

MCPB Item No.: 16C Date: 07-30-20

MD 355 - Clarksburg Shared Use Path, Mandatory Referral, MR2020018, Item C

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Completed: 07-23-20

Description

Construction of a shared use path along the east side of a 0.46-mile-long section of Old Frederick Road (MD 355) in Clarksburg, Maryland. The project includes two sections, with a southern 835-feet long section between Stringtown Road and Spire Street in Historic Clarksburg and the northern 1,616-feet long section between approximately 467 feet north of Clarksburg Road (MD 121) up to Snowden Farm Parkway.

- Applicant: Montgomery County Department of Transportation
- Ten Mile Creek Area Limited Amendment
- Filing Date: April 9, 2020



Staff Recommendation: Approval to Transmit Comments

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Summary

The Montgomery County Department of Transportation (MCDOT) is proposing to construct a sidepath along the east side of Old Frederick Road (MD 355). The project is being designed for two discontinuous segments, with a southern 835-foot long segment running through Historic Clarksburg from Stringtown Road to Spire Street, and a northern 1,616-feet long section running from 467 feet north of Clarksburg Road to Snowden Farm Parkway. The total project length is 2,451 feet (0.46 miles). The project location is depicted in Figure 1. The proposed project will provide an eight-foot wide sidepath with a variable buffer (predominantly six feet in width) on the east side of Old Frederick Road. The project also includes some utility relocation, pedestrian lighting, and stream water restoration (in coordination with MCDOT's MD 355-Clarksburg Road CIP Project, P508000-09, which was approved with comments by the Planning Board on April 26, 2018).

This project is included in the County Executive's Recommended FY21 Capital Budget and FY21-26 Capital Improvements Program as CIP Project No. P501744. This project has been proposed to start planning and design beyond the 90% design stage in FY24 with construction expected to be completed in FY 25 and 26. The current project cost estimate is \$6.398 million. The 90% design plans are provided as Attachment A to this report. This project is being submitted at the 90% design stage due to issues that developed during the design related to Historic Preservation which required significant modifications to the proposed project. More detail will be provided in the Historic Review section.



Figure 1: Project Limits and Site Vicinity

Mandatory Referral Review

This proposal for the construction of sidepath improvements is required to undergo the Mandatory Referral review process under the Montgomery County Planning Department's Uniform Standards for Mandatory Referral Review. State law requires all federal, state, and local governments and public utilities to submit proposed projects for a Mandatory Referral review by the Commission. The law requires the Planning Board to review and approve the proposed location, character, grade and extent of any road, park, public way or ground, public (including federal) building or structure, or public utility (whether publicly or privately owned) prior to the project being located, constructed or authorized.

Planning staff acknowledges that the implementation of master plan transportation recommendations is a challenge faced by the applicant in developing design plans to convert desired master plan recommendations into engineering design drawings. The design process up to 35 percent (typical) design brings clarity with considerably more detail than considered during a master plan, and issues such as environmental impacts, historical impacts, and construction costs may introduce new factors that need to be weighed in developing a final design solution. It is hoped that the Mandatory Referral process aids in this process to develop an optimal or at least an improved design solution.

Recommendations

Staff recommends **approval** to transmit the following comment to the Montgomery County Department of Transportation:

MCDOT should consult with MDOT SHA to request the reduction of the existing posted speed limit on Old Frederick Road from 30 mph to 25 mph with the implementation of this project. This road has a 25-mph target speed set within the Master Plan of Highways and Transitways, and is an Urban Area as defined in the Montgomery County Road Code. Given its context and historic urban nature, we request that this potential speed limit reduction be considered as part of MDOT SHA's Context Driven program (a copy of MDOT SHA's current Context Driven brochure is included as Attachment B). The proposed improvements, in our view, will change the context and merit a potential speed limit reduction.

Proposal

Project Description

The Montgomery County Department of Transportation (MCDOT) is proposing to construct a sidepath along the east side of Old Frederick Road (MD 355). The project is being designed for two discontinuous segments, with a southern 835-foot long segment running through Historic Clarksburg from Stringtown Road to Spire Street, and a northern 1,616-feet long section running from 430 feet north of Clarksburg Road to Snowden Farm Parkway. The total project length is 2,451 feet (0.46 miles).

A project location map showing a more regional context and other transportation design projects is provided in Figure 2.



Figure 2: Project Limits – Regional Context and Adjacent CIP Projects

Clearly, MCDOT has been working on a series of interconnected CIP projects in Clarksburg that are focused on improving bicycle and pedestrian connections on both Clarksburg Road and Old Frederick Road. Mandatory Referrals have already occurred for projects 508000-03 (Clarksburg Road at Snowden Farm Parkway) and 508000-09 (Clarksburg Road at MD 355). Old Frederick Road (MD 355) is classified in the Master Plan of Highways and Transitways as a two-lane business district street (with planned BRT in mixed traffic) between Stringtown Road and Snowden Farm Parkway. Currently, Old Frederick Road has narrow shoulders and short segments of sidewalk in the historic Clarksburg segment only. This project will significantly improve bike and pedestrian travel in the historic Clarksburg area.

The project is currently at the 90 percent design phase and the full design and construction of this project (excluding current design work) has been estimated to cost approximately \$6.4 million. The full plan set is attached with this staff report at Attachment A.

Project Background

Old Frederick Road (MD 355) currently is generally characterized as a two-lane (12-foot wide travel lanes) road with mostly very narrow (one to three feet-wide) shoulders. One section in Historic Clarksburg between Clarksburg Square Road and Spire Street has a very wide (12-feet wide) paved shoulder in the northbound direction. At the northern end of the project approaching Snowden Farm Parkway, exclusive left and right-turn lanes are present in the northbound direction. Within historic Clarksburg, there is one 300-foot long stretch along the east side of the road (along three properties identified as 23315, 23321, and 23329 Old Frederick Road) where a five-foot wide sidewalk is provided of varying materials (brick on one property and concrete on the other two). The remainder of the project limits has no sidewalks or sidepaths. The posted speed limit along Old Frederick Road (MD 355) is 30 miles per hour (mph).

Sidepath Design between Stringtown Road and Spire Street

For the southern segment of this project through historic Clarksburg, the proposed 8-foot wide sidepath will have a 6-foot-wide buffer except along the frontage of 23111 Old Frederick Road, and one location at Station 499+70 where the sidepath avoids a utility pole.

Sidepath Design between 467 feet north of Clarksburg Road and Snowden Farm Parkway

The proposed 8-foot wide sidepath will start 467 feet north of Clarksburg Road (connecting to the sidepath being designed as part of the MCDOT Clarksburg Road at MD 355 Intersection project). Between Station 515+21 and 531+37 (a distance of 1,616 feet), the buffer will be 6 feet for most of the length, except for two locations—one between Station 522+89 and 523+80 (91 feet) where a retaining wall is proposed, and the second between Stations 528+60 and 530+25 (165 feet) to avoid impacting a stormwater pond near the MD 355/Snowden Farm Parkway intersection.

Typical Cross Sections – Old Frederick Road

Figures 3 through 5 show the proposed typical cross sections. While all cross sections show varying buffer widths between the curb and the sidepath, the buffer is typically 6' wide except at pinch points.



Figure 3: Proposed Typical Cross Section – South of Clarksburg Road



Figure 4: Proposed Typical Cross Section Design – North of Clarksburg Road



Figure 5: Proposed Typical Cross Section Design – North of Clarksburg Road



Transportation Analysis

Design Elements - Transportation

- <u>General Comment</u>: In general, the **minimum** sidepath width required by Montgomery Planning, consistent with the approved Bicycle Master Plan and the ongoing Complete Streets Design Guideline, is 10'; however, this minimum is reduced to 8' in Special Protection Areas and areas of environmental concern, particularly through Montgomery Parks land. This project passes through two SPAs and through Historic Clarksburg, so the use of the 8' width is acceptable for this project.
- Posted Speed Limit on Old Frederick Road: MCDOT should consult with MDOT SHA to request consideration to reduce the existing posted speed limit on Old Frederick Road from 30 mph to 25 mph with the implementation of this project. This road has a 25 mph target speed set within the Master Plan of Highways and Transitways, and is an Urban Area as defined in the Montgomery County Road Code.

Master Plan Conformance – Transportation

The project is in conformance with the 2018 Bicycle Master Plan and the 2018 Master Plan of Highways and Transitways (MPOHT). The 2018 Bicycle Master Plan recommends a sidepath on the east side of Old Frederick Road between Stringtown Road and Snowden Farm Parkway. It should be noted that this sidepath is planned on the west side of Old Frederick Road to the north of Snowden Farm Parkway, so a protected crossing (signal justified based on pedestrian/bicycle crossing needs) may be needed at this intersection in the future. The 2018 Master Plan of Highways and Transitways classifies Old Frederick Road between Stringtown Road and Snowden Farm Parkway as a two-lane business district street (with BRT in mixed traffic) with a master plan right-of-way of 50 feet. This section of Old Frederick Road is located within the Clarksburg Urban Road Code boundary. Old Frederick Road has a 25-mile per hour master planned target speed assigned by the MPOHT. Note that MPOHT designations on state roads regarding target speed are advisory only.

Historic Resources Analysis

The applicant contacted the Functional Planning and Policy (FPP) division in 2018 for a Mandatory Referral. In consultation with historic preservation staff, the applicant was instructed to conduct further archaeological investigations, consider additional permeable paving, and to revise their drainage plan to avoid known African American archaeological sites. The applicants have made the requested revisions and have been receiving feedback from the Historic Preservation Commission (HPC) regarding the appropriateness of the proposed project. The applicant is required to obtain approval from the HPC via an approved Historic Area Work Permit (HAWP) under the requirements of Chapter 24A of the County Code, as well as achieve compliance with Section 106 of the National Historic Preservation Act. All work done and described as follows has been to undertaken to meet Section 106 and to obtain approval for the HAWP.

Staff is supportive of the applicant's overall proposal. The Clarksburg Master Plan and Hyattstown Special Study Area (1994), which amended the Clarksburg and Vicinity Master Plan (1968), called for an off-street sidepath along the existing road with vegetation against the edges in this location. In addition, the 10 Mile Creek Area Limited Amendment (2014), which amended the Clarksburg Master Plan and Hyattstown Special Study Area (1994) for the Ten Mile Creek Watershed, recommended a shared-use path in this location.

Most of the proposed work will occur within the public right-of-way, where previous alterations (i.e., road and sidewalk construction, road widening, regrading, landscaping) have occurred. In accordance with the Secretary of the Interior's Standards for Rehabilitation #2 and #9, the addition of a shared-use path will not remove or alter character-defining features of the historic district. The introduction and/or replacement of modern transportation features and appurtenances within the public right-of-way will not detract from the district's ability to convey its historical significance. Staff finds that increasing the connectedness of the historic district via a shared use path will create a more cohesive streetscape, with buildings that clearly relate and interact with one another.

Archaeological Investigations in the Project Area

The applicant has conducted archaeological investigations in compliance with Section 106 of the National Historic Preservation Act in consultation with the Maryland Historical Trust (MHT) and with the Montgomery County Historic Preservation Compliance Review Archaeologist. The methods used in investigations were consistent with MHT guidelines and identified five sites within the project area: 18MO742, 18MO743, 18MO744, 18MO745, and 18MO746. Of these, the consultant believed that three (18MO742, 18MO745, and 18MO746) warranted additional testing to determine their eligibility for the National Register of Historic Places (NRHP). Sites 18MO743 (a mid-19th through mid-20th century farmstead) and 18MO744 (a small concentration of late 18th- to 20th-century artifacts associated with the 19th-century residence of John Hurley) were found to have too little material and were too disturbed to retain any archaeological value.

NRHP evaluation testing at 18MO742 (the Neighborhood Site) looked for remains associated with the site of the late 19th-century Clarksburg Methodist Episcopal Church South and parsonage. This site is located on Montgomery County Parks land. The results showed that the site was heavily disturbed, but the consultant did find a small area underneath layers associated with demolition of the church and parsonage that contained early 19th-century artifacts. Based on this finding, the consultant recommended the site eligible for the NRHP. However, MHT did not concur, finding instead that the site yielded too little material and had too little physical integrity to contribute important information to the history of Clarksburg. Neither the Montgomery County Historic Preservation Compliance Review Archaeologist, nor Montgomery County Parks archaeologists dispute MHT's findings.

NRHP evaluation testing at Site 18MO745 (the Sibley Site) investigated possible remains associated with a 19th-century domestic occupation. Testing showed that the site had been heavily disturbed; however, the archaeologists found an infilled cellar with a possible root cellar at its base. The cellar was part of a

house built before 1850 and demolished in the 20th century. The 20th-century fill contained some colonial-era artifacts, and the presence of a possible root cellar at the base of the larger cellar suggested that there might be other early features or artifact deposits buried underneath fill associated with the demolition of the house. Based on that, the consultant recommended the site to be eligible for the NRHP; however, MHT did not agree, arguing that the site is too disturbed and has too little material of interest to be eligible. In any case, the deposits the consultant felt were important are outside the area that would be impacted by construction of the shared use path.

NRHP evaluation testing of Site 18MO746 (the Wims Site) explored remains of a middle 19th-century house occupied by a succession of families including that of John Wims, an African American man who purchased the home in 1892. Testing showed that the site had been too heavily disturbed by demolition in the 20th century to retain any information potential, and MHT concurred with the consultant's recommendation that the site is not eligible for the NRHP. However, MCDOT has been responsive to staff's concerns that any stormwater management facilities or other construction should avoid this site entirely.

Historic Preservation Commission Review

Montgomery County/MCDOT SHA appeared before the Historic Preservation Commission (HPC) at the February 12, 2020 HPC meeting for a preliminary consultation. The applicant's representatives in attendance were Dan Sheridan (Chief of Design Section, Division of Transportation and Engineering, MCDOT), Mark Bodmann (Project Engineer, Design Consultant, Wallace Montgomery), and Scott Rose (Project Manager, Wallace Montgomery). The HPC February 12, 2020 staff report can be viewed at the following link: https://montgomeryplanning.org/wp-content/uploads/2020/02/II.A-Multiple-Addresses-Clarksburg.pdf

The Commission recommended the following (with representative Dan Sheridan's subsequent written responses in BLUE):

- 1. The Commissioners voiced support for the project but provided the following recommendations and comments:
 - a. The proposed Colonial-style light fixtures will detract from the historic district, and alternatives should be explored.

MCDOT consulted with Potomac Edison to find out if there are any other alternatives. Unfortunately, Potomac Edison only have two style, Colonial and Acorn post top. After meeting with members of the Clarksburg Historic District and based on their recommendation, MCDOT selected the Colonial post top. The Colonial post top style will also match with lighting on adjacent projects in Clarksburg area.

b. Explore reducing the height of the retaining wall at 23415 Frederick Road (as depicted on Page 32 of the February 12, 2020 staff report).

The maximum height of the retaining wall is 6 foot above grade.

In order to reduce the height of the wall a design change is needed. The change would require either a reduced path width or a reduced buffer width. A design revision will

also impact current drainage and require redesign effort. MCDOT did investigate a wall height reduction and does not recommend a reduction in either the path or the buffer.

c. Concerns were expressed regarding altering the relationship of houses along Frederick Road to the street, due to the construction of retaining walls in front of the houses. The applicant should explore the introduction of stairs within the retaining walls to retain the relationship.

There currently is no pedestrian access to the front of 23407 and 23415, except across a grass slope. Pedestrian access currently is from the side of both houses (23407 & 23415) and will continue to be from the side. MCDOT can revise the design and add stairs in front of house. However, MCDOT will need to consult with SHA to see if SHA will allow a stair connection through the wall. Also, MCDOT will need to contact with property owners to find and verify if the stair option is preferred.

d. Consider reduction of the paved area and driveway width at 23421 Frederick Road (as depicted on Page 34 of the February 12, 2020 staff report).

MCDOT agreed with your recommendation. Coordination with the current property owner will be needed to reduce the driveway width due the commercial use of the driveway and type of vehicles requiring access.

e. Consider working with property owners to reduce the number of curb cuts and/or combine driveways.

MCDOT will consider your comments. MCDOT Property Acquisition personnel will contact the property owners to determine if driveways can be combined. Also, MCDOT will change the design to reduce the width of the driveways where possible.

f. Explore minimizing the amount of pavement directly adjacent to the proposed shared use path and/or in front of the houses.

MCDOT will review the construction plans and verify if the amount of pavement can reduce. As stated above MCDOT will reduce the driveway widths where possible.

g. Concrete with exposed aggregate should be used in lieu of plain concrete.

Exposed aggregate concrete is not a standard material for sidewalks. Typically, if an owner requests a non-standard material the owner must agree to a Maintenance and Liability agreement. It is unclear what entity would be required to maintain the exposed aggregate. Tinted or stained concrete can be used as an aesthetic alternative.

h. Explore differing border materials along the proposed shared use path to achieve the required 8' minimum width.

The County doesn't recommend combination of materials due to the difficulty of maintenance for the path. Separate materials will cause differential settlement along the edge of the path and will create uneven pavement after couple of years.

i. Consider preserving the existing concrete stair along Frederick Road (as depicted on Page 27 of the February 12, 2020 staff report).

MCDOT agrees with your recommendation. The specification and plans within the contract will be amended to direct the contractor to remove and salvage the existing

stairs. The contractor will coordinate with MNCCCP to have the stairs taken to a preferred location

j. Reduce the height of all proposed retaining walls and soften the retaining walls' appearance, where possible.

Please see response to previous comment regarding the height of retaining walls. Wall heights will be minimized based on adjacent grades. The face of the retaining walls will be changed to a plain concrete as requested. Notes for use of the concrete form liner will be removed. MCDOT recommends consideration be given to the finish due to potential graffiti and other possible abuse on a non-textured surface.

The Historic Preservation Commission recommended that the applicants return for a second preliminary consultation prior to filing their final HAWP application. The applicants stated that they would coordinate with the HPC staff and supervisor for further instruction after the Planning Board hearing for the Mandatory Referral.

Environmental Analysis

Environmental Guidelines

A Natural Resources Inventory and Forest Stand Delineation (NRI/FSD) #420182000 was approved by Staff on February 8, 2019. A Forest Conservation Application was submitted as part of a Mandatory Referral application.

Forest Conservation

The Application meets the requirements of Chapter 22A of the Montgomery County Forest Conservation Law. See the Forest Conservation staff report (Part A) for a complete analysis.

The Application proposes to remove approximately 1.18 acres and retain 0.00 acres of the 1.18 acres of existing forest on the Property, resulting in a 1.55-acre planting requirement. Approximately 0.48 acres of the forest clearing is necessary for the stream restoration work and that forest will be replanted after the work is complete. The Applicant proposes to meet the remaining 1.07 acre forest planting requirement through purchasing credits in an offsite forest conservation bank.

Water Quality

This project is located within the Ten Mile Creek and the Clarksburg Special Protection Areas and on publicly owned property, so it is required to obtain approval of a water quality plan under Section 19-62(c) of the Montgomery County Code. This section of the code states:

(c) Publicly owned property. Before engaging in any land-disturbing activity on publicly owned property in an area designated as a special protection area, the applying agency or department should prepare a combined preliminary and final water quality plan.

As part of the requirements of the Special Protection Area law, a SPA Water Quality Plan should be reviewed in conjunction with a Mandatory Referral. Under Section 19-65, the provision of the law, the Montgomery County Department of Permitting Services (MCDPS) and the Planning Board have different responsibilities in the review of a Water Quality Plan. MCDPS has reviewed and conditionally approved the elements of the Water Quality Plan under its purview. The Planning Board's responsibility is to determine if environmental buffer protection, SPA forest conservation and planting requirements, and limits on impervious surfaces have been satisfied.

MCDPS Special Protection Area Review Elements

In a letter dated April 18, 2019 (later revised via email), MCDPS has conditionally approved the elements of the SPA Preliminary/Final Water Quality Plan under its purview.

Planning Board Special Protection Area Review Elements

The Application meets all applicable requirements of Chapter 19, the Environmental Guidelines, the Clarksburg SPA, and the 10 Mile Creek Area Limited Amendment Master Plan. The Application meets the requirements of Chapter 22A of the Montgomery County Forest Conservation Law. See the Forest Conservation staff report (Part A) for a complete analysis.

Montgomery Parks Analysis

Due to limited right-of-way, nearby natural resources, and historic protections in the project area, locations for potential environmental site design storm water management practices for this site are extremely limited. An estimated cost to provide SWM for points of investigation 2-5 in this project was applied to an outfall improvement project to be performed in the same watershed in order to meet SWM requirements. The proposed outfall improvement will be built at approximate Sta. 507+50 Lt. at the southeast corner of the intersection of Frederick Road (MD 355) and Clarksburg Road (MD 121) in a channel that ultimately discharges to the same unnamed tributary to Ten Mile Creek as POIs 2-5. Both conceptual and technical designs for the channel work associated with this outfall were reviewed by staff from Montgomery Parks and the proposed improvements will provide channel stabilization and improved floodplain access, translating to water quality improvements downstream.

Community Outreach and Notification

This application was noticed in accordance with the Uniform Standards for Mandatory Referral Review. MCDOT held a public meeting for this project at Little Bennett Elementary School on November 7, 2018.

Conclusion

Based on information provided by the applicant and the analysis contained in this report, staff concludes that the proposed MD 355 – Clarksburg Shared Use Path Improvements project can be designed as submitted one comment for future actions by the applicant as detailed on pages 3 and 4 of this staff report.

Attachment

A. Proposed Project Plans

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	MAR 3 0 2018	
DEP. Isiah Leggett	ARTMENT OF PERMITTING SERVICES	Jones DIVISION OF T
County Executive	Director March 26, 2018	
Mr. Charles Main II Wallace Montgomery 10150 York Road, Suite 200		
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	MD 355 Mixed Use Path Preliminary Plan #, N/A SM File #, 283643 Trad Sim/Zone, 1 A percet/CP	
Dear Mr. Main	Total Concept Area; 1.4 acres Watershed: Little Seneca and Ten Mile Cro Special Protection Areas	
Based on a review by the D Water Quality Plan for the above-m meet required stormwater manager and 48° outfalls at the west side of of the Water Quality Plan of which t	Department of Permitting Services Review Staff, the Preliminary/F ientioned site is acceptable. The Water Quality Plan proposes to ment goals via micro bioretention and outfall improvements for the the MD 355 and MD 121 intersection. This approval is for the eler OPS has lead agency responsibility, and does not include limits or	Final e 36° ments n
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Page 2		C.I.P. PROJECT NO. 501744
reevaluate the site for additional or subsequent additions or modification	r amended stormwater management requirements. If there are ons to the development, a separate concept request shall be requ	uired. MD 355 (FREDERICK ROAD)
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MCE Ing CC: N. Braunstein SM File # 283643 CC: N. Braunstein SM File # 283643 CC: N. Braunstein SM File # 283643 CE te completed by the consultant and placed on the fire plan set for Exempt: Yes No f f exempt under applicable exemption category below. Total Property Area 	Sincerely. Mark C. Ethordge, Manager Water Resources Section Ethordse Manager Water Resources Section Ethordse to the Sediment Control / Stormwater Management Section 55-5 of the Code, please check the Total Disturbed Areasquare feet Shade Trees Proposed to be Planted er of Shade Trees s Number of Shade Trees Required 3 6 9 12 15 Ethordse to the sequired provide the sequired permits: 3 6 of Disturbance is more than 40,000, then the functuated using the following formula: s of Disturbance \$40,000\$ × 15 ON CATEGORIES: maintenance has obtained all required permits: 55-5(f) any stream restration project if the person performing the work has obtained all necessary permits: 55-5(f) curing or clearing any tree to comply with encoded to the permite to comply with encoded to the permite ocomply wi	CLP. PROJECT NO. 508000 CLARKSBURG ROAD STA. 515+21 LIMIT OF WORK C.I.P. PROJECT NO. 501744 MD 355 (FREDERICK ROAD) STA. 503+64: C.I.P. PROJECT NO. 508000 CLARKSBURG ROAD STA. 503+64 LIMIT OF WORK C.I.P. PROJECT NO. 501744 MD 355 (FREDERICK ROAD) STA. 503+64 C.I.P. PROJECT NO. 501744 MD 355 (FREDERICK ROAD) SHARED USE PATH STA. 495+29 CALE : 1"= 2000 OWNER'S DEVELOPER'S CERTIFICATION I/WE HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION AND DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CER ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TR FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE F DATE IMOTHY H. CUPPLES, P.E. CHIEF, DIVISION OF TRANSPORTATION DATE IMOTHY H. CUPPLES, P.E. CHIEF, DIVISION OF TRANSPORTATION DATE IMOTHY H. CUPPLES, P.E. CHIEF, DIVISION OF TRANSPORTATION CONTROL OF SEDIMENT AND SEEN PREPARED IN ACCORDANC "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AT CONTROL", MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES OF AND TRANSPORTATION "DRAINAGE DESIGN" DATED NOVEMBER, 2013 (
MCE Ing CC: N. Braunstein SM File # 283643 CC: N. Braunstein SM File # 283643 CTOTAL Property Area	Sincerely. Mark C. Etherfuge, Manager Mark C. Etherfuge, Mark Mark C	CLP. PROJECT NO. 508000 CLARKSBURG ROAD STA. 515+21 LIMIT OF WORK CLP. PROJECT NO. 501744 MD 355 (FREDERICK ROAD) STA. 503+64= CLP. PROJECT NO. 508000 CLARKSBURG ROAD STA. 503+64 LIMIT OF WORK CLP. PROJECT NO. 508000 CLARKSBURG ROAD STA. 503+64 LIMIT OF WORK MD 355 (FREDERICK ROAD) STA. 503+64 CLP. PROJECT NO. 501744 MD 355 (FREDERICK ROAD) SHARED USE PATH STA. 495+29 VEXT Y OWNER'S DEVELOPER'S CERTIFICATION Ive HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION AND DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CER ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TR FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE P DATE IMOTHY H. CUPPLES, P.E. CHEF, DIVISION OF TRANSPORTATION DESIGN CERTIFICATIONS AND SPECIFICATIONS FOR SOIL FROSION AND CONTROL", MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES OF AND TRANSPORTATION "DRAINAGE DESIGN" DATED NOVEMBER, 2013 (REGULATIONS 5–90, 7–02AM AND 36–90, AND MONTGOMERY COUNTY DE
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9/16/2019 M:\PR0J\214013.0010\Highways_Cadd_\pGN-T000_MD355.dgn

www.WallaceMontgomery.com

A Limited Liability Partnership

240-777-7224

IONTGOMERY COUNTY TRANSPORTATION 'I'RANSPO 855 - CLARKSBURGSHARED USE PATH 495+29 TO STA. 531+37 L. I. P. PROJECT NO. 501744 **90% SUBMITTAL**



RUCTION AND/OR THAT ANY RESPONSIBLE HAVE A CERTIFICATE OF PROVED TRAINING PROGRAM NNING THE PROJECT.

SPORTATION ENGINEERING

ACCORDANCE WITH THE EROSION AND SEDIMENT IG SERVICES EXECUTIVE BER, 2013 (REV. JUNE 10,2014) Y COUNTY DEPARTMENT

> I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 31487, EXPIRATION DATE: 03/18/2021

ATTENTION

THIS SITE IS WITHIN THE ENVIRONMENTALLY SENSITIVE

CLARKSBURG SPECIAL PROTECTION AREA

TO HELP PROTECT THE DELICATE AQUATIC HABITAT FROM THE IMPACTS OF LAND DEVELOPMENT

THESE PLANS MUST BE STRICTLY ADHERED TO

IF THERE IS A PROBLEM, CALL

LEO GALANKO _{AT} 240-777-6242

AND THE MCDPS STAFF MEMBER WILL ASSIST YOU

IN DEVELOPING A SOLUTION BEFORE STREAM IMPACTS OCCUR

(MENTION THAT THE SITE IS WITHIN A SPECIAL PROTECTION AREA WHEN YOU CALL)

"LET'S WORK TOGETHER TO KEEP IT CLEAN"

OWNER/DEVELOPER

ACKNOWLEDGED TIMOTHY H. CUPPLES, P.E.

MARK J. BODMANN, P.E

DATE

A

CERTIFICATION OF QUANTITIES I HEREBY CERTIFY THAT THE ESTIMATED TOTAL AMOUNT OF EXCAVATION AND FILL AS SHOWN ON THESE PLANS HAS BEEN COMPUTED TO BE 7305 CUBIC YARDS OF EXCAVATION AND 400 CUBIC YARDS OF FILL AND THAT THE TOTAL AREA TO BE DISTURBED AS SHOWN ON THESE PLANS HAS BEEN DETERMINED TO BE XXXX SQUARE FEET.

DATE

DATE

MONTGOMERY COUNTY DOT MAINTENANCE CERTIFICATION I HEREBY CERTIFY THAT THE DEPARTMENT OF TRANSPORTATION WILL ASSUME MAINTENANCE RESPONSIBILITIES FOR ALL STORMWATER MANAGEMENT FACILITIES AS LISTED AND SHOWN, HEREON, IN ACCORDANCE WITHTHE MEMORANDUM OF UNDERSTANDING BETWEEN THIS DEPARTMENT AND THE DEPARTMENT OF ENVIRONMENTAL PROTECTION DATED SEPTEMBER 1, 1986. IF, FOR ANY REASON, FUTURE IMPROVEMENTS TO THE ROADWAY ARE PLANNED THAT WOULD IMPACT ANY OF THE STORMWATER MANAGEMENT FACILITIES INCLUDED HEREIN, THIS DEPARTMENT WILL NOTIFY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION DURING THE PLANNING OR EARLY DESIGN STAGE OF SUCH IMPROVEMENTS.

DEPAR 100 EDIS GAI RECOMMENDED FOR APPROVAL Chief, Design Section APPROVED Chief, Division of Engineering Services Designed by : J.D.W.

RELATED	REQUIRED	PERMITS

To be completed by the consultant and placed on the first sheet of the Sediment Control/Stormwater Management plan set for all projects. IT IS THE RESPONSIBILITY OF PERMITTEE/OWNER OF THIS SITE TO OBTAIN ALL REQUIRED PERMITS PRIOR TO ISSUANCE OF THE APPROVED

SEDIMENT CONTROL PERMIT						
		NOT			WORK RESTRICTION	
TYPE OF PERMIT	REQ'D	REQ'D	PERMIT NO.	EXPIRATION DATE	DATES	
MCDPS Floodplain District		Х				
WATERWAYS/WETLAND(S)						
a. Corps of Engineers	Х					
b. MDE	Х					
c. MDE Water Quality		v				
Certification		^				
MDE Dam Safety		Х				
* DPS Roadside Trees	v			APPROVAL DATE		
Protection Plan	^					
N.P.D.E.S.	v				DATE FILED	
NOTICE OF INTENT	^					
FEMA LOMR (Required		v				
Post Construction)		^				
OTHERS:						
M-NCPPC - CONSTRUCTION	Х					
MSHA ACCESS PERMIT	Х					
DNR - ROADSIDE TREE PERMIT	Х					

* A copy of the approved Roadside Trees Protection Plan must be delivered to the sediment control inspector at the preconstruction meeting.

MONTGOMERY COUNT PERMITTING SERVICE	NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED FOR A MCDPS ACCESS PERMIT.			
Stormwater Management:	Sediment Control Technical Requirements:		Administrative Requirements:	
			Reviewed Date	
	Reviewed	Date		
			SEDIMENT CONTROL PERMIT NO.	
Reviewed Date	Approved	Date		
Approved Date				
			MCDPS APPROVAL OF THIS PLAN WILL EXPIRE	
SM FILE #			THE PROJECT HAS NOT STARTED.	

DPS approval of a sediment control or stormwater management plan is for demonstrated compliance with minimum environmental runoff treatment standards and does not create or imply any right to divert or concentrate runoff onto any adjacent property without that property owner's permission. It does not relieve the design engineer or other responsible person of professional liability or ethical responsibility for the adequacy of the drainage design as it affects uphill or downhill properties

PLAN LOCATION OF SOIL BORING

SOIL BORING LOG SUMMARY SHEETS ARE INCLUDED IN THE INVITATION FOR BIDS BOOK.

GLENN MARSCHKE, P.E. SENIOR ASSOCIATE, WALLACE MONTGOMERY

TIMOTHY H. CUPPLES, P.E. CHIEF, DIVISION OF TRANSPORTATION ENGINEERING						
MONTGOMERY COUNTY TMENT OF TRANSPORTATION SON PARK DRIVE, 4TH FLOOR THERSBURG MD 20878		DR	TITLE SHEET			
Date		e	MD 355 - CLARKSBUR SHARED USE PATH	G		
3	Date	e	SCALE : NO SCALE	09/2019		
awn by: J.D.W.	Checked by :	S.R.R.	Project No. : C.I.P. PR. # 501744 SHEET 01 of 88			

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<u>NO.</u>	<u>DESIGNATION</u>	DESCRIPTION
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3	GN 01 OF 01	GENERAL NOTES AND DEFINITIONS
4	TS 01 OF 01	TYPICAL SECTIONS
5	DE 01 OF 01	PAVEMENT DETAILS
6	CR 01 OF 01	CURB ELEVATIONS AND OFFSETS
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8	PS 01 OF 07	ROADWAY PLAN - STA. 495+29 to STA. 498+00 (MD 355)
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13	PS 06 OF 07	ROADWAY PLAN — STA. 523+50 TO STA. 528+00 (MD 355)
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26	DP US UF US	DRAINAGE PRUFILE
21	SC 01 0F 19	ERUSIUN AND SEDIMENT CUNTRUL NUTES AND DETAILS
28	SU UZ UF 19 SC 03 OF 10	ERUSION AND SEDIMENT CONTROL NOTES AND DETAILS
29	SC 03 OF 19	ERUSION AND SEDIMENT CONTROL NOTES AND DETAILS INITIAL EROSION AND SEDIMENT CONTROL PLAN $-$ STA 495+29 TO STA 498+00 (MD 355)
30	SC 04 01 13	INITIAL EROSION AND SEDIMENT CONTROL PLAN $= STA + 455+25 + 10 + 56 + 00 + 100 + 555 + 100 + 50$
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32	SC 00 01 13	INITIAL EROSION AND SEDIMENT CONTROL PLAN $=$ STA: 501450 TO STA: 503400 (MD 355)
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35	SC 09 DF 19	INITIAL EROSION AND SEDIMENT CONTROL PLAN - STA. 523+50 TO STA. 528+00 (MD 355)
36	SC 10 OF 19	INITIAL EROSION AND SEDIMENT CONTROL PLAN - STA, 528+00 TO STA, 531+37 (MD 355)
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41	SC 15 OF 19	FINAL EROSION AND SEDIMENT CONTROL PLAN - STA. 514+50 TO STA. 519+00 (MD 355)
42	SC 16 OF 19	FINAL EROSION AND SEDIMENT CONTROL PLAN - STA. 519+00 TO STA. 523+50 (MD 355)
43	SC 17 OF 19	FINAL EROSION AND SEDIMENT CONTROL PLAN - STA. 523+50 TO STA. 528+00 (MD 355)
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FOR ALL CONSTRUCTION WITHIN THE STATE OF MD RIGHT-OF-WAY THE CONTRACTOR SHALL REFER TO THE SHA BOOK OF STANDARDS WHICH CAN BE ACCESSED AT: HTTP://APPS.ROADS.MARYLAND.GOV/BUSINESSWITHSHA/BIZSTDSPECS/DESMANUALSTDPUB/PUBLICATIONSONLINE/OHD/BOOKSTD/INDEX/ASP.

