENTION.

4 - FIELD DELINEATE INDIVIDUAL CRZ LOCATIONS

PRIOR TO CONSTRUCTION ACTIVITIES, INDIVIDUAL TREE CRZ ZONES WITHIN DISTURBANCE ZONES WILL BE MARKED WITH FLAGGING AND/OR GROUND PAINT BY AN ARBORICULTURAL PROFESSIONAL. LICENSED BY THE STATE OF MARYLAND AND QUALIFIED IN THE FIELD OF TREE PRESERVATION.

5 - DEVELOP INDIVIDUAL TREE PROTECTION PLANS

INDIVIDUAL TREE PROTECTION PLANS WILL BE CREATED THAT ADDRESS ARBORICULTURAL INTERVENTIONS AND CONSTRUCTION PRACTICES REQUIRED FOR THE TARGETED PLANTS. THESE MAY INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

- ☐ TREE PROTECTION FENCING
- TREE PROTECTION SIGNAGE
- ☐ MULCH SPECIFICATIONS
- ☐ CONSTRUCTION MAT SPECIFICATIONS
- ☐ SOIL MOISTURE MONITORING STANDARDS
- ☐ SUPPLEMENTAL IRRIGATION STANDARDS
- SOIL MODIFICATION (FERTILIZATION, AIR SPADING) RECOMMENDATIONS
- ☐ TRENCHING, DIRECTIONAL DRILLING RECOMMENDATIONS
- ☐ ROOT PRUNING RECOMMENDATIONS
- ☐ ACCESS PIT LOCATIONS
- ☐ TREE REMOVAL AND STUMP REMOVAL SPECIFICATIONS
- ☐ TREE HAZARD REDUCTION RECOMMENDATIONS

6 - CONSTRUCTION MONITORING

A TRAINED AND QUALIFIED ARBORICULTURAL PROFESSIONAL DURING CRITICAL CONSTRUCTION PHASES WILL BE PRESENT ON SITE TO ENSURE TREE PRESERVATION PLAN IS ABIDED.

REDEVELOPMENT PHASES 2 & 3

2.23.16 SITE TREE PROTECTION & PRESERVATION PREPARED FOR: PROFESSIONAL CERTIFICATION MERRIWEATHER POST PAVILION MERRIWEATHER POST PAVILION & HEREBY CERTIFY THAT THESE PLANS CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS P.O. BOX 112 WERE PREPARED OR APPROVED BY MERRIWEATHER PARK AT SYMPHONY WOODS COLUMBIA, MARYLAND 21044 ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE ATTN: BRAD CANFIELD TOWN CENTER, SECTION 1, LOTS 13 & 23 LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12975 EXPIRATION DATE: MAY 26, 2016 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186 410-715-5550 -18-19 11 updated owner information 9+ AWL PLAT NoS. 4305 & 4306 1-20-16 ELECTION DISTRICT No. 5 BY APP'F HOWARD COUNTY, MARYLAND

G. L. W. FILE No.

SHEET 2

19 OF 26/

SCALE

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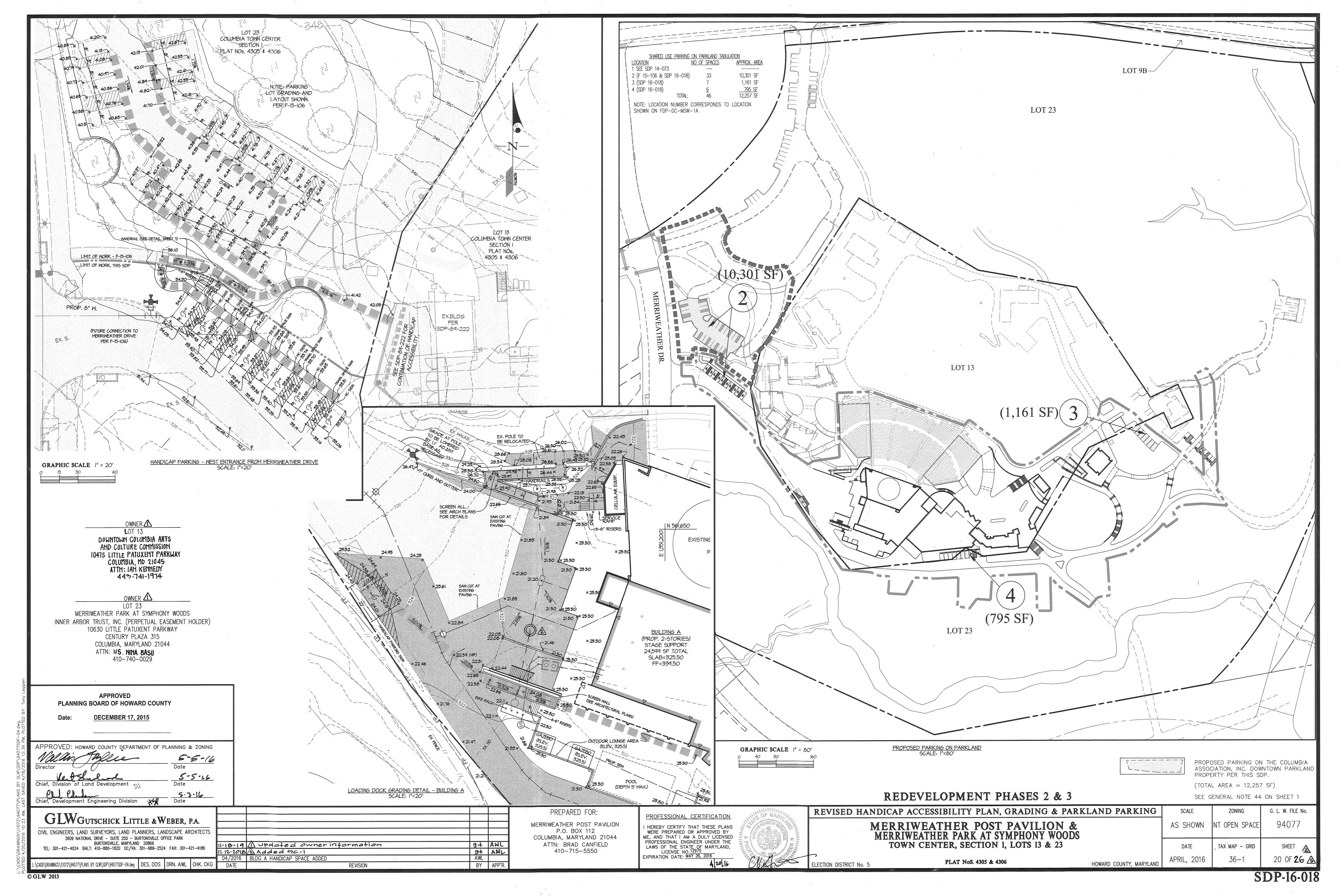
DATE