THE FOLLOWING L	IST OF STANDARDS SHALL BE USED WITHIN THIS PROJECT:
STD. NO.	
MD 356.01	STANDARD TYPE E ENDWALL METAL OR CONCRETE ROUND PIPE
MD 368.01	STANDARD CONCRETE END SECTION ROUND CONCRETE PIPE
MD 374.51	PRECAST OR CAST IN PLACE SQUARE AND RECTANGULAR COG INLETS 5', 10', 15' & 20'
MD 374.55	PRECAST CONCRETE INLET SLABS AND ADJUSTMENT COLLARS FOR COG AND COS INLETS
MD 374.61	PRECAST OR CAST IN PLACE SQUARE AND RECTANGULAR COS INLETS 5', 10', 15' & 20'
MD 374.68	PRECAST OR CAST-IN-PLACE COG/COS OPENING FOR 8" CURB 5' OR 10' ONLY
MD 378.03	STANDARD SINGLE OR DOUBLE OPENING TYPE K INLET OPEN-END GRATE NON-TRAFFIC AREA
MD 383.00	48" SQUARE STANDARD SHALLOW MANHOLE
MD 578.01	REPAIRING PAVEMENT OPENINGS FOR UTILITY TRENCHES
MD 580.03	NEW COMBINATION CURB AND GUTTER PLACEMENT ALONG EXISTING PAVEMENT
MD 580.08	DRIVEWAYS AND BIKE PATHS PAVEMENT SECTIONS
MD 620.02	STANDARD TYPES A & B CONCRETE CURB AND COMBINATION CONCRETE CURB & GUTTER
MD 620.03	DEPRESSED CURB FOR COMBINATION CURB AND GUTTER AND DEPRESSED CURB FOR SIDEWALI
MD 630.02	STANDARD ENTRANCE CONSTRUCTION RESIDENTIAL & COMMERCIAL METHOD NO. 2
MD 635.01	MAILBOX PLACEMENT DETAILS
MD 655.11	SIDEWALK RAMPS PERPENDICULAR
MD 655.40	DETECTABLE WARNING SURFACES
MD 657.00	STANDARD STAIRWAYS
SUP-FR(FN)-302	TYPE III CHAIN LINK FENCE
REBAR-BL-101	BAR LAP FOR MIX 3 CONCRETE, GRADE 60 REBAR
REBAR-DL-101	DEVELOPMENT LENGTH FOR MIX 3, GRADE 60 REBAR
REBAR-BB-102	REBAR HOOKS

-IN-PLACE COG/COS OPENING FOR 8" CURB 5' OR 10' ONLY OR DOUBLE OPENING TYPE K INLET OPEN-END GRATE NON-TRAFFIC AREAS DARD SHALLOW MANHOLE MENT OPENINGS FOR UTILITY TRENCHES N CURB AND GUTTER PLACEMENT ALONG EXISTING PAVEMENT IKE PATHS PAVEMENT SECTIONS A & B CONCRETE CURB AND COMBINATION CONCRETE CURB & GUTTER FOR COMBINATION CURB AND GUTTER AND DEPRESSED CURB FOR SIDEWALK RAMPS NCE CONSTRUCTION RESIDENTIAL & COMMERCIAL METHOD NO. 2 ENT DETAILS PERPENDICULAR NING SURFACES AYS LINK FENCE < 3 CONCRETE, GRADE 60 REBAR</pre> NGTH FOR MIX 3, GRADE 60 REBAR RW-301 DRAINAGE SYSTEM NOTE: ALL ITEMS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT VERSION OF THE REFERENCED STANDARD AT THE TIME OF CONSTRUCTION. NTGOMERY COUNTY PLAN SHEET INDX-01 MENT OF TRANSPORTATION ON PARK DRIVE, 4TH FLOOR **INDEX OF SHEETS** IERSBURG, MD 20878 MD 355 - CLARKSBURG Date SHARED USE PATH Date SCALE : NO SCALE 09/2019 by: J.D.W. Checked by: S.R.R. Project No.: C.I.P. PR, # 501744 SHEET 02 of 88

Ç	90% SUBM	ITTAL	-	MONTGOMERY COU DEPARTMENT OF TRANSF 100 EDISON PARK DRIVE, GAITHERSBURG, MD
C	ATUM: NAD 83/91 H NAVD 88 VER	ORIZONTA TICAL	L	RECOMMENDED FOR APPROVAL
				APPROVED
D.	REVISION	DATE	BY	Designed by : J.D.W. Drawn by : J.D.W.
				PLOTTED: 9/16/2019 FILE: M:\PROJ\214013.0010\Highways_Cadd_\pGN—1001_MD355.dgn

GENERAL NOTES

- I. THE SPECIFICATIONS FOR THIS CONTRACT WILL BE THOSE OF THE MARYLAND STATE HIGHWAY ADMINISTRATION DATED JULY 2011, ALL ERRATA AND ADDENDA THERETO. THE MARYLAND STATE HIGHWAY ADMINISTRATION BOOK OF STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES. WASHINGTON SUBURBAN SANITARY COMMISSION (W.S.S.C.) STANDARDS. MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION STANDARDS, AND SOIL CONSERVATION SERVICE POND CONSTRUCTION SPECIFICATIONS FOR MARYLAND.
- 2. FOR CONSTRUCTION, ALL HORIZONTAL CONTROL SHALL BE STATE HIGHWAY ADMINISTRATION NAD 83/91AND VERTICAL CONTROL NAVD 88.
- 3. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATIONS OF THE LINES BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF TRENCHING. IF CLEARANCES ARE LESS THAN SHOWN ON THIS PLAN OR SIX (6) INCHES. WHICH-EVER IS LESS, THE CONTRACTOR SHALL CONTACT THE MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION'S PROJECT INSPECTOR AND THE UTILITY OWNER BEFORE PROCEEDING WITH CONSTRUCTION.
- 4. CALL "MISS UTILITY" AT I-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE. REPAIRS TO UTILITIES OR PROPERTY DAMAGED AS A RESULT OF THE CONTRACTOR'S NEG-LIGENCE OR METHOD OF OPERATION, MUST BE MADE AT THE CONTRACTOR' EXPENSE WITHOUT ADDITIONAL COST TO MONTGOMERY COUNTY BEFORE PROCEEDING WITH CONSTRUCTION.
- 5. GRADING SHALL BE DONE IN SUCH A MANNER AS TO PROVIDE POSITIVE DRAINAGE IN BOTH TEMPORARY AND PERMANENT CONDITIONS.
- 6. DISTURBED AREAS ADJACENT TO ESTABLISHED LAWNS SHALL BE SODDED. OTHER DISTURBED AREAS SHALL BE SEEDED AND MULCHED.
- 7. CLEARING TO BE LIMITED TO THE "LIMIT OF DISTURBANCE" AS SHOWN ON THE PLANS.
- 8. CONTACT THE WASHINGTON SUBURBAN SANITARY COMMISSION SYSTEM MAINTENANCE ENGINEER BEFORE EXCAVATING BENEATH OR IN THE VICINITY OF EXISTING WATER OR SEWER LINES. BACKFILL TO BE DONE UNDER THE SUPERVISION OF W.S.S.C., CALL (301) 699-4420
- 9. ALL STORM DRAINS SHALL BE INSTALLED WITH CLASS "C" BEDDING UNLESS OTHERWISE NOTED.
- IO. ALL UTILITY POLES NOTED FOR RELOCATION SHALL BE PERFORMED BY OTHERS.
- II. THE CONTRACTOR SHALL OBTAIN A ROADSIDE TREE PERMIT FOR ANY MAINTENANCE, TREAT-MENT, PLANTING, REMOVAL OR ROOT CUTTING ON TREES WITHIN THE PUBLIC RIGHT-OF-WAY BEFORE STARTING A JOB. PERMIT REQUIREMENTS MAY BE OBTAINED FROM THE DEPARTMENT OF NATURAL RESOURCES - MARYLAND FOREST, PARK AND WILDLIFE SERVICE WHOSE TELE-PHONE NUMBER IS (301) 854-6060. THE PERMIT PROCESS TAKES SEVERAL DAYS. TAKE THIS INTO CONSIDERATION BEFORE STARTING A JOB.
- 12. THE LOCATION OF RIGHT-OF-WAY AND EASEMENT LINES SHOWN ON THE PLANS ARE FOR INFORMATION AND GUIDANCE ONLY. NO GUARANTEE IS MADE AS TO THE ACCURACY OF SAID LOCATIONS. PLEASE REFER TO THE APPROPRIATE RIGHT-OF-WAY PLAT FILES NO. 776 TO 781.
- 13. CONCRETE DESIGN: SERVICE LOAD DESIGN METHOD.
- 14. REINFORCING STEEL DESIGN: (fs=24,000 PSI)
- 15. ALL CONCRETE SHALL BE MIX NO.2 f'c=3000 psi UNLESS OTHERWISE NOTED.
- IG. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60. ALL SPLICES, NOT SHOWN, SHALL BE LAPPED AS PER ACI 318 REQUIREMENTS. MINIMUM COVER FOR ANY BAR SHALL BE 2" UNLESS OTHERWISE NOTED.
- 17. When the drop of the main line through a structure is greater than that which can be ACCOMMODATED BY A SHAPED CHANNEL WITH THE INVERT ON A 1.5 FOOT HORIZONTAL TO IFOOT VERTICAL SLOPE, THE BOTTOM OF THE STRUCTURE SHALL BE LINED WITH GRANITE BLOCKS AT LEAST 4 INCHES THICK. NO SHAPED CHANNEL WILL BE REQUIRED FOR THIS TYPE OF CONSTRUCTION, BUT THE BOTTOM OF THE STRUCTURE SHALL SLOPE AT LEAST $\frac{1}{2}$ INCH PER FOOT TOWARD THE INVERT OF THE OUTLET PIPE.
- ¹⁸. For additional notes on drainage structures and retaining walls see notes elsewhere in PLANS.
- ¹⁹, where curb and gutter ends are exposed, provide a nose down section at 3:1 slope.
- 20. DISTURBED AREAS TO BE PERMANENTLY GRASS SHALL RECEIVE 2" OF TOPSOIL.
- 21. STORM DRAIN AND UTILITY INSTALLATION WITHIN SHA RIGHT-OF-WAY AND IN EXISTING PAVEMENT SHALL BE IN ACCORDANCE WITH MD 578.01. ALL COSTS ASSOCIATED WITH MEETING THE REQUIREMENTS OF MD 578.0I SHALL BE INCIDENTAL TO THE APPLICABLE UTILITIES AND STORN DRAIN ITEMS.
- 22. SUBSURFACE INVESTIGATION RESULTS (TEST HOLES, SOIL BORINGS, ETC.) WILL BE MADE AVAILABLE TO THE CONTRACTOR.
- 23. PROPOSED INLETS AND ASSOCIATED PIPE EXTENSIONS SHALL BE CONNECTED TO THE NEAREST SOUND JOINT OF THE EXISTING PIPE AND IN COMPLIANCE WITH THE CONCRETE COLLAR CONNECTION DETAIL SHOWN ON THE STORM DRAIN SCHEDULE SHEET. PIPE CONNECTIONS WHETHER NEW PIPES TO EXISTING PIPES, NEW INLETS TO EXISTING PIPES, OR NEW PIPES TO EXISTING INLETS WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCIDENTAL TO PERTINENT STORM DRAIN ITEMS.
- 24. NOTIFY MR. TONY GOODMAN (703) 750-4708 OF WASHNGTON GAS, FOR STAND BY, 48 HOURS PRIOR TO ANY EXCAVATION IN THE VICINITY OF NATURAL GAS TRANSMISSION LINES.
- 25. ANY RELOCATION OF EXISTING NATURAL GAS TRANSMISSION LINES MAY ONLY BE ABLE TO BE PERFORMED DURING THE NON-HEATING SEASON, MAY THROUGH SEPTEMBER.

EXPLANATORY NOTES AND REFERENCES

SIGHT DISTANCES: STOPPING SITE DISTANCES FOR VERTICAL CREST CURVES ARE BASED ON A HEIGHT OF EYE OF 3.5' AND A HEIGHT OF OBJECT OF 2'-O".

PIPE CULVERTS: ALL PIPE LENGTHS AND LOCATIONS SHALL BE VERIFIED IN THE FIELD AND CHECKED BY THE ENGINEER BEFORE ORDERING.

INVERT ELEVATIONS: ALL INVERT ELEVATIONS HAVE BEEN CALCULATED WITH THE MOST RELIABLE DATA AVAILABLE, FIELD CHANGES WILL BE AT THE DIRECTION OF THE ENGINEER.



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CONVENTIONAL SIGNS

PROPOSED MEDIAN BARRIER		
ELECTRICAL HAND BOX - SIGNALS	ABUT -	ABUTMENT
EXISTING GROUND LINE	ACCT.NO	ACCOUNT NUMBER
PROPOSED TRAFFIC BARRIER	APPROX	APPROXIMATE
EXISTING TRAFFIC BARRIER	ASPH -	ASPHALT SURFACE
FENCE LINE ····································	BK	ВАСК
EXISTING RIGHT OF WAY LINE	B	BASELINE
PROPOSED RIGHT OF WAY LINE	BLVD -	BOULEVARD
	BRG	BEARING, BORING
FXISTING ROADWAY	B.R.L	BUILDING RESTRICTION LINE
	CATV -	CABLE TV
BASE OR SURVEY LINE	Ģ –	CENTERLINE
FIRE HYDRANT	CONC	CONCRETE
PROPOSED CULVERT	CMP -	CORRUGATED METAL PIPE
EXISTING CULVERT	CORR	CORRECTION (V.C.)
EXISTING DROP INLET	CSW -	CONCRETE SIDEWALK
UTILITY POLE	CSXT -	CSX RAILROAD
EXISTING CURB & GUITER ····································	C.Y. –	CUBIC YARDS
WETLAND	Dc -	DEGREE OF CURVE
HEDGE ······	DELTA -	CENTRAL ANGLE (CURVE DATA)
WATER LINE	DEV -	DEVELOPMENT
SANITARY SEWER LINE	DIA	DIAMETER
GAS LINE	DI –	EXISTING DRAIN INLET
SOIL BORING TARGET	E -	EXTERNAL DISTANCE (CURVE DATA)
	EA. –	EACH
TEST PIT LOCATION	E.B.R	EAST BOUND ROADWAY
M.H.	FLEV.EL -	FI EVATION
EXISTING SANITARY MANHOLE	EX., EXIST, -	EXISTING
EXISTING STODM DRAIN MANUALE	EXP -	EXPANSION
EXISTING STORM DRAIN MANHOLE	EXT.	
WATERS OF U.S. (AND ID NUMBERS)	F/0 -	
\mathbf{X}	F 215 -	
STORMDRAIN STRUCTURE IDENTIFICATION	HI –	
	- INIV –	
	IINV.	
MAINIENANCE OF TRAFFIC NOTES		
I. ALL VEHICULAR AND PEDESTRIAN TEMPORARY TRAFFIC CONTROL ACTIVITIES SHALL ADHERE TO THE	LBS -	
MARYLAND STATE HIGHWAY ADMINISTRATION'S (MSHA) BOOK OF STANDARDS FOR HIGHWAY,		LINEAR FEET
INCIDENTAL STRUCTURES AND TRAFFIC CONTROL APPLICATIONS.	L0 -	LOW POINT
2. CONSTRUCTION ACTIVITIES IMPACTING VEHICULAR TRAVEL ALONG MD 117 (CLOPPER ROAD) SHALL BE REFERENCED LISING DAY-TIME STANDARD SHOLL DER (ALIXILLARY LANE) AND LANE CLOSURE	LI	
FLAGGING OPERATIONS. REFER TO THE ALLOWABLE LANE CLOSURE SCHEDULE IN THE SPECIAL	L.5660 -	LIBER
PROVISIONS FOR SPECIFIC ALLOWABLE WORKING DAYS AND TIMES.	MAX	MAXIMUM
3. EXISTING BUS STOP AND DRIVEWAY ACCESS SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR	MC -	MONIGOMERY COUNTY
PROVISIONS DURING CONSTRUCTION.	MD -	MARYLAND
A ACCESS TO EXISTING DEDESTRIAN FACILITIES SUALL DE MAINITAINED DURING CONSTRUCTION	M.H., MH -	MANHOLE
ONLY ONE CORNER OF AN INTERSECTION AND ONE PEDESTRIAN CROSSING ACCESS MAY BE CLOSED	MIN. –	MINIMUM
AT A TIME, AND PERMANENT SIDEWALK CLOSURES SHOULD BE MINIMIZED.	MOD. –	MODIFIED
	MSE -	MECHANICAL STABILIZED EARTH
FIELD SUKVET NUIES	N.B.R	NORTH BOUND ROADWAY
I. TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED BY WALLACE MONTGOMERY DECEMBER	N.D.C	NUSE DOWN CURB
19—21, 2016, SUPPLEMENTAL SURVEYS WERE PERFORMED JANUARY-MARCH 2017.	NO	NUMBER
2. GANNETT FLEMING TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED BY MERCADO	NORM	NURMAL
CONSULTANTS AFRIL ZUTT.	NKI -	NATURAL RESUURCE INVENTORY Forest stand defineation
3. TOPOGRAPHIC INFORMATION SHOWN ALONG THE NORTHBOUND SIDE OF MD355 FROM STA. 500+10+ TO STA 502+10+ IS FROM CONSTRUCTION DRAWINGS DATED SEPTEMBER 2015 FOR	N.S	NEAR SIDE
THE CLARKSBURG CONNECTOR PROJECT AND MAY NOT REPRESENT CURRENT EXISTING	NTS -	NOT TO SCALE

- I. TOPO 19-2
- 2. GANN CON

3. TOP 500 THE CONDI CONDITIONS, CONSTRUCTION DRAWINGS DATED SEPTEMBER 2015 FOR THE CLARKSBURG CONNECTOR PROJECT PROVIDED BY MCDOT,

	90% SUBN	IITTAL	_	D 100	MONTGC EPARTMENT EDISON PA GAITHERSE)MERY C OF TRAN RK DRIV BURG, M	OUNTY ISPORTATION E, 4TH FLOO D 20878	DR	PLAN SHE GENERAL NOTES	ET GN-C)1 FINITI	ONS
	DATUM: NAD 83/91 H NAVD 88 VEF	HORIZONTA RTICAL	L	RECOMMENDED FOR APPROVA Chief, Design Section APPROVED	-		Dat	e	MD 355 - CLARKSBUR			RG
 NO.	REVISION	DATE	BY	Chief, Division of Engineering	Services Drawn by :	J.D.W.	Dat	s.R.R.	SCALE : NO SCALE Project No. : C.I.P. PR. # 501744	SHEET 0	3 of	09/201 88

ABBREVIATIONS

P/C	_	POINT OF CROWN
P.C.	_	POINT OF CURVATURE
P.C.C.	_	POINT OF COMPOUND CURVATURE
P/GE	_	PROFILE GRADE ELEVATION
P.G.L.	_	PROFILE GRADE LINE
P/GL	_	PROFILE GROUND LINE
PIE	_	PUBLIC IMPROVEMENT EASEMENT
P.I.	_	POINT OF INTERSECTION
PROP.	_	PROPOSED
P.S.I.	-	POUNDS PER SQUARE INCH
P.S.F.	_	POUNDS PER SQUARE FOOT
P.O.B.	_	POINT OF BEGINNING
P.O.E.	_	POINT OF ENDING
P/R	_	POINT OF ROTATION
P.P.C.C.	_	PLAIN PORTLAND CEMENT CONCRETE
РТ	_	
PUE	-	PUBLIC UTILITY EASEMENT
P.V.C.	_	POINT OF VERTICAL CURVE
P.V.I.	-	POINT OF VERTICAL INTERSECTION
P.V.R.C.	-	POINT OF VERTICAL REVERSE CURVE
PVT.	-	PAVEMENT
P.V.T.	-	POINT OF VERTICAL TANGENCY
R	-	RADIUS (CURVE DATA)
R.C.P.	-	REINFORCED CONCRETE PIPE
RT.	-	RIGHT
R∕W	-	RIGHT OF WAY
S.B.R.	-	SOUTH BOUND ROADWAY
SDWK.	-	SIDEWALK
SC	-	STORMCEPTOR
SD	-	STORM DRAIN
SF	-	SQUARE FEET
SHA	-	STATE HIGHWAY ADMINISTRATION
S.Y.	-	SQUARE YARDS
SPP	-	STRUCTURAL PLATE PIPE
STA.	-	STATION
STD.	-	STANDARD
SSD	-	STOPPING SIGHT DISTANCE
SMH	-	SANITARY MANHOLE
SWM	-	STORM WATER MANAGEMENT
SW-I	-	STORM WATER MANAGEMENT BORING
Т	-	TANGENT (CURVE DATA)
TBD	-	TO BE DETERMINED
ТС	-	TOP OF CURB
TRANS	_	TRANSFORMER
TRAV	-	TRAVERSE POINT
TYP.	_	TYPICAL
UG	-	UNDERGROUND
UTIL.	_	UTILITY STRUCTURE
VC	_	VERTICAL CURVE
W	_	WATER LINE
W.B.R.	-	WEST BOUND ROADWAY
W.P.	-	WORKING POINT







SHEET	BASELINE STATION	EASTBOUND ROADWAY BACK OF CURB OFFSFT	ROADWAY BACK OF CURB	REMARKS
	The Date Sector	U. CONDUFFSET	ELEVATION	
PS-01	495+29.11	21.33' RT.	661.41	
PS-01	495+47.30	15.01' RT.	660.85	
PS-01	495+50.00	14.25' RT.	660.73	
PS-01	495+55.28	13.67' RT.	660.61	
PS-01	495+75.00	13.67' RT.	659.59	
PS-01	496+00.00	13.67' RT.	659.27	
PS-01	496+25.00	13.67' RT.	658.54	
PS-01	496+50.00	13.67' RT.	657.88	
PS-01	496+75.00	13.67' RT.	657.43	
PS-01	497+00.00	13.67' RT.	657.28	
PS-01	497+25.00	13.67' RT.	657.35	
PS-01	497+50.00	13.67' RT	657 51	
PS-01	497+75.00	13.07 KT.	657.76	
PS-01	497+75.00	13.67' RT.	658.06	
PLAN	BASELINE	EASTBOUND	EASTBOUND ROADWAY BACK	REMARKS
SHEET	STATION	OF CURB OFFSET	OF CURB	ner mana s
DS 02	108+00 00	12 67' PT	ELEVATION	
PS-02	498+00.00	13.07 KI.	658.06	
PS-02	498+25.00	13.6/ KI.	658.44	
PS-02	498+33.76	13.67' RT.	658.57	1.1
PS-02	498+50.00	18.99' RT.	658.47	
PS-02	498+50.97	20.79' RT.	658.49	MIDPOINT OF CURVE
PS-02	498+58.10	38.00' RT.	659.25	
PS-02	498+58.10	47.01' RT.	659.40	
PS-02	498+79.43	49.62' RT.	660.44	
PS-02	498+79.43	38.00' RT.	660.32	
PS-02	498+86.56	20.79' RT.	660.18	MIDPOINT OF CURVE
PS-02	499+00.00	13.96' RT.	660.15	
PS-02	499+03.76	13.67' RT.	660.03	
PS-02	499+25.00	13.67' RT	660.52	
PS-02	499+50.00	13.67' RT	661 13	
DS 02	499130.00	13.67' PT	661.69	
PS-02	499+73.00	13.07 KI.	661.00	
PS-02	500+00.00	13.07 RT.	661.75	
PS-02	500+25.00	13.67 RT.	662.77	
PS-02	500+50.00	13.67' RT.	663.42	
PS-02	500+75.00	13.67' RT.	663.70	
PS-02	501+00.00	13.67' RT.	663.59	
PS-02	501+25.00	13.67' RT.	663.33	
	E01126 02	12 C7 DT		
PS-02	501+26.93	15.07 KI.	663.30	and the second
PS-02 PS-02	501+26.93	20.80' RT.	663.30 663.66	MIDPOINT OF CURVE
PS-02 PS-02 PS-02	501+26.93 501+44.14 501+50.00	20.80' RT. 29.98' RT.	663.30 663.66 663.83	MIDPOINT OF CURVE
PS-02 PS-02 PS-02	501+26.93 501+44.14 501+50.00	20.80' RT. 29.98' RT.	663.30 663.66 663.83	MIDPOINT OF CURVE
PS-02 PS-02 PS-02	501+26.93 501+44.14 501+50.00	20.80' RT. 29.98' RT. EASTBOUND	663.30 663.66 663.83 EASTBOUND	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PLAN	501+26.93 501+44.14 501+50.00 BASELINE	EASTBOUND ROADWAY BACK	663.30 663.66 663.83 EASTBOUND ROADWAY BACK	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PLAN SHEET	501+26.93 501+44.14 501+50.00 BASELINE STATION	EASTBOUND ROADWAY BACK OF CURB OFFSET	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PLAN SHEET	501+26.93 501+44.14 501+50.00 BASELINE STATION	EASTBOUND ROADWAY BACK OF CURB OFFSET	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PLAN SHEET PS-03	501+26.93 501+44.14 501+50.00 BASELINE STATION 501+50.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-03	501+26.93 501+44.14 501+50.00 BASELINE STATION 501+50.00 501+51.27	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-03 PS-03	501+26.93 501+44.14 501+50.00 BASELINE STATION 501+50.00 501+51.27 501+51.28	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 44.03' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-03 PS-03 PS-03	501+26.93 501+44.14 501+50.00 BASELINE STATION 501+50.00 501+51.27 501+51.28 501+78.61	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 44.03' RT. 44.07' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-03 PS-03 PS-03 PS-03	501+26.93 501+44.14 501+50.00 BASELINE STATION 501+50.00 501+51.27 501+51.28 501+78.61 501+78.61	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 44.03' RT. 44.07' RT. 38.00' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-03 PS-03 PS-03 PS-03 PS-03	501+26.93 501+44.14 501+50.00 BASELINE STATION 501+50.00 501+51.27 501+51.28 501+78.61 501+78.61 501+85.74	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66	MIDPOINT OF CURVE REMARKS MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03	501+26.93 501+44.14 501+50.00 BASELINE STATION 501+50.00 501+51.27 501+51.28 501+78.61 501+78.61 501+78.61 501+85.74 502+00.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 37.92' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.84' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03	501+26.93 501+44.14 501+50.00 BASELINE STATION 501+50.00 501+51.27 501+51.28 501+78.61 501+78.61 501+78.61 501+78.74 502+00.00 502+02.94	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.84' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03	501+26.93 501+44.14 501+50.00 BASELINE STATION 501+50.00 501+51.27 501+51.28 501+78.61 501+78.61 501+78.61 501+85.74 502+00.00 502+02.94 502+25.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.84' RT. 13.67' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.12 664.43 664.09 662.66 661.81 661.64 661.64 661.65	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03	501+26.93 501+44.14 501+50.00 BASELINE STATION 501+50.00 501+51.27 501+51.28 501+51.28 501+78.61 501+85.74 502+00.00 502+02.94 502+25.00 502+50.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.84' RT. 13.67' RT. 13.67' RT. 13.67' PT	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03	501+26.93 501+44.14 501+50.00 BASELINE STATION 501+50.00 501+51.27 501+51.28 501+51.28 501+78.61 501+78.61 501+85.74 502+00.00 502+02.94 502+25.00 502+50.00 502+75.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.84' RT. 13.67' RT. 13.67' RT. 13.67' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 P	501+26.93 501+44.14 501+50.00 BASELINE STATION 501+50.00 501+51.27 501+51.28 501+78.61 501+78.61 501+78.61 501+85.74 502+00.00 502+02.94 502+25.00 502+50.00 502+75.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.84' RT. 13.67' RT. 13.67' RT. 13.67' RT. 13.67' RT. 13.67' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 650.01	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03	501+26.93 501+44.14 501+50.00 BASELINE STATION 501+50.00 501+51.27 501+51.27 501+51.28 501+78.61 501+78.61 501+78.61 501+78.61 501+78.61 501+78.61 501+78.61 502+25.00 502+02.94 502+25.00 502+75.00 503+00.00 503+20.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.84' RT. 13.67' RT. 13.67' RT. 13.67' RT. 13.67' RT. 13.67' RT. 13.67' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 661.65 661.14 659.91 659.01 658.72	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03 PS-03	501+26.93 501+44.14 501+50.00 BASELINE STATION 501+50.00 501+51.27 501+51.28 501+78.61 501+78.61 501+78.61 501+78.61 501+85.74 502+00.00 502+02.94 502+25.00 502+75.00 502+75.00 503+20.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.84' RT. 13.67' RT. 13.67' RT. 13.67' RT. 13.67' RT. 13.67' RT. 13.67' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.01 659.01 658.72	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 P	BASELINE STATION BASELINE STATION 501+50.00 501+51.27 501+51.27 501+51.27 501+51.27 501+51.27 501+51.27 501+51.27 501+51.27 501+51.27 501+51.27 501+50.00 502+50.00 502+50.00 502+50.00 502+75.00 503+20.00 503+20.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 29.98' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT. 13.67' RT. 13.67' RT. 13.67' RT. 13.67' RT. 13.67' RT. 13.67' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.01 659.01 658.72 EASTBOUND ROADWAY BACK	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 P	BASELINE STATION 501+50.00 501+50.00 501+50.00 501+51.27 501+51.28 501+51.27 501+51.28 501+78.61 501+78.61 501+78.61 501+78.61 501+78.61 501+78.61 501+78.61 501+78.61 502+0.00 502+25.00 502+50.00 502+75.00 503+20.00 503+20.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 29.98' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.01 659.01 659.01 658.72 EASTBOUND ROADWAY BACK	
PS-02 PS-02 PS-02 PLAN SHEET PS-03 P	S01+26.93 501+44.14 501+50.00 BASELINE STATION 501+50.00 501+51.27 501+51.28 501+51.28 501+78.61 501+78.61 501+85.74 502+00.00 502+02.94 502+25.00 502+50.00 502+75.00 503+20.00 S03+20.00 BASELINE STATION	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 37.92' RT. 44.03' RT. 44.03' RT. 20.79' RT. 13.60' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.01 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB	
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 P	S01+26.93 S01+26.93 S01+44.14 S01+50.00 BASELINE STATION S01+50.00 S01+51.27 S01+51.28 S01+51.27 S01+51.28 S01+78.61 S01+78.61 S01+85.74 S02+00.00 S02+25.00 S02+75.00 S03+20.00 S03+20.00 BASELINE STATION	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 29.98' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.91 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION	
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-04 P	S01+26.93 S01+44.14 S01+50.00 BASELINE STATION S01+50.00 S01+51.27 S01+51.27 S01+51.28 S01+78.61 S01+78.61 S01+85.74 S02+00.00 S02+02.94 S02+50.00 S02+75.00 S03+00.00 S03+20.00 BASELINE STATION S15+29.85	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 661.65 661.14 659.91 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.29	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-04 PS-04 PS-04 PS-04	S01+26.93 S01+26.93 S01+44.14 S01+50.00 BASELINE STATION S01+51.27 S01+51.27 S01+51.27 S01+51.28 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+20.00 S02+25.00 S02+25.00 S02+50.00 S02+75.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 661.65 661.14 659.91 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.29 662.23	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-04 PS-04 PS-04 PS-04	S01+26.93 S01+26.93 S01+44.14 S01+50.00 BASELINE STATION S01+51.27 S01+51.27 S01+51.27 S01+51.28 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+20.00 S02+50.00 S02+50.00 S02+50.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S15+75.00 S15+75.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.01 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.29 662.23 661.05	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-04 PS-04 PS-04 PS-04 PS-04	S01+26.93 S01+26.93 S01+44.14 S01+50.00 BASELINE STATION S01+51.27 S01+51.27 S01+51.27 S01+51.28 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+20.00 S02+50.00 S02+50.00 S02+50.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S15+75.00 S15+75.00 S16+00.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 661.65 661.14 659.91 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.29 662.23 661.05 660.01	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-04 PS-04 PS-04 PS-04 PS-04 PS-04	S01+26.93 S01+26.93 S01+44.14 S01+50.00 BASELINE STATION S01+51.27 S01+51.28 S01+51.27 S01+51.28 S01+78.61 S01+85.74 S02+00.00 S02+00.00 S02+25.00 S02+50.00 S02+50.00 S02+75.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S15+75.00 S15+75.00 S15+75.00 S16+19.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.01 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.29 662.23 661.05 660.01 659.23	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-04 PS-04 PS-04 PS-04 PS-04 PS-04 PS-04	S01+26.93 S01+26.93 S01+44.14 S01+50.00 BASELINE STATION S01+51.27 S01+51.27 S01+51.28 S01+78.61 S01+78.61 S01+78.61 S01+85.74 S02+00.00 S02+02.94 S02+25.00 S02+75.00 S02+75.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S15+75.00 S15+75.00 S16+19.00 S16+25.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.01 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.29 662.23 661.05 660.01 659.23 658.99	
PS-02 PS-02 PS-02 PS-02 PS-02 PS-03 PS-04 PS-04 PS-04 PS-04 PS-04 PS-04 PS-04 PS-04	S01+26.93 S01+26.93 S01+44.14 S01+50.00 BASELINE STATION S01+51.27 S01+51.28 S01+51.28 S01+78.61 S01+78.61 S01+85.74 S02+00.00 S02+02.94 S02+25.00 S02+75.00 S02+75.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S15+75.00 S15+75.00 S16+00.00 S16+19.00 S16+50.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.91 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.29 662.23 661.05 660.01 659.23 658.99 657.97	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PS-02 PS-03 PS-04	S01+26.93 S01+26.93 S01+44.14 S01+50.00 S01+50.00 S01+51.27 S01+51.28 S01+51.28 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S02+00.00 S02+00.00 S02+00.00 S02+75.00 S02+75.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S15+75.00 S15+75.00 S16+00.00 S16+50.00 S16+75.00 S16+75.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.91 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.29 662.23 661.05 660.01 659.23 658.99 657.97 657.09	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PS-02 PS-03 PS-04	S01+26.93 S01+26.93 S01+44.14 S01+50.00 BASELINE STATION S01+51.27 S01+51.28 S01+51.28 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S02+00.00 S02+00.00 S02+00.00 S02+75.00 S02+75.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S15+75.00 S15+75.00 S16+19.00 S16+75.00 S16	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.01 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.29 662.23 661.05 660.01 659.23 657.97 657.09 655.79 657.09 655.21	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PS-03 PS-04	S01+26.93 S01+26.93 S01+44.14 S01+50.00 BASELINE STATION S01+50.00 S01+51.27 S01+51.28 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S02+00.00 S02+00.00 S02+00.00 S02+75.00 S02+75.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S15+75.00 S15+75.00 S16+19.00 S16+19.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S17+00.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.01 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.29 662.23 661.05 660.01 659.23 657.97 657.09 655.21	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PS-03 PS-04	S01+26.93 S01+26.93 S01+44.14 S01+50.00 BASELINE STATION S01+50.00 S01+51.27 S01+51.28 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S02+00.00 S02+02.94 S02+02.94 S02+25.00 S02+75.00 S02+75.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S15+75.00 S15+75.00 S16+19.00 S16+19.00 S16+75.00 S16+75.00 S16+75.00 S17+00.00 S17+00.00 S17+00.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.01 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.29 662.23 661.05 660.01 659.23 657.97 657.09 655.21 656.01	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PS-03 PS-04	S01+26.93 S01+26.93 S01+44.14 S01+50.00 BASELINE STATION S01+51.27 S01+51.28 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+85.74 S02+00.00 S02+50.00 S02+50.00 S02+50.00 S02+75.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S15+75.00 S15+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S17+08.15 S17+25.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.01 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.29 662.23 661.05 660.01 659.23 661.05 660.01 659.23 657.97 657.09 655.49	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PS-03 PS-04	S01+26.93 S01+26.93 S01+44.14 S01+50.00 S01+50.00 S01+51.27 S01+51.28 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+85.74 S02+00.00 S02+50.00 S02+50.00 S02+50.00 S02+50.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S15+75.00 S15+75.00 S16+50.00 S16+75.00 S16+75.00 S17+08.15 S17+25.00 S17+08.15 S17+25.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.01 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.29 662.23 661.05 660.01 659.23 665.21 655.49 655.49 655.49 654.77	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PS-03 PS-04	S01+26.93 S01+26.93 S01+44.14 S01+50.00 S01+50.00 S01+51.27 S01+51.28 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.00 S02+00.00 S02+00.00 S02+50.00 S02+50.00 S02+50.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S15+75.00 S15+75.00 S16+50.00 S16+75.00 S16+75.00 S17+00.00 S17+08.15 S17+25.00 S17+50.00 S17+50.00 S17+50.00 S17+75.00	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.01 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.29 662.23 661.05 660.01 659.23 665.21 655.49 655.49 654.27 654.23	
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-04 P	S01+26.93 S01+26.93 S01+44.14 S01+50.00 BASELINE STATION S01+51.27 S01+51.28 S01+51.27 S01+51.28 S01+78.61 S01+85.74 S02+00.00 S02+00.00 S02+00.00 S02+25.00 S02+50.00 S02+75.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S15+75.00 S15+75.00 S16+50.00 S16+50.00 S16+50.00 S16+50.00 S16+75.00 S17+00.00 S17+00.00 S17+00.00 S17+75.00 S17+50.00 S17+75.00 S17	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.01 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.29 662.23 661.05 660.01 659.23 661.05 660.01 659.23 657.97 657.09 655.49 655.49 654.77 654.23 654.77	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-04 P	S01+26.93 S01+26.93 S01+44.14 S01+50.00 BASELINE STATION S01+51.27 S01+51.28 S01+51.28 S01+78.61 S01+78.61 S01+85.74 S02+00.00 S02+00.00 S02+00.00 S02+25.00 S02+50.00 S02+75.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S15+75.00 S15+75.00 S15+75.00 S16+75.00 S16+50.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S17+00.00 S17+00.00 S17+50.00 S17+50.00 S17+50.00 S17+50.00 S17+50.00 S17+75.00 S17+50.00 S17+75.00 S17	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.01 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.29 662.23 661.05 660.01 659.23 661.05 660.01 659.23 657.97 657.09 655.10 655.49 655.49 654.77 654.23 653.82 653.82	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PLAN SHEET PS-03 PS-04 P	S01+26.93 S01+26.93 S01+44.14 S01+50.00 BASELINE STATION S01+51.27 S01+51.28 S01+51.28 S01+78.61 S01+78.61 S01+78.61 S01+85.74 S02+00.00 S02+00.00 S02+00.00 S02+25.00 S02+75.00 S02+75.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S15+75.00 S15+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S17+00.00 S17+00.00 S17+75.00 S17+50.00 S17+75.00 S17+50.00 S17+75.00 S17	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.91 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.29 662.23 661.05 660.01 659.23 661.05 660.01 659.23 657.09 657.09 655.49 655.49 654.77 654.23 653.82 653.82 653.82	MIDPOINT OF CURVE
PS-02 PS-02 PS-02 PS-02 PS-03 PS-04	S01+26.93 S01+26.93 S01+44.14 S01+50.00 BASELINE STATION S01+50.00 S01+51.27 S01+51.28 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.00 S02+00.00 S02+00.00 S02+25.00 S02+75.00 S02+75.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S15+75.00 S15+75.00 S15+75.00 S16+19.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S17+00.00 S17+75.00 S18+25.00 S18	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.01 659.01 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.29 662.23 661.05 660.01 659.23 665.21 655.49 655.49 655.49 654.77 654.23 653.82 653.52 653.34 653.22	
PS-02 PS-02 PS-02 PS-02 PS-03 PS-04	S01+26.93 S01+26.93 S01+44.14 S01+50.00 BASELINE STATION S01+50.00 S01+51.27 S01+51.28 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S01+78.61 S02+00.00 S02+00.00 S02+00.00 S02+75.00 S02+75.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S03+20.00 S15+75.00 S15+75.00 S15+75.00 S16+19.00 S16+19.00 S16+19.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S16+75.00 S17+00.00 S17+75.00 S18+69.97 S18+75.00 S18+69.97 S18+75.00 S18	EASTBOUND ROADWAY BACK OF CURB OFFSET 29.98' RT. 37.92' RT. 44.03' RT. 44.03' RT. 44.07' RT. 38.00' RT. 20.79' RT. 13.67' RT.	663.30 663.66 663.83 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.83 664.01 664.12 664.43 664.09 662.66 661.81 661.64 661.65 661.14 659.91 659.01 659.01 659.01 658.72 EASTBOUND ROADWAY BACK OF CURB ELEVATION 663.29 662.23 661.05 660.01 659.23 661.05 660.01 659.23 657.97 657.09 657.97 657.09 655.21 655.49 654.77 655.49 654.77 654.23 653.82 653.82 653.82 653.82 653.82 653.82	MIDPOINT OF CURVE

PLAN SHEET	BASELINE STATION	EASTBOUND ROADWAY BACK OF CURB OFFSET	EASTBOUND ROADWAY BACK OF CURB ELEVATION	REMARKS	PLAN SHEET	BASELINE STATION	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION	REMARKS
PS-05	519+00.00	13.67' RT.	653.33		PS-01	495+34.50	37.62' RT.	661.53	
PS-05	519+25.00	13.67' RT.	653.54		PS-01	495+36.63	36.12' RT.	661.46	
PS-05	519+50.00	13.67' RT.	653.79		PS-01	495+50.00	29.44' RT.	661.03	1
PS-05	519+75.00	13.67' RT.	654.16		PS-01	495+50.32	29.33' RT.	661.03	MIDPOINT OF CURVE
PS-05	520+00.00	13.67' RT.	654.53		PS-01	495+65.42	27.00' RT.	660.57	11213CH 0237510
PS-05	520+25.00	13.67' RT.	654.54		PS-01	495+69.10	27.00' RT.	660.46	
PS-05	520+50.00	13.67' RT.	655.44		PS-01	495+73.79	27.26' RT.	660.32	MIDPOINT OF CURVE
PS-05	520+75.00	13.67' RT.	655.91		PS-01	495+75.00	27.42' RT.	660.29	
PS-05	521+00.00	13.67' RT.	656.48		PS-01	495+78 43	28.05' BT	660.20	
PS-05	521+25.00	13.67' RT.	657.06		PS-01	495+84.83	29.13' RT	660.03	
PS-05	521+50.00	13.67' RT.	657.60		PS_01	495+01 22	29.15 NT.	650.05	
PS-05	521+75.00	13.67' RT.	658.02		PS-01	495+91.32	29.50 KT.	650.76	
PS-05	521+89.64	13.67' RT.	658.24		PS-01	495+94.19	29.50 KI.	659.76	
PS-05	522+00.00	13.67' RT.	658.39		PS-01	496+00.00	29.21 RI.	659.58	MIDDOINT OF CUDYF
PS-05	522+06.46	13.67' RT.	658.45	HIGH POINT	PS-01	496+00.67	29.13' RT.	659.56	MIDPOINT OF CURVE
PS-05	522+25.00	13.67' RT.	658.45		PS-01	496+07.08	28.05' RT.	659.35	spectrum to tracted
PS-05	522+50.00	13.67' RT.	658.26		PS-01	496+11.71	27.26' RT.	659.20	MIDPOINT OF CURVE
PS-05	522+75.00	13.67' RT.	657.44		PS-01	496+16.41	27.00' RT.	659.06	
PS-05	522+96.54	13.67' BT.	657.34	MIDPOINT OF CURVE	PS-01	496+25.00	27.00' RT.	658.80	
PS-05	523+00.00	13.67' RT	657.23		PS-01	496+48.73	27.00' RT.	658.17	
PS-05	523+25.00	13.67' RT	656 19		PS-01	496+50.00	26.98' RT.	658.14	
DS.OF	523+23.00	13.07 NT.	654.95		PS-01	496+58.20	26.22' RT.	657.93	
F3-05	323+30.00	1 13.07 KI.	004.85		PS-01	496+67.42	23.91' RT.	657.74	
					PS-01	496+74.09	22.23' RT	657.61	
				<u> </u>	PS 01	496+75 00	22.25 NT.	657.60	
5.5	and the second	EASTBOUND	EASTBOUND		PS-01	4907/5.00	22.03 NI.	657.00	
PLAN	BASELINE	BOADWAY BACK	ROADWAY BACK	REMARKS	PS-01	490+80.95	21.67 KI.	057.50	
SHEET	STATION	OF CLIPR OFFEET	OF CURB	NEWANIO.	PS-01	497+00.00	21.67' RT.	657.44	
_ <- 1		OT CONDUCTSET	ELEVATION		PS-01	497+25.00	21.67' RT.	657.51	
PS-06	523+50.00	13.67' RT.	654.85		PS-01	497+50.00	21.67' RT.	657.66	
PS-06	523+75.00	13.67' RT.	653.54		PS-01	497+75.00	21.67' RT.	657.92	
PS-06	524+00.00	13.67' RT.	652.24		PS-01	497+93.83	21.67' RT.	658.13	
PS-06	524+03.43	13.67' RT.	652.06		PS-01	498+00.00	22.12' RT.	658.23	
PS-06	524+25.00	17.56' RT.	650.69				a second second second		
PS-06	524+50.00	21.83' BT.	649.13						
PS-06	524+74 96	25.86' RT	647 53			1	FASTBOLIND	FASTBOLIND	
PS-06	524+96 16	28.34' RT	646 19	MIDPOINT OF CURVE	DIAN	DASELINE	POADWAY BACK	POADWAY PACK	101000020110
PS-06	525+00.00	20.54 NT.	645.92	WILD ON OF CONVE	FLAN	STATION	OF CHAPED LICE	ACADWAT BACK	REMARKS
PS-06	525+17 52	20.01 KT.	644.90		SHEET	STATION	OF SHARED USE	OF SHARED USE	
P3-00	525+17.52	29.17 KI.	644.05		25.28		PATH OFFSET	PATH ELEVATION	
P3-00	525+25.00	29.17 KI.	644.40		PS-02	498+00.00	22.12' RT.	658.23	Long to the state of the
PS-06	525+50.00	29.17 KT.	643.00		PS-02	498+01.31	22.34' RT.	658.26	MIDPOINT OF CURVE
PS-06	525+75.00	29.17 RT.	641.41		PS-02	498+08.54	24.33' RT.	658.40	A
PS-06	526+00.00	29.17 RT.	639.89		PS-02	498+18.53	27.07' RT.	658.61	MIDPOINT OF CURVE
PS-06	526+02.75	29.17' RT.	639.71	MIDPOINT OF CURVE	PS-02	498+25.00	27.87' RT.	658.72	
PS-06	526+25.00	29.17' RT.	638.32		PS-02	498+28.86	28.00' RT.	658.78	
PS-06	526+50.00	29.17' RT.	636.82		PS-02	498+32.22	28.00' RT.	658.83	
PS-06	526+75.00	29.17' RT.	635.32		PS-02	498+36.06	27.87' RT.	658.89	MIDPOINT OF CURVE
PS-06	526+87.99	29.17' RT.	634.55		PS-02	498+39.88	27 49' RT	658 77	
PS-06	527+00.00	29.17' RT.	634.03		PS 02	490199.00	27.45 RT.	658 71	
PS-06	527+10.04	29.17' RT.	633.61		PS-02	498+42.22	27.37 KT.	658 50	
PS-06	527+15.04	28.84' RT.	633.41	MATCH EXISTING	PS-02	498+45.22	27.12 RT.	658.30	INIT POINT OF CORVE
					P3-02	496+40.30	27.00 RT.	658.40	
					PS-02	498+50.00	27.00' RT.	658.48	
		and the second second	EASTBOUND		PS-02	498+55.47	27.00' RT.	658.59	
PLAN	BASELINE	EASTBOUND	ROADWAY BACK		1.000		51 		
SHEFT	STATION	ROADWAY BACK	OF CURB	REMARKS	PS-02	498+82.59	26.00' RT.	659.16	
		OF CURB OFFSET	ELEVATION		PS-02	499+00.00	26.00' RT.	660.03	
PS-07	528+36.00	28 87' PT	620.82	MATCH EXISTING	PS-02	499+25.00	26.00' RT.	660.77	
PS.07	528+50.00	28.36' PT	670 57		PS-02	499+31.82	26.00' RT.	660.94	
DC 07	520+30.00	20.30 KT.	620.10		PS-02	499+39.98	25.35' RT.	661.12	MIDPOINT OF CURVE
DC 07	520+/5.00	27.44 KI.	629.19		PS-02	499+47.93	23.44' RT.	661.28	
F3-07	529+00.00	20.52 KI.	620.94		PS-02	499+50.00	22.83' RT	661.32	
F3-07	529+13.//	20.01 KT.	028.83	MIDDOINT OF CUDUE	PS-02	499+53 44	22 11' RT	661 38	MIDPOINT OF CURVE
PS-07	529+19.72	25.99'RT.	628.80	WIDPOINT OF CURVE	PS-02	499+59.00	21 67' PT	661 40	CONVE
PS-07	529+25.00	26.31 RT.	628.//		PS-02	100+62 70	21.07 KI.	661 57	
PS-07	529+25.67	26.37' RT.	628.76		PS-02	455+02.79	21.07 KI.	001.37	MIDDOINT OF CURVE
PS-07	529+48.00	28.53' RT.	628.56		PS-02	499+68.44	22.11' RT.	001./1	INIT OF CORVE
PS-07	529+50.00	28.69' RT.	628.55	MIDPOINT OF CURVE	PS-02	499+73.95	23.44' RT.	661.86	
PS-07	529+51.69	28.78' RT.	628.54		PS-02	499+75.00	23.77' RT.	661.88	
PS-07	529+54.02	28.86' RT.	628.52	MATCH EXISTING	PS-02	499+81.90	25.35' RT.	662.05	MIDPOINT OF CURVE
15.07					PS-02	499+90.06	26.00' RT.	662.22	
15.07					PS-02	500+00.00	26.00' RT.	662.42	
15.07					PS-02	500+25.00	26.00' RT.	663.02	
1507					PS-02	500+50.00	26.00' PT		
13.07						1 300+30.00	20.00 11.	663.66	
13.07					PS-02	500+75.00	26.00' RT	663.66 663.95	
					PS-02	500+75.00 501+00.00	26.00' RT. 26.00' RT.	663.66 663.95 663.84	
					PS-02 PS-02	500+50.00 500+75.00 501+00.00 501+25.00	26.00' RT. 26.00' RT. 26.00' RT.	663.66 663.95 663.84	
					PS-02 PS-02 PS-02	500+75.00 501+00.00 501+25.00	26.00' RT. 26.00' RT. 26.00' RT. 26.00' RT.	663.66 663.95 663.84 663.41	
					PS-02 PS-02 PS-02 PS-02	500+55.00 500+75.00 501+00.00 501+25.00 501+25.94	26.00' RT. 26.00' RT. 26.00' RT. 26.00' RT. 26.00' RT.	663.66 663.95 663.84 663.41 663.31	
					PS-02 PS-02 PS-02 PS-02 PS-02	500+35.00 500+75.00 501+00.00 501+25.00 501+25.94 501+36.55	26.00' RT. 26.00' RT. 26.00' RT. 26.00' RT. 26.00' RT. 30.39' RT.	663.66 663.95 663.84 663.41 663.31 663.68	MIDPOINT OF CURVE
					PS-02 PS-02 PS-02 PS-02 PS-02 PS-02	500+30.00 500+75.00 501+00.00 501+25.00 501+25.94 501+36.55 501+40.94	26.00' RT. 26.00' RT. 26.00' RT. 26.00' RT. 26.00' RT. 30.39' RT. 41.00' RT.	663.66 663.95 663.84 663.41 663.31 663.68 664.13	MIDPOINT OF CURVE
					PS-02 PS-02 PS-02 PS-02 PS-02 PS-02 PS-02	500+50.00 500+75.00 501+00.00 501+25.00 501+25.94 501+36.55 501+40.94 501+40.94	26.00' RT. 26.00' RT. 26.00' RT. 26.00' RT. 26.00' RT. 30.39' RT. 41.00' RT. 44.00' RT.	663.66 663.95 663.84 663.41 663.31 663.68 664.13 664.20	MIDPOINT OF CURVE
					PS-02 PS-02 PS-02 PS-02 PS-02 PS-02 PS-02 PS-02	500+50.00 500+75.00 501+00.00 501+25.90 501+25.94 501+36.55 501+40.94 501+40.94 501+39.17	26.00' RT. 26.00' RT. 26.00' RT. 26.00' RT. 30.39' RT. 41.00' RT. 44.00' RT. 26.00' RT.	663.66 663.95 663.84 663.41 663.31 663.68 664.13 664.20 663.10	MIDPOINT OF CURVE