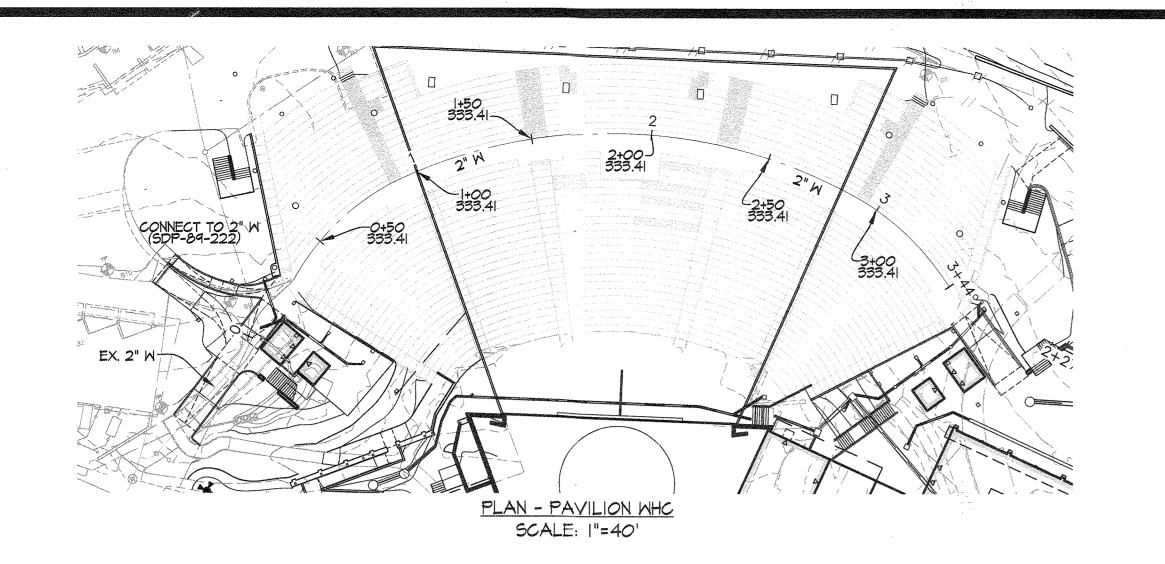
JAN., 2016

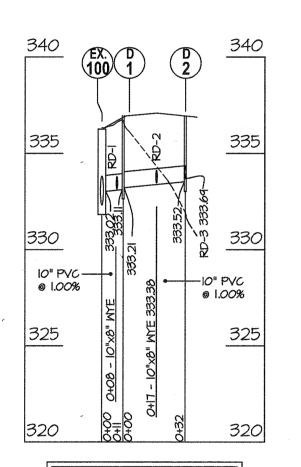
NT OPEN SPACE

TAX MAP - GRID

36-1







STORM DRAIN PROFILE

SCALE: HORZ. I" = 50'

VERT. I" = 5'

							STRU	CTURE S	CHEDULE					
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APPROVED PLANNING BOARD OF HOWARD COUNTY

Chief, Development Engineering Division KSP

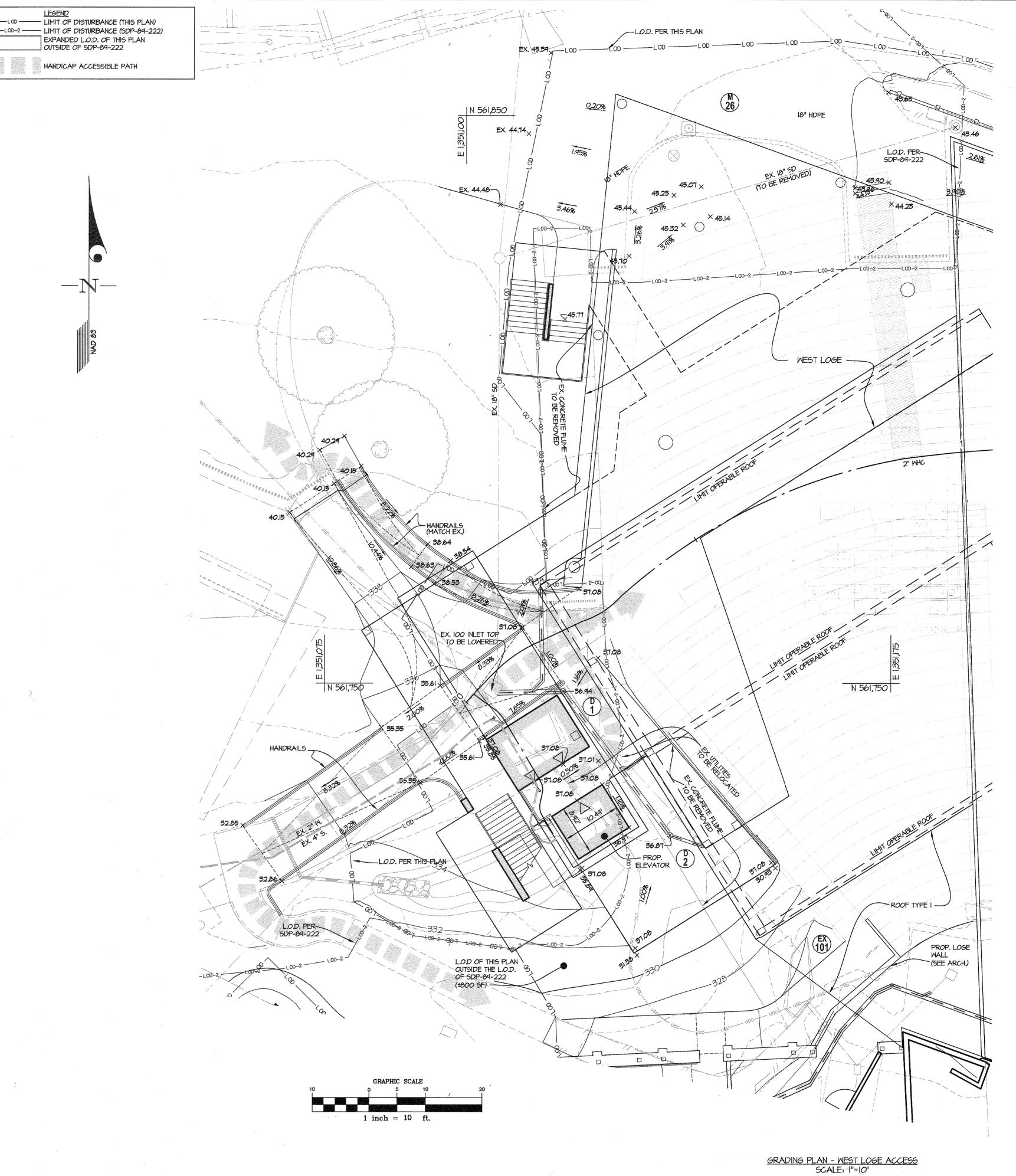
5-17-18 Chief, Division of Land Development Chief 5-17-18