	DACELINE	EASTBOUND	EASTBOUND	1.6.5
PLAN SHEET	STATION	OF SHARED USE	OF SHARED USE	REMARKS
SHEET	Shinon	PATH OFFSET	PATH ELEVATION	
PS-03	501+81.78	26.00' RT.	662.00	
PS-03	501+90.73	26.00' RT.	662.19	
PS-03	501+88.94	44.00' RT.	664.20	
PS-03	501+88.94	41.02 RT.	662.89	
PS-03	502+00.00	26.53' RT.	662.24	
PS-03	502+03.96	26.00' RT.	661.95	
PS-03	502+25.00	26.00' RT.	661.90	
PS-03	502+50.00	26.00' RT.	661.38	
PS-03	502+75.00	26.00' RT.	660.58	
PS-03	503+00.00	26.00' RT.	659.67	
PS-03	503+50.00	26.00' RT	656.92	
PS-03	503+62.30	26.00' RT.	656.25	
1				
		FASTBOUND	FASTBOLIND	
PLAN	BASELINE	ROADWAY BACK	ROADWAY BACK	022122010
SHEET	STATION	OF SHARED USE	OF SHARED USE	REMARKS
		PATH OFFSET	PATH ELEVATION	
PS-04	515+29.32	25.32' RT.	663.09	and the second
PS-04	515+42.07	23.90' RT.	662.44	MIDPOINT OF CURVE
PS-04	515+50.00	24.45' RI.	662.01	
PS-04	515+62.30	26.58' RT	661 38	MIDPOINT OF CURVE
PS-04	515+69.87	27.00' RT.	661.02	
PS-04	515+75.00	27.00' RT.	660.78	
PS-04	516+00.00	27.00' RT.	659.75	
PS-04	516+25.00	27.00' RT.	658.72	and an end of the
PS-04	516+39.01	27.00' RT.	658.16	MIDPOINT OF CURVE
PS-04	516+50.00	27.00' RT.	656.82	
PS-04	517+00.00	27.00 RT.	655.96	
PS-04	517+08.15	27.00' RT.	655.72	
PS-04	517+25.00	27.00' RT.	655.20	
PS-04	517+50.00	27.00' RT.	654.49	
PS-04	517+75.00	27.00' RT.	653.96	
PS-04	518+00.00	27.00' RT.	653.56	
PS-04	518+25.00	27.00' RT.	653.27	
PS-04	518+75.00	27.00 RT.	652.97	
PS-04	519+00.00	27.00' RT.	653.07	
1.00				
-		FASTBOUND	FASTBOUND	
PLAN	BASELINE	EASTBOUND ROADWAY BACK	EASTBOUND ROADWAY BACK	
PLAN SHEET	BASELINE STATION	EASTBOUND ROADWAY BACK OF SHARED USE	EASTBOUND ROADWAY BACK OF SHARED USE	REMARKS
PLAN SHEET	BASELINE STATION	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION	REMARKS
PLAN SHEET PS-05	BASELINE STATION 519+00.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07	REMARKS
PLAN SHEET PS-05 PS-05 PS-05	BASELINE STATION 519+00.00 519+25.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29	REMARKS
PLAN SHEET PS-05 PS-05 PS-05 PS-05	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.39 653.45	REMARKS
PLAN SHEET PS-05 PS-05 PS-05 PS-05 PS-05	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.39 653.45 653.45	REMARKS MIDPOINT OF CURVE
PLAN SHEET PS-05 PS-05 PS-05 PS-05 PS-05 PS-05	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.72' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.39 653.45 653.45 653.49 653.51	REMARKS MIDPOINT OF CURVE
PLAN SHEET PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.72' RT. 29.67' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.39 653.45 653.45 653.51 653.51 653.65	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+75.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 29.67' RT. 28.27' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.39 653.45 653.45 653.49 653.51 653.65 653.89	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.72' RT. 29.67' RT. 28.27' RT. 28.27' RT. 27.32' RT. 27.32' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.39 653.45 653.45 653.49 653.51 653.65 653.89 654.00 654.00	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 29.67' RT. 28.27' RT. 27.32' RT. 27.32' RT. 27.32' RT. 27.00' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.39 653.45 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.28	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 29.67' RT. 28.27' RT. 27.32' RT. 27.32' RT. 27.32' RT. 27.00' RT. 27.00' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.49 653.45 653.49 653.51 653.65 653.65 653.89 654.00 654.10 654.28 654.71	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+50.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 29.67' RT. 29.67' RT. 27.32' RT. 27.32' RT. 27.32' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.49 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.28 654.71 655.18	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+75.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 29.67' RT. 28.27' RT. 27.32' RT. 27.32' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.49 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.10 654.10 654.10 654.11 655.18 655.18 655.64	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+75.00 520+75.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 29.67' RT. 27.32' RT. 27.32' RT. 27.32' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.49 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.28 654.71 655.18 655.64 655.78	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+25.00 520+75.00 520+80.82 520+85.99	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 29.67' RT. 27.32' RT. 27.32' RT. 27.32' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.49 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.28 654.71 655.18 655.18 655.78 655.78 655.78	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05 PS-05	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+75.00 520+75.00 520+80.82 520+80.82 520+85.99 520+91.12	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 29.67' RT. 29.67' RT. 27.32' RT. 27.32' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.39 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.28 654.71 655.18 655.64 655.78 655.78 655.89 656.10 656.10	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+25.00 520+75.00 520+80.82 520+80.82 520+85.99 520+91.12 520+95.81 521+00.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 29.67' RT. 27.32' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.49 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.28 654.71 655.18 655.18 655.64 655.78 655.78 655.89 656.10 656.38	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+50.00 520+75.00 520+75.00 520+80.82 520+85.99 520+91.12 520+95.81 521+00.00 521+00.52	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 29.67' RT. 27.32' RT. 27.32' RT. 27.00' RT. 28.50' RT. 28.50' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.45 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.10 654.10 655.18 655.18 655.64 655.78 655.78 655.78 655.89 656.10 656.33 656.53	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+25.00 520+75.00 520+75.00 520+80.82 520+80.82 520+81.12 520+95.81 521+00.00 521+00.52 521+08.02	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 29.67' RT. 29.67' RT. 27.00' RT. 28.50' RT. 28.50' RT. 28.50' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.49 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.28 654.71 655.18 655.18 655.78 656.46	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+25.00 520+50.00 520+75.00 520+80.82 520+85.99 520+91.12 520+95.81 521+00.00 521+00.52 521+08.02 521+12.73	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 29.67' RT. 29.67' RT. 27.32' RT. 27.32' RT. 27.00' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.39 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.10 654.10 655.18 655.18 655.64 655.78 655.78 655.89 656.10 656.33 656.53 656.53 656.46 656.49	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+75.00 519+75.00 519+87.49 520+00.00 520+25.00 521+00.00 521+00.52 521+00.52 521+12.73 521+17.41	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 28.72' RT. 29.67' RT. 27.00' RT. 28.32' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.32' RT. 28.32' RT. 28.32' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.49 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.28 654.71 655.18 655.18 655.78 655.78 655.78 655.78 655.89 656.10 656.33 656.53 656.53 656.53 656.46 656.49 656.61	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+25.00 520+25.00 520+50.00 520+75.00 520+80.82 520+85.99 520+91.12 520+95.81 521+00.00 521+00.52 521+00.52 521+0.52 521+12.73 521+17.41 521+22.54	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 29.67' RT. 29.67' RT. 27.32' RT. 27.32' RT. 27.00' RT. 28.50' RT. 27.78' RT. 27.78' RT. 27.20' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.39 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.10 654.28 654.71 655.18 655.64 655.78 655.64 655.78 655.89 656.10 656.33 656.53 656.53 656.53 656.53 656.53 656.46 656.74 656.74	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 P	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+47.59 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+25.00 520+75.00 520+80.82 520+80.82 520+85.99 520+91.12 520+95.81 521+00.00 521+00.52 521+00.52 521+12.73 521+17.41 521+22.54 521+25.00 521+27.74	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 28.27' RT. 29.67' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.78' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.32' RT. 28.32' RT. 28.32' RT. 28.32' RT. 27.78' RT. 27.78' RT. 27.20' RT. 27.00' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.49 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.28 654.71 655.18 655.18 655.78 656.40 656.53 656.53 656.46 656.74 656.74 656.80 656.74	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 P	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+25.00 520+75.00 520+80.82 520+85.99 520+85.99 520+91.12 520+95.81 521+00.00 521+00.52 521+00.52 521+00.52 521+12.73 521+17.41 521+22.54 521+25.00 521+27.71 521+50.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 28.27' RT. 29.67' RT. 27.32' RT. 27.32' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.78' RT. 28.32' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.32' RT. 27.20' RT. 27.20' RT. 27.20' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.45 653.49 653.45 653.51 653.65 653.89 654.00 654.10 654.28 654.71 655.18 655.18 655.64 655.78 655.78 655.78 655.89 656.10 656.33 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.74 656.74 656.80 656.85 657.34	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 P	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+25.00 520+75.00 520+80.82 520+80.82 520+80.82 520+85.99 520+91.12 520+95.81 521+00.00 521+00.52 521+00.52 521+12.73 521+17.41 521+22.54 521+25.00 521+27.71 521+50.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 28.27' RT. 29.67' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.78' RT. 28.32' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.32' RT. 28.50' RT. 28.32' RT. 27.78' RT. 27.78' RT. 27.20' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.49 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.28 654.71 655.18 655.18 655.78 655.78 655.78 655.78 655.78 655.78 655.78 655.78 655.78 655.78 655.78 655.78 655.78 655.78 656.10 656.33 656.53 656.53 656.53 656.53 656.46 656.74 656.74 656.85 657.34 657.77	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 P	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+25.00 520+75.00 520+80.82 520+85.99 520+91.12 520+85.99 520+91.12 520+85.81 521+00.00 521+00.52 521+00.52 521+12.73 521+17.41 521+22.54 521+25.00 521+27.71 521+50.00 521+75.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 29.67' RT. 27.32' RT. 27.32' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.78' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 27.20' RT. 27.20' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.49 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.28 654.10 654.28 655.18 655.18 655.18 655.64 655.78 655.78 655.78 655.64 655.78 655.89 656.10 656.33 656.53 656.53 656.53 656.53 656.53 656.53 656.46 656.74 656.74 656.80 656.85 657.34 657.77 657.98	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 P	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+47.59 519+47.59 519+50.00 519+61.30 519+75.00 519+87.49 520+00.00 520+25.00 520+25.00 520+25.00 520+75.00 520+80.82 520+80.82 520+85.99 520+91.12 520+95.81 521+00.00 521+00.52 521+00.00 521+12.73 521+17.41 521+22.54 521+25.00 521+27.71 521+50.00 521+75.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 28.27' RT. 29.67' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.78' RT. 28.32' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.32' RT. 28.32' RT. 27.78' RT. 27.20' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.49 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.28 654.71 655.18 655.18 655.78 656.10 656.53 656.53 656.53 656.53 656.53 656.46 656.74 656.85 657.34 657.77 657.98 658.13	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 P	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+47.59 519+47.59 519+61.30 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+25.00 520+75.00 520+80.82 520+85.99 520+81.12 520+85.99 520+91.12 520+85.81 521+00.00 521+00.52 521+0.00 521+27.71 521+2.54 521+25.00 521+75.00 521+75.00 521+75.00 521+89.64 522+00.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 28.27' RT. 29.67' RT. 27.32' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.78' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 27.20' RT. 27.20' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.49 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.28 654.10 654.28 655.18 655.18 655.18 655.18 655.64 655.78 655.78 655.89 656.10 656.33 656.53 656.53 656.53 656.53 656.53 656.53 656.46 656.74 656.74 656.80 656.85 657.34 657.77 657.98 658.13 658.13	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 P	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+47.59 519+47.59 519+50.00 519+61.30 519+75.00 519+87.49 520+00.00 520+25.00 520+25.00 520+75.00 520+80.82 520+80.82 520+85.99 520+91.12 520+95.81 521+00.00 521+00.52 521+00.52 521+0.52 521+12.73 521+17.41 521+25.40 521+25.00 521+75.00 521+75.00 521+75.00 521+75.00 521+75.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 28.27' RT. 29.67' RT. 27.00' RT. 27.20' RT. 28.32' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.32' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.49 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.28 654.71 655.18 655.78 655.78 655.78 655.78 655.78 655.78 655.89 656.10 656.38 656.53 656.53 656.53 656.53 656.53 656.46 656.53 656.53 656.49 656.61 656.74 656.80 656.85 657.34 657.77 657.98 658.19 658.19	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 P	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+47.59 519+47.59 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+25.00 520+75.00 520+80.82 520+85.99 520+81.22 520+85.99 520+91.12 520+85.81 521+00.00 521+00.52 521+00.00 521+27.71 521+25.00 521+27.00 521+75.00 521+75.00 521+75.00 521+75.00 521+25.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 28.27' RT. 29.67' RT. 27.32' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.20' RT. 28.50' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.49 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.28 654.10 654.28 655.18 655.18 655.18 655.18 655.64 655.78 655.78 655.89 656.10 656.33 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.46 656.74 656.74 656.80 656.85 657.34 657.77 657.98 658.13 658.19 658.19 658.19 658.01	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 P	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+25.00 520+75.00 520+80.82 520+85.99 520+91.12 520+95.81 521+00.00 521+00.52 521+00.52 521+0.52 521+12.73 521+17.41 521+22.54 521+25.00 521+75.00 521+75.00 521+75.00 521+75.00 521+75.00 521+75.00 521+25.74 522+25.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 28.27' RT. 29.67' RT. 27.32' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.78' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 27.20' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.45 653.49 653.45 653.51 653.65 653.89 654.00 654.10 654.28 654.71 655.18 655.64 655.78 655.78 655.78 655.89 656.10 656.33 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.74 656.74 656.80 656.74 657.77 657.98 658.19 658.19 658.19 658.19 658.19	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 P	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+47.59 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+25.00 520+75.00 520+80.82 520+80.82 520+85.99 520+91.12 520+95.81 521+00.00 521+00.52 521+00.00 521+12.73 521+17.41 521+22.54 521+25.00 521+27.71 521+5.00 521+27.71 521+5.00 521+25.00 521+25.00 522+25.00 522+25.74 522+50.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 28.27' RT. 29.67' RT. 27.00' RT. 27.78' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.49 653.45 653.49 653.51 653.65 653.69 654.00 654.10 654.28 654.71 655.18 655.18 655.78 655.78 655.78 655.78 655.78 655.78 655.78 655.78 655.78 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.46 656.74 656.85 657.34 657.77 657.98 658.13 658.19 658.19 658.19 658.19 658.19	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 P	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+25.00 520+75.00 520+80.82 520+85.99 520+91.12 520+95.81 521+00.00 521+00.52 521+00.52 521+00.52 521+12.73 521+17.41 521+22.54 521+25.00 521+75.00 521+75.00 521+75.00 521+89.64 522+25.00 522+25.74 522+50.00 522+5.74	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 28.27' RT. 27.32' RT. 27.32' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.78' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 27.20' RT. 27.00' RT.	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.45 653.49 653.45 653.51 653.65 653.89 654.00 654.10 654.28 654.10 654.28 655.18 655.18 655.18 655.64 655.78 655.78 655.89 656.10 656.33 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.53 655.74 657.74 657.98 658.19 658.19 658.19 658.19 658.19 658.19	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 P	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+47.59 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+25.00 520+75.00 520+80.82 520+80.82 520+85.99 520+91.12 520+95.81 521+00.00 521+00.52 521+00.00 521+12.73 521+17.41 521+22.54 521+25.00 521+27.71 521+25.00 521+27.71 521+50.00 521+75.00 521+89.64 522+50.00 522+25.74 522+50.00 522+75.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 28.27' RT. 29.67' RT. 27.00' RT. 27.78' RT. 28.32' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 27.00'	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.49 653.49 653.49 653.51 653.65 653.89 654.00 654.10 654.28 654.71 655.18 655.18 655.78 655.78 655.78 655.78 655.78 655.89 656.10 656.33 656.53 656.53 656.53 656.53 656.53 656.53 656.46 656.74 656.74 656.85 657.34 657.77 657.98 658.13 658.19 658.19 658.19 658.19 658.19 658.19	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 P	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+25.00 520+75.00 520+80.82 520+85.99 520+91.12 520+85.99 520+91.12 520+85.99 520+91.12 520+80.82 521+00.00 521+00.52 521+00.52 521+12.73 521+17.41 521+2.54 521+2.50 521+27.71 521+50.00 521+75.00 521+75.00 521+75.00 521+89.64 522+00.00 522+25.74 522+5.00 522+5.74 522+5.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 28.27' RT. 29.67' RT. 27.32' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.78' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 27.20' RT. 27.00'	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.45 653.49 653.45 653.51 653.65 653.89 654.00 654.10 654.28 654.10 654.28 655.18 655.18 655.64 655.78 655.78 655.78 655.64 655.78 655.33 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.53 657.74 657.98 658.19 658.19 658.19 658.19 658.19 658.19 658.19 657.86 657.74 657.86 657.74 657.86 657.74 657.63 657.52 657.79	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 P	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+47.59 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+25.00 520+80.82 520+80.82 520+80.82 520+80.82 520+80.82 520+80.82 520+80.82 520+80.82 521+12.73 521+10.00 521+00.52 521+00.00 521+27.71 521+2.54 521+2.54 521+2.50 521+27.71 521+50.00 521+75.00 521+75.00 521+75.00 521+89.64 522+50.00 522+25.74 522+50.00 522+75.00 522+75.00	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 28.27' RT. 29.67' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.78' RT. 28.32' RT. 28.50' RT. 27.00'	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.49 653.45 653.49 653.51 653.65 653.89 654.00 654.10 654.28 654.71 655.18 655.78 655.78 655.78 655.78 655.78 655.78 655.78 656.10 656.33 656.53 656.53 656.53 656.53 656.53 656.53 656.46 656.74 656.74 656.85 657.34 657.77 657.98 658.13 658.19 658.19 658.19 658.19 658.19 658.19 658.19 657.64 657.64 657.63 657.52 657.79 657.79	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE
PLAN SHEET PS-05 P	BASELINE STATION 519+00.00 519+25.00 519+35.10 519+41.38 519+47.59 519+50.00 519+61.30 519+75.00 519+81.21 519+87.49 520+00.00 520+25.00 520+25.00 520+25.00 520+75.00 520+80.82 520+85.99 520+91.12 520+85.99 520+91.12 520+95.81 521+00.00 521+00.52 521+00.52 521+12.73 521+17.41 521+22.54 521+25.00 521+27.71 521+50.00 521+75.00 521+75.00 521+75.00 521+75.00 521+89.64 522+60.00 522+25.74 522+5.00 522+61.83 522+61.83 522+61.83 522+61.83	EASTBOUND ROADWAY BACK OF SHARED USE PATH OFFSET 27.00' RT. 27.00' RT. 27.00' RT. 27.32' RT. 28.27' RT. 28.27' RT. 28.27' RT. 29.67' RT. 27.32' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.00' RT. 27.78' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 28.50' RT. 27.20' RT. 27.00'	EASTBOUND ROADWAY BACK OF SHARED USE PATH ELEVATION 653.07 653.29 653.45 653.49 653.45 653.51 653.65 653.89 654.00 654.10 654.28 654.10 654.28 655.18 655.18 655.18 655.64 655.78 655.78 655.89 656.10 656.33 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.53 656.74 656.74 656.80 656.85 657.34 657.77 657.98 658.13 658.19 658.19 658.19 658.19 658.19 658.19 657.64 657.64 657.64 657.64 657.63 657.52 657.79 657.46 657.79	REMARKS MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE MIDPOINT OF CURVE

Ç	90% SUBM	ITTAL		MONTGOME DEPARTMENT OF 100 EDISON PARK GAITHERSBUE	ERY COU TRANSF DRIVE, RG, MD	NTY PORTATION 4TH FLOOR 20878
				RECOMMENDED FOR APPROVAL		
C	ATUM: NAD 83/91 H NAVD 88 VER	ORIZONTAL TICAL	-	Chief, Design Section		Date
				APPROVED		
				Chief, Division of Engineering Services		Date
).	REVISION	DATE	BY	Designed by : J.D.W. Drawn by : J	.D.W.	Checked by : S.F
				PLOTTED: 9/16/2019 FILE: M:\PROJ\214013.0010\Highways_Cadd_\pCR-D0	01_MD355.dgn	

		EASTBOUND	EASTBOUND	
PLAN	BASELINE	ROADWAY BACK	ROADWAY BACK	DEMARKS
SHEET	STATION	OF SHARED USE	OF SHARED USE	REIVIARKS
2121		PATH OFFSET	PATH ELEVATION	1 ·····
PS-06	523+50.00	24.00' RT.	655.07	
PS-06	523+75.00	24.00' RT.	653.70	
PS-06	523+80.32	24.00' RT.	653.05	1.1.1.2.C.1.4
PS-06	523+86.13	24.27' RT.	652.74	MIDPOINT OF CURVE
PS-06	523+91.89	25.08' RT.	652.43	
S-06	524+00.00	26.59' RT.	651.98	
PS-06	524+25.00	31.10' RT.	650.47	
PS-06	524+43.44	34.26' RT.	649.28	
PS-06	524+50.00	35.71' RT.	648.85	10 mm 2 mm
PS-06	524+51.19	36.06' RT.	648.77	MIDPOINT OF CURVE
PS-06	524+58.67	38.78' RT.	648.26	
PS-06	524+75.00	44.37' RT.	647.16	A 352 194
PS-06	524+79.54	45.42' RT.	646.86	MIDPOINT OF CURVE
PS-06	525+00.00	47.66' RT.	645.54	
PS-06	525+01.39	47.67' RT.	645.45	
PS-06	525+25.00	47.67' RT.	644.09	
PS-06	525+50.00	47.67' RT.	642.63	
PS-06	525+75.00	47.67' RT.	641.04	
PS-06	525+94.69	47.67' RT.	639.84	MIDPOINT OF CURVE
PS-06	526+00.00	47.67' RT.	639.52	10.00
PS-06	526+25.00	47.67' RT.	637.95	
PS-06	526+50.00	47.67' RT.	636.45	
PS-06	526+75.00	47.67' RT.	634.95	
PS-06	526+87.99	47.67' RT.	634.18	
PS-06	527+00.00	47.67' RT.	633.66	
PS-06	527+25.00	47.67' RT.	632.61	
PS-06	527+50.00	47.67' RT.	631.79	
PS-06	527+75.00	47.67' RT.	631.02	
PS-06	527+88.85	47.67' RT.	630.61	100000000000000000000000000000000000000
PS-06	527+95.30	47.36' RT.	630.43	MIDPOINT OF CURVE
PS-06	528+00.00	46.81' RT.	630.33	

1.1		EASTBOUND	EASTBOUND	
PLAN	BASELINE	ROADWAY BACK	ROADWAY BACK	DEMADING
SHEET	STATION	OF SHARED USE	OF SHARED USE	REIVIARKS
		PATH OFFSET	PATH ELEVATION	
PS-07	528+00.00	46.81' RT.	630.33	
PS-07	528+01.68	46.44' RT.	630.29	
PS-07	528+25.00	41.96' RT.	629.80	
PS-07	528+45.04	38.11' RT.	629.46	
PS-07	528+50.00	37.16' RT.	629.39	
PS-07	528+50.61	37.04' RT.	629.39	100 C 100 C 100 C
PS-07	528+55.15	36.35' RT.	629.33	MIDPOINT OF CURVE
PS-07	528+59.73	36.00' RT.	629.26	
PS-07	528+75.00	35.44' RT.	629.03	
PS-07	529+00.00	34.52' RT.	628.78	
PS-07	529+14.06	34.01' RT.	628.67	1. 1. 1. 1. N. 1.
PS-07	529+19.48	33.99' RT.	628.64	MIDPOINT OF CURVE
PS-07	529+25.00	34.34' RT.	628.61	
PS-07	529+47.66	36.54' RT.	628.41	
PS-07	529+50.00	36.73' RT.	628.39	
PS-07	529+51.16	36.79' RT.	628.38	MIDPOINT OF CURVE
PS-07	529+54.66	36.86' RT.	628.36	
PS-07	529+75.00	36.78' RT.	628.47	
PS-07	529+79.58	36.76' RT.	628.50	MIDPOINT OF CURVE
PS-07	530+00.00	36.70' RT.	628.68	
PS-07	530+13.37	36.56' RT.	628.96	
PS-07	530+24.21	37.46' RT.	629.18	MIDPOINT OF CURVE
PS-07	530+25.00	37.61' RT.	629.20	
PS-07	530+34.70	40.36' RT.	629.34	
PS-07	530+50.00	44.22' RT.	629.70	
PS-07	530+51.53	44.40' RT.	629.75	MIDPOINT OF CURVE
PS-07	530+68.81	44.05' RT.	630.27	
PS-07	530+75.00	43.47' RT.	630.49	
PS-07	530+85.65	44.01' RT.	630.86	MIDPOINT OF CURVE
PS-07	531+00.00	47.98' RT.	631.28	
PS-07	531+01.81	48.78' RT.	631.32	
PS-07	531+15.05	53.31' RT.	631.67	MIDPOINT OF CURVE
PS-07	531+25.00	54.83' RT.	631.98	
PS-07	531+28.92	55.01' RT.	632.12	
PS-07	531+37.02	55.17' RT.	633.61	

PLAN SHEET CR-01 **CURB ELEVATIONS AND OFFSETS** MD 355 - CLARKSBURG SHARED USE PATH

Date SCALE : N.T.S.

Drawn by : J.D.W. Checked by : S.R.R. Project No. : C.I.P. PR. # 501744 SHEET 06 of 88

09/2019

	CURVE DATA									
CURVE	BASELINE	DELTA	Dc	RADIUS	TANGENT	LENGTH				
C-01	MD 355 (FREDERICK ROAD)	2°04′23.0"LT.	5° 43′55 . I"	I,000.00′	18.09′	36.18′				
C-02	MD 355 (FREDERICK ROAD)	2°16′55.8" LT.	0°57′17 . 8"	6,000.00′	119 . 51′	238.99′				
C-03	MD 355 (FREDERICK ROAD)	8°23′55.0"LT.	I° 49′47 . 7"	3,131.21′	229.90′	458.98′				
C-04	MD 355 (FREDERICK ROAD)	10° 44′32.5" RT.	2°09′20.6"	2,658.00′	249.91′	498.35′				
C-05	MD 355 (FREDERICK ROAD)	2°40′43.8"LT.	l°12′24 . 3"	4,748.00′	111.02′	221.99′				
C-06	CLARKSBURG ROAD	1°50′45.7" LT.	0°39′28.6"	8,708.41′	140.30′	280 . 58′				
C-07	CLARKSBURG ROAD	2°03′56.9" RT.	0° 42′58.3"	8,000.00′	144.24′	288.44′				
C-08	CLARKSBURG ROAD	II°28′50.3" RT.	2°56′58.6"	1,942.49′	195.27′	389.23′				
C-09	STRINGTOWN ROAD	0°23′32.I" RT.	°08′45 . 3"	5,000.00′	17.12'	34.23′				



င္ OF ROADWAY								
POINT	STATION	COORD	INATES	PEADING				
DESCR.	STATION	NORTH	EAST	DEARING				
P.O.T.	700+00.00	572,222.0466	I , 233,608.2946					
P.C.	701+48.39	572,319.0823	I , 233,720.5632	N 49°09′45 . 3"E				
P . I.	701+65.51	572,330.2745	1,233,733.5123					
P.T.	701+82.62	572,341.3778	I , 233,746.5379	N 49°33′17 . 4" E				
P.O.T.	703+64.77	572,459.5426	I , 233,885.I594					
		CLARKSBURG SQU	ARE ROAD					
P.O.T.	0+01.66	572,715.0642	1,233,147.5017					
P.O.T.	2+00.00	572,850.6445	I , 233,292.2645	N 46 52 33.1 E				
		SPIRE STRE	EET					
P.0.T.	600+00.00	572,850.9939	I,233,0I9 . 777I					
P.0.T.	601+10.00	572,960.9253	I,233,023.6594					
		CLARKSBURG	ROAD					
P.O.T.	190+00.00	572,273.8601	I , 232,308.9732					
P.O.T.	200+02.06	573,199.9788	1,232,691.6332	N 22°26′59 . 2" E				
P.C.	200+53.38	573,247.4110	1,232,711.2315					
P . I.	20I+93 . 68	573,377.0795	1,232,764.8088					
P.R.C.	203+33.96	573,508.4065	1,232,814.1812	N 20°36′13 . 5" E				
P . I.	204+78.20	573 , 643 . 4176	I,232,864.9386					
P.T.	206+22.40	573,776.5112	I,232,920.5298					
P.C.	208+23.01	573,961.6211	1,232,997.8474	N 22 4010.4 E				
P . I.	210+18.28	574,141.8028	1,233,073.1066					
P . T .	212+12.24	574,303.4002	1,233,182.7229	N 34°09′00.7" F				
P.C.	217+50.68	573,748.9952	1,233,484.9832					



		CONTROL TRAVERS	SE	
POINT NO.			ELEVATION	DESCRIPTION
WMI	572 612 1750	EASI	647 365	REBAR & CAP
WM2	572,360,6198	1,231,012,1130	656 216	
	572 085 4874		669 500	
WM4	572,406,9292	1,233,468,6510	655,793	
WM5	572.601.9950	1.233.221.1993	663.426	REBAR & CAE
WM6	572,910,5108	1.232.999.3619	656.127	REBAR & CAF
WM7	573,103,5557	1,232,748,6685	640.521	REBAR & CAF
WM8	573,366,8426	1,232,561,8287	647.495	REBAR & CAF
WM9	573,584,3873	1,232,263,744	666.701	REBAR & CAF
WMIO	573,873.8993	1,231,964,4479	652.919	MAG NAIL
WMII	574,070.6373	1,231,618,4007	658.264	REBAR & CAF
WMI2	574,324.7651	1,231,395.1291	642.679	REBAR & CAF
WMI3	574,539.8173	1,231,088.9347	626.893	REBAR & CAF
WMI4	574,798.7957	1,230,928.3124	636.191	REBAR & CAF
WMI5	575,173.2046	1,231,345.2351	657.911	REBAR & CAF
MERIOI	573,234.1295	1,232,692.8439	640.58	
MERI59	573,195.9319	1,232,895.0696	651.80	
MERI6I	573,045.9194	1,232,713.7816	635.25	
529+95.26 530	1. 533+75.17 N 46°38'51.6" W			
5 ROAD)				

င့္ OF ROADWAY									
POINT	STATION	COORE	DINATES	BEARING					
DESCR.	STATION	NORTH	EAST	DLAKING					
P.0.T.	494+26.42	572,174.0566	1,233,650.2792						
P.C.	494+67.64	572,205.1882	1,233,623.2616	N 40°57′10.9"W					
P .I.	494+85.73	572,218.8527	I , 233,6II . 4029						
P.T.	495+03.82	572,232.0793	I,233,599.0577	N 43°01′33 . 9"W					
P.I.	500+00.00	572,594.8068	I,233,260.4999						
P.0.T.	501+65.02	572,715.0642	1,233,147.5017						
P.0.T.	503+51.54	572,850.9939	1,233,019.7771						
P.C.	507+86.22	573,167.7764	1,232,722.1166	- N 45 15 02.9 W					
P.0.C.	508+30.57	573,199.9788	1,232,691.6332						
P.I.	509+05.73	573,254.8699	1,232,640.2803						
P.T.	5I0+25 . 2I	573,338.6356	1,232,555.0408						
P.C.	512+49.16	573,495.6056	I,232,395.3090	N 45 25 50.1 W					
P.I.	514+79.06	573,656.7479	1,232,231.3315						
P.T.	517+08.14	573,792.2117	I,232,045.5762	N 53°53′53.7"W					
P.I.	518+50.00	573,875.7952	1,231,930.9620						
P.C.	521+89.64	574,072.0056	1,231,653.7294	N 54°42′40.3"W					
P.I.	524+39.55	574,216.3760	1,231,449.7432						
P.T.	526+87.99	574,396.2380	1,231,276.2415						
P.C.	529+95.26	574,617.3863	1,231,062.9135	- N 4J 30 07.0 W					
P.I.	53I+06 . 28	574,697.2867	I,230,985.8387	<u> </u>					
P . T .	532+17.25	574,773.4974	1,230,905.1137	N 46°38′51.6" W					
P.0.T.	533+75 . 17	574,881.9025	1,230,790.2873						

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE, 4TH FLOOR GAITHERSBURG, MD 20878

Date

PLAN SHEET GS-01 GEOMETRY LAYOUT MD 355 - CLARKSBURG SHARED USE PATH

3		Date		SCALE : 1"= 200'				09/201			/2019
awn by :	J.D.W.	Checked by :	S.R.R.	Project No. :	C.I.P. PR. :	# 501744	SHEET	07	of	88	



	\$ 06 AV D 0 _ 164	
	BE COMPO	PS-07 PS-06 PS-06 PS-04
	270	REGENT CONTRACTOR
ŀ		
		SCALE 1"=1000'
		STANDARD TYPE A COMBINATION CURB AND GUTTER,
	272	IZ INCH GUTTER FAN, O INCLUMEDEL IN NUC CECCE. 2 L.F. MD 355 (FREDERICK ROAD) - STA. 495+29 TO STA. 498+00, RT.
	[
	216	6 L.F. MD 355 (FREDERICK ROAD) - STA. 495+85 TO STA. 498+00, RT.
		RFMOVAL OF EXISTING PAVEMENT
	IС. 5 С	C.Y. MD 355 (FREDERICK ROAD) - STA. 495+53 TO STA. 495+57, RT. C.Y. MD 355 (FREDERICK ROAD) - STA. 495+82 TO STA. 496+81, RT.
	·	
	 .c.	MD 355 (FREDERICK ROAD) - STA. 496+90, RT. (EXISTING HEADWALL)
		CLASS I RIPRAP FOR SLOPE AND CHANNEL PROTECTION
	22	S.Y. MD 355 (FREDERICK ROAD) - STA. 496+89, RT.
		BARRIER CURB (SEE DWG.NO.TS-01)
	6 L	L.F. MD 355 (FREDERICK ROAD) - STA. 497+94 TO STA. 498+00, RT.
20' 40' "=20'		
TGOMERY COUNTY NT OF TRANSPORTATION		PLAN SHEET PS-01
PARK DRIVE, 4TH FLOOF RSBURG, MD 20878	?	
Date		SHARED LISE PATH
Date		STA. 495+29 TO STA. 498+00
		SCALE I = 20 09/2019

Drawn by : J.D.W. Checked by : S.R.R. Project No. : C.I.P. PR. # 501744 SHEET 08 of 88



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• • •	
	BENNETT REGIONAL PARK SNOWDEN FARM PARKWAY
2	PS-07 PS-06 PS
	PS-04 PS-04 PS-03 STRINGTOWN PS-02
270	
	SCALE 1"=1000' STANDARD TYPE A COMBINATION CURB AND GUTTER, I2 INCH GUTTER PAN, 8 INCH MIN. DEPTH (MD 620.02)
	82 L.F. MD 355 (FREDERICK ROAD) - STA. 498+00 TO STA. 498+60, RT. 303 L.F. MD 355 (FREDERICK ROAD) - STA. 498+78 TO STA. 50I+50, RT. CPI IT PAIL FFNCF
	4I L.F. MD 355 (FREDERICK ROAD) - STA. 498+00 TO STA. 498+40, RT. 27 L.F. MD 355 (FREDERICK ROAD) - STA. 498+12 TO STA. 498+39, RT. 26 L.F. MD 355 (FREDERICK ROAD) - STA. 499+48 TO STA. 499+74, RT.
	REMOVAL OF EXISTING PAVEMENT 7 C.Y. MD 355 (FREDERICK ROAD) - STA. 498+92 TO STA. 499+59 3 C.Y. MD 355 (FREDERICK ROAD) - STA. 499+63 TO STA. 499+94 I9 C.Y. MD 355 (FREDERICK ROAD) - STA. 500+16 TO STA. 501+41
	DETECTABLE WARNING SURFACE FOR CURB RAMPS (MD 655.40)
	22 S.F. MD 355 (FREDERICK ROAD) - STA. 498+53, RT. 18 S.F. MD 355 (FREDERICK ROAD) - STA. 498+86, RT. 18 S.F. MD 355 (FREDERICK ROAD) - STA. 501+45, RT. 18 S.F. MD 355 (FREDERICK ROAD) - STA. 501+45, RT.
	SIDEWALK RAMP CONSTRUCTION MD 355 (FREDERICK ROAD) - STA. 498+53, RT. MD 655.II MD 355 (FREDERICK ROAD) - STA. 498+86, RT. MD 655.II MD 355 (FREDERICK ROAD) - STA. 50I+45, RT. MD 655.II
	8 INCH PORTLAND CEMENT CONCRETE PAVEMENT FOR DRIVEWAY MIX NO. 9 (MD 630.02)32 S.Y.MD 355 (FREDERICK ROAD) - STA. 499+94 TO STA. 500+16, RT.
	BARRIER CURB (SEE DWG. NO. TS-OI) 44 L.F. MD 355 (FREDERICK ROAD) - STA. 498+00 TO STA. 498+44, RT.
0 20' 40' SCALE: 1" = 20'	
IONTGOMERY COUNTY MENT OF TRANSPORTATION ON PARK DRIVE, 4TH FLOOR THERSBURG, MD 20878	PLAN SHEET PS-02 ROADWAY PLANS MD 355 - CLARKSBURG
Date	SHARED USE PATH STA. 498+00 TO STA. 501+50 SCALE 1'= 20' (9/2019)
wn by : J.D.W. Checked by : S.R	₹.R. Project No. : C.I.P. PR. # 501744 SHEET 09 of 88



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UTILITY ADJUSTMENTS								
ILITY	STATION	OFFSET	REMARKS					
RANT (WSSC)	519+55	21′ RT.	RELOCATE BY OTHERS					
CONNECTION (WSSC)	520+25	16′ RT .	RELOCATE BY OTHERS					
ETER (WSSC)	520+25	27′ RT.	RELOCATE BY OTHERS					

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). PART OF THIS CONTRACT.					20'	0 SC
O → SPLIT RAIL FENCE TRAFFIC BARRIER CLARKSBURG HISTORIC		90% SUBN	1ITTAI		DE 100	N PAR EDIS GAI
PEDESTRIAN LIGHT POLE AND		DATUM: NAD 83/91 NAVD 88 VEF	HORIZONTA RTICAL	NL.	RECOMMENDED FOR APPROVAL	
JUNCTION BOX PIPE 7 INLET 7 STORM DRAIN SYMBOLS					APPROVED	Services
SECTION MANHOLE ENDWALL	NO.	REVISION	DATE	BY	Designed by : J.D.W.	Dra

FILE: M:\PROJ\214013.0010\Highways_Cadd_\pHD-P005_MD355.dgn

CURVE DATA DELTA = 10°44'32.5'' RT. $Dc = 2^{\circ}09'20.6''$ R = 2,658.00'L = 498.35'T = 249.91'CH = 497.62'E = 11.72'

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	SHARE	D USE PATH	FRONT EDGE	
POINT TYPE	STATION	OFFSET	NORTHING	EASTING
P.O.C.	523+50.00	16.00' RT.	574,181.0132	I,23I,535.722
P.C.C.	523+80.32	16.00' RT.	574,200.0082	1,231,512.3262
P.T.	523+93.40	17.22′ RT.	574,209.2231	I,23I,503.08I
P.C.	524+44.79	26.37′ RT.	574,249.1345	1,231,470.080
P.R.C.	524+61.94	3I.47′ RT.	574,264.1040	1,231,460.6110
P.C.C.	525+01.39	39.67′ RT.	574,296.0701	1,231,436.940
P.T.	526+87.99	39.67′ RT.	574,423.7763	1,231,304.789
P.C.	527+88.85	39.67′ RT.	574,496.3689	1,231,234.763
POC	528+00.00	38.62′ RT	574 503 6670	23 226 272

OFFSET	REMARKS
	1
12' RT.	RELOCATE BY OTHERS
21' RT.	RELOCATE BY OTHERS
28′ RT.	RELOCATE BY OTHERS
	12' RT. 21' RT. 28' RT.







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32720		LEGEND
E 1232 X 572640		 PROPOSED DITCH LINE PROPOSED GRADE BREAK ROOTWAD BOULDERS TYPE A BSM RIFELE GRADE CONTROL
-00026697 LLEN ET AL B FOLIO 715 RCEL PI55	AX_ID_02-00026128 S, KATHRYN PATRICIA-MILES NDALL M. LUPARI IN & KAREN ANNE MILES-MIL R 43394 FOLIO 375 EW2I PARCEL P303 WUS S	RIFFLE GRADE CUNTRUL (TYPE D BSM)
M	HYDRANT E	1232480 T M M M
96 L	0G+	+ + 20 -20
MONTGOMERY COUNT PERMITTING SERVICE	TY DEPARTMENT OF ES APPROVED FOR:	NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED FOR A <u>MCDPS</u> ACCESS PERMIT.
Stormwater Management:	Sediment Control Technical Requirements:	Administrative Requirements:
iewed Date	Reviewed Date Approved Date	Reviewed Date SEDIMENT CONTROL PERMIT NO.
SM FILE #		MCDPS APPROVAL OF THIS PLAN WILL EXPIRE TWO YEARS FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED.
proval of a sediment control or stormwant to standards and does not create or imp permission. It does not relieve the design y of the drainage design as it affects uphil MONTGOMERY COUNTY TMENT OF TRANSPORTATION SON PARK DRIVE, 4TH FLOO ITHERSBURG, MD 20878	Ater management plan is for demonstration by any right to divert or concentrate rund n engineer or other responsible person of ll or downhill properties. PR PLA STREAM MD 355 SHAF	ted compliance with minimum environmental runoff off onto any adjacent property without that property of professional liability or ethical responsibility for the N SHEET SR-01 RESTORATION PLAN 5 - CLARKSBURG RED USE PATH
s Date	SCALE 1"=20' C.V.M. Project No. : C.I.P. PR. #	09/2019 501744 SHEET 15 of 88
 Cadd-Drainage\pSR-P001_MD355.dgn		

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MONTGOMERY COUNT PERMITTING SERVICE	Y DEPARTME S APPROVEI	ENT OF D FOR:	NOTE: MCDPS A NEGATE THE NE ACCESS PERMIT.	PPROVAL DOES NOT EED FOR A <u>MCDPS</u>	
Stormwater Management:	Sediment C Req	Control Technical uirements:	Administrative Requirements:		
			Reviewed	Date	
	Reviewed	Date			
iewed Date	Approved	Date			
roved Date			MCDPS APPROVAL OF	THIS PLAN WILL EXPIRE	
SM FILE #			TWO YEARS FROM THE THE PROJECT HAS NOT	DATE OF APPROVAL IF STARTED.	
proval of a sediment control or stormwa It standards and does not create or impl permission. It does not relieve the design by of the drainage design as it affects uphill	ter management pla y any right to divert engineer or other n or downhill propertie	in is for demonstrated c or concentrate runoff or esponsible person of pro- s.	ompliance with minim to any adjacent prope fessional liability or eth	um environmental runoff erty without that property nical responsibility for the	
MONTGOMERY COUNTY TMENT OF TRANSPORTATION SON PARK DRIVE, 4TH FLOOF THERSBURG, MD 20878	S	PLAN S	SHEET SR-0 TORATION)2 PROFILE	
Date	Γ	ID 355 - SHARE	CLARK D USE F	SBURG PATH	

		Date		MI	MD 355 - CLARKSBURG SHARED USE PATH							
ces		Dat	e	SCALE AS NOT	ED						09/2019	
Drawn by :	L.E.W.	Checked by :	C.V.M.	Project No. :	C.I.P. PR. #	501744	SHEET	16	of	88		
Cadd-Drainac	je∖pSR–P002_	MD355.dgn										

PLOTTED: 9/16/2019 FILE: M:\PROJ\214013.0010\Highways

OVERBANK STAKEOUT TABLE

	٨	R
STATION	<u> </u>	D,
0+00	9′	6'
0+70	6′	9′
1+35	9′	6′
1+90	6′	9′
2+40	9′	6′
2+90	6′	9′
3+35	9′	6′
3+70	6′	9′

NATIVE F	RIPARIAN	SEED	MIX
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PERCENT	COMMON NAME	SCIENTIFIC NAME
25%	VIRGINIA WILD RYE	Elymus virginicus
10%	ANNUAL RYE	Lollium multiflorum
20%	RIVERBANK WILD RYE	Elymus riparius
15%	RED FESCUE	Festuca rubra L
10%	DEERTONGUE	Dischanthelium clandestinum
20%	BOTTLEBRUSH	Elymus hystrix

TYPICAL BOULDER NOT TO SCALE

REVISION

NO.

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Reviewed	Date	Approved	Date	_ 5	EDIMENT	CONTRO		RMIT NO.
Approved	Date			MCDI TWO	PS APPROVA YEARS FRO	AL OF THIS F	PLAN WI	LL EXPIRE PROVAL IF
SM F	ILE #			THE	PROJECT HA	S NOT STA	RTED.	
PS approval of a sed eatment standards and wner's permission. It d dequacy of the drainage	iment control or stormwa d does not create or impl oes not relieve the desigr e design as it affects uphill	ter management y any right to div engineer or othe or downhill prope	plan is for demonstrate ert or concentrate runo r responsible person of rties.	ed complia Iff onto any profession	ance with n y adjacent nal liability	ninimum e property v or ethical	nvironr vithout respons	nental runoff that property sibility for the
MONTGOMER PARTMENT OF 1 EDISON PARK I GAITHERSBURG	Y COUNTY FRANSPORTATION DRIVE, 4TH FLOOR , MD 20878	STR	PLAN EAM REST	I SHE DRAT	ET SF	R-03 YP. S	EC.	TIONS
			MD 355	- CI	LAR	KSE	SU	RG
	Date		SHAR	ED	USE	PA	TH	
Services	Date	SCALE 1	N.T.S.					09/2019
Drawn by : L.E.	W. Checked by :	C.V.M. Project	No.: C.I.P. PR. # 5	501744	SHEET	17	of	88

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED FOR A <u>MCDPS</u> ACCESS PERMIT. PERMITTING SERVICES APPROVED FOR: Stormwater Management: Sediment Control Technical Administrative Requirements: Requirements: Reviewed Date Reviewed Date

MONTGOMERY COUNTY DEPARTMENT OF

	RIFFLE GRADE CONTROL TABLE									
STR #	CREST STA.	CREST ELEV.	TAIL STA.	TAIL ELEV.	SLOPE %	GLIDE LENGTH	RUN LENGTH	BANKFULL WIDTH	BANKFULL DEPTH	
RIFFLE 10	0+17.0	628.0	0+42.0	627.6	I . 6	N/A - ROCK SILL 21	N/A - ROCK SILL 20	6′	0.75′	
RIFFLE 9	0+57.0	627.2	0+82.0	626.8	1.6	N/A - ROCK SILL 19	N/A - ROCK SILL 18	6′	0.75′	
RIFFLE 8	0+97.0	626.4	1+22.0	626.0	I . 6	N/A - ROCK SILL 17	N/A - ROCK SILL 16	6′	0.75′	
RIFFLE 7	1+37.0	625.6	1+62.0	625.2	1.6	N/A - ROCK SILL 15	N/A - ROCK SILL 14	6′	0.75′	
RIFFLE 6	1+77.0	624.8	2+02.0	624.4	1.6	N/A - ROCK SILL I3	N/A - ROCK SILL 12	6′	0.75′	
RIFFLE 5	2+17.0	624.0	2+42.0	623.6	1.6	N/A - ROCK SILL II	N/A - ROCK SILL IO	6′	0.75′	
RIFFLE 4	2+57.0	623.2	2+82.0	622.8	1.6	N/A - ROCK SILL 9	N/A - ROCK SILL 8	6′	0.75′	
RIFFLE 3	2+97.0	622.4	3+22.0	622.0	1.6	N/A - ROCK SILL 7	N/A - ROCK SILL 6	6′	0.75′	
RIFFLE 2	3+37.0	621.6	3+62.0	621.2	1.6	N/A - ROCK SILL 5	N/A - ROCK SILL 4	6′	0.75	
RIFFLE I	3+77.0	620.8	4+02.0	620.4	1.6	N/A - ROCK SILL 3	N/A - ROCK SILL 2	6′	0.75′	

Montgomery Parks Bed Stability Mix (BSM) Tables

Purpose: Bed Stability Mix (BSM) is a mixture of sands, gravels, cobbles, and rocks that are installed within stream channels to stabilize areas of high stress, provide channel shaping, and create long-term stability, surficial flow, aquatic habitat, and fish passage. BSM Types: Selection of BSM Type for a particular project should be made based on channel size, stream gradient, anticipated water power, etc.

Material Size:	Percentage of BSM	
BRG/Native SBM	50%]
Woodchips	20%]
#2 Stone	20%]
Surge Stone	10%]
Total:	100%	-

Material Size: Percentage of BSM BRG/Native SBM Woodchips Surge Ste Class 0 Total:

Type C: For smaller perenial channels (BFw<12') w/low-moderate stresses. Material Size: Percentage of BSM

G/Native SBM Surge Stone Total: 100%

als (REw<18') with moderate high stresse Type D: For mid-size chan

Material Size: Per

inneis (brw<10) v	vith moderate-mgn stresses.
rcentage of BSM	
30%	

Material Size:	Percentage of BSM	
BRG/Native SBM	20%	1
Class 0	10%]
Class I	30%]
Class II	40%]
Total:	100%	-

Type F: For mid-larg	e channels (BFw<30') v	vith moderate stresses.
Material Size:	Percentage of BSM	
BRG/Native SBM	20%	
Class I	30%	
Class II	30%	
Class III	20%	
Total:	100%	•

Type G: For large channels with higher stresse					
Material Size:	Percentage of BSM				
BRG/Native SBM	20%				
Class I	10%				
Class II	30%				
Class III	40%				
Total:	100%				

BRG/Native SBM Class 0

- Class I Class II Total: Notes:
- 1. Native Stream Bed Material (SBM) should be harvested prior to channel grading for reuse, especially in upper 12" of BSM. 2. BSM materials shall consist of clean natural materials (i.e. no concrete, asphalt, stone dust, etc.)
- 3. Materials should be well mixed prior to in-stream placement, installed in 18" (max.) lifts, and washed in to promote surface flow. 4. Wash Bank Run Gravel (BRG)/SBM into each lift to lock-in material and establish surface flow at baseflow conditions.
- 5. Placed BSM lifts should be pressed/tracked into stream channel to ensure stability and smooth transitions.
- 6. Parks may permit common borrow to be incorporated into lower lifts of BSM and silica sand in upper layers if washed-in BRG does not seal BSM. 7. Installed BSM should be checked and augmented as needed once baseflow conditions are observed and following storm events. 8. Alternative BSM types may be submitted by design team for site specific approval by Parks.
- 9. Percentages listed are by volume. Actual content of each component may vary 5% up or down.

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ROCK SILL TABLE									
STR	ST A	POINT "X"	Α	В	Х	Y			
#	STA.	C/L OFFSET	ARCH HEIGHT	BANKFULL	ELEV.	ELEV.			
ROCK SILL 22	0+02.3	0′	1'	15′	630.5	63I . 25			
ROCK SILL 21	0+17.0	0′	11	15′	628.0	628.75			
ROCK SILL 20	0+42.0	0′	1'	15′	627 . 6	628.35			
ROCK SILL 19	0+57.0	0′	1'	15′	627.2	627.95			
ROCK SILL 18	0+82.0	0′	1'	15′	626.8	627 . 55			
ROCK SILL 17	0+97.0	0′	1'	15′	626.4	627.15			
ROCK SILL 16	1+22.0	0′	1'	15′	626.0	626.75			
ROCK SILL 15	1+37.0	0′	1'	15′	625.6	626.35			
ROCK SILL 14	1+62.0	0′	1'	15′	625.2	625.95			
ROCK SILL 13	1+77.0	0′	1'	15′	624.8	625.55			
ROCK SILL 12	2+02.0	0′	1'	15′	624.4	625.15			
ROCK SILL II	2+17.0	0′	1'	15′	624.0	624.75			
ROCK SILL 10	2+42.0	0′	1'	15′	623.6	624.35			
ROCK SILL 9	2+57.0	0′	1'	15′	623.2	623.95			
ROCK SILL 8	2+82.0	0′	1'	15′	622.8	623.55			
ROCK SILL 7	2+97.0	0′	1'	15′	622.4	623 . 15			
ROCK SILL 6	3+22.0	0′	1'	15′	622.0	622.75			
ROCK SILL 5	3+37.0	0′	1'	15′	621.6	622.35			
ROCK SILL 4	3+62.0	0′	1'	15′	621.2	621.95			
ROCK SILL 3	3+77.0	0′	1'	15′	620.8	621.55			
ROCK SILL 2	4+02.0	0′	1'	15′	620.4	621.15			
ROCK SILL I	4+17.0	0′	1'	15′	620.0	620.75			
ROCK SILL 24	30+11.0	0′	0'	12′	632.82	633.85			
ROCK SILL 23	30+23.0	0′	0'	12′	631.7	632.7			

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NO.

0% SUBM	ITTAL		. 17 76 .	DE 100	PAR EDIS GAI
ATUM: NAD 83/91 H NAVD 88 VER	ORIZONTAL TICAL		RECOMMENDED FOR Chief, Design Secti	APPROVAL	
REVISION	DATE	BY	Designed by :	_ngineering E.W.	Dro

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The Maryland-National Capital Park and Planning Commission

Montgomery County Department of Parks

603.2 JUNE 2018

	MONTGOM PERMITTI	ERY COUNT	y def S apf	PARTMEN	IT OF FOR:	NOTE: MCDF NEGATE THE ACCESS PERM	PS APPR NEED IT.	OVAL FOR	DOES A <u>N</u>	S NOT MCDPS
	Stormwater Management:			Sediment Con Require	trol Technical ments:	Adminis	trative Re	quirem	ients:	
						Reviewed		Da	te	
			Revie	ewed	Date		CONTRO		BMIT	
	Reviewed D	ate	Appro	oved	Date					
	Approved E	Date				MCDPS APPROVA		PLAN W		PIRE
	SM FILE #					TWO YEARS FROM THE PROJECT HA	N THE DATI S NOT STA	: OF AP RTED.	PROVA	L
	DPS approval of a sediment treatment standards and does owner's permission. It does no adequacy of the drainage desig	control or stormwa not create or impl t relieve the design on as it affects uphill	ter mana y any rig enginee or downl	gement plan i ht to divert or r or other resp hill properties.	s for demonstrated co concentrate runoff on onsible person of prof	ompliance with m to any adjacent j essional liability o	iinimum e property v pr ethical	nviron vithout respon	mental that p isibility	I runoff property for the
10	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE, 4TH FLOOR GAITHERSBURG MD 20878				PLAN S REAM REST	HEET SR ORATIO	2-04 N DE		LS	
PPRO	VAL			MI	D 355 -	CLARI	KSE	3U	RC	,
		Date			SHARE	D USE	PA	TH		
neeri	ng Services	Date		SCALE N.T.S.						09/2019
.W.	Drawn by : L.E.W.	Checked by : (C.V.M.	Project No. :	C.I.P. PR. # 50174	44 SHEET	18	of	88	

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PLUNGE POOL TABLE									
STR #	E STA.	F STA.	POOL ELEV.	POOL BOTTOM LENGTH	POOL BOTTOM WIDTH	POOL DEPTH	BACKWATER ABOVE CULVERT		
POOL II	0+03.3	0+12.5	626.5	II . 2′	2′	I . 5′	0.87′		
POOL IO	0+43.0	0+53.7	626 . I	10.7′	2′	. '	N/A		
P00L 9	0+83.0	0+93.7	625 . 3	10.7′	2′	. ′	N/A		
POOL 8	1+23.0	1+33.7	624.5	10.7′	2′	. ′	N/A		
P00L 7	1+63.0	1+73.7	623.7	10.7′	2′	. '	N/A		
P00L 6	2+03.0	2+13.7	622.9	10.7′	2′	1.11	N/A		
P00L 5	2+43.0	2+53.7	622 . I	10.7′	2′	1.1′	N/A		
P00L 4	2+83.0	2+93.7	621.3	10.7′	2′	I.I′	N/A		
P00L 3	3+23.0	3+33.7	620 . 5	10.7′	2′	1.1′	N/A		
P00L 2	3+63.0	3+73.7	619.7	10.7′	2′	1.17	N/A		
POOL I	4+03.0	4+13.7	618.9	10.7′	2′	1.11	N/A		
P00L 13	30+00	30+10.0	63I . 85	10.0	4'	1.0′	1.0		
P00L 12	30+12.0	30+22.0	630.7	10.0	4'	1.0'	N/A		

Montgomery Parks Construction Notes for Stream Restoration on Parkland

- 1. A pre-construction meeting with the M-NCPPC (Parks) Construction Inspector, Urban Forester, Park Manager, Engineer, Contractor, and applicant's Stream Restoration Professional (SRP) shall occur to ensure full understanding of the project goals, design intent, and field conditions at the time of construction. (The applicant is responsible for coordination with MDE and other regulatory agencies as required by permits.) Contact Jay Childs, Park Construction Manager, at 301.495.2574 to schedule this meeting.
- 2. Contractor shall be familiar with and implement MDE Waterway Construction Guidelines and MDE Best Management Practices for Working in Nontidal Wetlands, Wetland Buffers, Waterways, and 100-Year Floodplain throughout construction. All in-channel construction shall occur "in the dry" with appropriate pump-around practices.
- 3. The applicant shall engage a SRP, an individual familiar with stream restoration revetment design features and waterway construction techniques, to oversee in-stream construction activities to ensure stable channel construction, including appropriate field adjustments and natural resources protection. The applicant shall empower this person to direct Contractor's work as needed to ensure design intent is achieved. This person shall coordinate all adjustments and acceptance of structures with Parks as construction progresses.
- 4. Parks, in coordination with the SRP and contractor, may require minor adjustments to the layout/elevation of in-stream structures, streambank stabilization, and grading during construction to minimize disturbance to trees/tree roots and to ensure functionality of completed construction. Note that the contractor shall take care to protect trunks/roots designated to remain throughout construction.
- 5. Contractor shall layout critical design points (centerline station, offsets, elevations, structures, etc.) along the stream channel for review prior to structure installation. SRP shall coordinate with Parks to adjust/confirm stakeout to ensure channel stability and protect natural resources. Contractor shall be responsible for maintaining stakeout during construction until final acceptance by Parks. Contractor shall maintain laser level equipment onsite to check grades as construction progresses.
- 6. Construction of in-stream revetments, including grade control, bank stabilization and habitat structures, shall be inspected by SRP and Parks under baseflow (nct pump-around) conditions to determine any modifications required prior to acceptance. Additional inspections following storm events may result in additional modifications. Contractor is encouraged to utilize construction equipment for compaction of completed structures to ensure stability.
- χ_{*} Access routes and staging areas shall be field adjusted with Parks to minimize impacts to natural resources. Equipment restrictions (e.g., <8 psi loaded ground pressure) may be required by Parks in sensitive areas. Access routes will be limited to 12' width, unless otherwise approved by Parks.
- 8. Contractor shall coordinate all tree protection measures and tree removals with Parks prior to construction. Protection measures, such as hardwood mats, tree planking, root aeration matting, equipment restrictions, mulch roads, tree protection fencing, etc. must be installed before equipment enters root areas. Revised 06.01.18

to excavation at the direction of Parks. impacts to terrestrial and aquatic natural resources. and runoff through disturbed areas.

work areas and between the streambed and its banks. 14. Upon completion of in-stream revetments and channel grading, thalweg to be reestablished as directed by the SRP and Parks.

15. All exposed stone (including stone toe, imbricated rock walls, rock packs, etc.) above bankfull depth shall be backfilled with topsoil/compost to within 2-inches of rock surface and vegetated with native riparian seed and mulched.

16. Voids should not be left in any completed in-stream structures. Structures should be chinked in with BSM and/or stream bed mix to fill all voids. Constructed riffles and other grade control revetments will not be accepted by Parks until surficial baseflow is established.

17. Applicant is responsible for completing fish rescues associated with all pump-arounds. Fish rescue teams should consist of properly trained personnel, based on Maryland Biological Stream Survey (MBSS) standards. A list of personnel certified in MBSS protocols can be found at http://www.dnr.maryland.gov/streams/MBSSRegistry.asp. Fish rescues require three (3)

18. Where fish pool/aquatic habitat is specified for preservation or enhancement, completed construction should favor the following conditions:

constructed riffles shall not be steeper than 3% to ensure fish passage. Contractor will be required to modify/augment constructed revetments that exceed limits, or otherwise create fish passage restrictions at baseflow, as directed by SRP and Parks.

Revised 06.01.18

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9. Contractor shall coordinate with Sediment Control Inspector and Parks to utilize trenchless sediment controls (i.e. compost socks, trenchless silt fences, etc.) and/or daily stabilization to avoid cutting through mature tree root systems. Where trenching is required, root prune prior

10. Tree trunk/root systems to remain shall not be damaged during placement of riprap, vegetated rock packs, riffle grade controls, rock sills, and other revetments. Exact extent/orientation of stone placement shall be adjusted in the field, and work completed in a manner that minimizes

11. Contractor is responsible for control of water throughout construction, including stream flows

12. In-stream areas where pump-around is removed at the end of the workday must be completed and stabilized daily. Disturbed areas above baseflow shall receive seed/mulch at the end of each workday. Once stream flow is re-established at the end of the workday, the contractor

shall allow sufficient time to inspect the new flow pattern and make appropriate adjustments to ensure non-erosive conditions before vacating the site. 13. Contractor is responsible for ensuring smooth transitions at upstream and downstream ends of

working days advanced notice to Parks.

Root-water interaction at baseflow

Maintaining void space between roots and undercut banks

 Restoring post-construction flow patterns to provide adequate scour depth to naturally wash out pools and maintain adequate habitat

19. Completed streambed profile shall not have revetment drops greater than six inches and

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Stormwater Management:		Sediment Control Technical Requirements:			Administrative Requirements:				
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iewed Date				- 5	SEDIMENT	CONTRO)L PEF	RMIT N	0.
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proval of a sediment control or stormy it standards and does not create or im permission. It does not relieve the desi y of the drainage design as it affects uph	vater mana ply any rig gn enginee hill or down	agement plan i ht to divert or or other resp hill properties.	s for demonstrated concentrate runoff onsible person of	d complia f onto an professio	ance with m y adjacent p nal liability c	ninimum e property w pr ethical n	nvironr vithout respon	nental that pro sibility fo	runoff operty or the
ONTGOMERY COUNTY MENT OF TRANSPORTATION ON PARK DRIVE, 4TH FLOO THERSBURG, MD 20878	R	ST	PLAN REAM RE	SHE STOI	ET SR Ratio	R-05 N DE	TAI	LS	
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Date		SCALE N.T.S.						0	9/2019
wn by : L.E.W. Checked by :	C.V.M.	Project No. :	C.I.P. PR. # 50	01744	SHEET	19	of	88	

			CURVE DAT	A – STREA
CURVE	RADIUS	DELTA	Dc	LENGTH
C-01	40.00′	42°04′27.23"LT.	43° 4′22 . 02"	29.37′
C-02	40.00′	42°00′01.36" RT.	43° 4′22 . 02"	29.32′
C-03	40.00′	55°00′11.69" LT.	43° 4′22 . 02"	38.40′
C-04	40.00′	62°27′00.87" RT.	43° 4′22 . 02"	43.60′
C-05	40.00′	61°59′36.69" LT.	43° 4′22 . 02"	43.28′
C-06	40.00′	49° 46′12.57" RT.	43° 4′22 . 02"	34.75′
C-07	40.00′	46°00′23.I6" LT.	43° 4′22 . 02"	32.12′
C-08	40.00′	63° 40′58.02" RT.	43° 4′22.02"	44.46′

	B	OF CONSTRUCTIO	N STREAM			
POINT	STATION	COOR	COORDINATES			
DESCR.	STATION	NORTH	EAST	DEAKING		
P.O.B.	0+00.00	573,099.5030	I,232,726.8023			
P.C	0+42.08	573,065.1107	1,232,702.5517	S 35°11′17.76"W		
P.I.	0+57.47	573,052.5376	I,232,693.6862			
P.T.	0+71.46	573,037.2643	1,232,695.5307	S 06°53'00 17" E		
P.C	1+03.99	573,004.9690	1,232,699.4309	3 06 33 09.41 E		
P.I.	+ 9.34	572,989.7250	I,232,70I.27I8			
P.T.	+33.3	572,977.1648	1,232,692.4396			
P.C	I+53 . 3I	572,960.8047	1,232,680.9354	2 22 00 21°30 M		
P.I.	+74. 3	572,943.7704	1,232,668.9571			
P.T.	+9 .7	572,924.1884	1,232,676.0414			
P.C	1+96.71	572,919.4866	1,232,677.7424	2 13,22,13"13" E		
P.I.	2+20.96	572,896.6841	I,232,685.99I7			
P.T.	2+40.3	572,878.8236	1,232,669.5903	C 100 33/11 00"		
P.C	2+45.31	572,875.1408	1,232,666.2084	5 42 33 41.00 W		
P.I.	2+69.34	572,857.4404	,232,649.954			
P.T.	2+88.59	572,834.7780	1,232,657.9491			
P.C	2+98.59	572,825.3476	1,232,661.2760	2 13, 52, 22°PO, F		
P.I.	3+17.14	572,807.8499	I,232,667.4489			
P.T.	3+33.33	572,791.8360	1,232,658.0769			
P.C	3+38.33	572,787.5207	1,232,655.5514	2 20.50.10°21. M		
P.I.	3+55.31	572,772.8645	1,232,646.9740			
P.T.	3+70.45	572,756.5139	1,232,651.5602			
P.C	3+82.73	572,744.6858	1,232,654.8779	5 15°40′06 ₈ 19" E		
P.I.	4+07.58	572,720.7678	I,232,66I.5867			
P.T.	4+27.19	572,704.1506	1,232,643.1220	S 48°00′51.83"W		
P.I.	4+37.46	572,697.2803	I,232,635.4880			
P.O.E.	4+72.99	572,667.5362	1,232,616.0664	S 33°08′34.07"W		

	₿ O	F CONSTRUCTION	I TRIBUTARY		
POINT	POINT		COORDINATES		
DESCR.	STATION	NORTH	EAST	BEAKING	
P.O.B.	30+00.00	572,966.4217	1,232,631.6960		
P.O.E.	30+48.16	572,943.5385	1,232,674.0699	5 61 57 46.28	
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NO.	REVISION	DATE	BY	Designed by : L.E.W.	Drawn by
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	IMPERVIOUS AREA				
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	WOODED AREA				
M	MONTGOM	ERY			
Engineers · Planners · 10150 York Road, Suit	SURVEYORS · CONSTRUCTION M e 200	ANAGERS			
Hunt Valley, Maryland 410.494.9093 Tel / 4	21030 10.667.0925 Fax				
www.WallaceMontgomery.co	m A Limited Liabili	ty Partnersh			

	STRUCTURE SCHEDULE								
PLAN		CTATION		ТИРГ		VERTICAL			
SHEET	NUMBER	STATION	UFFSEI	ITPE	TOP	INV.	- STANDARD	DEPTH	
PS-01	I-01	496+88.53	13.00′ RT.	10' COG OPENING	N⁄A	N/A	MD 374.68	N/A	
PS-02	I-02	500+25.07	13.00′ RT.	STANDARD 10' COG INLET	662.79	656.62	MD 374.51	0.00	
PS-02	I-03	499+15.20	13.00′ RT.	STANDARD 15' COG INLET	660.41	654.10	MD 374.51	0.14	
PS-02	I-04	501+20.27	13.00′ RT.	MODIFIED 10' COG INLET	663.40	657.40	SEE SHEET DD-02	0.00	
PS-03	I -05	502+37.34	13.00′ RT.	MODIFIED 15' COG INLET	661.55	655.55	SEE SHEET DD-02	0.00	
PS-04	I-22	516+47.01	13.00′ RT.	10' COG OPENING	N⁄A	N/A	MD 374.68	N/A	
PS-04	I-10	518+69.97	13.00' RT.	MODIFIED 15' COS INLET	653.22	647.09	SEE SHEET DD-02	0.00	
PS-05	I -1 1	520+57.00	13.00′ RT.	10' COG OPENING	N/A	N/A	MD 374.68	N/A	
PS-05	I-12	521+33.00	13.00′ RT.	10' COG OPENING	N/A	N/A	MD 374.68	N/A	
PS-05	I -1 4	522+55.72	13.00′ RT.	STANDARD 5' COG INLET	658.25	652.08	MD 374.51	0.00	
PS-06	I-16	523+70.69	13.00′ RT.	MODIFIED 15' COG INLET	653.80	647.63	SEE SHEET DD-02	0.00	
PS-06	I-17	524+44.68	20.27′ RT.	STANDARD 15' COG INLET	649.51	643.33	MD 374.51	0.00	
PS-07	I –1 8	527+07.54	28.50' RT.	STANDARD 20' COG INLET	633.64	628.26	MD 374.52	0.00	
PS-02	ES-01	518+69.97	26.50' LT.	24" STANDARD CONCRETE END SECTION ROUND	N/A	646.03	MD 368.01	N/A	
PS-04	ES-07	518+25.62	40.56′ RT.	24" STANDARD CONCRETE END SECTION ROUND	N/A	650.83	MD 368.01	N/A	
PS-05	ES-13	520+43.81	34.79′ RT.	18" STANDARD CONCRETE END SECTION ROUND	N/A	653.64	MD 368.01	N/A	
PS-05	ES-14	520+00.31	34.77′RT.	18" STANDARD CONCRETE END SECTION ROUND	N/A	652.86	MD 368.01	N/A	
PS-04	EW-08	518+69.97	32.61′ RT.	STANDARD TYPE E ENDWALL FOR 24 INCH PIPE	N/A	650.36	MD 356.01	N/A	
PS-02	MH-02	499+14.47	23.22′RT.	48" SQUARE STANDARD SHALLOW MANHOLE	660.49	653.92	MD 383.00	1.15	

						PIPE SCHEDULE		
PLAN SHEET	STRUCTURE FROM	STRUCTURE TO	SIZE	UPSTREAM INV.	DOWNSTREAM INV.	TYPE	LENGTH	
PS-01 & 02	MH-02	EX. MH-01	18″	651.60	648.76	RCP CLASS IV	209′	
PS-02	I-02	I-03	15″	652.97	652.02	RCP CLASS IV	106′	
PS-02	I-03	MH-02	18″	651.77	651.70	RCP CLASS IV	4 ′	
PS-02 & 03	I-04	I-05	18″	657.40	655.65	RCP CLASS IV	113′	
PS-03	I-05	EX. I 8-1	18″	655.55	652.43	RCP CLASS IV	94′	TIE
PS-04	ES-07	EW-08	24″	650.83	650.61	RCP CLASS IV	44′	
PS-04	EW-08	I-10	24″	650.36	649.70	RCP CLASS IV	14′	
PS-04	I-10	ES-01	24″	647.09	646.17	RCP CLASS IV	47′	
PS-05	ES-13	ES-14	18″	653.64	652.86	RCP CLASS IV	44′	
PS-05 & 06	I -1 4	I-16	18″	652.08	647.73	RCP CLASS IV	111′	
PS-06	I-16	I-17	18″	647.63	643.43	RCP CLASS IV	70′	
PS-06	I-17	I -18	18″	643.33	628.43	RCP CLASS IV	257′	

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10.	REVISION	DATE	BY	Designed by : J.D.W. Dr
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	CONVEYA	NCE DITCH STAKE	EOUT	
PLAN SHEET	STATION	OFFSET	WIDTH	ELEVATION
PS-04	515+45.58	42.73' RT.	2'	661.00
PS-04	515+50.00	43.00' RT.	2'	660.33
PS-04	515+75.00	43.80' RT.	2'	658.02
PS-04	516+00.00	44.12' RT.	2'	656.86
PS-04	516+25.00	44.65' RT.	2'	655.84
PS-04	516+50.00	45.19' RT.	2'	654.54
PS-04	516+75.00	45.94' RT.	2'	653.66
PS-04	517+00.00	46.05' RT.	2'	652.37
PS-04	517+25.00	45.61' RT.	2'	651.77
PS-04	517+50.00	44.91' RT.	2'	651.28
PS-04	517+75.00	44.19' RT.	2'	650.97
PS-04	518+00.00	43.29' RT.	2'	650.87
PS-04	518+19.57	41.51' RT.	2'	651.00

1.0.2.	CONVEYA	NCE DITCH STAKE		
PLAN SHEET	STATION	OFFSET	WIDTH	ELEVATION
PS-04	518+75.89	34.82' RT.	2'	651.68
PS-04 & 05	519+00.00	34.82' RT.	2'	651.75
PS-05	519+25.00	34.82' RT.	2'	652.00
PS-05	519+50.00	35.84' RT.	2'	652.22
PS-05	519+75.00	35.23' RT.	2'	652.60
PS-05	519+94.15	34.77' RT.	2'	652.92

GRASS SWALE STAKEOUT					
PLAN SHEET	STATION	OFFSET	WIDTH	ELEVATION	
PS-05	520+50.00	34.79' RT.	2'	653.89	
PS-05	520+75.00	34.20' RT.	2'	654.36	
PS-05	521+00.00	33.45' RT.	2'	654.95	
PS-05	521+25.00	34.07' RT.	2'	655.50	
PS-05	521+50.00	34.76' RT.	2'	656.05	
PS-05	521+75.00	34.93' RT.	2'	656.48	
PS-05	522+00.00	35.08' RT.	2'	656.84	
PS-05	522+25.00	35.04' RT.	2'	656.89	
PS-05	522+50.00	34.77' RT.	2'	656.94	

CONVEYANCE DITCH STAKEOUT					
PLAN SHEET	STATION	OFFSET	WIDTH	ELEVATION	
PS-06	524+46.51	42.46' RT.	2'	647.79	
PS-06	524+50.00	43.55' RT.	2'	647.57	
PS-06	524+75.00	51.67' RT.	2'	645.87	
PS-06	525+00.00	55.20' RT.	2'	644.25	
PS-06	525+25.00	55.42' RT.	2'	642.81	
PS-06	525+50.00	55.46' RT.	2'	641.34	
PS-06	525+75.00	55.43' RT.	2'	639.77	
PS-06	526+00.00	55.44' RT.	2'	638.23	
PS-06	526+25.00	55.47' RT.	2'	636.66	
PS-06	526+50.00	55.47' RT.	2'	635.16	
PS-06	526+75.00	55.42' RT.	2'	633.66	
PS-06	527+00.00	55.43' RT.	2'	632.37	
PS-06	527+25.00	55.42' RT.	2'	631.33	
PS-06	527+50.00	55.42' RT.	2'	630.50	
PS-06	527+75.00	55.61' RT.	2'	629.73	
PS-06 & 07	528+00.00	56.11' RT.	2'	629.22	
PS-07	528+25.00	51.87' RT.	2'	628.85	
PS-07	528+38.61	49.57' RT.	2'	628.67	











COG OPENING OUTFALL PROTECTION SCHEDULE										
STRUCTURE ID	La (FT)	W (FT)	T (IN)	H (FT)	CLASS	SLOPE	QTY (SY)	CUTOFF WALL (LF)	Q10 (CFS)	V10 (FPS)
I-01	18.2	11.0	19	1.50	CLASS I	33%	23	11.0	2.8	0.3
I-11	10.0	11.0	19	1.50	CLASS I	33%	13	11.0	0.2	0.02
I-12	10.0	11.0	19	1.50	CLASS I	33%	13	11.0	0.1	0.01
I-22	10.0	11.0	19	1.50	CLASS I	33%	13	11.0	0.9	0.09

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MARYLAND		GAITI
RECOMMENDED F	OR APPROVAI	L
Chief, Design Se	ction	
APPROVED		
Chief, Division of	Engineering	Services
Designed by :	J.D.W.	Drawn
PLOTTED: 9/16/201	9	

90% SUBMITTAL DATUM: NAD 83/91 HORIZONTAL NAVD 88 VERTICAL

DATE

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T)	W2(FT)			
0	6.0			

MONTGOM TMENT OF SON PARK THERSBU	ERY COU F TRANS < DRIVE, RG, MD	UNTY PORTATION 4TH FLOC 20878)R	PLAN SHEET DD-02 DRAINAGE DETAILS							
		- Date	9	M	D 35 SHA	5 - C RED	LAR USE	KSE Pa	BU TH	R(G
3		– Date	•								09/201
awn by: u	J.D.W.	Checked by :	S.R.R.	Project No. :	C.I.P. PR.	# 501744	SHEET	23	of	88	

FILE: M:\PROJ\214013.0010\Highways\Cadd-Drainage\pDD-S002_MD355.dgn









	DATUM: NAD 83/91 HORIZONTAL NAVD 88 VERTICAL						
NO.	REVISION		DATE	BY			



RECOMMENDED FOR APPROVAL

Chief, Design Section

APPROVED





SCALE: HOR. 1"=20' VERT. 1"=5'









PLOTTED: 9/16/2019 FILE: M:\PROJ\214013.0010\Highways\Cadd-Drainage\pDP-V003_MD355.dgn

		655	
		650	
		645	
		640	
		$ \begin{array}{c} \begin{array}{c} 1\\ 18\\ \hline \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	
		630	
		F F 625 C 53 L.F. C 18" RCP C 1.03%	
		$\begin{array}{c} Q_{10} = 4.03 \text{ / } \\ Q_{10} = 4.07 \text{ CFS} \\ V_{10} = 4.73 \text{ FPS} \\ \end{array} $ 620	
0 20' ZONTAL SCALE: $1" = 20'$ 0 5' RTICAL SCALE: $1" = 5'$	40' 10'		
MONTGOMERY COU TMENT OF TRANS SON PARK DRIVE, ITHERSBURG, MD	JNTY PORTATION 4TH FLOOR 20878	PLAN SHEET DP-03 DRAINAGE PROFILES	
	Date	MD 355 - CLARKSBURG SHARED USE PATH	
3	- Date	SCALE : AS SHOWN 09/20)19
awn by : J.D.W.	Checked by : S.R.R.	Project No. : C.I.P. PR. # 501744 SHEET 26 of 88	

EROSION AND SEDIMENT CONTROL

STANDARD EROSION AND SEDIMENT CONTROL NOTES

- 1. THE PERMITTEE SHALL NOTIFY THE DEPARTMENT OF PERMITTING SERVICES (DPS) FORTY-EIGHT (48) HOURS BEFORE COMMENCING ANY LAND DISTURBING ACTIVITY AND, UNLESS WAIVED BY THE DEPARTMENT, SHALL BE REQUIRED TO HOLD A PRE-CONSTRUCTION MEETING BETWEEN THEM OR THEIR REPRESENTATIVE, THEIR ENGINEER AND AN AUTHORIZED REPRESENTATIVE OF THE DEPARTMENT.
- THE PERMITTEE MUST OBTAIN INSPECTION AND APPROVAL BY DPS AT THE 2. FOLLOWING POINTS: A. AT THE REQUIRED PRE-CONSTRUCTION MEETING.
 - B. FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES.
 C. DURING THE INSTALLATION OF A SEDIMENT BASIN OR STORMWATER MANAGEMENT STRUCTURE AT THE REQUIRED INSPECTION POINTS (SEE INSPECTION CHECKLIST ON PLAN). NOTIFICATION PRIOR TO
 - COMMENCING CONSTRUCTION IS MANDATORY. D. PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL
 - STRUCTURE(S). E. PRIOR TO FINAL ACCEPTANCE

-(+)-

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- THE PERMITTEE SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND CONSTRUCTION SEQUENCE, SHALL HAVE THEM INSPECTED AND APPROVED BY THE DEPARTMENT PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCES, SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES, AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURE WITHOUT PRIOR PERMISSION FROM THE DEPARTMENT.
- 4. THE PERMITTEE SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO TRAVERSED PUBLIC ROADS. ALL MATERIALS DEPOSITED ONTO PUBLIC THOROUGHFARE(S) SHALL BE REMOVED IMMEDIATELY.
- THE PERMITTEE SHALL INSPECT PERIODICALLY AND MAINTAIN CONTINUOUSLY IN EFFECTIVE OPERATING CONDITION, ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIME AS THEY ARE REMOVED WITH PRIOR PERMISSION FROM THE DEPARTMENT. THE PERMITTEE IS RESPONSIBLE FOR IMMEDIATELY REPAIRING OR REPLACING ANY SEDIMENT CONTROL MEASURES WHICH HAVE BEEN DAMAGED OR REMOVED BY THE PERMITTEE OR ANY OTHER PERSON.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:

A) THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER 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 GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

ALL AREAS DISTURBED OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM MUST BE MINIMIZED AND STABILIZED IMMEDIATELY. MAINTENANCE MUST BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION.