5 · 10 · 18 Date

LOT 13 DOWNTOWN COLUMBIA ARTS AND CULTURE COMMISSION 10475 LITTLE PATUXENT PARKWAY COLUMBIA, MD 21045 ATTH: IAH KENNEDY 443-741-1974

LOT 23 MERRIWEATHER PARK AT SYMPHONY WOODS INNER ARBOR TRUST, INC. (PERPETUAL EASEMENT HOLDER)
10630 LITTLE PATUXENT PARKWAY CENTURY PLAZA 315 COLUMBIA, MARYLAND 21044 ATTN: MS. NINA BASU

410-740-0029



REDEVELOPMENT PHASES 2 & 3

REVISED GRADING PLAN G. L. W. FILE No. SCALE MERRIWEATHER POST PAVILION & MERRIWEATHER PARK AT SYMPHONY WOODS TOWN CENTER, SECTION 1, LOTS 13 & 23 94077 AS SHOWN NT OPEN SPACE SHEET Z DATE TAX MAP - GRID MAY, 2018 21 OF 2**6** PLAT NoS. 4305 & 4306 HOWARD COUNTY, MARYLAND

GLWGUTSCHICK LITTLE &WEBER, P.A. CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

S+ AWL BY APP'R. 11-18-19 (A updated owner information DATE REVISION L:\CADD\DRAWNGS\11072\94077\PLANS BY GLW\SDP\94077SDP-21.dwg | DES. AWL | DRN. AWL | CHK. DDS REVISION © GLW 2017

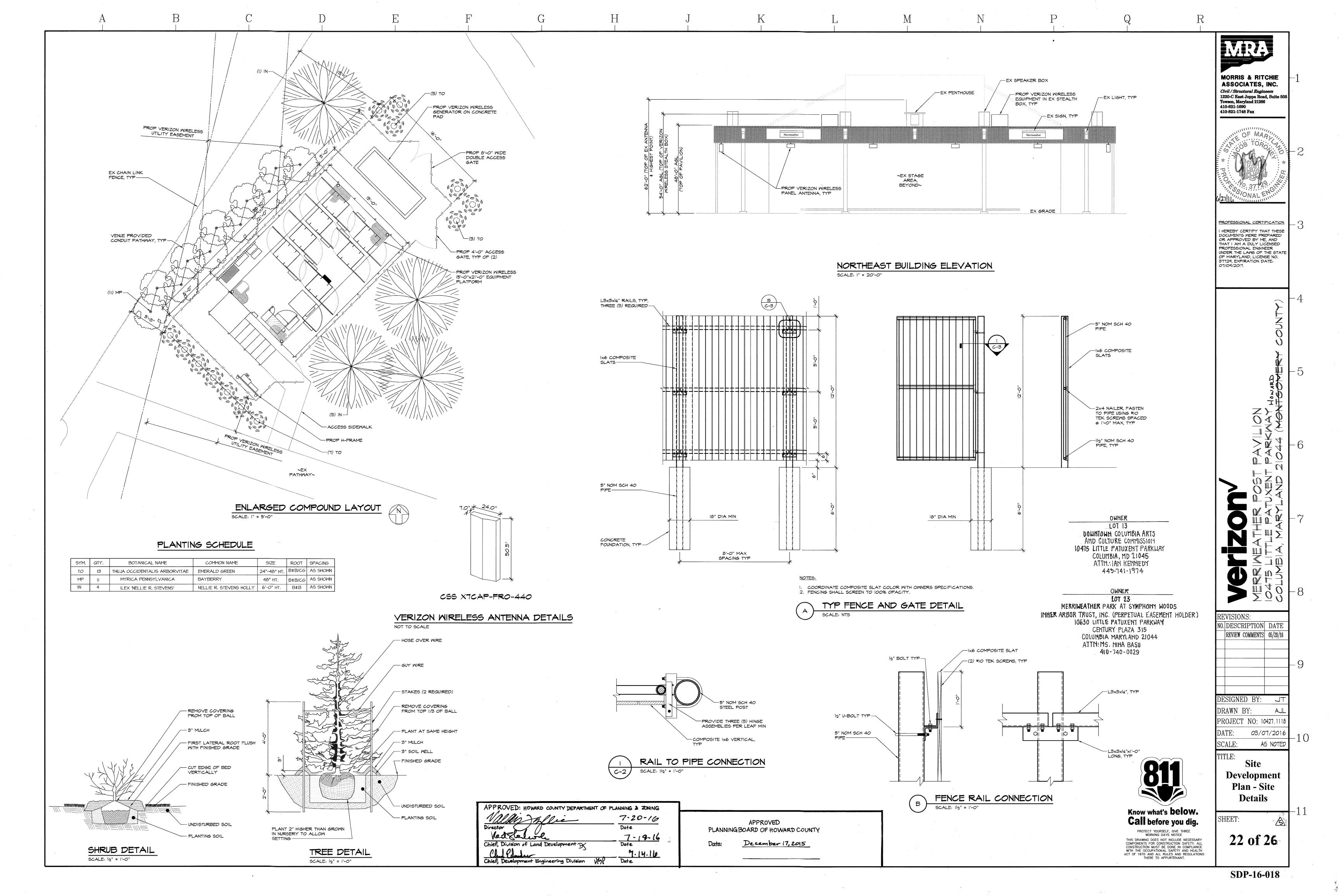
PREPARED FOR: MERRIWEATHER POST PAVILION P.O. BOX 112 COLUMBIA, MARYLAND 21044 ATTN: BRAD CANFIELD 410-715-5550

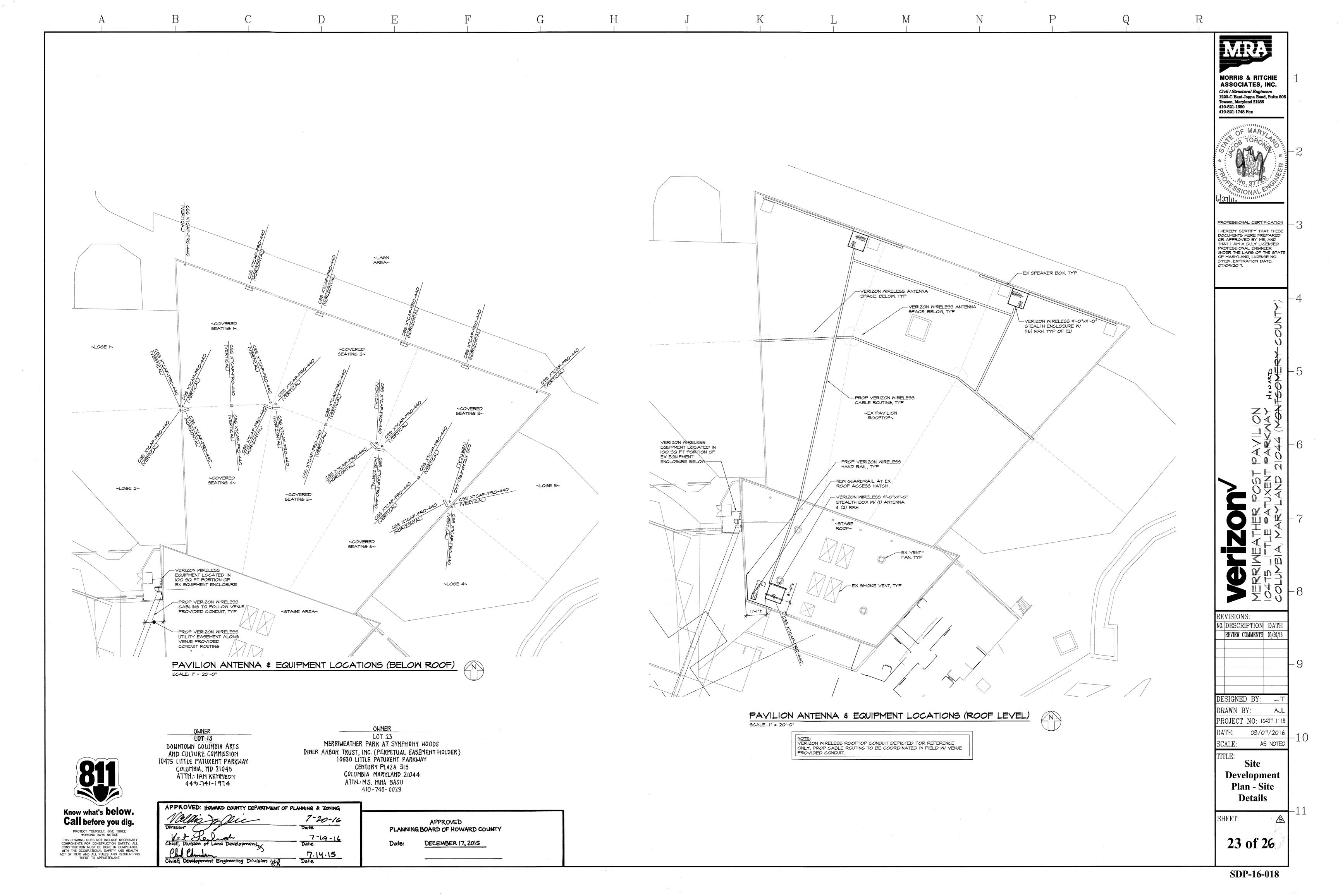
PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE PLANS
WERE PREPARED OR APPROVED BY
ME, AND THAT I AM A DULY LICENSED
PROFESSIONAL ENGINEER UNDER THE
LAWS OF THE STATE OF MARYLAND,
LICENSE NO. 12975
EXPIRATION DATE: MAY 26, 2018

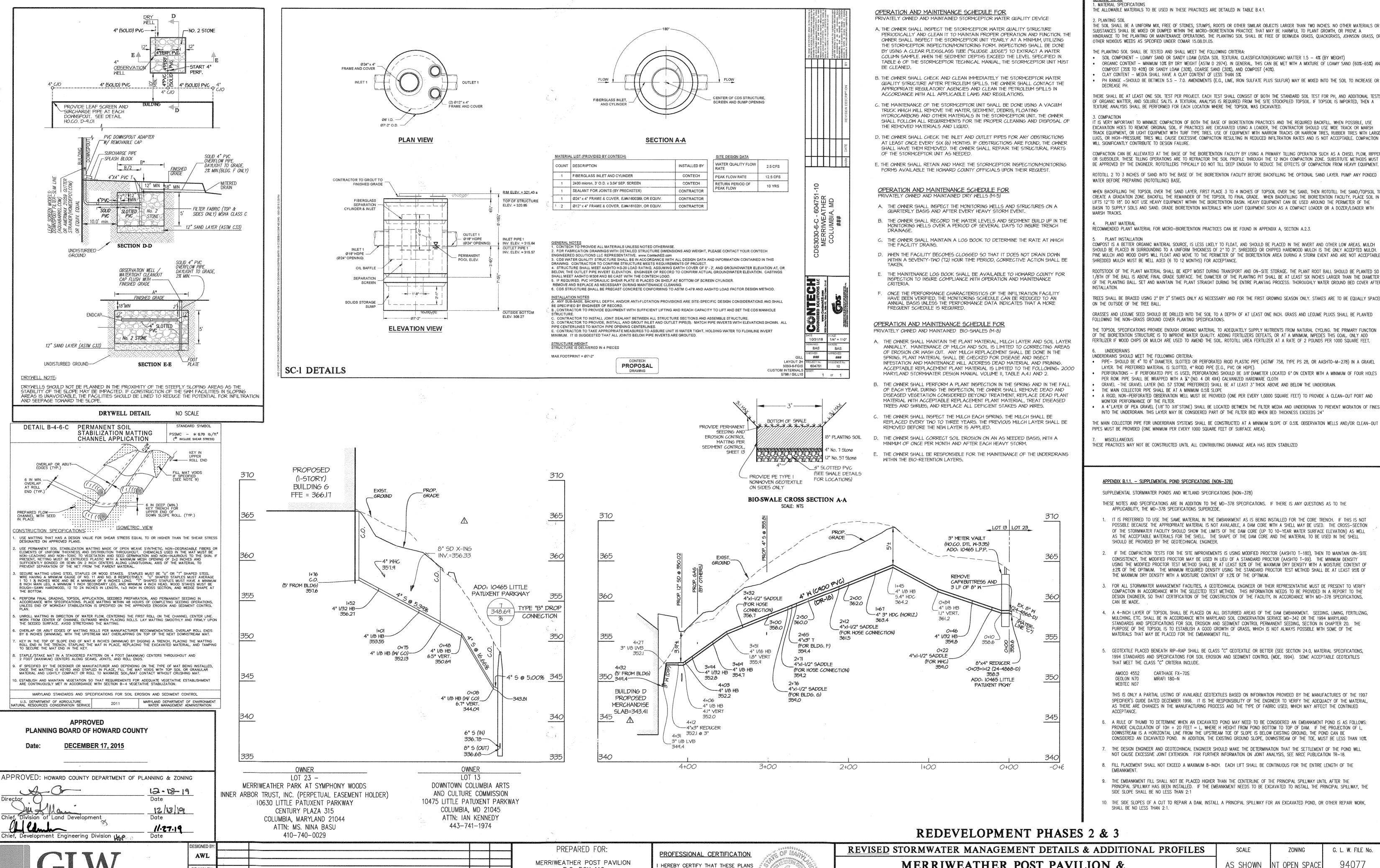
HANDICAP ACCESSIBLE PATH

ELECTION DISTRICT No. 5

SDP-16-018







P.O. BOX 112

COLUMBIA, MARYLAND 21044

ATTN: BRAD CANFIELD

AWL DDS

BY APP'R.