- THE PERMITTEE SHALL APPLY SOD, SEED, AND ANCHORED STRAW MULCH, OR 7. OTHER APPROVED STABILIZATION MEASURES TO ALL DISTURBED AREAS WITHIN SEVEN (7) CALENDAR DAYS AFTER STRIPPING AND GRADING ACTIVITIES HAVE CEASED ON THAT AREA. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION. ACTIVE CONSTRUCTION AREAS SUCH AS BORROW OR STOCKPILE AREAS, ROADWAY IMPROVEMENTS, AND AREAS WITHIN FIFTY (50) FEET OF A BUILDING UNDER CONSTRUCTION MAY BE EXEMPT FROM THIS REQUIREMENT, PROVIDED THAT EROSION AND SEDIMENT CONTROL MEASURES ARE INSTALLED AND MAINTAINED TO PROTECT THOSE AREAS.
- 8. PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES, THE PERMITTEE SHALL STABILIZE ALL CONTRIBUTORY DISTURBED AREAS WITH REQUIRED SOIL AMENDMENTS AND TOPSOIL, USING SOD OR AN APPROVED PERMANENT SEED MIXTURE AND AN APPROVED ANCHORED MULCH, WOOD FIBER MULCH MAY ONLY BE USED IN SEEDING SEASON WHEN THE SLOPE DOES NOT EXCEED 10% AND GRADING HAS BEEN DONE TO PROMOTE SHEET FLOW DRAINAGE. AREAS BROUGHT TO FINISHED GRADE DURING THE SEEDING SEASON SHALL BE PERMANENTLY STABILIZED WITHIN SEVEN (7) CALENDAR DAYS OF ESTABLISHMENT. WHEN PROPERTY IS BROUGHT TO FINISHED GRADE DURING THE MONTHS OF NOVEMBER THROUGH FEBRUARY, AND PERMANENT STABILIZATION IS FOUND TO BE IMPRACTICAL, AN APPROVED TEMPORARY SEED AND STRAW ANCHORED MULCH SHALL BE APPLIED TO DISTURBED AREAS. THE FINAL PERMANENT STABILIZATION OF SUCH PROPERTY SHALL BE COMPLETED PRIOR TO THE FOLLOWING APRIL 15.
- 9. THE SITE PERMIT, WORK, MATERIALS, APPROVED SC/SM PLANS, AND TEST REPORTS SHALL BE AVAILABLE AT THE SITE FOR INSPECTION BY DULY AUTHORIZED OFFICIALS OF MONTGOMERY COUNTY.
- 10. SURFACE DRAINAGE FLOWS OVER UNSTABILIZED CUT AND FILL SLOPES SHALL 3E CONTROLLED BY EITHER PREVENTING DRAINAGE FLOWS FROM TRAVERSING THE SLOPES OR BY INSTALLING MECHANICAL DEVICES TO LOWER THE WATER DOWN SLOPE WITHOUT CAUSING EROSION. DIKES SHALL BE INSTALLED AND MAINTAINED AT THE TOP OF CUT OR FILL SLOPES UNTIL THE SLOPE AND DRAINAGE AREA TO IT ARE FULLY STABILIZED, AT WHICH TIME THEY MUST BE REMOVED AND FINAL GRADING DONE TO PROMOTE SHEET FLOW DRAINAGE. MECHANICAL DEVICES MUST BE PROVIDED AT POINTS OF CONCENTRATED FLOW WHERE EROSION IS LIKELY TO OCCUR.
- 11. PERMANENT SWALES OR OTHER POINTS OF CONCENTRATED WATER FLOW SHALL BE STABILIZED WITHIN 3 CALENDAR DAYS OF ESTABLISHMENT WITH SOD OR SEED WITH AN APPROVED EROSION CONTROL MATTING OR BY OTHER APPROVED STABILIZATION MEASURES.
- 12. SEDIMENT CONTROL DEVICES SHALL BE REMOVED, WITH PERMISSION OF THE DEPARTMENT, WITHIN THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS. STORMWATER MANAGEMENT STRUCTURES USED TEMPORARILY FOR SEDIMENT CONTROL SHALL BE CONVERTED TO THE PERMANENT CONFIGURATION WITHIN THIS TIME PERIOD AS WELL.
- 13. NO PERMANENT CUT OR FILL SLOPE WITH A GRADIENT STEEPER THAN 3:1 WILL BE PERMITTED IN LAWN MAINTENANCE AREAS OR ON RESIDENTIAL LOTS. A SLOPE GRADIENT OF UP TO 2:1 WILL BE PERMITTED IN NON-MAINTENANCE AREAS PROVIDED THAT THOSE AREAS ARE INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN WITH A LOW-MAINTENANCE GROUND COVER SPECIFIED FOR PERMANENT STABILIZATION. SLOPE GRADIENT STEEPER THAN 2:1 WILL NOT BE PERMITTED WITH VEGETATIVE STABILIZATION.
- 14. THE PERMITTEE SHALL INSTALL A SPLASHBLOCK AT THE BOTTOM OF EACH DOWNSPOUT UNLESS THE DOWNSPOUT IS CONNECTED BY A DRAIN LINE TO AN ACCEPTABLE OUTLET.
- 15. FOR FINISHED GRADING, THE PERMITTEE SHALL PROVIDE ADEQUATE GRADIENTS SO AS TO PREVENT WATER FROM STANDING ON THE SURFACE OF LAWNS MORE THAN TWENTY-FOUR (24) HOURS AFTER THE END OF A RAINFALL, EXCEPT IN DESIGNATED DRAINAGE COURSES AND SWALE FLOW AREAS, WHICH MAY DRAIN AS LONG AS FORTY-EIGHT (48) HOURS AFTER THE END OF A RAINFALL.



- 16. SEDIMENT TRAPS OR BASINS ARE NOT PERMITTED WITHIN 20 FEET OF A BUILDING WHICH IS EXISTING OR UNDER CONSTRUCTION. NO BUILDING MAY BE CONSTRUCTED WITHIN 20 FEET OF A SEDIMENT TRAP OR BASIN.
- 17. ALL INLETS IN NON-SUMP AREAS SHALL HAVE ASPHALT BERMS INSTALLED AT THE TIME OF BASE PAVING ESTABLISHMENT.
- 18. THE SEDIMENT CONTROL INSPECTOR HAS THE OPTION OF REQUIRING ADDITIONAL SEDIMENT CONTROL MEASURES, AS DEEMED NECESSARY.
- 19. ALL TRAP ELEVATIONS ARE RELATIVE TO THE OUTLET ELEVATION, WHICH MUST BE ON EXISTING UNDISTURBED GROUND.
- 20. VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE
- 21. SEDIMENT TRAP(S)/BASIN(S) SHALL BE CLEANED OUT AND RESTORED TO THE ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO THE POINT OF ONE-HALF (1/2) THE WET STORAGE DEPTH OF THE TRAP/BASIN (1/4 THE WET STORAGE DEPTH FOR ST-III) OR WHEN REQUIRED BY THE SEDIMENT CONTROL INSPECTOR.
- 22. SEDIMENT REMOVED FROM TRAPS/BASINS SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A FLOODPLAIN.
- 23. ALL SEDIMENT BASINS AND TRAPS MUST BE SURROUNDED WITH A WELDED WIRE SAFETY FENCE. THE FENCE MUST BE AT LEAST 42 INCHES HIGH, HAVE POSTS SPACED NO FARTHER APART THAN 8 FEET, HAVE MESH OPENINGS NO GREATER THE TWO INCHES IN WIDTH AND FOUR INCHES IN HEIGHT, WITH A MINIMUM OF 14 GAUGE WIRE. SAFETY FENCE MUST BE MAINTAINED IN GOOD CONDITION AT ALL TIMES.
- 24. NO EXCAVATION IN THE AREAS OF EXISTING UTILITIES IS PERMITTED UNLESS THEIR LOCATION HAS BEEN DETERMINED. CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK.
- 25. OFF-SITE SPOIL OR BORROW AREAS MUST HAVE PRIOR APPROVAL BY DPS.
- 26. SEDIMENT TRAP/BASIN DEWATERING FOR CLEANOUT OR REPAIR MAY ONLY BE DONE WITH THE DPS INSPECTOR'S PERMISSION. THE INSPECTOR MUST APPROVE THE DEWATERING METHOD FOR EACH APPLICATION. THE FOLLOWING METHODS MAY BE CONSIDERED:
- A. PUMP DISCHARGE MAY BE DIRECTED TO ANOTHER ON-SITE SEDIMENT TRAP OR BASIN, PROVIDED IT IS OFSUFFICIENT VOLUME AND THE PUMP INTAKE IS FLOATED TO PREVENT AGITATION OR SUCTION OF DEPOSITED SEDIMENTS; OR
- B. THE PUMP INTAKE MAY UTILIZE A REMOVABLE PUMPING STATION AND MUST DISCHARGE INTO ANUNDISTURBED AREA THROUGH A NON-EROSIVE OUTLET; OR
- C. THE PUMP INTAKE MAY BE FLOATED AND DISCHARGE INTO A DIRT BAG (12 OZ. NON-WOVEN FABRIC), OR APPROVED EQUIVALENT, LOCATED IN AN UNDISTURBED BUFFER AREA.
- REMEMBER: DEWATERING OPERATION AND METHOD MUST HAVE PRIOR APPROVAL BY THE DPS INSPECTOR.
- 27. THE PERMITTEE MUST NOTIFY THE DEPARTMENT OF ALL UTILITY CONSTRUCTION ACTIVITIES WITHIN THE PERMITTED LIMITS OF DISTURBANCE PRIOR TO THE COMMENCEMENT OF THOSE ACTIVITIES.
- 28. TOPSOIL MUST BE APPLIED TO ALL PERVIOUS AREAS WITHIN THE LIMITS OF DISTURBANCE PRIOR TO PERMANENT STABILIZATION IN ACCORDANCE WITH MDE STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS".

SEQUENCE OF CONSTRUCTION

THE CONTRACTOR SHALL NOTIFY THE SHA REGIONAL ENVIRONMENT COORDINATOR (REC) AT (410) 365-0164, SEVEN (7) DAYS BEFORE ANY LAND DISTURBANCE ACTIVITY AND HOLD A PRE-CONSTRUCTION MEETING BETWEEN PROJECT REPRESENTATIVES AND REPRESENTATIVES OF SHA

- 1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS PER MDSHA STANDARDS.
- 2. ALL DISTURBED AREAS SHOWN AS SAME DAY STABILIZATION SHALL BE STABILIZED AT

THE END OF EACH WORK DAY.

PHASE 1

- ESTABLISH THE LOD 2. INSTALL SILT FENCE (SF 1.1 TO SF 1.3) AND SUPER SILT FENCE (SSF 7.1 TO SSF 7.6) AS SHOWN ON PLANS.
- 3. UNDER A 3-DAY NOAA DRY WEATHER FORECAST INSTALL STORM DRAIN SYSTEM (I-02 TO I-05, I-10, I-14, I-16 TO I-18, MH-02, ES-7, ES-13, ES-14, AND EW-08) FROM DOWNSTREAM TO UPSTREAM AS SHOWN ON PLANS. BLOCK PIPE BETWEEN ES-13 AND ES-14. USE SAME DAY STABILIZATION (SDS) TO TREAT THE AREAS. AREAS OF SDS MUST BE STABILIZED AT THE END OF EACH WORK DAY. PLACE INLET PROTECTION (CIP 2.1 TO CIP 2.3, COIP 2.1, CIP 3.1, CIP 4.1, CIP 5.2, CIP 6.1 TO CIP 6.3, AND CIP 7.1) DEVICES AS SHOWN ON PLANS ONCE STORM DRAIN SYSTEM IS ONLINE.
- INSTALL THE FOLLOWING COTROLS: EARTH DIKE (ED 4.1 TO ED 4.6, ED 5.1 TO 4 ED 5.3, ED 6.1, AND ED 6.2), TEMPORARY ASPHALT BERMS (TAB 4.1, TAB 5.1, TAB 5.2, TAB 6.1,), TEMPORARY STONE OUTLET STRUCTURE (TSOS 4.1, TSOS 4.2, TSOS 5.1, AND TSOS 7.1), PUMP AROUND DEVICE, AND PIPE SLOPE DRAINS (PSD 4.1 AND PSD 4.2) AS SHOWN ON THE PLANS.
- PROVIDE INITIAL GRADING AS SHOWN ON THE PLANS. INSTALL STABILIZED CONSTRUCTION ENTRANCE (SCE 1.1), SILT FENCE (SF 11.1), CLEAR WATER DIVERSION PIPE (CWD 1.1 AND CWD 1.2), SANDBAGS (SB 1.1 TO SB 1.3). PUMP AROUND DEVICE, PORTABLE SEDIMENT TANK (PST 1.1), AND FILTER BAGS (FB 1.1) AS SHOWN ON SHEET NO. SC-11.

PHASE 2

- ESTABLISH THE LOD AS SHOWN ON SC-12.
- (CIP 1.1, CIP 4.2, CIP 5.1, AND CIP 5.3). BLOCK I-09 AND I-12. PERFORM STREAM RESTORATION CONSTRUCTION AS SHOWN ON PLANS. CONSTRUCT SHARED USE PATH, RETAINING WALLS 1 AND 2, AND PEDESTRIAN LIGHTING
- AS SHOWN ON PLANS. REMOVE PUMP AROUND DEVICE (SC-15 AND SC-16), ED 4.5 (SC-15), ED 5.3 (SC-16), AND ED 6.2 (SC-17), PRIOR TO INSTALLING PATHWAY, AND FINALIZE GRADING AS EACH UPSTREAM SECTION OF PATHWAY IS CONSTRUCTED.
- 5. WITH WRITTEN APPROVAL FROM THE REC, REMOVE THE REST OF EROSION AND SEDIMENT CONTROLS AND STABILIZE AREAS DISTURBED BY THEIR REMOVAL, AND UNBLOCK I-09, I-12, AND PIPE BETWEEN ES-13 AND ES-14.

STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

INSTALL I-01, I-09, I-11, AND I-12 AS SHOWN ON PLANS. PLACE INLET PROTECTION

AT-GRADE INLET PROTECTION	
BAFFLE BOARDS	BB
BENCHING	BENCHING
CATCH BASIN INSERT	СССві
CLEAR WATER DIVERSION PIPE	CWD - 12 DESIGNATION CWD-12 REFERS TO 12 INCH CLEAR WATER DIVERSION.
CLEAR WATER PIPE	
COMBINATION INLET PROTECTION	
CONCRETE WASHOUT STRUCTURE	CWS
CURB INLET PROTECTION	
DIVERSION FENCE	⊢ DFI
EARTH DIKE	A-I PLACE DESIGNATION (A-I, B-2, etc.) ON FLOW CHANNEL SIDE OF DIKE.
EMERGENCY SPILLWAY	ES
FILTER BAG	⊠FВ
FILTER BERM	IFB-AI IFB-BI
FILTER LOG	← FL-18 ← DESIGNATION FL-18 REFERS TO 18 INCH DIAMETER FILTER LOG.
GABION INFLOW PROTECTION	GP
GABION INLET PROTECTION	
HORIZONTAL DRAW-DOWN DEVICE	HDDD
LIMIT OF DISTURBANCE	LOD
MEDIAN INLET PROTECTION	
MEDIAN SUMP INLET PROTECTION	
MOUNTABLE BERM	MB
PERIMETER DIKE/SWALE	₽DS-I 4 4 4
PERMANENT SOIL STABILIZATION MATTING-	
PERMANENT SOIL STABILIZATION MATTING-	$FYPE \ C \qquad \qquad$
PIPE OUTLET SEDIMENT TRAP ST I	ST-I
PIPE SLOPE DRAIN	PSD - 12 DESIGNATION PSD-12 REFERS TO 12 INCH PIPE SLOPE DRAIN.
PLUNGE POOL	PP
PORTABLE SEDIMENT TANK	⊠PST
REMOVABLE PUMPING STATION	⊠RPS
RIPRAP INFLOW PROTECTION	be RRP S
RIPRAP OUTLET SEDIMENT TRAP ST III	ST-III

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	ROCK OUTLET PROTECTION I
BB	ROCK OUTLET PROTECTION II
BENCHING	ROCK OUTLET PROTECTION III
ССВІ	SILT FENCE
ND - 12 CWD-12 REFERS TO AR WATER DIVERSION.	SILT FENCE ON PAVEMENT
	SOD
	STABILIZED CONSTRUCTION ENTRANCE
CWS	STANDARD INLET PROTECTION
ے_ CIP	STOCKPILE AREA
— DF ——————————————————————————————————	STONE CHECK DAM
A-I MATION (A-I, B-2, 0†c.) ANNEL SIDE OF DIKE.	STONE/RIPRAP OUTLET SEDIMENT TRAP ST I
ES	SUBSURFACE DRAINS
Øfb	SUMP PIT
- FB-A 1 - FB-B 1	SUPER SILT FENCE
-FL-18 N FL-18 REFERS TO METER FILTER LOG.	TEMPORARY ACCESS BRIDGE
GP	TEMPORARY ACCESS CULVERT
GIP	TEMPORARY ASPHALT BERM
HDDD	TEMPORARY BARRIER DIVERSION
-LOD	TEMPORARY GABION OUTLET STRUCTURE
	TEMPORARY SOIL STABILIZATION MATTING-TYP
	TEMPORARY SOIL STABILIZATION MATTING-TYP
мв	TEMPORARY SOIL STABILIZATION MATTING-TYP
PDS-I	TEMPORARY STONE OUTLET STRUCTURE
BBBBB	TEMPORARY SWALE
	WASH RACK OPTION
ST-I	CHESAPEAKE BAY CRITICAL AREA
'SD - 12 on psd-12 refers to pe slope drain,	DRAINAGE BOUNDARY
РР	EXISTING CONTOURS
⊠pst	PROPOSED CONTOURS
⊠RPS	TREE PROTECTION FENCE
	WETLAND
ST-III	WETLAND BUFFER

			F S		
STANDARD	SYMBOLS				
	ROCK OUTLET PRO	TECTION I	ROPI		
BB	ROCK OUTLET PRO	TECTION II	ROPI		
BENCHING	ROCK OUTLET PRO	TECTION III	ROPIII		
СПСВІ	SILT FENCE		⊢SF		
CWD - 12 DESIGNATION CWD-12 REFERS TO 12 INCH CLEAR WATER DIVERSION.	SILT FENCE ON PA	VEMENT	⊢—_SF0P—I		
	SOD		* * * * * * * * * * * * * * * * * * * *		
	STABILIZED CONSTI	RUCTION ENTRANCE	SCE		
CWS	STANDARD INLET F	PROTECTION	[] SIP		
[] CIP	STOCKPILE AREA				
	STONE CHECK DAM				
A-I PLACE DESIGNATION (A-I, B-2, etc.)	STONE/RIPRAP OUT	ILET SEDIMENT TRAP ST	II ST-II		
ON FLOW CHANNEL SIDE OF DIKE.	SUBSURFACE DRAIN	IS	⊢ — ssp — ⊣		
Øгв	SUMP PIT		⊠sp		
I FB-AI I FB-BI	SUPER SILT FENCE		⊢——SSF——I		
	TEMPORARY ACCES	S BRIDGE	TB		
GP GP	TEMPORARY ACCES	S CULVERT			
GIP	TEMPORARY ASPHA	LT BERM	<u> </u>		
HDDD	TEMPORARY BARRIE	ER DIVERSION	TBD		1011
LOD	TEMPORARY GABIO	N OUTLET STRUCTURE	TGOS	A. TOTAL AREA B. TOTAL AREA	ION: OF FACILITY (BASE, CAMPUS, PARK, ETC.) <u>3.96</u> ACRES OF PROJECT SITE <u>3.96</u> ACRES
	TEMPORARY SOIL S	STABILIZATION MATTING-T		C.AREA DISTURE D.AREA TO BE	BED <u>3.49</u> ACRES ROOFED-OR PAVED <u>0.82</u> ACRES
`́, MSIP	TEMPORARY SOIL S	STABILIZATION MATTING-T		E. TOTAL CUT F. TOTAL FILL G. OFF-SITE WAS	<u>2560</u> CUBIC YARDS <u>1380</u> CUBIC YARDS STE / BORROW AREA LOCATION N/A
	TEMPORARY SOIL S	STABILIZATION MATTING-T			
	TEMPORARY STONE	OUTLET STRUCTURE			DESIGN CERTIFICATION
	TEMPORARY SWALE		▲ ^{A-1} =	STANDARDS AND SPECIFIC STORMWATER DESIGN MANU	CATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, THE ENVIRONMENT ARTICLE JAL, VOLUMES 1 & II INCLUDING SUPPLEMENTS, THE ENVIRONMENT ARTICLE
	WASH RACK OPTION	J	PLACE DESIGNATION (A-1, B-2, GTG.)	REGULATIONS (COMAR) 26 STORMWATER MANAGEMENT.	5.17.01 AND COMAR 26.17.02 FOR EROSION AND SEDIMENT CONTROL AND RESPECTIVELY.
ST-I	CHESAPEAKE BAY	CRITICAL AREA	CBCA	WILLIAM (C. ENGMAN, JR.
PSD - 12 DESIGNATION PSD-12 REFERS TO 12 INCH PIPE SLOPE DRAIN.	DRAINAGE BOUNDAF	RY	DA	NAI	ME SIGNATURE
РР	EXISTING CONTOUR	S	<u> </u>	MARYLAND, REGISTI	S30 RATION NUMBER. DATE
⊠PST	PROPOSED CONTOU	RS	<u> </u>		
⊠RPS	TREE PROTECTION	FENCE	TPF	PROFESSIONAL	CERTIFICATION
j∉ RRP Ĵ}	WETLAND		• • • • • •	I HEREBY CERITFY THAT AND THAT I AM A DULY THE STATE OF MARYLAND	THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF
ST-III	WETLAND BUFFER		— в —	THE STATE OF MARTLAND	, LICENSE NO. <u>14025</u> , EXFIRATION DATE. <u>1710/2020</u> .
	100-YEAR FLOODPL	AIN			
90% SUBI	ΜΙΤΤΔΙ	DEPA 100 EE	MONTGOMERY CO RTMENT OF TRANS SON PARK DRIVE	OUNTY SPORTATION I, 4TH FLOOR	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS SC-01 OF 19
		RECOMMENDED FOR APPROVAL	AUTERSBUKG, ML	20070	MD 355 - CLARKSBURG
NAVD 83/91		Chief, Design Section		Date	SHARED USE PATH
		 Chief, Division of Engineering Servi	ces	Date	
REVISION	DATE BY	Designed by : XUE	Drawn by : XUE	Checked by : JND	Project No. : C.I.P. PR. # 501744 SHEET 27 of 88
		PLOTTED: Tuesday, September 17, 20 FILE: \$FILEL\$	19 AT 06:11 PM		





NCE SF	DETAIL E-9-3 CURB INLET	DETAIL C-5 TEMPORARY ASPHALT BERM
QUARE CUT OF SOUND QUALITY HARDWOOD.AS AN R "U" SECTION STEEL POSTS WEIGHING NOT LESS	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	
INIMUM INTO GROUND NO MORE THAN 6 FEET	2 IN x 4 IN WEIR 6 FT MAX. SPACING OF 2 IN x 4 IN SPACERS 4 TO 1½ STONE 2 IN x 4 IN SPACERS	
POSTS WITH WIRE TIES OR STAPLES AT TOP AND	34 TO 1½ IN SIZED STONE NONWOVEN	BERM BERM
T THE GEOTEXTILE USED MEETS THE	GEOTEXTILE GEOTEXTILE GEOTEXTILE GALVANIZED HARDWARE CIDTH	ASPHALT
VERLAP, TWIST, AND STAPLE TO POST IN	NONWOVEN GEOTEXTILE 2 IN x 4 IN SPACER	
MUM OF FIVE HORIZONTAL FEET UPSLOPE AT REVENT RUNOFF FROM GOING AROUND THE ENDS OF	GALVANIZED 2 IN X 4 IN WEIR HARDWARE EDGE OF GUTTER PAN SECTION A-A ISOMETRIC	PLAN VIEW
HEN BULGES DEVELOP IN SILT FENCE OR WHEN GEOTEXTILE IF TORN.IF UNDERMINING OCCURS,	CONSTRUCTION SPECIFICATIONS 1. USE NOMINAL 2 INCH × 4 INCH LUMBER	PAVED SURFACE
	 USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS. NAIL THE 2×4 WEIR TO 9 INCH LONG VERTICAL SPACERS (MAXIMUM 6 FEET APART). ATTACH A CONTINUOUS RECE OF 1/2 INCH CALVANIZED HARDWARE CLOTH, WITH A MINIMUM WIDTH OF 	3 1/2 FT
	 ATTACH A CONTINUOUS PIECE OF % INCH GALVANIZED HARDWARE CLOTH, WITH A MINIMUM WIDTH OF 30 INCHES AND A MINIMUM LENGTH OF 4 FEET LONGER THAN THE THROAT OPENING, TO THE 2×4 WEIR, EXTENDING IT 2 FEET BEYOND THROAT ON EACH SIDE. PLACE A CONTINUOUS PIECE OF NONWOVEN GEOTEXTILE OF THE SAME DIMENSIONS AS THE HARDWARE 	CROSS_SECTION
	 CLOTH OVER THE HARDWARE CLOTH AND SECURELY ATTACH TO THE 2×4 WEIR. 6. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL TO 2×4 ANCHORS (MINIMUM 2 FEET LENGTH). EXTEND THE ANCHORS ACROSS THE INLET TOP AND HOLD IN PLACE BY SANDBAGS OR OTHER APPROVED ANCHORING METHOD. 	CONSTRUCTION SPECIFICATIONS 1. CONSTRUCT BERM ON AN UNINTERRUPTED, CONTINUOUS GRADE,
	 INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND THE ENDS OF THE THROAT OPENING. FORM THE HARDWARE CLOTH AND THE GEOTEXTILE TO THE CONCRETE GUTTER AND FACE OF CURB TO SPAN THE INLET OPENING. COVER THE HARDWARE CLOTH AND GEOTEXTILE WITH CLEAN 34 TO 134 INCH 	2. INSTALL BERM TO CONFORM TO CROSS SECTION DIMENSIONS OF A UNIFORM HEIGHT OF 8 INCHES MINIMUM AND APPROXIMATE WIDTH OF 31/2 FEET.
	STONE OR EQUIVALENT RECYCLED CONCRETE. 9. AT NON-SUMP LOCATIONS, INSTALL A TEMPORARY SANDBAG OR ASPHALT BERM TO PREVENT INLET BYPASS.	 PROVIDE OUTLET PROTECTION AS REQUIRED ON PLAN. COMPACT ASPHALT BERM. REPAIR DAMAGED ASPHALT. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. MAINTAIN POSITIVE
	10. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.	DRAINAGE. 6. UPON REMOVAL OF ASPHALT BERM, RETURN TO ORIGINAL CONDITIONS OR AS SPECIFIED ON APPROVED PLAN.
FOR SOIL EROSION AND SEDIMENT CONTROL	MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT	MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT
11 WATER MANAGEMENT ADMINISTRATION	NATURAL RESOURCES CONSERVATION SERVICE 2011 WATER MANAGEMENT ADMINISTRATION	NATURAL RESOURCES CONSERVATION SERVICE 2011 WATER MANAGEMENT ADMINISTRATION
.G STANDARD SYMBOL	DETAIL D-1 PIPE SLOPE DRAIN STANDARD SYMBOL PSD - 12 DESIGNATION PSD-12 REFERS TO 12 IN PIPE SLOPE DRAIN.	DETAIL D-1 PIPE SLOPE DRAIN DESIGNATION PSD-12 REFERS TO 12 IN PIPE SLOPE DRAIN.
	- 4 TO 7 IN STONE APRON ON NONWOVEN GEOTEXTILE	CONSTRUCTION SPECIFICATIONS 1. THE HEIGHT OF THE EARTH DIKE MUST BE AT LEAST 2 TIMES THE PIPE DIAMETER MEASURED FROM THE INVEST OF THE PAPE. EXTEND THE TOP FLEVATION OF DIKE AT ZERO BERCENT CRAPE LINTUL T
FILTER BAG	FLOW STANDARD FLARED END SECTION	INTERCEPTS THE TOP OF THE ADJOINING EARTH DIKE. 2. FLEXIBLE PIPE IS PREFERRED, HOWEVER, CORRUGATED METAL PIPE OR EQUIVALENT PVC PIPE CAN BE USED. ALL CONNECTIONS MUST BE WATERTIGHT.
	FLOW	3. ATTACH A FLARED END SECTION TO THE INLET END OF PIPE WITH A WATERTIGHT CONNECTION. AT THE INLET OF THE PIPE SLOPE DRAIN, INSTALL 4 TO 7 INCH STONE OR EQUIVALENT RECYCLED CONCRETE PLACED 12 INCHES IN DEPTH ON NONWOVEN GEOTEXTILE AND EXTEND OUT 5 FEET FROM THE INLET IN ALL DIRECTIONS.
EW MULCH, LEAF/WOOD COMPOST, WOODCHIPS, SAND, OR STRAW BALES	COMPACTED EARTH DIKE	 PROVIDE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, UNDER THE BOTTOM AND ALONG SIDES OF ALL RIPRAP. SECURELY ANCHOR THE PIPE SLOPE DRAIN (PSD) TO THE SLOPE. SPACE THE ANCHORS EVERY 10 FEET.
	EXTEND TOP ELEVATION AT ZERO PERCENT GRADE UNTIL IT INTERCEPTS ADJOINING EARTH DIKE	 HAND TAMP THE SOIL AROUND AND UNDER THE PIPE AND END SECTION IN 4 INCH LIFTS TO THE TOP OF THE EARTH DIKE. UPON COMPLETING INSTALLATION OF THE PSD, STABILIZE ASSOCIATED DISTURBANCES WITH SEED,
DN FILTER BAG L8 IN MIN.	DISCHARGE INTO A STABILIZED CHANNEL, SEDIMENT TRAPPING	MULCH, AND TACK. 8. INSTALL OUTLET PROTECTION AS SPECIFIED ON APPROVED PLAN. 9. KEEP POINTS OF INFLOW AND OUTFLOW FREE OF EROSION. MAINTAIN WATER TIGHT CONNECTIONS AND
LEAF/WOOD COMPOST, WOODCHIPS, SAND, OR M SLOPING SURFACE. DISCHARGE TO A ICHES FROM EDGES OF BAG. ISSURE WITHIN THE FILTER BAG IN ACCORDANCE F BAG FILLS WITH SEDIMENT. REDUCE PUMPING	DEVICE, OR INTO A STABLE AREA AT A NON-EROSIVE ISOMETRIC VIEW VELOCITY.	POSITIVE DRAINAGE. REMOVE ACCUMULATED SEDIMENT AND DEBRIS.
ON COMPLETION OF PUMPING OPERATIONS OR CURS FIRST. SPREAD THE DEWATERED SEDIMENT STABILIZE WITH SEED AND MULCH BY THE END NEATH THE BAG TO ORIGINAL CONDITION UPON	DISCHARGES TO TRAPS AND BASINS MUST ENTER AT OR ABOVE WET POOL ELEVATION HEIGHT = PIPE DIAMETER X 2 (MAX. 4 FT)	
SEAMS USING HIGH STRENGTH THREAD. SIZE TER PUMP DISCHARGE HOSE. THE BAG MUST BE T MEETS OR EXCEEDS MINIMUM AVERAGE ROLL	3% SLOPE OR GREATER STANDARD FLARED 4 TO 7 IN STONE	
ASTM D-4632 ASTM D-4833 ASTM D-4491	19 IN LENGTH	
ASTM D-4491 500 HOURS ASTM D-4355 ASTM D-4751 ASTM D-4632	AT LESS THAN 1% SLOPE NONWOVEN GEOTEXTILE DEDUADE ROCK OUT ET	
EARS, OR PUNCTURES. DURING OPERATION KEEP WATER TIGHT. REPLACE BEDDING IF IT BECOMES	PROTECTION AS REQUIRED ON PLAN. 1 OF 2 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	2 OF 2 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
R SOIL EROSION AND SEDIMENT CONTROL MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION	U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION D.3	U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT D.4
		MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION CONTROL ADDIS OF TRANSPORTATION
	90% SUBMITAL	APPROVAL NOTES AND DETAILS SC- 02 OF 19
	DATUM: NAD 83/91 HORIZONTAL NAVD 88 VERTICAL Chief, Design Section	
	APPROVED Chief. Division of For	
	NO. REVISION DATE BY Designed by :	08/2019 XUE Drawn by : XUE Checked by : JND Project No. : C,I,P, PR, # 501744 SHEET 28 of 88 ember 17, 2019 AT 03:34 PM
	FILE: SFILELS	





DETAIL E-9-6 COMBINATION	D SYMBOL	DETAIL E-9-6 COMBINATION INLET PROTECTION	
2 FT MIN. LENGTH OF 2 IN x 4 IN 34 TO 1½ IN SANDBAG OR OTHER APPRO ANCHORING ME	4 ACRE	 <u>CONSTRUCTION SPECIFICATIONS</u> 1. USE NOMINAL 2 INCH × 4 INCH LUMBER. 2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 M/ 3. LIFT GRATE, AND WRAP WITH NONWOVEN GEOTEXTILE TO COMF GRATE BACK IN PLACE. 4. ATTACH A CONTINUOUS PIECE OF ½ INCH GALVANIZED HARDW 30 INCHES AND A MINIMUM LENGTH OF 4 FEET LONGER THAN WEIR, EXTENDING 2 FEET BEYOND THROAT ON EACH SIDE. 5. PLACE A CONTINUOUS PIECE OF NONWOVEN GEOTEXTILE THE S CLOTH OVER THE HARDWARE CLOTH AND SECURELY ATTACH I 	ATERIALS. PLETELY COVER ALL OPENINGS, THEN SET VARE CLOTH WITH A MINIMUM WIDTH OF I THE THROAT OPENING, TO THE 2X4 SAME DIMENSIONS AS THE HARDWARE IT TO THE WEIR.
GEUTEXTILE		 NAIL THE 2X4 WEIR TO THE TOP OF A 9 INCH LONG VERTICAL WEIR AND THE INLET FACE (MAXIMUM 4 FEET APART). PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL LENGTHS OF 2×4 INCH TO THE TOP OF THE WEIR AT SPACER ACROSS THE INLET TOP AND HOLD IN PLACE BY SANDBAGS OF METHOD. INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND BOTH I 9. FORM THE ¼ INCH HARDWARE CLOTH AND THE GEOTEXTILE TO THE FACE OF THE CURB ON BOTH SIDES OF THE INLET. PLA EQUIVALENT RECYCLED CONCRETE OVER THE HARDWARE CLOTI TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AR 	L SPACER TO BE LOCATED BETWEEN THE TO 2X4 ANCHORS (MINIMUM 2 FOOT LOCATIONS). EXTEND 2X4 ANCHORS OR OTHER APPROVED ANCHORING ENDS OF THE THROAT OPENING. O THE CONCRETE GUTTER AND AGAINST ACE CLEAN 3/4 TO 11/2 INCH STONE OR H AND GEOTEXTILE IN SUCH A MANNER ROUND THE GEOTEXTILE.
4 TO 1½ IN STONE NONWOVEN GEOTEXTILE GRATE WRAPPED WITH GEOTEXTILE ISOMETRIC VIEW		 AT NON-SUMP LOCATIONS, INSTALL A TEMPORARY SANDBAG BYPASS. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTEL AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CL STONE. 	OR ASPHALT BERM TO PREVENT INLET NANCE. REMOVE ACCUMULATED SEDIMENT PREMATURE CLOGGING. IF INLET AFTER A STORM EVENT, IT IS CLOGGED. LEAN, OR REPLACE GEOTEXTILE AND
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTR U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011 MARYLAND DEPARTMENT OF WATER MANAGEMENT ADM	OF 2 ROL ENVIRONMENT INISTRATION	MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EF U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011	2 OF 2 ROSION AND SEDIMENT CONTROL MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
DETAIL H-6 ONSITE CONCRETE STANDARI WASHOUT STRUCTURE	O SYMBOL VS	DETAIL C-1 EARTH DIKE	STANDARD SYMBOL A-1 PLACE DESIGNATION (e.g. A-1) ON FLOW CHANNEL SIDE OF DIKE.
A CONTRACT OF TALES CONTRACT OF	WIRE AKES	2:1 SLOPE OR FLATTER EXISTING GROUND CROSS SECTION CONTINUOUS GRADE 0.5% MIN. TO 10% MAX. SLOPE A A A A A A A A U V V V V V V V V V V PLAN VIEW CROSS SECTION CROSS SECTION CR	PE OR FLATTER FLOW GRADE TO PROVIDE REQUIRED FLOW WIDTH AND FLOW DEPTH DIKE TYPE A B EIGHT 18 IN MIN. 30 IN MIN. IDTH 24 IN MIN. 36 IN MIN. MDTH 4 FT MIN. 6 FT MIN. DEPTH 12 IN MIN. 24 IN MIN.
PLAN PLAN PLAN NOTE: CAN BE TWO STACKED BALES OR PARTIALLY EXCAVATED TO REACH 3 FT DEPTH WASHOUT STRUCTURE WITH STRAW BALES CONSTRUCTION SPECIFICATIONS		FLOW CHANNEL STABILIZATION A-1 SEED WITH STRAW MULCH AND TACK. (DIVERSION.) A-2/B-2 SEED WITH SOIL STABILIZATION MATTING OR LINE A-3/B-3 4 TO 7 INCH STONE OR EQUIVALENT RECYCL A MINIMUM OF 7 INCHES AND FLUSH WITH GROUN CONSTRUCTION SPECIFICATIONS	(NOT ALLOWED FOR CLEAR WATER WITH SOD. ILED CONCRETE PRESSED INTO SOIL ND.
 LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STOR INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CO TRAFFIC. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLID MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FE FEET DEEP. 	M DRAIN NSTRUCTION S AND ET X 3	 REMOVE AND DISPOSE OF ALL TREES, BRUSH, STUMPS, OBSTR MATERIAL SO AS NOT TO INTERFERE WITH PROPER FUNCTION EXCAVATE OR SHAPE EARTH DIKE TO LINE, GRADE, AND CROS PROJECTIONS OR OTHER IRREGULARITIES ARE NOT ALLOWED. COMPACT FILL. CONSTRUCT FLOW CHANNEL ON AN UNINTERRUPTED, CONTINUCTION 	RUCTIONS, AND OTHER OBJECTIONABLE OF EARTHDIKE. SS SECTION AS SPECIFIED. BANK DUS GRADE, ADJUSTING THE LOCATION
 J. FILE ARE SOLL DASE FREE OF ROCKS OK OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL. 4. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY. 5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAM RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET-VAC LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOW HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED. 	AGED (E.G., FULL, AND JUM STORED TO S. REMOVE F	 DUE TO FIELD CONDITIONS AS NECESSARY TO MAINTAIN POSITION 5. PROVIDE OUTLET PROTECTION AS REQUIRED ON APPROVED PLA 6. STABILIZE EARTH DIKE WITHIN THREE DAYS OF INSTALLATION. WATER DIVERSION WITHIN 24 HOURS OF INSTALLATION. 7. MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUME MAINTAIN POSITIVE DRAINAGE. KEEP EARTH DIKE AND POINT O CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE SECTION B-4 VEGETATIVE STABILIZATION. 8. UPON REMOVAL OF EARTH DIKE, GRADE AREA FLUSH WITH EXI REMOVAL STABILIZE DISTURBED AREA WITH TOPSOIL, SEED, AN APPROVED PLAN. 	IVE DRAINAGE. AN. STABILIZE FLOW CHANNEL FOR CLEAR JLATED SEDIMENT AND DEBRIS, AND DF DISCHARGE FREE OF EROSION, AND VE ESTABLISHMENT IN ACCORDANCE WITH ISTING GROUND. WITHIN 24 HOURS OF ID MULCH, OR AS SPECIFIED ON
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTR U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011 MARYLAND DEPARTMENT OF WATER MANAGEMENT ADMI	OL ENVIRONMENT NISTRATION	MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL ER U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011	ROSION AND SEDIMENT CONTROL MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
90% SUBMITTAL	 DEPAF 100 ED GA	MONTGOMERY COUNTY RTMENT OF TRANSPORTATION ISON PARK DRIVE, 4TH FLOOR AITHERSBURG, MD 20878	ROSION AND SEDIMENT CONTROL NOTES AND DETAILS SC-03 of 19
DATUM: NAD 83/91 HORIZONTAL NAVD 88 VERTICAL	RECOMMENDED FOR APPROVAL Chief, Design Section APPROVED	Date	MD 355 - CLARKSBURG SHARED USE PATH
NO. REVISION DATE BY	Chief, Division of Engineering Servic Designed by : XUE E	ces Date Drawn by : XUE Checked by : JND Project 9 AT 05:03 PM	08/2019 No. : C.I.P. PR. # 501744 SHEET 29 of 88



MC DEPARTM 100 EDISO						
GAITH	90% SUBMITTAL					
RECOMMENDED FOR APPROVAL Chief, Design Section	DATUM: NAD 83/91 HORIZONTAL NAVD 88 VERTICAL					
APPROVED Chief, Division of Engineering Services		40'	20'	0	20'	
Designed by : XUE Drawn	NO. REVISION DATE BY		: 1" = 20'	SCALE		
PLOTTED: Tuesday September 17 2019 AT						

SILT FENCE (SF)			
SF I.I	21 LF	STA.496+13 TO 496+33, RT	
SF I.2	21 LF	STA.496+32 TO 496+51, RT	
SF I.3	33 LF	STA.496+51 TO 496+83, RT	



NOTE:	
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1. CURB & GUTTER, SHARED USE PATH, TEMPORARY CURB RAMP, INLETS AND STORM DRAIN TO BE CONSTRUCTED BY C.I.P.