410-715-5550

WERE PREPARED OR APPROVED BY

ME. AND THAT I AM A DULY LICENSED

PROFESSIONAL ENGINEER UNDER THE

LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12975 EXPIRATION DATE: MAY 26, 2020

DRAWN BY

CHECKED B

DDS

ADDED WATER AND SEWER PROFILES PER ARCHITECT CHANGES

REVISION

PLANNING ENGINEERING SURVEYING

3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20866 | GLWPA.COM

PHONE: 301-421-4024 | BALT: 410-880-1820 | DC&VA: 301-989-2524 | FAX: 301-421-4186

1. MATERIAL SPECIFICATIONS

THE ALLOWABLE MATERIALS TO BE USED IN THESE PRACTICES ARE DETAILED IN TABLE B.4.1

2. PLANTING SOI THE SOIL SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES. NO OTHER MATERIALS OR SUBSTANCES SHALL BE MIXED OR DUMPED WITHIN THE MICRO-BIORETENTION PRACTICE THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS. THE PLANTING SOIL SHALL BE FREE OF BERMUDA GRASS, QUACKGRASS, JOHNSON GRASS, OR OTHER NOXIOUS WEEDS AS SPECIFIED UNDER COMAR 15 08 01 05

THE PLANTING SOIL SHALL BE TESTED AND SHALL MEET THE FOLLOWING CRITERIA:

• SOIL COMPONENT - LOAMY SAND OR SANDY LOAM (USDA SOIL TEXTURAL CLASSIFICATION)ORGANIC-MATTER 1.5 - 4% (BY WEIGHT) ORGANIC CONTENT - MINIMUM 10% BY DRY WEIGHT (ASTM D 2974). IN GENERAL, THIS CAN BE MET WITH A MIXTURE OF LOAMY SAND (60%-65%) AND

COMPOST (35% TO 40%) OR SANDY LOAM (30%), COARSE SAND (30%), AND COMPOST (40%). CLAY CONTENT - MEDIA SHALL HAVE A CLAY CONTENT OF LESS THAN 5%

PH RANGE -SHOULD BE BETWEEN 5.5 - 7.0. AMENDMENTS (E.G., LIME, IRON SULFATE PLUS SULFUR) MAY BE MIXED INTO THE SOIL TO INCREASE OR

THERE SHALL BE AT LEAST ONE SOIL TEST PER PROJECT. EACH TEST SHALL CONSIST OF BOTH THE STANDARD SOIL TEST FOR PH, AND ADDITIONAL TEST OF ORGANIC MATTER, AND SOLUBLE SALTS. A TEXTURAL ANALYSIS IS REQUIRED FROM THE SITE STOCKPILED TOPSOIL IF TOPSOIL IS IMPORTED, THEN A TEXTURE ANALYSIS SHALL BE PERFORMED FOR EACH LOCATION WHERE THE TOPSOIL WAS EXCAVATED.

IT IS VERY IMPORTANT TO MINIMIZE COMPACTION OF BOTH THE BASE OF BIORETENTION PRACTICES AND THE REQUIRED BACKFILL, WHEN POSSIBLE, USE EXCAVATION HOES TO REMOVE ORIGINAL SOIL IF PRACTICES ARE EXCAVATED USING A LOADER, THE CONTRACTOR SHOULD USE WIDE TRACK OR MARSH TRACK EQUIPMENT, OR LIGHT EQUIPMENT WITH TURF TYPE TIRES. USE OF EQUIPMENT WITH NARROW TRACKS OR NARROW TIRES, RUBBER TIRES WITH LARGE LUGS, OR HIGH-PRESSURE TIRES WILL CAUSE EXCESSIVE COMPACTION RESULTING IN REDUCED INFILTRATION RATES AND IS NOT ACCEPTABLE. COMPACTION WILL SIGNIFICANTLY CONTRIBUTE TO DESIGN FAILURE.

COMPACTION CAN BE ALLEMATED AT THE BASE OF THE BIORETENTION FACILITY BY USING A PRIMARY TILLING OPERATION SUCH AS A CHISEL PLOW, RIPPER OR SUBSOILER. THESE TILLING OPERATIONS ARE TO REFRACTOR THE SOIL PROFILE THROUGH THE 12 INCH COMPACTION ZONE. SUBSTITUTE METHODS MUST

ROTOTILL 2 TO 3 INCHES OF SAND INTO THE BASE OF THE BIORETENTION FACILITY BEFORE BACKFILLING THE OPTIONAL SAND LAYER. PUMP ANY PONDED WATER BEFORE PREPARING (ROTOTILLING) BASE. WHEN BACKFILLING THE TOPSOIL OVER THE SAND LAYER, FIRST PLACE 3 TO 4 INCHES OF TOPSOIL OVER THE SAND, THEN ROTOTILL THE SAND/TOPSOIL

CREATE A GRADATION ZONE. BACKFILL THE REMAINDER OF THE TOPSOIL TO FINAL GRADE. WHEN BACKFILLING THE BIORETENTION FACILITY, PLACE SOIL IN LIFTS 12"TO 18". DO NOT USE HEAVY EQUIPMENT WITHIN THE BIORETENTION BASIN. HEAVY EQUIPMENT CAN BE USED AROUND THE PERIMETER OF THE BASIN TO SUPPLY SOILS AND SAND. GRADE BIORETENTION MATERIALS WITH LIGHT EQUIPMENT SUCH AS A COMPACT LOADER OR A DOZER/LOADER WITH

RECOMMENDED PLANT MATERIAL FOR MICRO-BIORETENTION PRACTICES CAN BE FOUND IN APPENDIX A. SECTION A.2.3.

COMPOST IS A BETTER ORGANIC MATERIAL SOURCE, IS LESS LIKELY TO FLOAT, AND SHOULD BE PLACED IN THE INVERT AND OTHER LOW AREAS. MULCH SHOULD BE PLACED IN SURROUNDING TO A UNIFORM THICKNESS OF 2" TO 3". SHREDDED OR CHIPPED HARDWOOD MULCH IS THE ONLY ACCEPTED MULCH. PINE MULCH AND WOOD CHIPS WILL FLOAT AND MOVE TO THE PERIMETER OF THE BIORETENTION AREA DURING A STORM EVENT AND ARE NOT ACCEPTABLE SHREDDED MULCH MUST BE WELL AGED (6 TO 12 MONTHS) FOR ACCEPTANCE.

ROOTSTOCK OF THE PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT AND ON-SITE STORAGE. THE PLANT ROOT BALL SHOULD BE PLANTED SO 1/8TH OF THE BALL IS ABOVE FINAL GRADE SURFACE. THE DIAMETER OF THE PLANTING PIT SHALL BE AT LEAST SIX INCHES LARGER THAN THE DIAMETER OF THE PLANTING BALL. SET AND MAINTAIN THE PLANT STRAIGHT DURING THE ENTIRE PLANTING PROCESS. THOROUGHLY WATER GROUND BED COVER AFTER INSTALLATION.