PROJECT 508000 BEFORE THIS PROJECT. 2. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT. 3. FOR FOREST CONSERVATION MEASURES, REFER TO LANDSCAPING PLANS.



, REFER TO LANDSCAPING	
LEGEND	
LIMIT OF DISTURBANCE	
CURB INLET PROTECTION PHASE 1	
COMBINATION INLET PROTECTION PHASE 1	[]COIP
SAME DAY STABILIZATION	H H H H H H H H

COIP

INLET PROTECTION (IP)						
	DRAINAGE					
ID NO.	STATION	QUANTITY	AREA (AC)			
CIP 2.1	STA.501+20, RT	ΙEΑ	0.07			
CIP 2.2	STA.499+21, RT	I EA	0.07			
CIP 2.3	STA.500+28, RT	ΙEΑ	0.02			
COIP 2.1	STA.499+5I, RT	ΙEΑ	0.25			



	SC-06
	NO.
-OD	DWG.
	SEE
	501+50 -
_	STA.
	LINE
	MATCH

	MONTGOMERY COU PERMITTING SERVI	NTY DEPARTME	NT OF FOR:	NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED FOR A MCDPS ACCESS PERMIT.			
	Stormwater Management:		Sediment Control Technical Requirements:		Administrative Requirements:		
			Buland		Reviewed	Date	
	-	- ASI	Heviewad	Date	SEDIMENT CON	INTROL PERMIT NO).
	Reviewe	d Date	Approved	Date			-
	Approved	d Date			MCDPS APPROVAL OF	THIS PLAN WILL EXPIRE	
	-	SM FILE #			TWO YEARS FROM THE DATE O THE PROJECT HAS NOT START	E DATE OF APPROVAL IF IT STARTED	OF APPROVAL IF
	DPS approva treatment sta owner's perm adequacy of t	al of a sediment control or storr andards and does not create or nission. It does not relieve the de the drainage design as it affects u	nwater management plan imply any right to divert o sign engineer or other re- phill or downhill properties	is for demonstrate or concentrate runoff sponsible person of	d compliance with minin onto any adjacent prop professional liability or e	num environmental ru perty without that prop thical responsibility for	inotf perty r the
OMERY COUNTY		EROSIO	N AND S	SEDIM	ENT CC	NTRO	L
ARK DRIVE, 4TH FLOOI BURG, MD 20878	२	PLAN	IS PHAS	E 1 - S	C-05 O	F 19	
		MD 3	355 -	CLAF	RKSB	URG	
Date		Sł	HARE) US	E PAT	Ή	
Data		STA.	498+00	TO S	TA. 501	L+50	
Date						09/2	2019
XUE Checked by : JN	ID	Project No. : C.I.P	. PR. # 50174	4 SHEET	31	of 88	

CIP



NOTE:				
 CURB & GUTTER, SHARED USE PATH, TEMPORARY CURB RAMP, INLETS AND STORM DRAIN TO BE CONSTRUCTED BY C.I.P. PROJECT 508000 BEFORE THIS PROJECT. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT. FOR FOREST CONSERVATION MEASURES, REFER TO LANDSCAPING PLANS. 				
	LEGEND			
	LIMIT OF DISTURBANCE			
MERCADO	CURB INLET PROTECTION PHASE 1	[]CIP		
CONSULTANTS, INC.	SAME DAY STABILIZATION	HARD HA		

INLET PROTECTION (IP)				
			DRAINAGE	
ID NO.	STATION	QUANTITY	AREA (AC)	
CIP 3.1	STA.502+33, RT	ΙEΑ	0.02	



MONIGOMERY TMENT OF TRA SON PARK DR ITHERSBURG, I	ANSPORTATION IVE, 4TH FLOOR MD 20878 Date	PLAN PLAN MD 3 STA.	N AND IS PHAS 355 - HARE 501+50	SEDIM SE 1 - S CLAF D US D TO S	ENT CONTROL C-06 OF 19 RKSBURG E PATH TA. 505+00	
MONTGOMERY TMENT OF TRA SON PARK DR ITHERSBURG, I	ANSPORTATION IVE, 4TH FLOOR MD 20878	PLAN PLAN MD 3	n and Is phas 355 - HARE	SEDIM SE 1 - S CLAF D US	ENT CONTROL C-06 OF 19 RKSBURG E PATH	
MONTGOMERY TMENT OF TRA SON PARK DR ITHERSBURG, I	ANSPORTATION IVE, 4TH FLOOR MD 20878	PLAN MD 3	n and 1s phas 355 -	SEDIM SE 1 - S CLAF	ENT CONTROL C-06 OF 19 RKSBURG	
MONTGOMERY TMENT OF TRA SON PARK DR ITHERSBURG, I	ANSPORTATION IVE, 4TH FLOOR MD 20878		N AND IS PHAS	SEDIM SE 1 - S	ENT CONTROL C-06 OF 19	
MONIGOMERY TMENT OF TRA					ENT CONTROL	
. .						
	DPS appret treatment owner's pe adequacy i	oval of a sediment control or stor standards and does not create or rmission. It does not relieve the di of the drainage design as it affects i	mwater management pla imply any right to divert esign engineer or other r uphill or downhill propertie	an is for demonstrate or corcentrate runof esponsible person of IS.	d compliance with minimum environmental runoff onto any adjacent property without that property professional liability or ethical responsibility for the	
		SM FILE #			TWO YEARS FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED	
	Appro	ved Date				
	Review	ved Date	Approved	Date	SEDIMENT CONTROL PERMIT NO.	
			Reviewed	Date	- Heviewed Date	
			—	unements:	- Decision	
		Stormwater Management:	Sediment (Control Technical	Administrative Requirements:	
				MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:		



	EARTH DIKE (ED)					
				DRAINAGE		
ID NO.	LENGTH	STATION	TOP ELEV.	AREA		
ED 4.I	293 LF	STA.515+21 TO 518+10, RT	663.6 FT.	5.44 AC		
ED 4.2	21 LF	STA.518+13 TO 518+35, RT	655.0 FT.	0.66 AC		
ED 4.3	23 LF	STA.518+44 TO 518+63, RT	655.0 FT.	0.31 AC		
ED 4.4	139 LF	STA.518+64 TO 520+22, RT	661.5 FT.	1.09 AC		
ED 4.5	289 LF	STA.518+23 TO 518+07, RT	662.7 FT.	0.23 AC		
ED 4.6	115 LF	STA.518+78 TO 519+91, RT	654.0 FT.	0.01 AC		

PIPE SLOPE DRAIN (PSD)					
	DRAINAGE				
ID NO.	STATION	LENGTH	DIIAMETER	AREA	
PSD 4.1	STA.518+11, RT	7.3 FT.	24"	0.66 AC	
PSD 4.2	STA.518+72, RT	8.3 FT.	24"	2.07 AC	

NOTE:

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1. CURB & GUTTER, SHARED USE PATH, TEMPORARY CURB RAMP, INLETS AND STORM DRAIN TO BE CONSTRUCTED BY C.I.P. PROJECT 508000 BEFORE THIS PROJECT.

- 2. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT. 3. FOR FOREST CONSERVATION MEASURES, REFER TO LANDSCAPING
- PLANS.



LIMIT OF DISTURBANCE EARTH DIKE PHASE 1 PIPE SLOPE DRAIN PHASE 1 TEMPORARY ASPHALT BERM PHASE 1



- LOD -

TAB

CURB INLET PROTECTION PHASE 1 TEMPORARY STONE OUTLET STRUCTURE PHASE 1 SAME DAY STABILIZATION

TEMPORARY ASPHALT BERM			
ID NO.	STATION	LENGTH	
TAB 4.I	STA.518+40, RT	IO FT.	

TEMPORARY STONE OUTLET STRUCTURE (ISOS)						
	OTATION		DRAINAGE	STORAGE		
ID NO.	STATION	WEIR ELEV.	AREA (AC)	REQUIRED (CF)		
TSOS 4.I	STA.518+07, RT	652.5 FT	0.19	342		
TSOS 4.2	STA.518+79, RT	653.5 FT	0.10	180		

								MONTGOMERY PERMITTING SI	COUNTY DEPARTMENT OF ERVICES APPROVED FOR:	NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED FOR A MCDPS ACCESS PERMIT.
							14	Stormwater Management:	Sediment Control Technical Requirements:	Administrative Requirements:
										Reviewed Date
									Reviewed Date	
								Reviewed Date	Approved Date	SEDIMENT CONTHOL PERMIT NO.
								Approved Date	142 24	MGDPS APPROVAL OF THIS PLAN WILL EXPIRE
								SM FILE #		TWO YEARS FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED
							DPs trea own ade	S approval of a sediment control atment standards and does not cre ner's permission. It does not relieve quacy of the drainage design as it a	or stormwater management plan is for demonstrate sate or imply any right to divert or corcentrate runc a the design engineer or other responsible person of affects uphill or downhill properties.	ed compliance with minimum environmental runolf ff onto any adjacent property without that property professional liability or ethical responsibility for the
						MONTGOMERY	COUNTY	EROS	ION AND SEDIM	IENT CONTROL
				90% SUBMITTAL	100 E	DISON PARK DI GAITHERSBURG,	RIVE, 4TH FLOOR MD 20878	PL	ANS PHASE 1 - S	C-07 OF 19
				,	RECOMMENDED FOR APPROVAL			MD) 355 - CLAI	RKSBURG
				DATUM: NAD 83/91 HORIZONTAL NAVD 88 VERTICAL	Chief, Design Section		Date		SHARFD US	F PATH
					APPROVED					
TSOS					Chief Division of Engineering Ser	vices	Date	51A	. 514+500 10	SIA. 519+00
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					PLOTTED: Tuesday, September 17, 2	019 AT 03:34 PM				



TEMPORARY STONE OUTLET STRUCTURE (TSOS)							
ID NO.	STATION	WEIR ELEV.	DRAINAGE AREA (AC)	STORAGE REQUIRED (CF)	ST PROV		
TSOS 5.1	STA.520+64, RT	656.5 FT	0.25	450			

EARTH DIKE (ED)				
				DRAINAGE
ID NO.	LENGTH	STATION	TOP ELEV.	AREA (AC)
ED 5.I	208 LF	STA.520+41 TO 522+50 RT	661.5 FT.	0.96
ED 5.2	35 LF	STA.520+64 TO 520+65 RT	666.5 FT.	0.01
ED 5.3	195 LF	STA.520+64 TO 522+58 RT	666.5 FT.	0.05

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1. CURB & GUTTER, SHARED USE PATH, TEMPORARY CURB RAMP, INLETS AND STORM DRAIN TO BE CONSTRUCTED BY C.I.P.

PROJECT 508000 BEFORE THIS PROJECT. 2. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT. 3. FOR FOREST CONSERVATION MEASURES, REFER TO LANDSCAPING

PLANS.



LIMIT OF DISTURBANCE

EARTH DIKE PHASE 1

CURB INLET PROTECTION PHASE 1

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		TEMPORARY ASPHA
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SAME DAY STABILIZATION TEMPORARY STONE OUTLET STRUCTURE PHASE 1





	MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:			NOTE: MCDPS APPROVAL DOES NEGATE THE NEED FOR A MC ACCESS PERMIT.		
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PLAN SHEET SC-09 INITIAL



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THERSBURG, MD 20878			- 2C-TO OL TA
MENT OF TRANSPORTATION			
IONTGOMERY COUNTY			
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INLET PROTECTION (IP)							
			DRAINAGE				
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	MONTGOMERY COU PERMITTING SERVI	r of OR:	NOTE: MCDPS AP NEGATE THE NEE ACCESS PERMIT.	PROVAL DOES NOT D FOR A <u>MCDPS</u>	
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Y COUNTY TRANSPORTATION DRIVE, 4TH FLOOR 5, MD 20878	DPS approval of a sediment control or stor treatment standards and does not create or owner's permission. It does not relieve the di adequacy of the drainage design as it affects in EROSIO PLAN MDC	mwater management plan is imply any right to divert or of esign engineer or other response uphill or downhill properties. N AND S IS PHASE 3555 - (EDIM 2 - SO	compliance with minimum onto any adjacent propert rofessional liability or ethic ENT COI C-12 OF RKSBL	n environmental runoff y without that property al responsibility for the NTROL 19 JRG
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1. CURB & GUTTER, SHARED USE PATH, TEMPORARY CURB RAMP, INLETS AND STORM DRAIN TO BE CONSTRUCTED BY C.I.P.

PROJECT 508000 BEFORE THIS PROJECT. 2. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT. 3. FOR FOREST CONSERVATION MEASURES, REFER TO LANDSCAPING PLANS.



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					SEDIMENT CONTROL PERMIT NO.
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PLAN SHEET SC-13 FINAL

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:

Stormwater Management:

Sediment Control Technical Requirements:

Reviewed

Date

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED FOR A MCDPS ACCESS PERMIT.

Administrative Requirements:

Reviewed

Date





NOTE:



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NOTE:

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1. CURB & GUTTER, SHARED USE PATH, TEMPORARY CURB RAMP, INLETS AND STORM DRAIN TO BE CONSTRUCTED BY C.I.P. PROJECT 508000 BEFORE THIS PROJECT.

- PROJECT 508000 BEFORE THIS PROJECT. 2. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT. 3. FOR FOREST CONSERVATION MEASURES, REFER TO LANDSCAPING
- PLANS.



LIMIT OF DISTURBANCE

EARTH DIKE PHASE 1 CURB INLET PROTECTION PHASE 1 TEMPORARY STONE OUTLET STRUCTURE PHASE 1 LEGEND

CIP

TSOS

TEMPORARY ASPHALT BERM PHASE 1

SAME DAY STABILIZATION

CURB INLET PROTECTION PHASE 2

INLET PROTECTION (IP)							
				DRAINAGE			
ID	NO.	STATION	QUANTITY	AREA (AC)			
CIP	5 . I	STA.520+52, RT	ΙEΑ	0.34			
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		MD 🕻	355 - C	LAR	KSE	SUF	lG
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MAINTENANCE OF TRAFFIC NOTES:

- 1. THE TEMPORARY TRAFFIC CONTROL PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE MARYLAND DEPARTMENT OF TRANSPORTATIONS STATE HIGHWAY ADMINISTRATION (MDOT SHA) BOOK OF STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES, THE LATEST EDITION OF THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MD-MUTCD), AND THE MDOT SHA DETAILS FOR TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATIONS. THE SHADED AREAS ON THE MAINTENANCE OF TRAFFIC PLANS WILL REPRESENT THE AREA TO BE CONSTRUCTED.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT SAFETY OF THE PUBLIC AND THE WORK CREW IS MAINTAINED AT ALL TIMES THROUGHOUT THE TERM OF THE CONTRACT. THE MOTORIST SHALL BE GUIDED IN A CLEAR AND POSITIVE MANNER WHILE APPROACHING AND PASSING THROUGH CONSTRUCTION WORK AND EQUIPMENT AREAS.

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- 3. THE CONTRACTOR SHALL INSTALL (PRIOR TO BEGINNING CONSTRUCTION) AND MAINTAIN (DURING CONSTRUCTION) ALL NECESSARY TRAFFIC CONTROL DEVICES DURING HOURS OF CONSTRUCTION AND AT ALL OTHER TIMES IN ACCORDANCE WITH THE METHODS OF TRAFFIC CONTROL SHOWN ON THESE DRAWINGS, THE SPECIFICATIONS, AND THE MD MUTCD. THE WORK HOURS ARE SUBJECT TO COMPLIANCE WITH MDOT SHA SPECIFICATIONS.
- 4. WORK WITHIN LANE CLOSURE FLAGGING OPERATIONS ALONG 2 LANE SECTIONS SHALL BE PERFORMED DURING DAY-TIME HOURS FROM 9 AM TO 5 PM. REFER TO THE CONTRACT SPECIAL PROVISIONS FOR ALL LANE CLOSURE RESTRICTIONS AND TIMES.
- 5. THE CONTRACTOR AND INSPECTORS SHALL NOT PARK VEHICLES OR WORK BEHIND DRUMS WITHIN THE TAPER OR BUFFER AREAS.
- 6. WORK SHALL BE PERFORMED ON A BLOCK-BY-BLOCK BASIS OR 1000 FOOT MAXIMUM SEGMENTS. THE MAINTENANCE OF TRAFFIC (MOT) PLANS ARE INTENDED TO CONVEY A TYPICAL MOT LAYOUT FOR EACH ROADWAY SECTION. ALL CHANNELIZATION DEVICES AND FLAGGERS SHALL BE RE-POSITIONED ACCORDINGLY AS CONSTRUCTION PROGRESSES.
- 7. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 11' TRAVEL LANES. LOCATIONS OF INDIVIDUAL CHANNELING DRUMS AS SHOWN ON THE PLANS ARE APPROXIMATE AND ARE SHOWN ONLY TO CONVEY THEIR PLACEMENT RELATIVE TO WORK ZONES AND ACTIVE TRAFFIC LANES.
- 8. DRUMS MUST BE REMOVED IN THE TRAVEL LANE BY THE END OF EACH CONSTRUCTION WORK PERIOD.
- 9. STAGING OR STOCKPILING OF MATERIAL ON-SITE SHALL BE PROHIBITED.
- 10.ANY DAMAGE TO EXISTING STRUCTURES, SIGNS, POSTS OR HARDWARE AS A RESULT OF OPERATIONS DURING CONSTRUCTION SHALL BE REPAIRED AND/OR REPLACED AT NO ADDITIONAL COST TO THE STATE.
- 11. TEMPORARY SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH MDOT SHA STD NO 104.01-17A,104.01-17B, 104.01-17C AND MDOT SHA SPECIFICATIONS NOS 812.01 AND 812.04. ALL SIGNS THAT ARE NOT APPLICABLE DUE TO TEMPORARY TRAFFIC CONTROL CONDITIONS SHALL BE RELOCATED WHEN NECESSARY, COMPLETELY COVERED WITH AN OPAQUE MATERIAL, OR REMOVED WITH APPROVAL FROM THE ENGINEER. ALL APPLICABLE SIGNS SHALL BE MAINTAINED DURING CONSTRUCTION UNLESS OTHERWISE SPECIFIED BY THE ENGINEER OR AS NOTED IN THE CONTRACT DOCUMENTS. ALL SIGNS SHALL BE PROPERLY REDISPLAYED TO TRAFFIC AS SOON AS CONDITIONS WARRANT. ALL SIGN LOCATIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- 12. THE ENGINEER SHALL INSPECT THE MAINTENANCE OF TRAFFIC MATERIAL AND APPLICATION ON A ROUTINE BASIS. ALL DEFICIENCIES SHALL BE CORRECTED PROMPTLY UPON NOTICE BY THE ENGINEER.
- 13.ACCESS SHALL BE PROVIDED TO ALL EXISTING SIDE STREETS AND DRIVEWAYS AT ALL TIMES. A FLOATING FLAGGER SHALL BE USED AT IMPACTED ACCESS POINTS AS NEEDED UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 14.TRAFFIC SIGNALS SHALL BE MAINTAINED BY POLICE FORCES IF DAY-TIME FLAGGING OPERATIONS IMPACT THE OPERATIONS OF A SIGNAL.

SEQUENCE OF CONSTRUCTION

- 1. THE CONTRACTOR MUST SUBMIT A DETAILED WORK PLAN WITH THE PROPOSED SEQUENCE OF CONSTRUCTION IN CONJUNCTION WITH THE PROJECT SCHEDULE. SUBMITTAL AND APPROVAL OF THIS PLAN WILL BE REQUIRED PRIOR TO THE START OF ANY WORK ON THE PROJECT. THE PLAN WILL NEED TO ADHERE TO ALL OF THE REQUIREMENTS, RESTRICTIONS, NOTES AND DETAILS INCORPORATED IN THE PLANS AND SPECIAL PROVISIONS INCLUDING A PHASED CONSTRUCTION.
- 2. PLACE ADVANCED PVMS 7 DAYS PRIOR TO CONSTRUCTION AND WILL REMAIN 7 DAYS AFTER CONSTRUCTION HAS BEGUN ALONG MD 355.
- 3. PRIOR TO STARTING ANY LAND DISTURBING ACTIVITIES, THE CONTRACTOR SHALL FIELD MARK THE LIMITS OF DISTURBANCE.
- 4. PRIOR TO BEGINNING WORK OR NEW CONSTRUCTION STAGE, THE CONTRACTOR SHALL REFER TO THE EROSION AND SEDIMENT CONTROL PLANS FOR THE REQUIRED EROSION AND SEDIMENT CONTROL MEASURES TO BE INSTALLED.
- 5. WORK SHALL BE PERFORMED WHILE MAINTAINING A SINGLE LANE OF TRAFFIC ON A BLOCK-BY-BLOCK BASIS OR 1000 FOOT MAXIMUM SEGMENTS.
- 6. UTILIIZE DAY-TIME STANDARD SHOULDER CLOSURE (104.02-02) OR LANE CLOSURE FLAGGING OPERATIONS (MD 104.02-10 AND 104.02-14) FOR ALL CONSTRUCTION WORK.
- 7. ALL PROPOSED DRAINAGE SYSTEMS SHALL BE COMPLETED PRIOR TO MOVING TO THE NEXT WORK AREA.
- 8. THE FINAL STAGE OF CONSTRUCTION SHALL INCLUDE INSTALLING THE FINAL PAVEMENT SURFACE, SIGNING, PAVEMENT MARKINGS AND LANDSCAPING FOR THE ENTIRE LIMITS OF WORK.





STANDARD DETAILS



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CRITERIA

THE CONTRACTOR SHALL BE GOVERNED BY THE STANDARDS AND REQUIREMENTS OF THE FOLLOWING PUBLICATIONS, EXCEPT AS MODIFIED BY THE SPECIAL PROVISIONS OF THIS CONTRACT: DESIGN

> MDSHA - "MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", 2011 EDITION AND SUBSEQUENT REVISIONS. (MdMUTCD)

A A S H T O - "HIGHWAY SAFETY DESIGN AND OPERATIONS GUIDE" -1997

A A S H T O - "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS LUMINAIRES AND TRAFFIC SIGNALS", 2001 EDITION (CATEGORY || FOR ALL OVERHEAD AND CANTILEVER SIGN STRUCTURES).

MATERIALS AND CONSTRUCTION

MDSHA - "STANDARD SPECIFICATIONS FOR CONSTRUCTION & MATERIALS", 2017 EDITION AND SUBSEQUENT SUPPLEMENTS.

DESIGN WIND

100 MPH - WOOD SUPPORTS IO YEAR RECURRENCE INTERVAL 100 MPH - GROUND MOUNT SIGN STEEL SUPPORTS IO YEAR RECURRENCE INTERVAL 100 MPH - OVERHEAD AND CANTILEVER STRUCTURES 50 YEAR RECURRENCE INTERVAL

ALL DISTRICTS

DESIGN STRESS

SOIL BEARING PRESSURE - S = 3,000 P.S.F. (ASSUMED) SEE MATERIAL & CONSTRUCTION ABOVE AND SPECIAL PROVISIONS FOR DESIGN STRESSES FOR STRUCTURAL STEEL, ALUMINUM, REINFORCING STEEL AND CONCRETE.

CHAMFER

ALL EXPOSED EDGES OF CONCRETE SHALL HAVE A 3/4" X 3/4" CHAMFER.

CLASSIFICATION OF SIGNS

SIGNS ARE DIVIDED INTO TWO (2) GENERAL CATEGORIES.	
I. GUIDE SIGNS A) STRUCTURAL TYPES OH - OVERHEAD C - CANTILEVER GM - GROUND MOUNT, BREAKAWAY OR NON-BREAKWAY BM - BRIDGE MOUNTED	 B) PANELS MATERIAL - EXTRUDED ALUMINUM COPY - DIRECT APPLIED I) HIGH INTENSITY (NEW SIGNS AND REVISIONS TO EXISTING SIGNS)
2. STANDARD SIGNS (REGULATORY, WARNING, ETC.) A) STRUCTURAL TYPES WOOD SUPPORTS SQUARE TUBE DENTIFICATION OF SIGNS AND DANELS	B) PANELS MATERIAL - SHEET ALUMINUM COPY - DIRECT APPLIED
DENTIFICATION OF SIGNS AND PANELS	
GUIDE SIGNS	

EACH GUIDE SIGN IS IDENTIFIED BY A SIGN NUMBER ON THE PLANS AND IN THE TABULATIONS.(GM-I, GM-2, GM-3, etc) SIGNS ON STRUCTURES ARE IDENTIFIED WITH A NUMBER AND WHERE VARIATIONS OCCUR,

A LOWER CASE LETTER. (OH-Ia, OH-Ib, OH-Ic)

STANDARD SIGNS

STANDARD SIGNS ARE IDENTIFIED BY PANEL NUMBERS AND ARE CLASSIFIED AS FOLLOWS R - REGULATORY

W – WARNING

M - ROUTE MARKERS AND ACCESSORIES

D - DESTINATION AND MILEAGE PANELS

S - SCHOOL

PANELS SHALL BE DESIGNATED TO AGREE WITH MARYLAND STANDARD SIGN BOOK. EACH STANDARD SIGN IS IDENTIFIED FIRST BY THE SHEET NUMBER. THEN BY THE NUMERICAL ORDER OF THE SIGN AS IT APPEARS ON THE PLAN. FOR EXAMPLE SHEET SN 2.1-101,102,103, ETC. SHEET SN 2.2-201,202,203,ETC.

PANEL LAYOUT AND ALPHABETS

I. GUIDE SIGN PANEL LAYOUTS ARE BASED ON THE A.A.S.H.T.O. MANUALS NOTED ABOVE. 2. STANDARD SIGN PANEL LAYOUTS ARE BASED ON THE MOMUTCD WITH SPECIFICATIONS DETAILED IN THE MARYLAND STATE HIGHWAY ADMINISTRATION PUBLICATION. "STANDARD SIGN BOOK", AVAILABLE ONLINE @ https:/www.marylandroads.com/businesswithsha/ bizStdsSpecs/desManualStdPub/publicationsonline/oots/internet_signbook.asp

REFLECTORIZATION

BACKGROUNDS, BORDERS, TEXTS AND ALL OTHER ELEMENTS OF SIGN PANELS SHALL BE REFLECTORIZED EXCEPT WHERE NOTED. REFER TO PROJECT REQUIREMENTS FOR MORE DETAIL.



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ORIENTATION OF SIGN FACES

90° EDGE OF TRAVELLED ROADWAY $\overline{}$ 90° -(TANGENT) MEDIAN EDGE OF TRAVELLED 500' ROADWAY 90°

* UNDER 30 FEET FROM TRAVELLED ROADWAY TO NEAR EDGE OF SIGN - 93° AWAY FROM THE ROAD TO AVOID SPECULAR REFLECTION AS INDICATED IN 813.03 OF THE MARYLAND STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS.

OVER 30 FEET FROM TRAVELLED ROADWAY TO NEAR EDGE OF SIGN - 90°

SIGN LOCATIONS

I. GUIDE SIGNS ARE LOCATED ON THE PLANS BY DIMENSION TO SURVEY STATIONS, OR WHEN NECESSARY, TO IDENTIFIABLE PHYSICAL FEATURES.

2. ALL CHANGES IN THE LOCATIONS OF SIGNS AS SHOWN ON THE PLAN SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

EXISTING UTILITIES

THE ENGINEER DOES NOT WARRANT OR GUARANTEE THE ACCURACY OR COMPLETENESS OF UTILITY INFORMATION SHOWN ON THE PLAN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND PROTECT ALL EXISTING FACILITIES WHICH MIGHT BE AFFECTED BY THIS WORK OR HIS OPERATION.

ROADSIDE SIGNS

- I. VERTICAL ALIGNMENT
- POSITION PANEL SO FACE IS PLUMB.
- 2. HORIZONTAL ALIGNMENT (SEE DIAGRAM ABOVE)
- A) ON STRAIGHT ROADWAY SECTIONS, ANGLE OF SIGN FACE TO ROADWAY VARIES WITH DISTANCE FROM TRAVELLED ROADWAY TO NEAR EDGE OF SIGN - SEE DIAGRAM. B) ON THE INSIDE OF HORIZONTAL CURVES. POSITION SIGN SO FACE OF PANEL MAKES
- AN ANGLE OF 90° WITH A CHORD BETWEEN A POINT ON NEAR EDGE OF PAVEMENT AT SIGN LOCATION AND A POINT ON EDGE OF PAVEMENT 500' IN ADVANCE OF SIGN. C) ON THE OUTSIDE OF HORIZONTAL CURVES, POSITION SIGN SO FACE OF PANEL IS
- AT RIGHT ANGLES TO THE TANGENT OF THE CURVE AT THE SIGN LOCATION. D) POSITIONING OF SIGNS AT GORES AND RAMP SEPARATIONS IS REFERRED TO THE
- NORMAL EDGE OF THE MAINLINE ROADWAY.

OVERHEAD SIGNS

I. VERTICAL ALIGNMENT

POSITION PANELS FOR ALL OVERHEAD STRUCTURES SO THAT PANEL FACE IS PLUMB. 2. OVERHEAD SIGN STRUCTURES SHALL NOT BE ERECTED WITHOUT ATTACHING LUMINAIRES.

- SUPPORTS, AND/OR SIGNS.
- 3. HORIZONTAL ALIGNMENT
- A) POSITION ALL OVERHEAD SIGNS SO THAT THE FACE OF THE PANEL IS AT RIGHT ANGLES TO THE NORMAL EDGE OF ROADWAY, IF ON A STRAIGHT ROADWAY SECTION.
- B) POSITION ALL OVERHEAD SIGNS SO THAT THE FACE OF THE PANEL IS AT RIGHT ANGLES TO THE TANGENT OF THE CURVE AT SIGN LOCATION, IF ON A HORIZONTAL CURVE.
- C) POSITIONING OF SIGNS AT GORES AND RAMP SEPARATIONS IS REFERRED TO THE NORMAL EDGE OF THE MAINLINE ROADWAY.

4. VERTICAL CLEARANCE

- A) OVERHEAD SIGNS SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 17'-9" FROM ROADWAY TO THE BOTTOM OF LIGHT FIXTURES. ALL LIGHT FIXTURES ARE TO BE AT THE SAME ELEVATION. B) IF THE CONTRACTOR CANNOT OBTAIN 17'-9" (SEE 3A) CLEARANCE. HE IS TO CEASE WORK
- AND CONTACT THE PROJECT ENGINEER FOR FURTHER INSTRUCTIONS. THE PROJECT ENGINEER MAY CONTACT THE TRAFFIC ENGINEERING DESIGN DIVISION FOR ASSISTANCE.
- C) ON ALL OVERHEAD SIGNS, THE MINIMUM CLEARANCE TO BOTTOM OF SIGN: 20'-9".

PROJECT REQUIREMENTS

ALL NEW SIGNS ON THIS PROJECT SHALL BE FABRICATED FROM SHEETING WHICH MEETS ALL OF THE FOLLOWING REQUIREMENTS, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS, OR AS DIRECTED BY THE ENGINEER:

I. SHEETING SHALL MEET THE REQUIREMENTS OF SECTIONS 813 AND 950.03 OF MDSHA'S STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS (JULY 2008) AND SUBSEQUENT REVISIONS

APPROVALS	REVISIONS		MONTGOMERY C DEPARTMENT OF TRAN 100 EDISON PARK DRIV	OUNTY NSPORTATION 'E, 4TH FLOOR	PLAN SHEET SN-01
TEAM LEADER			GAITHERSBURG, M RECOMMENDED FOR APPROVAL	D 20878	MD 355 - CLARKSBURG
ASST. DIV. CHIEF		NAVD 88 VERTICAL	Chief, Design Section APPROVED	Date	SHARED USE PATH
DIVISION CHIEF			Chief, Division of Engineering Services	Date	GENERAL NOTES
OFFICE DIRECTOR		NO. REVISION DATE BY	Designed by : J.D.W. Drawn by : J.D.W.	Checked by : J.L.R.	Project No. : C.I.P. PR. # 501744 SHEET 48 of 88

PROJECT REQUIREMENTS CONT'D

A) GUIDE, EXIT GORE, AND GENERAL INFORMATION SIGNS- RETROREFLECTIVE SHEETING FOR GUIDE SIGNS, EXIT GORE, AND GENERAL INFORMATION (INCLUDES WHITE ON GREEN, WHITE ON BLUE, WHITE ON BROWN AND THE REVERSE OF THESE COLORS) SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX LEGEND ON ASTM TYPE IX BACKGROUND. REGULATORY AND WARNING MESSAGES WITHIN GUIDE SIGNS SHALL BE NON-REFLECTIVE BLACK LEGEND ON BACKGROUND SHEETING WHICH MEETS OR EXCEEDS THE REQUIREMENTS FOR ASTM TYPE IX SHEETING.

B) WARNING SIGNS - RETROREFLECTIVE SHEETING FOR BLACK ON FLUORESCENT YELLOW WARNING SIGNS SHALL BE NON-REFLECTIVE BLACK LEGEND ON BACKGROUND SHEETING WHICH MEETS OR EXCEEDS THE REQUIREMENTS FOR ASTM TYPE IX SHEETING, REGULATORY MESSAGES WITHIN WARNING SIGNS SHALL FOLLOW THE GUIDELINES FOR REGULATORY SIGNS.

C) SCHOOL SIGNS - RETROREFLECTIVE SHEETING FOR SCHOOL SIGNS (BLACK ON FLUORESCENT YELLOW GREEN) SHALL BE NON-REFLECTIVE BLACK LEGEND ON BACKGROUND SHEETING WHICH MEETS OR EXCEEDS THE REQUIREMENTS FOR ASTM TYPE IX SHEETING. REGULATORY MESSAGES WITHIN SCHOOL SIGNS SHALL FOLLOW THE REQUIREMENTS FOR REGULATORY SIGNS.

ii. ALL R7 AND R8 SERIES PARKING RELATED SIGNS AND THEIR SUPPLEMENTAL PANELS. NO TRESPASSING SIGNS. AND SIGNS DIRECTED AT PEDESTRIANS AND BICYCLISTS ONLY (INCLUDES RED ON WHITE, GREEN ON WHITE, BLUE ON WHITE, BLACK ON WHITE AND THE REVERSE OF THESE COLORS) SHALL BE ASTM TYPE I LEGEND ON ASTM TYPE I BACKGROUND.

iii. ALL OTHER REGULATORY SIGNS - RETROREFLECTIVE SHEETING FOR THESE SIGNS AND THEIR SUPPLEMENTAL PANELS (INCLUDES BLACK ON WHITE) SHALL BE NON-REFLECTIVE BLACK LEGEND ON ASTM TYPE IV BACKGROUND. WHERE RED IS SPECIFIED. OR WHERE THE COLOR OF THE SIGN IS WHITE ON BLACK. THE LEGEND SHALL BE ASTM TYPE IV RETROREFLECTIVE SHEETING ON NON-REFLECTIVE BLACK BACKGROUND. WARNING MESSAGES WITHIN REGULATORY SIGNS SHALL FOLLOW THE GUIDELINES FOR WARNING

SIGNS.

E) ROUTE MARKERS - RETROREFLECTIVE SHEETING FOR ROUTE MARKERS (INCLUDES BLACK ON WHITE, GREEN ON WHITE, WHITE ON GREEN, WHITE ON RED/BLUE) SHALL MEET THE REQUIREMENTS OF GUIDE SIGNS ABOVE WHEN SPECIFIED AS THE LEGEND OF A GUIDE SIGN. RETROREFLECTIVE SHEETING FOR ALL INDEPENDENT ROUTE MARKERS AND THEIR AUXILIARY PANELS SHALL BE ASTM TYPE IV AND/OR NON-REFLECTIVE BLACK LEGEND ON ASTM TYPE IV BACKGROUND.