TREES SHALL BE BRACED USING 2" BY 2" STAKES ONLY AS NECESSARY AND FOR THE FIRST GROWING SEASON ONLY. STAKES ARE TO BE EQUALLY SPACE ON THE OUTSIDE OF THE TREE BALL.

GRASSES AND LEGUME SEED SHOULD BE DRILLED INTO THE SOIL TO A DEPTH OF AT LEAST ONE INCH. GRASS AND LEGUME PLUGS SHALL BE PLANTED FOLLOWING THE NON-GRASS GROUND COVER PLANTING SPECIFICATIONS.

THE TOPSOIL SPECIFICATIONS PROVIDE ENOUGH ORGANIC MATERIAL TO ADEQUATELY SUPPLY NUTRIENTS FROM NATURAL CYCLING. THE PRIMARY FUNCTION OF THE BIORETENTION STRUCTURE IS TO IMPROVE WATER QUALITY. ADDING FERTILIZERS DEFEATS, OR AT A MINIMUM, IMPEDES THIS GOAL. ONLY ADD FERTILIZER IF WOOD CHIPS OR MULCH ARE USED TO AMEND THE SOIL. ROTOTILL UREA FERTILIZER AT A RATE OF 2 POUNDS PER 1000 SQUARE FEET.

UNDERDRAINS UNDERDRAINS SHOULD MEET THE FOLLOWING CRITERIA

 PIPE— SHOULD BE 4" TO 6" DIAMETER, SLOTTED OR PERFORATED RIGID PLASTIC PIPE (ASTMF 758, TYPE PS 28, OR AASHTO-M-278) IN A GRAVEL LAYER. THE PREFERRED MATERIAL IS SLOTTED, 4" RIGID PIPE (E.G., PVC OR HDPE). PERFORATIONS - IF PERFORATED PIPE IS USED, PERFORATIONS SHOULD BE 3/8" DIAMETER LOCATED 6" ON CENTER WITH A MINIMUM OF FOUR HOLES PER ROW. PIPE SHALL BE WRAPPED WITH A 1/4" (NO. 4 OR 4X4) GALVANIZED HARDWARE CLOTH

GRAVEL -THE GRAVEL LAYER (NO. 57 STONE PREFERRED) SHALL BE AT LEAST 3" THICK ABOVE AND BELOW THE UNDERDRAIN.

THE MAIN COLLECTOR PIPE SHALL BE AT A MINIMUM 0.5% SLOPE A RIGID, NON-PERFORATED OBSERVATION WELL MUST BE PROVIDED (ONE PER EVERY 1,0000 SQUARE FEET) TO PROVIDE A CLEAN-OUT PORT AND MONITOR PERFORMANCE OF THE FILTER.

A 4"LAYER OF PEA GRAVEL (1/8" TO 3/8" STONE) SHALL BE LOCATED BETWEEN THE FILTER MEDIA AND UNDERDRAIN TO PREVENT MIGRATION OF FINES INTO THE UNDERDRAIN. THIS LAYER MAY BE CONSIDERED PART OF THE FILTER BED WHEN BED THICKNESS EXCEEDS 24"

THE MAIN COLLECTOR PIPE FOR UNDERDRAIN SYSTEMS SHALL BE CONSTRUCTED AT A MINIMUM SLOPE OF 0.5%, OBSERVATION WELLS AND/OR CLEAN-OUT PIPES MUST BE PROVIDED (ONE MINIMUM PER EVERY 1000 SQUARE FEET OF SURFACE AREA).

THESE PRACTICES MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED

APPENDIX B.1.1. - SUPPLEMENTAL POND SPECIFICATIONS (NON-378)

SUPPLEMENTAL STORMWATER PONDS AND WETLAND SPECIFICATIONS (NON-378)

THESE NOTES AND SPECIFICATIONS ARE IN ADDITION TO THE MD-378 SPECIFICATIONS. IF THERE IS ANY QUESTIONS AS TO THE APPLICABILITY, THE MD-378 SPECIFICATIONS SUPERCEDE.

1. IT IS PREFERRED TO USE THE SAME MATERIAL IN THE EMBANKMENT AS IS BEING INSTALLED FOR THE CORE TRENCH. IF THIS IS NOT POSSIBLE BECAUSE THE APPROPRIATE MATERIAL IS NOT AVAILABLE, A DAM CORE WITH A SHELL MAY BE USED. THE CROSS-SECTION OF THE STORMWATER FACILITY SHOULD SHOW THE LIMITS OF THE DAM CORE (UP TO 10-YEAR WATER SURFACE ELEVATION) AS WELL AS THE ACCEPTABLE MATERIALS FOR THE SHELL. THE SHAPE OF THE DAM CORE AND THE MATERIAL TO BE USED IN THE SHELL SHOULD BE PROVIDED BY THE GEOTECHNICAL ENGINEER.

2. IF THE COMPACTION TESTS FOR THE SITE IMPROVEMENTS IS USING MODIFIED PROCTOR (AASHTO T-180), THEN TO MAINTAIN ON-SITE CONSISTENCY, THE MODIFIED PROCTOR MAY BE USED IN LIEU OF A STANDARD PROCTOR (AASHTO T-99). THE MINIMUM DENSITY USING THE MODIFIED PROCTOR TEST METHOD SHALL BE AT LEAST 92% OF THE MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT OF ±2% OF THE OPTIMUM. THE MINIMUM REQUIRED DENSITY USING THE STANDARD PROCTOR TEST METHOD SHALL BE AT LEAST 95% OF THE MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT OF +2% OF THE OPTIMUM.

3. FOR ALL STORMWATER MANAGEMENT FACILITIES, A GEOTECHNICAL ENGINEER OR THEIR REPRESENTATIVE MUST BE PRESENT TO VERIFY COMPACTION IN ACCORDANCE WITH THE SELECTED TEST METHOD. THIS INFORMATION NEEDS TO BE PROVIDED IN A REPORT TO THE DESIGN ENGINEER, SO THAT CERTIFICATION OF THE CONSTRUCTION OF THE FACILITY, IN ACCORDANCE WITH MD-378 SPECIFICATIONS.

4. A 4-INCH LAYER OF TOPSOIL SHALL BE PLACED ON ALL DISTURBED AREAS OF THE DAM EMBANKMENT. SEEDING, LIMING, FERTILIZING, MULCHING, ETC. SHALL BE IN ACCORDANCE WITH MARYLAND SOIL CONSERVATION SERVICE MD-342 OR THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL PERMANENT SEEDING, SECTION IN CHAPTER 20. THE PURPOSE OF THE TOPSOIL IS TO ESTABLISH A GOOD GROWTH OF GRASS, WHICH IS NOT ALWAYS POSSIBLE WITH SOME OF THE MATERIALS THAT MAY BE PLACED FOR THE EMBANKMENT FILL.

5. GEOTEXTILE PLACED BENEATH RIP-RAP SHALL BE CLASS "C" GEOTEXTILE OR BETTER (SEE SECTION 24.0, MATERIAL SPECIFICATIONS, 1994 STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL (MDE, 1994). SOME ACCEPTABLE GEOTEXTILES THAT MEET THE CLASS "C" CRITERIA INCLUDE.

AMOCO 4552 CARTHAGE FX-70S GEOLON N70 MIRAFI 180-N

WEBTEC NO7

THIS IS ONLY A PARTIAL LISTING OF AVAILABLE GEOTEXTILES BASED ON INFORMATION PROVIDED BY THE MANUFACTURES OF THE 1997 SPECIFIER'S GUIDE DATED DECEMBER 1996. IT IS THE RESPONSIBILITY OF THE ENGINEER TO VERIFY THE ADEQUACY OF THE MATERIAL. AS THERE ARE CHANGES IN THE MANUFACTURING PROCESS AND THE TYPE OF FABRIC USED, WHICH MAY AFFECT THE CONTINUED

6. A RULE OF THUMB TO DETERMINE WHEN AN EXCAVATED POND MAY NEED TO BE CONSIDERED AN EMBANKMENT POND IS AS FOLLOWS: PROVIDE CALCULATION OF 10H + 20 FEET = L, WHERE H HEIGHT FROM POND BOTTOM TO TOP OF DAM. IF THE PROJECTION OF L. DOWNSTREAM IS A HORIZONTAL LINE FROM THE UPSTREAM TOE OF SLOPE IS BELOW EXISTING GROUND, THE POND CAN BE CONSIDERED AN EXCAVATED POND. IN ADDITION, THE EXISTING GROUND SLOPE, DOWNSTREAM OF THE TOE, MUST BE LESS THAN 10%.

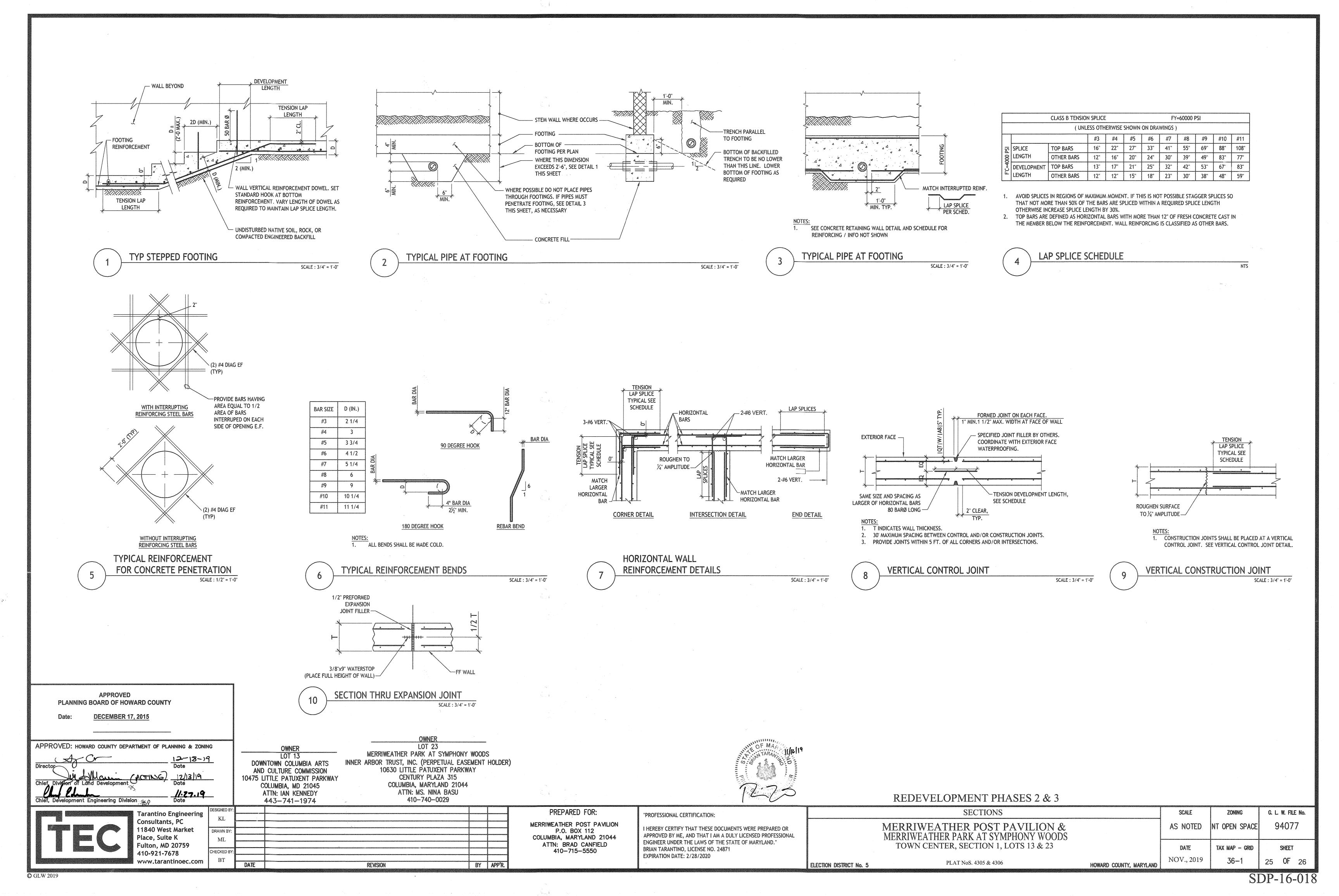
7. THE DESIGN ENGINEER AND GEOTECHINCAL ENGINEER SHOULD MAKE THE DETERMINATION THAT THE SETTLEMENT OF THE POND WILL NOT CAUSE EXCESSIVE JOINT EXTENSION. FOR FURTHER INFORMATION ON JOINT ANALYSIS, SEE NRCE PUBLICATION TR-18.