F) LOGOS AND/OR GRAPHICS - WITHIN SIGNS SHALL FOLLOW THE GUIDELINES FOR THE RESPECTIVE SIGN CLASSIFICATION UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS. OR AS DIRECTED BY THE ENGINEER.

4. THE FOLLOWING MINIMUM THICKNESS SHALL BE USED FOR THE APPROPRIATE WIDTH OF SHEET ALUMINUM BLANKS. LONGEST DIMENSION MINIMUM THICKNESS

UP TO 12". GREATER GREATER GREATER OVER 48".

3. THE FOLLOWING TYPES OF SHEETING SHALL BE USED FOR THE SPECIFIED SIGN CLASSIFICATIONS

D) REGULATORY SIGNS - FALL INTO THREE SUBCATEGORIES:

i. "RED" REGULATORY SIGNS (STOP. YIELD. DO NOT ENTER AND WRONG WAY) RETROREFLECTIVE SHEETING FOR THESE SIGNS AND THEIR SUPPLEMENTAL PANELS (INCLUDES WHITE ON RED AND RED ON WHITE) SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX SHEETING.

G) CIVIL DEFENSE SIGNS AND OTHER SIGNS - NOT SPECIFICALLY FALLING INTO ONE OF THE CATEGORIES ABOVE, SHALL FOLLOW THE GUIDELINES FOR THE SIGN CLASSIFICATION THAT MOST CLOSELY MATCHES THE COLOR(S) OF THE PROPOSED SIGN.

I 			 	 0.040"
THAN	12" TO	24"	 	 0.063"
THAN	24" TO	36"	 	 0.080"
THAN	36" TO	48"	 	 0.100"
			 	 0.125"

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			+50 495 I I	19.75
		,	STRINGTOWN STRINGTOWN	
				IINE STA J98400 - SEE THIS SHEET
	LEGEND PROPOSED SIGN & SUPPORT	ABCC	5" SOLID WHITE THERMOPLASTIC PAVEMENT MARKINGS 5" SOLID YELLOW THERMOPLASTIC PAVEMENT MARKINGS 5" DASHED WHITE THERMOPLASTIC PAVEMENT MARKINGS (3' LINE, 9' SPACE) 5" SOLID DOUBLE YELLOW	HUTAM
	EXISTING SIGN & SUPPORT	E F G	THERMOPLASTIC PAVEMENT MARKINGS IO" SOLID WHITE THERMOPLASTIC PAVEMENT MARKINGS I2" SOLID WHITE THERMOPLASTIC PAVEMENT MARKINGS 24 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS (STOP LINE)	
Wallace Wallace Work Wallace Work Non Work Non	EXISTING SIGN & SUPPORT TO BE REMOVED LANE USE ARROW	(H) (-) (-) +	THERMOPLASTIC PAVEMENT MARKING LEGENDS AND SYMBOLS EXISTING PAVEMENT MARKINGS TO REMAIN EXISTING PAVEMENT MARKINGS TO BE REMOVED INSTALL ON ONE SQUARE PERFORATED TUBULAR STEEL SUPPORT	

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STRINGTOWN ROAD





MONTGOMERY COU TMENT OF TRANS SON PARK DRIVE, ITHERSBURG, MD	UNTY PORTATION 4TH FLOO 20878	١R	PLAN SHEET SN-2.1 SIGNING & PAVEMENT MARKING PLANS
			MD 355 - CLARKSBURG
	Date		SHARED USE PATH
			STA. 495+29 TO STA. 501+00
S	Date)	09/2019
awn by: J.D.W.	Checked by :	J.L.R.	Project No. : C.I.P. PR. # 501744 SHEET 49 of 88



$R = \frac{SI-1}{36^{\circ} \times 36^{\circ}} \\ 9 \le F. \\ 24^{\circ} \times 12^{\circ} \\ 2 \le F. \\ 3 \le F. \\ 9 \le F. \\ 18^{\circ} \times 24^{\circ} \\ 3 \le F. \\ 9 = 10^{\circ} \times 10^{\circ} \\ 18^{\circ} \times 24^{\circ} \\ 3 \le F. \\ 9 = 10^{\circ} \times 10^{\circ} \\ 18^{\circ} \times 24^{\circ} \\ 3 \le F. \\ 9 = 10^{\circ} \times 10^{\circ} \\ 18^{\circ} \times 24^{\circ} \\ 3 \le F. \\ 9 = 10^{\circ} \times 10^{\circ} \\ 18^{\circ} \times 24^{\circ} \\ 3 \le F. \\ 9 = 10^{\circ} \times 10^{\circ} \\ 18^{\circ} \times 24^{\circ} \\ 3 \le F. \\ 9 = 10^{\circ} \times 10^{\circ} \\ 18^{\circ} \times $	TO SNOWDEN FARM PARKWAY
S4-3P S4-3P 12"×4" 12"×4" 204 0.33 S.F. 0.33 S.F. 0.33 S.F. 81-6(a)1 81-6(a)1 12"×36" +50 3 S.F. 3 S.F.	504 +50
SH-L 206 SI-I 206 SI-I 36'x36' 9 36'x36' 9 36'x36' 6,205 4'x12' 24'x12' 24'x12' 25,F. (+) 209	SAIRE SIREE SO SO C C C C C C C C C C C C C C C C C

THERMOPLASTIC PAVEMENT



20' 0 SCALE	20' 40'		MERI		
APPROVALS	REVISIONS	90% SUBMITTAL	MONIGOMERY CC DEPARTMENT OF TRANS 100 EDISON PARK DRIVE GAITHERSBURG, MD	SPORTATION 5, 4TH FLOOR 20878	PLAN SHEET SN-2.2 SIGNING & PAVEMENT MARKING PLANS
TEAM LEADER		DATUM: NAD 83/91 HORIZONTAL NAVD 88 VERTICAL	RECOMMENDED FOR APPROVAL	Date	MD 355 - CLARKSBURG
DIVISION CHIEF			APPROVED Chief, Division of Engineering Services	Date	STA. 501+00 TO STA. 505+00
OFFICE DIRECTOR		NO. REVISION DATE BY	Designed by : J.D.W. Drawn by : J.D.W.	Checked by : J.L.R.	Project No. : C.I.P. PR. # 501744 SHEET 50 of 88













IONTGOMERY CO IMENT OF TRAN SON PARK DRIVE THERSBURG, ME	DUNTY SPORTATION E, 4TH FLOOR) 20878	2	PLAN SHEET SN-2.4 SIGNING & PAVEMENT MARKING PLANS
			MD 355 - CLARKSBURG
	Date		SHARED USE PATH
	Date		STA. 523+50 TO STA. 532+50
wn by: J.D.W.	Checked by :	J.L.R.	Project No. : C.I.P. PR. # 501744 SHEET 52 of 88

NO.															
101			1	2	3	4	5	6	7	8	9	10	11	12	13
101	D11-1 (18"x24") 'BIKE ROUTE', R5-3 (24"x24") 'NO MOTOR VEHICLES'	ONE SQ PERFORATED TUBULAR STEEL SUPPORT	7	1	1	· · · · · ·									
102	RELOCATE R2-1 (24"x30") 'SPEED LIMIT 30'	ONE SQ PERFORATED TUBULAR STEEL SUPPORT		1	1	5									
103	RELOCATE M3-1 (12"x18") 'NORTH', M1-5 (24"x30") 'MARYLAND 355'	ONE SQ PERFORATED TUBULAR STEEL SUPPORT	2	1	1	6.5			·	·					
104	RELOCATE MONTGOMERY COUNTY CORRECTIONAL FACILITY SIGN	ONE SQ PERFORATED TUBULAR STEEL SUPPORT		1	1	2									
105	R7-4(2) (24"x30") 'NO STOPPING ANY TIME'	ONE SQ PERFORATED TUBULAR STEEL SUPPORT	5	1	1	1									
106	RELOCATE W16-9 (24"x12") 'AHEAD', \$1-1 (36"x36") SCHOOL	ONE SQ PERFORATED TUBULAR STEEL SUPPORT		1	1	5									
	PAVEMENT MARKINGS							503		61		13			
201	D11-1 (18"x24") 'BIKE ROUTE', R5-3 (24"x24") 'NO MOTOR VEHICLES'	ONE SQ PERFORATED TUBULAR STEEL SUPPORT	7	1	1										
202	R1-1 (18"x18") 'STOP'	ONE SQ PERFORATED TUBULAR STEEL SUPPORT	2.25	1	1										
203	R1-1 (18"x18") 'STOP'	ONE SQ PERFORATED TUBULAR STEEL SUPPORT	2.25	1	1										
204	S4-3P (12"x4") 'SCHOOL' (2), R1-6(a)1 (12"x36") IN-STREET PEDESTRIAN CROSSING (2)		6.67												
205	D11-1 (18"x24") 'BIKE ROUTE', R5-3 (24"x24") 'NO MOTOR VEHICLES'	ONE SQ PERFORATED TUBULAR STEEL SUPPORT	7	1	1										
206	S1-1 (36"x36") SCHOOL (2), W16-7pR (24"x12") ARROW PLAQUE, W16-7pL (24"x12") ARROW PLAQUE	ONE SQ PERFORATED TUBULAR STEEL SUPPORT	22	1	1										
207	S1-1 (36"x36") SCHOOL (2), W16-7pR (24"x12") ARROW PLAQUE, W16-7pL (24"x12") ARROW PLAQUE	ONE SQ PERFORATED TUBULAR STEEL SUPPORT	22	1	1										
208	W3-3 (30"x30") SIGNAL AHEAD	ONE SQ PERFORATED TUBULAR STEEL SUPPORT	6.25	1	1										
209	D11-1 (18"x24") 'BIKE ROUTE', R5-3 (24"x24") 'NO MOTOR VEHICLES'	ONE SQ PERFORATED TUBULAR STEEL SUPPORT	7	1	1										
210	R1-1 (18"x18") 'STOP'	ONE SQ PERFORATED TUBULAR STEEL SUPPORT	2.25	1	1										
	PAVEMENT MARKINGS							213		154					
301	RELOCATE M2-1 (15"x21") 'JCT', M1-5 (24"x30"), 'MARYLAND 121'	ONE SQ PERFORATED TUBULAR STEEL SUPPORT		1	1	7.19									
302	W1-2a(1)(R) (30"x30") CURVE	ONE SQ PERFORATED TUBULAR STEEL SUPPORT	6.25	1	1										
303	W1-4R (18"x18") REVERSE CURVE	ONE SQ PERFORATED TUBULAR STEEL SUPPORT	2.25	1	1										
	PAVEMENT MARKINGS							820	40						
401	RELOCATE EXISTING SIGN	TWO 4"x4" WOOD SUPPORT													36
402	R3-7R (30"x30") 'RIGHT LANE MUST TURN RIGHT'	ONE SQ PERFORATED TUBULAR STEEL SUPPORT	6.25	1	1										
403	W5-4a(1) (18"x18") 'TRAIL NARROWS'	ONE SQ PERFORATED TUBULAR STEEL SUPPORT	2.25	1	1				2 - 1	-					
404	W5-4a(1) (18"x18") 'TRAIL NARROWS'	ONE SQ PERFORATED TUBULAR STEEL SUPPORT	2.25	1	1	1			5 — i	1	7.1		51 1		1
405	R3-7R (30"x30") 'RIGHT LANE MUST TURN RIGHT'	ONE SQ PERFORATED TUBULAR STEEL SUPPORT	6.25	1	1								14.1	1.1	
406	D11-1 (18"x24") 'BIKE ROUTE', R5-3 (24"x24") 'NO MOTOR VEHICLES'	ONE SQ PERFORATED TUBULAR STEEL SUPPORT	7	1	1				2						
	PAVEMENT MARKINGS							1384	2				126		
	SUBTOTAL THIS SHEET		129.17	23	23	25.69		2920	40	215		13	126		

	* CODE NUMBER DESCRIPTION & UNIT							
CODE	NUMBERS	DESCRIPTION	UNIT					
1.4.4	1	SHEET ALUMINUM SIGNS	SF					
1	2	SQUARE PERFORATED TUBULAR STEEL SIGN POSTS	EA					
	3	SQUARE TUBULAR STEEL ANCHOR BASES	EA					
1	4	RELOCATE EXISTING GROUND MOUNTED SIGNS	SF					
7	5	REMOVE EXISTING GROUND MOUNTED SIGNS AND SUPPORTS	SF					
	6	5 INCH WHITE THERMOPLASTIC PAVEMENT MARKING LINES	LF					
	7	5 INCH YELLOW THERMOPLASTIC PAVEMENT MARKING LINES	LF					
-	8	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF					
1.7.1	9	16 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF					
	10	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF					
	11	WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LEGENDS AND SYMBOLS	SF					
	12	BIKE LANE PREFORMED THERMOPLASTIC PAVEMENT MARKING WITH ARROW	SF					
	13	4"x4" WOOD SUPPORT	LF					



F	REVISIONS		90% SUBN	IITTA	L	MONTGOMER DEPARTMENT OF 100 EDISON PARK GAITHERSBURG	RY COUNTY TRANSPORTATION DRIVE, 4TH FLOOR G, MD 20878	PLAN SHEET SN-11.1 SIGNING & PAVEMENT MARKING PLANS
		[DATUM: NAD 83/91 H NAVD 88 VER	HORIZONTA RTICAL	AL	RECOMMENDED FOR APPROVAL Chief, Design Section APPROVED	Date	MD 355 - CLARKSBURG SHARED USE PATH
		NO.	REVISION	DATE	BY	Chief, Division of Engineering Services Designed by : J.D.W. Drawn by : J.D	Date D.W. Checked by : J.L.R.	INDEX OF QUANTITIES 09/2019 Project No. : C.I.P. PR. # 501744 SHEET 53 of 88

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POLE SCHEDULE

POLE NUMBER TYPE OF POLE POLE OFFSET TRAVEL LAVE ** STATION AND OFFSET ULMINAIRE/ WITH COLONAL POST TOP POLE OFFSET FROM TRAVEL LAVE ** VITE OF BASE WITH COLONAL POST TOP 6' 495164, 17' RT LED/S3W Breakaway LT-02 22243 16' BLACK FIBERGLASS WITH COLONAL POST TOP 6' 495164, 17' RT LED/S3W Breakaway LT-02 22244 16' BLACK FIBERGLASS WITH COLONAL POST TOP 14' 49743, 26' RT LED/S3W Breakaway LT-02 22247 16' BLACK FIBERGLASS WITH COLONAL POST TOP 6' 499149, 17' RT LED/S3W Breakaway LT-03 22253 16' BLACK FIBERGLASS WITH COLONAL POST TOP 6' 499149, 17' RT LED/S3W Breakaway LT-03 22255 16' BLACK FIBERGLASS WITH COLONAL POST TOP 6' 500152, 17' RT LED/S3W Breakaway LT-04 22256 16' BLACK FIBERGLASS WITH COLONAL POST TOP 16' 50142, 27' RT LED/S3W Breakaway LT-04 22257 16' BLACK FIBERGLASS WITH COLONAL POST TOP 17' 50246, 27' RT LED/S3W Breakaway LT-04 <																
NUMBER NUMBER NUMBER 22243 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 495+63, 17' RT LED/S3W Breakway LT-02 22244 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 14' 497+43, 26' RT LED/S3W Breakway LT-02 22247 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 14' 497+43, 26' RT LED/S3W Breakway LT-03 22243 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 499+90, 17' RT LED/S3W Breakway LT-03 22251 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 499+90, 17' RT LED/S3W Breakway LT-03 22257 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 16' 500+52, 17' RT LED/S3W Breakway LT-04 22251 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 16' 500+52, 17' RT LED/S3W Breakway LT-03 22251 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 16' 500+52, 17' RT LED/S3W Breakway LT-04 22261 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 17'		TYPE OF POLE	POLE OFFSET FROM	STATION AND	LUMINAIRE /	TYPE OF BASE										
22243 16 BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 495+64, 17 RT ILD/33W Breakaway LT-02 22245 16 BLACK FIBERGLASS WITH COLONIAL POST TOP 14' 497+43, 26' RT ILD/33W Breakaway LT-02 22247 16 BLACK FIBERGLASS WITH COLONIAL POST TOP 5' 498+35, 16' RT ILD/33W Breakaway LT-03 22253 16 BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 499+90, 17' RT ILD/53W Breakaway LT-03 22255 16 BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 499+90, 17' RT ILD/53W Breakaway LT-03 22257 16 BLACK FIBERGLASS WITH COLONIAL POST TOP 16' 501+22, 28' RT ILD/53W Breakaway LT-04 22258 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 116' 501+22, 28' RT ILD/53W Breakaway LT-04 22267 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 117' 524-64, 28' RT ILD/53W Breakaway LT-04 22268 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 11' 503+61, 29' RT ILD/53W Breakaway LT-04	NONDER			OTTSET	WATTAGE		NOWIDEIN									
122245 16 BLACK FIBERGLASS WITH COLONIAL POST TOP 5' 496-57, 16 RT LED/S3W Breakaway LT-02 22247 16 BLACK FIBERGLASS WITH COLONIAL POST TOP 14' 497-43, 26 RT LED/S3W Breakaway LT-03 22251 16 BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 498+97, 17 RT LED/S3W Breakaway LT-03 22253 16 BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 499-97, 17 RT LED/S3W Breakaway LT-03 22255 16 BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 500-52, 17 RT LED/S3W Breakaway LT-03 22257 16 BLACK FIBERGLASS WITH COLONIAL POST TOP 16' 501-28, 28 RT LED/S3W Breakaway LT-04 22253 16 BLACK FIBERGLASS WITH COLONIAL POST TOP 116' 501-28, 28 RT LED/S3W Breakaway LT-04 22263 16 BLACK FIBERGLASS WITH COLONIAL POST TOP 12' 503-61, 29 RT LED/S3W Breakaway LT-04 22264 16 BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 515-65, 17 RT LED/S3W Breakaway LT-05 22267 16 BLACK FIBERGLASS WITH COLONIAL POST TOP 7' </td <td>22243</td> <td>16' BLACK FIBERGLASS WITH COLONIAL POST TOP</td> <td>6'</td> <td>495+64<i>,</i> 17' RT</td> <td>LED/53W</td> <td>Breakaway</td> <td>LT-02</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>10.7</td> <td></td>	22243	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	6'	495+64 <i>,</i> 17' RT	LED/53W	Breakaway	LT-02								10.7	
122247 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 14' 4974-3, 26' RT LED/S3W Breakaway LT-02 22249 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 5' 4984-35, 16' RT LED/S3W Breakaway LT-03 22251 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 4984-90, 17' RT LED/S3W Breakaway LT-03 22252 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 4994-90, 17' RT LED/S3W Breakaway LT-03 22253 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 16' S04-28, 2' RT LED/S3W Breakaway LT-03 22254 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 16' S04-28, 2' RT LED/S3W Breakaway LT-04 22261 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 16' S04-6, 2'' RT LED/S3W Breakaway LT-04 22263 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' S15+65, 1'' RT LED/S3W Breakaway LT-04 22264 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' S15+65, 1'' RT LED/S3W Breakaway LT-05 22275 16' BLACK FIBERGLASS WITH COLONIAL POST TOP </td <td>22245</td> <td>16' BLACK FIBERGLASS WITH COLONIAL POST TOP</td> <td>5'</td> <td>496+57<i>,</i> 16' RT</td> <td>LED/53W</td> <td>Breakaway</td> <td>LT-02</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	22245	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	5'	496+57 <i>,</i> 16' RT	LED/53W	Breakaway	LT-02									
12249 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 5' 498+35, 16' R LE/53W Breakaway LT-03 22251 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 498+90, 17' RT LED/53W Breakaway LT-03 22253 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 500+52, 17' RT LED/53W Breakaway LT-03 22255 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 500+52, 17' RT LED/53W Breakaway LT-04 22250 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 16' 502+66, 28' RT LED/53W Breakaway LT-04 22261 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 17' 502+66, 28' RT LED/53W Breakaway LT-04 22265 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 515+65, 18' RT LED/53W Breakaway LT-05 22267 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 515+65, 18' RT LED/53W Breakaway LT-05 22267 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 517+55, 18' RT LED/53W Breakaway LT-05 22271 16' BLACK FIBERGLASS WITH COLONIAL POST TOP	22247	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	14'	497+43 <i>,</i> 26' RT	LED/53W	Breakaway	LT-02									
22251 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 499+90, 17' RT LED/53W Breakaway LT-03 22253 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 499+90, 17' RT LED/53W Breakaway LT-03 22255 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 16' 501+28, 28' RT LED/53W Breakaway LT-04 22259 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 16' 502+66, 28' RT LED/53W Breakaway LT-04 22261 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 11' 502+66, 28' RT LED/53W Breakaway LT-04 22265 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 18' 503+61, 29' RT LED/53W Breakaway LT-04 22267 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 515+65, 17' RT LED/53W Breakaway LT-05 22271 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 518+50, 18' RT LED/53W Breakaway LT-06 22273 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 521+69, 18' RT LED/53W Breakaway LT-06 22275 16' BLACK FIBERGLASS WITH COLONIAL POST TOP <td>22249</td> <td>16' BLACK FIBERGLASS WITH COLONIAL POST TOP</td> <td>5'</td> <td>498+35<i>,</i> 16' RT</td> <td>LED/53W</td> <td>Breakaway</td> <td>LT-03</td> <td></td> <td></td> <td></td> <td>1</td> <td>T</td> <td>1</td> <td>L</td> <td>1</td> <td>T</td>	22249	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	5'	498+35 <i>,</i> 16' RT	LED/53W	Breakaway	LT-03				1	T	1	L	1	T
22253 16' BLACK FIBERGLASS WITH COLONNAL POST TOP 6' 499+90, 17' Rt LED/S3W Breakaway LT-03 22257 16' BLACK FIBERGLASS WITH COLONNAL POST TOP 16' 500+52, 17' RT LED/S3W Breakaway LT-03 22259 16' BLACK FIBERGLASS WITH COLONNAL POST TOP 16' 502+60, 28' RT LED/S3W Breakaway LT-04 22261 16' BLACK FIBERGLASS WITH COLONNAL POST TOP 11' 502+61, 29' RT LED/S3W Breakaway LT-04 22263 16' BLACK FIBERGLASS WITH COLONNAL POST TOP 12' 502+61, 29' RT LED/S3W Breakaway LT-04 22264 16' BLACK FIBERGLASS WITH COLONNAL POST TOP 6' 515+65, 17' RT LED/S3W Breakaway LT-05 22267 16' BLACK FIBERGLASS WITH COLONNAL POST TOP 6' 518+59, 18' RT LED/S3W Breakaway LT-05 22271 16' BLACK FIBERGLASS WITH COLONNAL POST TOP 7' 518+45, 18' RT LED/S3W Breakaway LT-06 22275 16' BLACK FIBERGLASS WITH COLONNAL POST TOP 7' 521+9,18' RT LED/S3W Breakaway LT-05 22277 16' BLACK FIBERGLASS WITH COLONNAL POST TOP	22251	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	6'	498+97 <i>,</i> 17' RT	LED/53W	Breakaway	LT-03					F	-	-	-	- 1
22255 16* BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 501+28, 28' RT LED/S3W Breakaway LT-03 22257 16* BLACK FIBERGLASS WITH COLONIAL POST TOP 16' 501+28, 28' RT LED/S3W Breakaway LT-04 22261 16* BLACK FIBERGLASS WITH COLONIAL POST TOP 116' 502+66, 29' RT LED/S3W Breakaway LT-04 22263 16* BLACK FIBERGLASS WITH COLONIAL POST TOP 18' 503+61, 29' RT LED/S3W Breakaway LT-04 22265 16* BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 515+65, 17' RT LED/S3W Breakaway LT-05 22267 16* BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 515+65, 17' RT LED/S3W Breakaway LT-05 22273 16* BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 512+50, 18' RT LED/S3W Breakaway LT-06 22273 16* BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 512+41, 19' RT LED/S3W Breakaway LT-06 22274 16* BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 521+41, 18' RT LED/S3W Breakaway LT-06 22275 16* BLACK FIBERGLASS WITH COLONIAL POST TOP <td>22253</td> <td>16' BLACK FIBERGLASS WITH COLONIAL POST TOP</td> <td>6'</td> <td>499+90<i>,</i> 17' RT</td> <td>LED/53W</td> <td>Breakaway</td> <td>LT-03</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	22253	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	6'	499+90 <i>,</i> 17' RT	LED/53W	Breakaway	LT-03									
22257 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 16' 501+28, 28' RT LED/53W Breakaway LT-03 22259 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 16' 502+66, 28' RT LED/53W Breakaway LT-04 22261 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 18' 503+61, 29' RT LED/53W Breakaway LT-04 22263 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 515+65, 18' RT LED/53W Breakaway LT-05 22267 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 516+59, 18' RT LED/53W Breakaway LT-05 22269 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 516+59, 18' RT LED/53W Breakaway LT-05 22271 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 519+41, 19' RT LED/53W Breakaway LT-06 22273 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 521+41, 18' RT LED/53W Breakaway LT-06 22271 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 521+49, 18' RT LED/53W Breakaway LT-06 22271 16' BLACK FIBERGLASS WITH COLONIAL POST TOP <td>22255</td> <td>16' BLACK FIBERGLASS WITH COLONIAL POST TOP</td> <td>6'</td> <td>500+52<i>,</i> 17' RT</td> <td>LED/53W</td> <td>Breakaway</td> <td>LT-03</td> <td></td> <td></td> <td>i</td> <td>_</td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td>	22255	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	6'	500+52 <i>,</i> 17' RT	LED/53W	Breakaway	LT-03			i	_	-	-			
22259 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 16' 502+06, 28' RT LED/53W Breakaway LT-04 22261 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 17' 502+66, 29' RT LED/53W Breakaway LT-04 22263 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 18' 503+61, 29' RT LED/53W Breakaway LT-04 22267 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 516+59, 18' RT LED/53W Breakaway LT-05 22267 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 516+59, 18' RT LED/53W Breakaway LT-05 22271 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 517+51, 18' RT LED/53W Breakaway LT-06 22275 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 521+14, 19' RT LED/53W Breakaway LT-06 22277 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 521+14, 18' RT LED/53W Breakaway LT-06 22273 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 521+9, 18' RT LED/53W Breakaway LT-06 22277 16' BLACK FIBERGLASS WITH COLONIAL POST TOP	22257	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	16'	501+28, 28' RT	LED/53W	Breakaway	LT-03	Î								
22261 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 17' 502+64, 29' RT LED/53W Breakaway LT-04 22263 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 18' 503+61, 29' RT LED/53W Breakaway LT-04 22265 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 515+65, 17' RT LED/53W Breakaway LT-05 22269 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 516+59, 18' RT LED/53W Breakaway LT-05 22271 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 518+50, 18' RT LED/53W Breakaway LT-05 22273 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 519+41, 19' RT LED/53W Breakaway LT-06 22274 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 520+08, 18' RT LED/53W Breakaway LT-06 22273 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 521+94, 18' RT LED/53W Breakaway LT-06 22281 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 521+99, 18' RT LED/53W Breakaway LT-07 22281 16' BLACK FIBERGLASS WITH COLONIAL POST TOP	22259	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	16'	502+06 <i>,</i> 28' RT	LED/53W	Breakaway	LT-04								/	
22263 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 18' 503+61, 29' RT LED/53W Breakaway LT-04 22265 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 515+65, 17' RT LED/53W Breakaway LT-05 22267 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 516+59, 18' RT LED/53W Breakaway LT-05 22269 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 517+55, 18' RT LED/53W Breakaway LT-05 22271 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 519+41, 19' RT LED/53W Breakaway LT-05 22273 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 519+41, 19' RT LED/53W Breakaway LT-06 22275 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 521+41, 8' RT LED/53W Breakaway LT-06 22279 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 521+99, 18' RT LED/53W Breakaway LT-06 22281 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 521+99, 18' RT LED/53W Breakaway LT-07 22283 16' BLACK FIBERGLASS WITH COLONIAL POST TOP	22261	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	17'	502+64 <i>,</i> 29' RT	LED/53W	Breakaway	LT-04									
22265 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 515+65, 17' RT LED/53W Breakaway LT-05 22267 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 516+59, 18' RT LED/53W Breakaway LT-05 22269 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 517+55, 18' RT LED/53W Breakaway LT-05 22271 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 519+41, 19' RT LED/53W Breakaway LT-06 22275 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 519+41, 19' RT LED/53W Breakaway LT-06 22277 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 521+49, 18' RT LED/53W Breakaway LT-06 22279 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 521+39, 18' RT LED/53W Breakaway LT-06 22281 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 521+39, 18' RT LED/53W Breakaway LT-07 22282 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 524+57, 28' RT LED/53W Breakaway LT-07 22285 16' BLACK FIBERGLASS WITH COLONIAL POST TOP	22263	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	18'	503+61 <i>,</i> 29' RT	LED/53W	Breakaway	LT-04									
22267 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 516+59, 18' RT LED/53W Breakaway LT-05 22269 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 517+55, 18' RT LED/53W Breakaway LT-05 22271 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 518+50, 18' RT LED/53W Breakaway LT-05 22273 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 519+41, 19' RT LED/53W Breakaway LT-06 22275 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 521+41, 18' RT LED/53W Breakaway LT-06 22279 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 521+91, 18' RT LED/53W Breakaway LT-06 22281 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 522+62, 18' RT LED/53W Breakaway LT-07 22283 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 522+59, 18' RT LED/53W Breakaway LT-07 22284 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 8' 526+50, 36' RT LED/53W Breakaway LT-07 22285 16' BLACK FIBERGLASS WITH COLONIAL POST TOP	22265	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	6'	515+65 <i>,</i> 17' RT	LED/53W	Breakaway	LT-05				1	ſ	P	1	1	04
22269 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 517+55, 18' RT LED/53W Breakaway LT-05 22271 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 6' 518+50, 18' RT LED/53W Breakaway LT-05 22273 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 519+41, 19' RT LED/53W Breakaway LT-06 22275 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 520+08, 18' RT LED/53W Breakaway LT-06 22277 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 521+14, 18' RT LED/53W Breakaway LT-06 22279 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 521+9, 18' RT LED/53W Breakaway LT-06 22281 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 522+52, 18' RT LED/53W Breakaway LT-07 22283 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 7' 523+59, 18' RT LED/53W Breakaway LT-07 22284 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 8' 525+50, 6' RT LED/53W Breakaway LT-07 22285 16' BLACK FIBERGLASS WITH COLONIAL POST TOP	22267	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	6'	516+59 <i>,</i> 18' RT	LED/53W	Breakaway	LT-05						l	TT	11	
2227116' BLACK FIBERGLASS WITH COLONIAL POST TOP6'518+50, 18' RTLED/53WBreakawayLT-052227316' BLACK FIBERGLASS WITH COLONIAL POST TOP7'519+41, 19' RTLED/53WBreakawayLT-062227516' BLACK FIBERGLASS WITH COLONIAL POST TOP7'520+08, 18' RTLED/53WBreakawayLT-062227716' BLACK FIBERGLASS WITH COLONIAL POST TOP7'521+14, 18' RTLED/53WBreakawayLT-062227916' BLACK FIBERGLASS WITH COLONIAL POST TOP7'521+99, 18' RTLED/53WBreakawayLT-062228116' BLACK FIBERGLASS WITH COLONIAL POST TOP7'522+62, 18' RTLED/53WBreakawayLT-072228316' BLACK FIBERGLASS WITH COLONIAL POST TOP7'523+59, 18' RTLED/53WBreakawayLT-072228716' BLACK FIBERGLASS WITH COLONIAL POST TOP6'524+57, 28' RTLED/53WBreakawayLT-072228716' BLACK FIBERGLASS WITH COLONIAL POST TOP8'526+45, 35' RTLED/53WBreakawayLT-072228916' BLACK FIBERGLASS WITH COLONIAL POST TOP8'526+45, 35' RTLED/53WBreakawayLT-072229116' BLACK FIBERGLASS WITH COLONIAL POST TOP10'527+44, 36' RTLED/53WBreakawayLT-072229316' BLACK FIBERGLASS WITH COLONIAL POST TOP17'528+41, 44' RTLED/53WBreakawayLT-072229316' BLACK FIBERGLASS WITH COLONIAL POST TOP16'529+32, 43' RTLED/53WBreakawayLT-08 <td>22269</td> <td>16' BLACK FIBERGLASS WITH COLONIAL POST TOP</td> <td>7'</td> <td>517+55<i>,</i> 18' RT</td> <td>LED/53W</td> <td>Breakaway</td> <td>LT-05</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>11</td> <td></td> <td>NUN NUN</td>	22269	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	7'	517+55 <i>,</i> 18' RT	LED/53W	Breakaway	LT-05							11		NUN NUN
2227316' BLACK FIBERGLASS WITH COLONIAL POST TOP7'519+41, 19' RTLED/53WBreakawayLT-062227516' BLACK FIBERGLASS WITH COLONIAL POST TOP7'520+08, 18' RTLED/53WBreakawayLT-062227716' BLACK FIBERGLASS WITH COLONIAL POST TOP7'521+14, 18' RTLED/53WBreakawayLT-062227916' BLACK FIBERGLASS WITH COLONIAL POST TOP7'521+99, 18' RTLED/53WBreakawayLT-062228116' BLACK FIBERGLASS WITH COLONIAL POST TOP7'522+62, 18' RTLED/53WBreakawayLT-072228316' BLACK FIBERGLASS WITH COLONIAL POST TOP7'523+59, 18' RTLED/53WBreakawayLT-072228716' BLACK FIBERGLASS WITH COLONIAL POST TOP6'524+57, 28' RTLED/53WBreakawayLT-072228916' BLACK FIBERGLASS WITH COLONIAL POST TOP8'525+50, 36' RTLED/53WBreakawayLT-072229116' BLACK FIBERGLASS WITH COLONIAL POST TOP8'526+45, 35' RTLED/53WBreakawayLT-072229116' BLACK FIBERGLASS WITH COLONIAL POST TOP10'527+44, 36' RTLED/53WBreakawayLT-082229316' BLACK FIBERGLASS WITH COLONIAL POST TOP16'529+32, 43' RTLED/53WBreakawayLT-082229316' BLACK FIBERGLASS WITH COLONIAL POST TOP16'529+32, 43' RTLED/53WBreakawayLT-082229316' BLACK FIBERGLASS WITH COLONIAL POST TOP15'530+27' 42' RTLED/53WBreakawayLT-08 <td>22271</td> <td>16' BLACK FIBERGLASS WITH COLONIAL POST TOP</td> <td>6'</td> <td>518+50<i>,</i> 18' RT</td> <td>LED/53W</td> <td>Breakaway</td> <td>LT-05</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>11</td> <td></td> <td></td>	22271	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	6'	518+50 <i>,</i> 18' RT	LED/53W	Breakaway	LT-05							11		
2227516' BLACK FIBERGLASS WITH COLONIAL POST TOP7'520+08, 18' RTLED/53WBreakawayLT-062227716' BLACK FIBERGLASS WITH COLONIAL POST TOP7'521+14, 18' RTLED/53WBreakawayLT-062227916' BLACK FIBERGLASS WITH COLONIAL POST TOP7'521+99, 18' RTLED/53WBreakawayLT-062228116' BLACK FIBERGLASS WITH COLONIAL POST TOP7'522+62, 18' RTLED/53WBreakawayLT-062228316' BLACK FIBERGLASS WITH COLONIAL POST TOP7'523+59, 18' RTLED/53WBreakawayLT-072228516' BLACK FIBERGLASS WITH COLONIAL POST TOP6'524+57, 28' RTLED/53WBreakawayLT-072228716' BLACK FIBERGLASS WITH COLONIAL POST TOP8'525+50, 36' RTLED/53WBreakawayLT-072228916' BLACK FIBERGLASS WITH COLONIAL POST TOP8'526+45, 35' RTLED/53WBreakawayLT-072229116' BLACK FIBERGLASS WITH COLONIAL POST TOP10'527+44, 36' RTLED/53WBreakawayLT-072229316' BLACK FIBERGLASS WITH COLONIAL POST TOP10'527+44, 36' RTLED/53WBreakawayLT-082229516' BLACK FIBERGLASS WITH COLONIAL POST TOP16'529+32, 43' RTLED/53WBreakawayLT-082229916' BLACK FIBERGLASS WITH COLONIAL POST TOP16'529+32, 43' RTLED/53WBreakawayLT-082229916' BLACK FIBERGLASS WITH COLONIAL POST TOP15'530+27' 42' RTLED/53WBreakawayLT-08 </td <td>22273</td> <td>16' BLACK FIBERGLASS WITH COLONIAL POST TOP</td> <td>7'</td> <td>519+41<i>,</i> 19' RT</td> <td>LED/53W</td> <td>Breakaway</td> <td>LT-06</td> <td>34 11/16'</td> <td>,</td> <td></td> <td></td> <td></td> <td></td> <td>//</td> <td>///</td> <td>///</td>	22273	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	7'	519+41 <i>,</i> 19' RT	LED/53W	Breakaway	LT-06	34 11/16'	,					//	///	///
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2227916' BLACK FIBERGLASS WITH COLONIAL POST TOP7'521+99, 18' RTLED/53WBreakawayLT-062228116' BLACK FIBERGLASS WITH COLONIAL POST TOP7'522+62, 18' RTLED/53WBreakawayLT-062228316' BLACK FIBERGLASS WITH COLONIAL POST TOP7'523+59, 18' RTLED/53WBreakawayLT-072228516' BLACK FIBERGLASS WITH COLONIAL POST TOP6'524+57, 28' RTLED/53WBreakawayLT-072228716' BLACK FIBERGLASS WITH COLONIAL POST TOP8'525+50, 36' RTLED/53WBreakawayLT-072228916' BLACK FIBERGLASS WITH COLONIAL POST TOP8'526+45, 35' RTLED/53WBreakawayLT-072229116' BLACK FIBERGLASS WITH COLONIAL POST TOP10'527+44, 36' RTLED/53WBreakawayLT-072229316' BLACK FIBERGLASS WITH COLONIAL POST TOP10'527+44, 36' RTLED/53WBreakawayLT-082229316' BLACK FIBERGLASS WITH COLONIAL POST TOP17'528+41, 44' RTLED/53WBreakawayLT-082229416' BLACK FIBERGLASS WITH COLONIAL POST TOP16'529+32, 43' RTLED/53WBreakawayLT-082229516' BLACK FIBERGLASS WITH COLONIAL POST TOP15'530+27' 42' RTLED/53WBreakawayLT-082229416' BLACK FIBERGLASS WITH COLONIAL POST TOP15'530+27' 42' RTLED/53WBreakawayLT-082229416' BLACK FIBERGLASS WITH COLONIAL POST TOP33'531+16, 59' RTLED/53WBreakawayLT-08	22277	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	7'	521+14 <i>,</i> 18' RT	LED/53W	Breakaway	LT-06								///	111
2228116' BLACK FIBERGLASS WITH COLONIAL POST TOP7'522+62, 18' RTLED/53WBreakawayLT-062228316' BLACK FIBERGLASS WITH COLONIAL POST TOP7'523+59, 18' RTLED/53WBreakawayLT-072228516' BLACK FIBERGLASS WITH COLONIAL POST TOP6'524+57, 28' RTLED/53WBreakawayLT-072228716' BLACK FIBERGLASS WITH COLONIAL POST TOP8'525+50, 36' RTLED/53WBreakawayLT-072228916' BLACK FIBERGLASS WITH COLONIAL POST TOP8'526+45, 35' RTLED/53WBreakawayLT-072229116' BLACK FIBERGLASS WITH COLONIAL POST TOP10'527+44, 36' RTLED/53WBreakawayLT-072229316' BLACK FIBERGLASS WITH COLONIAL POST TOP10'527+44, 36' RTLED/53WBreakawayLT-082229416' BLACK FIBERGLASS WITH COLONIAL POST TOP17'528+41, 44' RTLED/53WBreakawayLT-082229516' BLACK FIBERGLASS WITH COLONIAL POST TOP16'529+32, 43' RTLED/53WBreakawayLT-082229716' BLACK FIBERGLASS WITH COLONIAL POST TOP15'530+27' 42' RTLED/53WBreakawayLT-082229916' BLACK FIBERGLASS WITH COLONIAL POST TOP33'531+16, 59' RTLED/53WBreakawayLT-08** - POLE OFFSET MEASURED TO THE CENTER OF THE POLE#*	22279	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	7'	521+99 <i>,</i> 18' RT	LED/53W	Breakaway	LT-06								Pr-	Pr-1
2228316' BLACK FIBERGLASS WITH COLONIAL POST TOP7'523+59, 18' RTLED/53WBreakawayLT-072228516' BLACK FIBERGLASS WITH COLONIAL POST TOP6'524+57, 28' RTLED/53WBreakawayLT-072228716' BLACK FIBERGLASS WITH COLONIAL POST TOP8'525+50, 36' RTLED/53WBreakawayLT-072228916' BLACK FIBERGLASS WITH COLONIAL POST TOP8'526+45, 35' RTLED/53WBreakawayLT-072229116' BLACK FIBERGLASS WITH COLONIAL POST TOP10'527+44, 36' RTLED/53WBreakawayLT-072229316' BLACK FIBERGLASS WITH COLONIAL POST TOP10'527+44, 36' RTLED/53WBreakawayLT-072229316' BLACK FIBERGLASS WITH COLONIAL POST TOP10'527+44, 36' RTLED/53WBreakawayLT-082229416' BLACK FIBERGLASS WITH COLONIAL POST TOP16'529+32, 43' RTLED/53WBreakawayLT-082229516' BLACK FIBERGLASS WITH COLONIAL POST TOP15'530+27' 42' RTLED/53WBreakawayLT-082229716' BLACK FIBERGLASS WITH COLONIAL POST TOP15'530+27' 42' RTLED/53WBreakawayLT-082229916' BLACK FIBERGLASS WITH COLONIAL POST TOP33'531+16, 59' RTLED/53WBreakawayLT-082229916' BLACK FIBERGLASS WITH COLONIAL POST TOP33'531+16, 59' RTLED/53WBreakawayLT-082229916' BLACK FIBERGLASS WITH COLONIAL POST TOP33'531+16, 59' RTLED/53WBreakawayLT-	22281	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	7'	522+62 <i>,</i> 18' RT	LED/53W	Breakaway	LT-06								/	1
2228516' BLACK FIBERGLASS WITH COLONIAL POST TOP6'524+57, 28' RTLED/53WBreakawayLT-072228716' BLACK FIBERGLASS WITH COLONIAL POST TOP8'525+50, 36' RTLED/53WBreakawayLT-072228916' BLACK FIBERGLASS WITH COLONIAL POST TOP8'526+45, 35' RTLED/53WBreakawayLT-072229116' BLACK FIBERGLASS WITH COLONIAL POST TOP10'527+44, 36' RTLED/53WBreakawayLT-072229316' BLACK FIBERGLASS WITH COLONIAL POST TOP10'527+44, 36' RTLED/53WBreakawayLT-082229316' BLACK FIBERGLASS WITH COLONIAL POST TOP17'528+41, 44' RTLED/53WBreakawayLT-082229516' BLACK FIBERGLASS WITH COLONIAL POST TOP16'529+32, 43' RTLED/53WBreakawayLT-082229716' BLACK FIBERGLASS WITH COLONIAL POST TOP15'530+27' 42' RTLED/53WBreakawayLT-082229916' BLACK FIBERGLASS WITH COLONIAL POST TOP15'530+27' 42' RTLED/53WBreakawayLT-082229916' BLACK FIBERGLASS WITH COLONIAL POST TOP15'530+27' 42' RTLED/53WBreakawayLT-082229916' BLACK FIBERGLASS WITH COLONIAL POST TOP33'531+16, 59' RTLED/53WBreakawayLT-08** - POLE UFFSET MEASURED TO THE CENTER OF THE POLE#** - POLE#** - POLE#** - POLE#** - POLE#** - POLE	22283	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	7'	523+59 <i>,</i> 18' RT	LED/53W	Breakaway	LT-07								1	11
2228716' BLACK FIBERGLASS WITH COLONIAL POST TOP8'525+50, 36' RTLED/53WBreakawayLT-072228916' BLACK FIBERGLASS WITH COLONIAL POST TOP8'526+45, 35' RTLED/53WBreakawayLT-072229116' BLACK FIBERGLASS WITH COLONIAL POST TOP10'527+44, 36' RTLED/53WBreakawayLT-072229316' BLACK FIBERGLASS WITH COLONIAL POST TOP10'527+44, 36' RTLED/53WBreakawayLT-082229316' BLACK FIBERGLASS WITH COLONIAL POST TOP11'528+41, 44' RTLED/53WBreakawayLT-082229516' BLACK FIBERGLASS WITH COLONIAL POST TOP16'529+32, 43' RTLED/53WBreakawayLT-082229716' BLACK FIBERGLASS WITH COLONIAL POST TOP15'530+27' 42' RTLED/53WBreakawayLT-082229916' BLACK FIBERGLASS WITH COLONIAL POST TOP33'531+16, 59' RTLED/53WBreakawayLT-08** - POLE OFFSET MEASURED TO THE CENTER OF THE POLE </td <td>22285</td> <td>16' BLACK FIBERGLASS WITH COLONIAL POST TOP</td> <td>6'</td> <td>524+57<i>,</i> 28' RT</td> <td>LED/53W</td> <td>Breakaway</td> <td>LT-07</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>L</td>	22285	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	6'	524+57 <i>,</i> 28' RT	LED/53W	Breakaway	LT-07									L
2228916' BLACK FIBERGLASS WITH COLONIAL POST TOP8'526+45, 35' RTLED/53WBreakawayLT-07229116' BLACK FIBERGLASS WITH COLONIAL POST TOP10'527+44, 36' RTLED/53WBreakawayLT-07229316' BLACK FIBERGLASS WITH COLONIAL POST TOP17'528+41, 44' RTLED/53WBreakawayLT-08229516' BLACK FIBERGLASS WITH COLONIAL POST TOP16'529+32, 43' RTLED/53WBreakawayLT-08229716' BLACK FIBERGLASS WITH COLONIAL POST TOP15'530+27' 42' RTLED/53WBreakawayLT-08229916' BLACK FIBERGLASS WITH COLONIAL POST TOP33'531+16, 59' RTLED/53WBreakawayLT-08** - POLE OFFSET MEASURED TO THE CENTER OF THE POLE	22287	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	8'	525+50, 36' RT	LED/53W	Breakaway	LT-07									T
2229116' BLACK FIBERGLASS WITH COLONIAL POST TOP10'527+44, 36' RTLED/53WBreakawayLT-072229316' BLACK FIBERGLASS WITH COLONIAL POST TOP17'528+41, 44' RTLED/53WBreakawayLT-082229516' BLACK FIBERGLASS WITH COLONIAL POST TOP16'529+32, 43' RTLED/53WBreakawayLT-082229716' BLACK FIBERGLASS WITH COLONIAL POST TOP15'530+27' 42' RTLED/53WBreakawayLT-082229916' BLACK FIBERGLASS WITH COLONIAL POST TOP33'531+16, 59' RTLED/53WBreakawayLT-08** - POLE OFFSET MEASURED TO THE CENTER OF THE POLE	22289	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	8'	526+45, 35' RT	LED/53W	Breakaway	LT-07	T								d
2229316' BLACK FIBERGLASS WITH COLONIAL POST TOP17'528+41, 44' RTLED/53WBreakawayLT-082229516' BLACK FIBERGLASS WITH COLONIAL POST TOP16'529+32, 43' RTLED/53WBreakawayLT-082229716' BLACK FIBERGLASS WITH COLONIAL POST TOP15'530+27' 42' RTLED/53WBreakawayLT-082229916' BLACK FIBERGLASS WITH COLONIAL POST TOP33'531+16, 59' RTLED/53WBreakawayLT-08** - POLE OFFSET MEASURED TO THE CENTER OF THE POLE	22291	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	10'	527+44, 36' RT	LED/53W	Breakaway	LT-07									3
2229516' BLACK FIBERGLASS WITH COLONIAL POST TOP16'529+32, 43' RTLED/53WBreakawayLT-082229716' BLACK FIBERGLASS WITH COLONIAL POST TOP15'530+27' 42' RTLED/53WBreakawayLT-082229916' BLACK FIBERGLASS WITH COLONIAL POST TOP33'531+16, 59' RTLED/53WBreakawayLT-08** - POLE OFFSET MEASURED TO THE CENTER OF THE POLE	22293	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	17'	528+41, 44' RT	LED/53W	Breakaway	LT-08					Ţ	to A	TO ACCES	TO ACCEPT A	TO ACCEPT A 3 1,
22297 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 15' 530+27' 42' RT LED/53W Breakaway LT-08 22299 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 33' 531+16, 59' RT LED/53W Breakaway LT-08 ** - POLE OFFSET MEASURED TO THE CENTER OF THE POLE	22295	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	16'	529+32, 43' RT	LED/53W	Breakaway	LT-08				1	TR	TENC	TENON x	TENON x 3-1,	TENON x 3-1/2"
22299 16' BLACK FIBERGLASS WITH COLONIAL POST TOP 33' 531+16, 59' RT LED/53W Breakaway LT-08 ** - POLE OFFSET MEASURED TO THE CENTER OF THE POLE	22297	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	15'	530+27' 42' RT	LED/53W	Breakaway	LT-08									
** - POLE OFFSET MEASURED TO THE CENTER OF THE POLE	22299	16' BLACK FIBERGLASS WITH COLONIAL POST TOP	33'	531+16, 59' RT	LED/53W	Breakaway	LT-08									
	** - POLE O	FSET MEASURED TO THE CENTER OF THE POLE	1	,	<u> </u>	,										