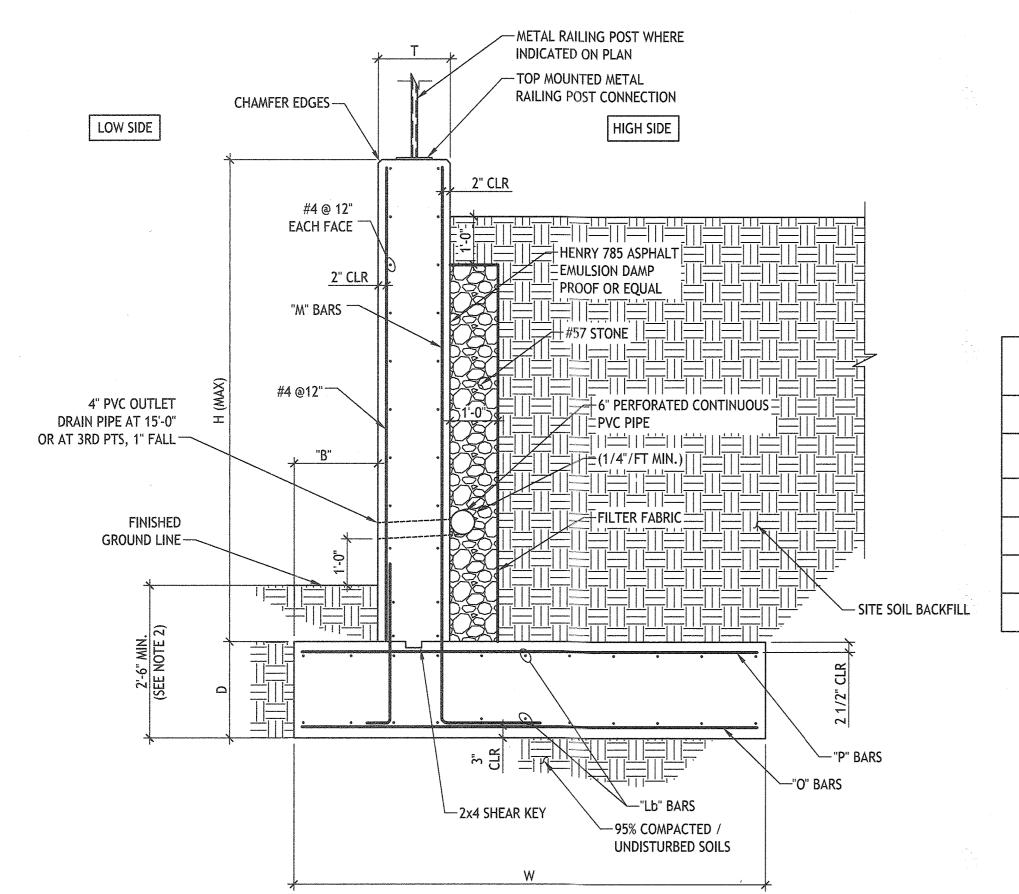
8. FILL PLACEMENT SHALL NOT EXCEED A MAXIMUM 8-INCH. EACH LIFT SHALL BE CONTINUOUS FOR THE ENTIRE LENGTH OF THE

9. THE EMBANKMENT FILL SHALL NOT BE PLACED HIGHER THAN THE CENTERLINE OF THE PRINCIPAL SPILLWAY UNTIL AFTER THE PRINCIPAL SPILLWAY HAS BEEN INSTALLED. IF THE EMBANKMENT NEEDS TO BE EXCAVATED TO INSTALL THE PRINCIPAL SPILLWAY, THE SIDE SLOPE SHALL BE NO LESS THAN 2:1

10. THE SIDE SLOPES OF A CUT TO REPAIR A DAM, INSTALL A PRINCIPAL SPILLWAY FOR AN EXCAVATED POND, OR OTHER REPAIR WORK, SHALL BE NO LESS THAN 2:1.

REVISED STORMWATER MANAGEMENT DETAILS & ADDITIONAL PROFILES SCALE G. L. W. FILE No. 94077 MERRIWEATHER POST PAVILION & AS SHOWN NT OPEN SPACE MERRIWEATHER PARK AT SYMPHONY WOODS TOWN CENTER, SECTION 1, LOTS 13 & 23 TAX MAP - GRID SHEET NOV., 2019 24 OF 26 PLAT NoS. 4305 & 4306 ELECTION DISTRICT No. 5 HOWARD COUNTY, MARYLAND





	CONCRETE SITE RETAINING WALL SCHEDULE									
	WALL	111111111111111111111111111111111111111	÷		REINFORCEMENT					
MARK	+	T	D	В	W	"M" BARS	"0" BARS	"P" BARS	"Lb" BARS	
SRW1	3'-6"	8"	1'-0"	0'-8"	2'-0"	#5@12"	#5@12"	#5@12"	#5@12"	
SRW2	4'-9"	8"	1'-0"	0'-9"	2'-9"	#5@12"	#5@12"	#5@12"	#5@12"	
SRW3	7'-0"	8"	1'-0"	1'-0"	4'-0"	#5@12"	#5@12"	#5@12"	#5@12"	
SRW4	8'-6"	8"	1'-0"	1'-3"	4'-6"	#5@12"	#5@12"	#5@12"	#5@12"	

PREPARED FOR:

MERRIWEATHER POST PAVILION P.O. BOX 112 COLUMBIA, MARYLAND 21044

ATTN: BRAD CANFIELD 410-715-5550

APPROVED PLANNING BOARD OF HOWARD COUNTY

DECEMBER 17, 2015

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

1218-19

CHECKED BY:

BT

DATE

Consultants, PC

Place, Suite K

11840 West Market

Fulton, MD 20759 410-921-7678

www.tarantinoec.com

CONCRETE RETAINING WALL DETAIL AND SCHEDULE

1. REFER TO PLAN FOR SITE WALL LOCATIONS.

2. STEP FOOTING AS REQUIRED TO MAINTAIN FROST DEPTH COVER, SEE "TYP STEPPED FOOTING" DETAIL ON PREVIOUS SHEET FOR ADDITIONAL INFORMATION.

"PROFESSIONAL CERTIFICATION:

SCALE: 1/2" = 1'-0"

REDEVELOPMENT PHASES 2 & 3

SECTIONS MERRIWEATHER POST PAVILION & AS NOTED NT OPEN SPACE I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR MERRIWEATHER PARK AT SYMPHONY WOODS APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND." TOWN CENTER, SECTION 1, LOTS 13 & 23 TAX MAP - GRID BRIAN TARANTINO, LICENSE NO. 24871 EXPIRATION DATE: 2/28/2020 36-1 PLAT NoS. 4305 & 4306 ELECTION DISTRICT No. 5 HOWARD COUNTY, MARYLAND

SDP-16-018

SHEET

26 **O**F 26

G. L. W. FILE No.

ef, Development Engineering Division HSP	12/13/19 Date //-27-19 Date	AND CULTURE COMMISSION 10475 LITTLE PATUXENT PARKWAY COLUMBIA, MD 21045 ATTN: IAN KENNEDY 443-741-1974	10630 LITTLE PATUXENT PARKWAY CENTURY PLAZA 315 COLUMBIA, MARYLAND 21044 ATTN: MS. NINA BASU 410-740-0029
Tarantino	Engineering DESIGNED BY		

LOT 23 MERRIWEATHER PARK AT SYMPHONY WOODS DOWNTOWN COLUMBIA ARTS INNER ARBOR TRUST, INC. (PERPETUAL EASEMENT HOLDER)

REVISION

BY APP'R.