GENERAL NOTES:

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- 1. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING AND PROPOSED UTILITIES, LIGHTING CONDUITS, AND CIRCUITS PRIOR TO COMMENCING WORK.
- 2. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IN CASE OF DAMAGE TO AN EXISTING FACILITY.
- 3. ALL SOIL REMOVED FOR HANDHOLE INSTALLATION MUST BE COVERED TO PREVENT EROSION. ALL SOIL NOT USED FOR BACKFILL MUST BE REMOVED ON THE SAME WORKING DAY.
- 4. ALL CONDUIT AND CABLE CONNECTIONS MUST MEET THE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE.
- 5. ALL TESTING SPECIFIED IN SECTION 820 OF THE SHA STANDARD SPECIFICATIONS MUST BE PREFORMED.
- 6. ALL CONNECTIONS BETWEEN GROUND RODS AND GROUND CABLE SHALL BE EXOTHERMIC WELDS.
- 7. CONDUCTORS SHALL NOT BE SPLICED EXCEPT IN STRUCTURES AND MANHOLES, ALL MANHOLES, CONDUITS UNDER PAVEMENTS, LIGHTING STRUCTURES, ETC, SHALL BE STAKED OUT AND EVERY LOCATION APPROVED BY THE ENGINEER BEFORE ANY WORK IS COMPLETED.
- 8. ALL TRENCHING MUST BE BACKFILLED AND RESTORED TO ITS ORIGINAL CONDITION ON THE SAME WORKING DAY ON WHICH IT WAS OPENED. AREAS WHICH ARE NOT RESEEDED, MULCHED OR SODDED MUST BE COVERED TO PREVENT EROSION. ALL SOIL NOT USED FOR BACKFILL MUST BE REMOVED ON THE SAME WORKING DAY.
- 9. UPON RECEIVING NOTICE TO PROCEED THE CONTRACTOR SHALL ARRANGE A MEETING WITH THE LOCAL UTILITY COMPANY (POTOMAC EDISION POWER), THE PROJECT ENGINEER TO DETERMINE THE LOCATION OF AVAILABLE POWER AND ENSURE THAT POWER IS AVAILABLE WHEN REQUIRED.
- 10. ALL HANDHOLES BETWEEN LIGHTING FIXTURES AND/OR ROADWAY CROSSINGS SHALL HAVE 5 FEET OF SLACK WIRING FOR FUTURE MAINTENANCE.
- 11. BASE MOUNTED PEDESTAL SHALL HAVE A SPLIT PANEL TO PROVIDE PHOTO CELL CONTROL FOR THE 240V LIGHTING CIRCUITS, BUT NO PHOTO CELL CONTROL FOR THE 120V GFI CIRCUITS.
- 12. GFI RECEPTACLES SHALL BE WIRED WITH #10 AWG WIRE BETWEEN THE CONNECTOR KIT AND THE RECEPTACLE.



-VENTED FINAL

@ 120' APART

COLONIALPOST-TOP LED LUMINAIRE SCALE: N.T.S.

GOMERY

CATEGORY CODE NO.	DESCRIPTION	UNIT	QUANTITY
800000	PEDESTRIAN POLE AND LUMINAIRE	EA	29
801003	CONCRETE FOR LIGHT FOUNDATION	CY	40
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	2400
805135	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	2270
805140	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED	LF	120
832016	CABLE - 1 CONDUCTOR, NO 6 AWG, TYPE USE, 600V	LF	8890
832019	CABLE - 1 CONDUCTOR, NO 10 AWG, TYPE THWN/THHN, 600V	LF	1400
834002	CONNECTOR KIT - TYPE II	EA	18
834003	CONNECTOR KIT - TYPE III	EA	40
837001	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH	EA	29

PAY ITEMS

APPROVALS	REVISIONS					DEPAF 100 ED	RT IS
TEAM LEADER					•	RECOMMENDED FOR APPROVAL	417
ASST. DIV. CHIEF			NATUM: NAD 83/91 F NAVD 88 VER	IORIZONTAL TICAL	-	Chief, Design Section APPROVED	
DIVISION CHIEF						- Chief, Division of Engineering Servic	
OFFICE DIRECTOR		NO.	REVISION	DATE	BY	Designed by : J.D.W. [Drav
						PLOTTED: 9/16/2019 FILE: M:\PROJ\214013.0010\Traffic_(Cac

LUMINAIRE DETAIL



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DEPARTMENT OF TRANS 00 EDISON PARK DRIVE, GAITHERSBURG, MD	PORTATION 4TH FLOOR 20878	PLAN SHEET LT-03 LIGHTING PLANS
ROVAL	Date	MD 355 - CLARKSBURG
	-	SHARED USE PAIH STA. 498+00 TO STA. 501+50
ering Services	Date	SCALE 1"= 20' 09/2019
l. Drawn by : D.M.J.	Checked by : J.L.R.	Project No. : C.I.P. PR. # 501744 SHEET 56 of 88

1. SEE SHEET LT-01 FOR LIGHT INSTALLATION DETAIL. 2. NO UTILITY RELOCATIONS ARE INCLUDED IN THIS PROJECT. FOR RECOMENDED UTILITY RELOCATIONS, SEE PS-01 THRU PS-07. З.

NOTES:



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MONTGOMERY COUNTY

DEPARTMENT OF TRANSPORTATION

GAITHERSBURG, MD 20878

	MD 355 - CLARKSBURG						
Date	SHARED USE PATH						
s Date	STA. 501+50 TO STA. 505+50						
rawn by : D.M.J. Checked by : J.L.R.	Project No. : C.I.P. PR. # 501744 SHEET 57 of 88						

2. NO UTILITY RELOCATIONS ARE INCLUDED IN THIS PROJECT. FOR RECOMENDED UTILITY RELOCATIONS, SEE PS-01 THRU PS-07. 3.

PLAN SHEET LT-04

LIGHTING PLANS

SEE SHEET LT-01 FOR LIGHT INSTALLATION DETAIL. 1.

NOTES:







∣, II, III, IV								2. 3.	NO UTILITY RELOCATIONS ARE INCLUDED IN THIS PROJECT. FOR RECOMENDED UTILITY RELOCATIONS, SEE PS-01 THRU PS-07.
	APPROVALS	REVISIONS	2	00% SUBM	20' 40' BMITTAL		MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE, 4TH FLOOR GAITHERSBURG, MD 20878		PLAN SHEET LT-05 LIGHTING PLANS
I, IV	TEAM LEADER		DATUM: NAD 83/91 HORIZONTAL NAVD 88 VERTICAL		RECOMMENDED FOR APPROVAL Chief, Design Section APPROVED	Date	MD 355 - CLARKSBURG SHARED USE PATH		
IT	DIVISION CHIEF						Chief, Division of Engineering Services	Date	STA. 514+50 TO STA. 519+00 09/2019
	OFFICE DIRECTOR		NO.	REVISION	DATE	BY	Designed by : D.M.J. Drawn by : D.M.J.	Checked by : J.L.R.	Project No. : C.I.P. PR. # 501744 SHEET 58 of 88



NOTES:

1. SEE SHEET LT-01 FOR LIGHT INSTALLATION DETAIL.

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							TEOMERY CO
	APPROVALS	REVISIONS		20 90% SUBI		40'	DEPAR 100 EDIS GA
I, IV	TEAM LEADER		[DATUM: NAD 83/91	HORIZONTA	L	RECOMMENDED FOR APPROVAL
	ASST. DIV. CHIEF			NAVD 88 V			Chief, Design Section APPROVED
IT	DIVISION CHIEF						Chief, Division of Engineering Service
	OFFICE DIRECTOR		NO.	REVISION	DATE	BY	Designed by : D.M.J. Dr

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LT-0
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MONTGOMERY COUNTY PLAN SHEET LT-06 RTMENT OF TRANSPORTATION NISON PARK DRIVE, 4TH FLOOR LIGHTING PLANS AITHERSBURG, MD 20878 MD 355 - CLARKSBURG Date SHARED USE PATH STA. 519+00 TO STA. 523+50 Date 09/2019 Checked by : J.L.R. Project No. : C,I,P, PR, # 501744 SHEET 59 of 88 Drawn by: D.M.J. Cadd_\pLT-P005_MD355.dgn

NO UTILITY RELOCATIONS ARE INCLUDED IN THIS PROJECT.

FOR RECOMENDED UTILITY RELOCATIONS, SEE PS-01 THRU PS-07.

1. SEE SHEET LT-01 FOR LIGHT INSTALLATION DETAIL.



	0 0 2 0 STA 525+50, 38' RT 22287 16'X0' 1	• 6 30 0 0 2 0 STA 526+46, 38' RT 22289 16'X0' 3		O 39' RT	
				N 514.50	
, II, III, IV			20' 0 20' 40' SCALE: 1" = 20'	NOTES: 1. 5 2. N 3. F	EE SHEET LT-01 FOR LIGHT INSTALLATION DETAIL. IO UTILITY RELOCATIONS ARE INCLUDED IN THIS PROJECT. OR RECOMENDED UTILITY RELOCATIONS, SEE PS-01 THRU PS-07.
, II, III, IV }	APPROVALS	REVISIONS	20' 0 20' 40' SCALE: 1" = 20' 90% SUBMITTAL	NOTES 1. 5 2. N 3. F MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE, 4TH FLOOR GAITHERSBURG, MD 20878	EE SHEET LT-01 FOR LIGHT INSTALLATION DETAIL. IO UTILITY RELOCATIONS ARE INCLUDED IN THIS PROJECT. OR RECOMENDED UTILITY RELOCATIONS, SEE PS-01 THRU PS-07. PLAN SHEET LT-07 LIGHTING PLANS
, II, III, IV	APPROVALS TEAM LEADER ASST. DIV. CHIEF	REVISIONS	20' 0 20' 40' SCALE: 1" = 20' 90% SUBMITTAL DATUM: NAD 83/91 HORIZONTAL NAVD 88 VERTICAL	NOTES: 1. 5 2. M 3. F MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE, 4TH FLOOR GAITHERSBURG, MD 20878 RECOMMENDED FOR APPROVAL Chief, Design Section APPROVED	EE SHEET LT-01 FOR LIGHT INSTALLATION DETAIL. NO UTILITY RELOCATIONS ARE INCLUDED IN THIS PROJECT. OR RECOMENDED UTILITY RELOCATIONS, SEE PS-01 THRU PS-07. PLAN SHEET LT-07 LIGHTING PLANS MD 355 - CLARKSBURG SHARED USE PATH

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MD 355 (FREDERICK RD)

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EX. 16"W DIP (75-2480A)

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-EX. UTIL. POLE

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TO SNOWDEN FARM PARKWAY

+50

EX. UTIL. POLE

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5 I, II, III, IV							
R	APPROVALS	REVISIONS			20' 	40'	DEPAR 100 EDIS
BER						•	GAI
, IV	TEAM LEADER)ATUM: NAD 83/91 F	HORIZONTAI	_	RECOMMENDED FOR APPROVAL
	ASST. DIV. CHIEF			NAVD 88 VEF			Chief, Design Section
							APPROVED
JIT	DIVISION CHIEF						Chief, Division of Engineering Services
	OFFICE DIRECTOR		NO.	REVISION	DATE	BY	Designed by : D.M.J. Dro
							PLOTTED: 9/16/2019

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Pre-Construction

1. An on-site pre-construction meeting is required after the limits of disturbance have been staked and flagged, but before any clearing or grading begins. The property owner should contact the Montgomery County Planning Department inspection staff before construction to verify the limits of disturbance and discuss tree protection and tree care measures. The developer's representative, construction superintendent, ISA certified arborist or Maryland-licensed tree expert that will implement the tree protection measures, forest conservation inspector, and Department of Permitting Services (DPS) sediment control inspector should attend this pre-construction meeting.

2. No clearing or grading shall begin before stress-reduction measures have been implemented. Appropriate measures may include, but are not limited to:

- a. Root pruning b. Crown reduction or pruning
- c. Watering
- d. Fertilizing
- e. Vertical mulching
- f. Root aeration matting

Measures not specified on the forest conservation plan may be required as determined by the forest conservation inspector in coordination with the arborist.

3. A Maryland-licensed tree expert or an International Society of Arboriculture- certified arborist must perform all stress reduction measures. Documentation of stress reduction measures must be either observed by the forest conservation inspector or sent to the inspector at 8787 Georgia Avenue, Silver Spring, MD 20910. The forest conservation inspector will determine the exact method to convey the stress reductions measures during the pre-construction meeting.

4. Temporary tree protection devices shall be installed per the Forest Conservation Plan/Tree Save Plan and prior to any construction activities. Tree protection fencing locations should be staked prior to the pre-construction meeting. The forest conservation inspector, in coordination with the DPS sediment control inspector, may make field adjustments to increase the survivability of trees and forest shown as saved on the approved plan. Temporary tree protect devices may include:

- a. Chain link fence (four feet high)
- b. Super silt fence with wire strung between support poles (minimum 4 feet high) with high visibility flagging. c. 14 gauge 2 inch x 4 inch welded wire fencing supported by steel T-bar posts (minimum 4 feet high) with high visibility flagging.

5. Temporary protection devices shall be maintained and installed by the contractor for the duration of construction project and must not be altered without prior approval from the forest conservation inspector. No equipment, trucks, materials, or debris may be stored within the tree protection fence areas during the entire construction project. No vehicle or equipment access to the fenced area will be permitted. Tree protection shall not be removed without prior approval of forest conservation inspector.

6. Forest retention area signs shall be installed as required by the forest conservation inspector, or as shown on the approved plan.

7. Long-term protection devices will be installed per the Forest Conservation Plan/Tree Save Plan and attached details Installation will occur at the appropriate time during the construction project. Refer to the plan drawing for long-term protection measures to be installed. During Construction

8. Periodic inspections by the forest conservation inspector will occur during the construction project. Corrections and repairs to all tree protection devices, as determined by the forest conservation inspector, must be made within the timeframe established by the inspector.

Post-Construction

9. After construction is completed, an inspection shall be requested. Corrective measures may include: a. Removal and replacement of dead and dying trees

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- b. Pruning of dead or declining limbs
- c. Soil aeration
- d. Fertilization
- e. Watering

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Hunt Valley, Maryland 21030 410.494.9093 Tel / 410.667.0925 Fax

- f. Wound repair g. Clean up of retention areas

10. After inspection and completion of corrective measures have been undertaken, all temporary protection devices shall be removed from the site. Removal of tree protection devices that also operate for erosion and sediment control must be coordinated with both the Department of Permitting Services and the forest conservation inspector. No additional grading, sodding, or burial may take place after the tree protection fencing is removed.



FOREST TREELINE SCRUB AREA/SCREENING TREES/ NON-FOREST CANOPY LIMITS OF DISTURBANCE —___LOD —__LOD —__LOD —__ PROPERTY BOUNDARY _ ____ _ _ _ _ — sv — sv — sv — sv — sv — sv — EX. CONTOUR ____390-___-EXISTING STREAM EASEMENT VALLACE MONTGOMERY Engineers · Planners · Surveyors · Construction Managers





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	F MC	FOREST CON	NSERVAT		SHEET SE PATH	4	
NET TRACT A	REA:				2		5-Aug-
A. Total tract	area						3.5
B. Land dedic	ation acres (park	(s, county fac	ility, etc.))	thic plan	.)	0.0
D. Area to ren	nain in commerc	ial agricultura	Il producti	on/use	uns plan	ı)	0.0
E. Other dedu	ictions (specify)					_	0.0 3 F
		······································					0.0
LAND USE CA	Input the numb limit to only or	Trees Techn ber "1" under he entry.	the appro	<i>ial</i>) priate land us	se,		
	ARA 0	MDR 0	IDA 1	HDR 0	MPD 0	CIA	
O AFFarrat 1		v		v	4604		~ ~
H. Conservatio	on Threshold				15% 20%	x F = x F =	0.5
EXISTING FOF	REST COVER:						
I. Existing fore	est cover			=			1.1
J. Area of fore K. Area of fore	st above afforest est above conser	ation thresho vation thresho	ld old	= =			0.6 0.4
BREAK EVEN							0.1
	ntion above three	hold with po	mitiaction	_			0.0
M. Clearing pe	ermitted without	mitigation		=			0.3
PROPOSED F	OREST CLEAR	ING:					
N. Total area	of forest to be cle	eared		=			1.1
O. Total area	of forest to be re	tained		=			0.0
PLANTING RE	QUIREMENTS:						
P. Reforestati	on for clearing at	ove conserva	ation three	hold=			0.1
Q. Reforestati R. Credit for re	on for clearing be etention above co	elow conservation th	ation thres reshold	shold= =			1.4 0.0
S. Total refore	station required			=			1.5
T. Total affores	station required .	not overed (2004 of "S	=			0.0
V. Total refore	estation and affor	estation requi	20% 01 S)= =			1.5
		·					
SITE	TABULA	TIONS	•				
ACREAG	E OF TRAC	T:					
ACREAG	E OF TRAC F OF ROAD	I REMAII	NING I TILITY	N AGRIC R/W WH	ULIUH NCH V	RE: NILL N	от
BE IMPF	ROVED AS	PART OF	DEV.	APPLICA	TION:		
ACREAG	E OF EX. I	FOREST:					
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LAND U	se categ	L FURES	I ULE				
AFFORES	STATION TH	RESHOLD)				
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ACREAGI	E OF FORE) WITHIN M	ST RETA	INED,	CLEARED), AN[С	0.00/0.02
ACREAG	E OF FORE	ST RETA	INED,	CLEARED), AN[C	0.00/0.00
PLANTE) WITHIN 1	00-YEAF	R FLOC			~	
ACREAG	L OF FORE	SI RETA	INED,	CLEARED), AN[ر	0.00/0./6

TOTAL DBH INCHES OF SPECIMEN TREES REMOVED (OUTSIDE FOREST) $311 \times 0.25 = 78 \text{ REQUIRED CALIPER INCHES MITIGATION}$ TOTAL DBH INCHES OF SPECIMEN TREE REMOVED + 3" CALIPER TREES = TOTAL TREES REQUIRED TO BE PLANTED 26 TOTAL 3" CALIPER TREES REQUIRED TO BE PLANTED



ACREAGE OF TRACT:	3.58
ACREAGE OF TRACT REMAINING IN AGRICULTURE:	0
BE IMPROVED AS PART OF DEV. APPLICATION:	NUT 0
ACREAGE OF EX. FOREST:	1.18
ACREAGE OF TOTAL FOREST RETENTION:	0.00
ACREAGE OF TOTAL FOREST CLEARED:	1.18
LAND USE CATEGORY:	IDA
AFFORESTATION THRESHOLD	0.59
CONSERVATION THRESHOLD	0.77
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN WETLANDS	0.00/0.02/0.00
ACREAGE OF FOREST RETAINED, CLEARED, AND	0.00/0.00/0.00
PLANTED WITHIN 100-YEAR FLOODPLAIN	
ACREAGE OF FOREST RETAINED, CLEARED, AND	0.00/0.76/0.00
PLANTED WITHIN STREAM BUFFERS	
ACREAGE OF FOREST RETAINED, CLEARED, AND	
PLANTED WITH PRIORITY AREAS	0.00/0.00/0.00
LINEAR EXTENT & AVERAGE WIDTH OF STREAM BU	JFFER 342'/200'









1.43	
0.00	
1.55	
0.00	
0.00	
1.55	



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MONTGOMERY

PRESCRIBED BY THE PROJECT'S ARBORIST AT THE TIME OF THE LOD LAYOUT AND/OR INSTALLATION OF E&S MEASURES, MAY BE REQUIRED ALONG THE TOCF LINE

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L	NORTON LAND DESIGN					MONTG DEPARTMENT 100 EDISON P GAITHERS
	5146 DORSEY HALL DRIVE, 2ND FLOORELLICOTT CITY, MD 21042BALT.443.542.9199 x101DC 240.342.2329x101WWW.NORTONLANDDESIGN.COMWATER CLASSI,P/IV,PWATERSHEDFEMA_FLOODPLAIN MAP_PANEL #		ATUM: NAD 83/91 H NAVD 88 V	ORIZONTAL ERTICAL		
	TRIBUTARY LITTLE SENECA CREEK 24031C 0160D TAX MAP EW341 EW121 200 SHEET 233NW13 IADC MAP B-3					
	SCALE DATE PROJ. NO. SHEET NO. AS SHOWN AUGUST 2019 15–138 SHEET NO.	NO.	REVISION	DATE	BY	Designed by : H.J. Draw

6 <u>VICINITY MAP</u> 1"=2000' <u>LEGEND</u> EXISTING TREE >6" AND <24"DBH AND CRITICAL ROOT ZONE رون ک 14"RED OAK 41 EXISTING SIGNIFICANT TREE ≥ 24 " 26"RED OAK AND <30"DBH WITH TAG NUMBER #2 EXISTING SPECIMEN TREE ≥30"DBH 32"RED OAK WITH TAG NUMBER FOREST TREELINE SCRUB AREA/SCREENING TREES/ NON-FOREST CANOPY -LOD -LOD -LOD -LIMITS OF DISTURBANCE - PROPOSED GRADE - PROPERTY BOUNDARY - EX. CONTOUR - EXISTING STREAM — EASEMENT TREE TO BE REMOVED TREE PROTECTION FENCE (TEMPORARY) _T___T___T___T___T___T TRENCH/TREE PROTECTION FENCE TEMPORARY TREE PROTECTION SIGNAGE (APPROX. 20' O.C.) FOREST CLEARING AREA PROPOSED SHARED USE PATH 25' STATE REGULATED WETLAND BUFFER 75' SPA WETLAND BUFFER -WR— STREAM BUFFER EXISTING WETLAND PROPOSED LIGHT POLES BRINKLOW 2UB GLENELG GOMERY COUNTY PLAN SHEET L-1.7 OF TRANSPORTATION PARK DRIVE, 4TH FLOOR **FINAL FOREST** SBURG, MD 20878 CONSERVATION PLAN MD 355 - CLARKSBURG SHARED USE PATH 07/2018 wn by : H.J. Checked by : M.N.Project No. : C.I.P. PR. #501744 SHEET 69 of 88



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	\square			Significant/Sp	ecimen Tree	Summary 24" +					
	Tre e	# Species Scientific Name	Species Common Name	D.B.H (inches)	Critical Root Zone (Sq.Ft)	Critical Root Zone Impacts	Percent of CRZ Impacted (SF)	Tree Condition	Comments	Status	Variance
	1		BLACK CHERRY	30	6362	937	15%	POOR	VINE, BROKEN BRANCHES/ SPLIT @ 2'	SAVE AND PROTECT	YES
	2 3 4	ROBINIA PSEUDOACACIA ACER SACCHARINUM	BLACK LOCUST SILVER MAPLE	26 26 49	4778 4778 16972	4778 4778 16972	100% 100% 100%	POOR POOR FAIR	VINE COVERED, DEAD BRANCHES VINE COVERED, DEAD BRANCHES VINE COVERED	TO BE REMOVED TO BE REMOVED TO BE REMOVED	N/A N/A YES
	5 6A	ACER SA CHHARINUM JUNIPERUS SP.	SILVER MAPLE CEDAR SP.	40 24	11310 4072	3300 0	29% 0%	GOOD FAIR		SAVE AND PROTECT	YES N/A
	7 8	JUNIPERUS SP. ACER SACCHARINUM	CEDAR SP. SILVER MAPLE	28 40	5542 11310	0 11310	0% 0% 100%	GOOD POOR	SPLIT @ 3' VINE COV ERED, DEA D BRAINCHES	SAVE AND PROTECT SAVE AND PROTECT TO BE REMOVED	N/A YES
	9 10	ACER SACCHARINUM ACER SACCHARINUM	SILVER MAPLE SILVER MAPLE	33 30	7698 6362	7698 2570	100% 40%	GOOD GOOD	SPLIT @ 5'	TO BE REMOVED SAVE AND PROTECT	YES YES
	11 12 13	ACER SA CCHA RINUM MORUS SP. JUGLANS NIGRA	SILVER MAPLE MULBERRY SP. BLACK WALNUT	36 36 24	9161 9161 4072	3275 9161 4072	36% 100% 100%	GOOD POOR FAIR	TRUNK DAMAGED MA JOR PRUNING, OHW	TO BE REMOVED	YES YES N/A
	14 15	CA TA LPA SPECIOSA MORUS SP.	CA TALPA MULBERRY SP.	36 36	9161 9161	9161 9161	100% 100%	FAIR POOR	18" LEADER SPLITS @ 2' PRUNED LEADER, VINES	TO BE REMOVED	YES YES
	17 18	CA TALPA SPECIOSA ACER SACCHARINUM	CA TA LPA SILVER MAPLE	24 35 46	4072 8659 14957	4072 8659 14957	100% 100% 100%	POOR POOR POOR	TRUNK DAMAGED, BROKEN LEADER, DEAD BRANCHES VINE COVERED, PRUNING, OHW MAJOR PRUNING, OHW	TO BE REMOVED TO BE REMOVED TO BE REMOVED	YES YES
	19 20	CA TALPA SPECIOSA CA TALPA SPECIOSA	CA TA LPA CA TA LPA	33 31	7698 6793	2104 6793	27% 100%	FAIR FAIR	MAIN LEADER PRUNED, HEAVY PRUNING OHW	SAVE AND PROTECT TO BE REMOVED	YES YES
	21 22 23	ACER SACCHARINUM	MULBERRY SP. HICKORY SP. SILVER MAPLE	42 32 30	12469 7238 6362	12469 16 6362	100% <1% 100%	FAIR GOOD POOR	SPLIT @ 3', 30" LEADER, 42" LEADER OFFSITE TRUNK DAMAGED, VINE, BROKEN BRANCHES	TO BE REMOVED SAVE AND PROTECT TO BE REMOVED	YES YES YES
	24 25	JUGLANS NIGRA	BLACK WALNUT SILVER MAPLE	25 32	4418 7238	264 4	6% 0%	FAIR FAIR	VINES MIDDLE LEA DER PRUNED 10' UP, OHW	SAVE AND PROTECT SAVE AND PROTECT	Y ES NO
	26 27 28	ULMUS SP. PINUS STROBUS ACER SACCHARUM	ELM WHITE PINE SLIGAR MARI E	28 26 30	5542 4778 6362	0 235 87	0% 5% 1%	GOOD FAIR GOOD	OHW VINES, BROKEN BRANCHES SPLITS @ 5'	SAVE AND PROTECT SAVE AND PROTECT SAVE AND PROTECT	VO YES
	29 30	ACER SACCHARINUM ACER PLA TANOIDES	SILVER MAPLE NORWAY MAPLE	25 38	4418 10207	0	0% 0%	GOOD POOR	SPLITS @ 8', BROKEN BRANCHES, VINES, LITTLE GROV	SAVE AND PROTECT VTH SAVE AND PROTECT	NO YES
	31 32	ACER SACCHARUM	SUGAR MAPLE	28 26	5542 4778	5542 829	100% 17%	POOR FAIR	VINE/OHW SPLITS @ 5'	TO BE REMOVED SAVE AND PROTECT	YES
	33 34 35	ACER SACCHARINON ACER SACCHARUM ACER PLA TANOIDES	SILVER MAPLE SUGAR MAPLE NORWAY MAPLE	46 32 28	14957 7238 5542	5054 7238 5542	34% 100% 100%	POOR FAIR POOR	COVERED IN VINES, BROKEN BRANCHES BROKEN BRANCHES, OHW, VINES DEAD LIMBS	TO BE REMOVED	YES YES YES
	36 37	ACER PLA TANOIDES ACER SACCHARINUM	NORWAY MAPLE SILVER MAPLE	26 27	4778 5153	4778 153	100% 3%	FAIR GOOD	SPLIT @ 4', 14", 12" SPLIT @ 2', 8", 17"	TO BE REMOVED SAVE AND PROTECT	N/A N/A
	38 39		SILVER MAPLE	27 VOID	5153 VOID	732 V OD	14% VOD	GOOD VOD	VINE, SPLIT @ 4', 12" 12" VOID	SAVE AND PROTECT	N/A VOD
	40 41 42	JUGLANS NIGRA	SILVER MAPLE BLACK WALNUT SILVER MAPLF	29 25	8171 5945 4418	u 2547 0	U% 43% 0%	GOOD POOR GOOD	VINE	TO BE REMOVED SAVE AND PROTECT	YES NO
	43 44	ACER SACCHARINUM	SILVER MAPLE TREE OF HEAVEN	28 42	5542 12469	5542 12469	100% 100%	POOR POOR	MISSING BARK, VINE	TO BE REMOVED	Y ES YES
	45 46	ACER SACCHARINUM ACER SACCHARINUM	SILVER MAPLE	32 40	7238	3200 1056	44% 9%	GOOD GOOD	SPLIT @ 4', 18'', 20''	TO BE REMOVED SAVE AND PROTECT	YES
	47 48 49	ROBINIA PSEUDOACACIA ACER NEGUNDO	BLACK LOCUST BOXELDER	28 32	9677 5542 7238	2829 542 7238	29% 10% 100%	GOOD GOOD GOOD		SAVE AND PROTECT SAVE AND PROTECT TO BE REMOVED	YES YES
	50 51	ACER SACCHARINUM ACER SACCHARINUM	SILVER MAPLE SILVER MAPLE	34 33	8171 7698	1736 7698	21% 100%	GOOD GOOD	SPLIT @ 1', 17'', 19''	SAVE AND PROTECT TO BE REMOVED	YES
	52 53	ACER SACCHARINUM ACER SACCHARINUM	SILVER MAPLE SILVER MAPLE	31 35	6793 8659	6793 8659	100% 100%	GOOD POOR	MISSING BARK	TO BE REMOVED TO BE REMOVED	YES
	55 56	ACER SACCHARINUM	NORWAY MAPLE	26 8 8	4778 452 452	564 20 452	12% 4% 100%	GOOD GOOD GOOD		SAVE AND PROTECT SAVE AND PROTECT TO BE REMOVED	YES YES YES
	57 58	ACER SACHHARINUM ACER SACHHARINUM	NORWAY MAPLE NORWAY MAPLE	14 7	1385 346	848 346	61% 100%	GOOD GOOD		TO BE REMOVED TO BE REMOVED	YES
	59 60	ACER SA CHHARINUM	NORWAY MAPLE	6 7	254 346	30 0	12% 0%	GOOD GOOD		SAVE AND PROTECT SAVE AND PROTECT	YES YES
	61 62 63	ACER NEGUNDO ACER NEGUNDO	BLACK WALNUT BOXELDER BOXELDER	10 9 6	573 254	0 573 254	0% 100% 100%	GOOD GOOD GOOD		TO BE REMOVED	YES
	64 65	ACER NEGUNDO ROBINA PSEUDOACACIA	BOXELDER BLACK LOCUST	8 6	452 254	0	0% 0%	GOOD GOOD		SAVE AND PROTECT SAVE AND PROTECT	NO NO
	66 67	ACER NEGUNDO ROBINIA P SEUDOACACIA	BOXELDER BLACK LOCUST	10 10	707 707	158 120	22% 17%	GOOD GOOD		SAVE AND PROTECT SAVE AND PROTECT	YES
	69 70	ACER NEGUNDO AILANTHUS ALTISSIMA JUGLANS NIGRA	BOXELDER TREE OF HEAVEN BLACK WALNUT	6 10 12	254 707 1018	254 231 1018	100% 33% 100%	GOOD GOOD GOOD		TO BE REMOVED SAVE AND PROTECT TO BE REMOVED	YES YES
	71 72	ACER SACHHARINUM ROBINA PSEUDOACACIA	NORWAY MAPLE BLACK LOCUST	12 12 10	1018 707	0	0% 0%	GOOD GOOD		SAVE AND PROTECT SAVE AND PROTECT	YES
	73 74	ROBINA P SEUDOACACIA MORUS SP.	BLACK LOCUST MULBERRY SP.	22 12	3421 1018	719 126	21% 12%	GOOD GOOD		SAVE AND PROTECT SAVE AND PROTECT	YES
	75 76 77	CA TALPA SPECIOSA JUGLANS NIGRA	CA TA LPA BLA CK WALNUT BLA CK WALNUT	11 6 8	254 452	5 0 0	1% 0% 0%	GOOD GOOD GOOD		SAVE AND PROTECT SAVE AND PROTECT SAVE AND PROTECT	NO NO
	78 79	ROBINA PSEUDOACACIA CATALPA SPECIOSA	BLACK LOCUST CATALPA	12 18	1018 2290	0 783	0% 34%	GOOD GOOD		SAVE AND PROTECT SAVE AND PROTECT	NO YES
	80 81	ROBINA P SEUDOACACIA ACER SA CHHARINUM	BLACK LOCUST NORWAY MAPLE	18 6	2290 254	2290 254	100% 100%	GOOD GOOD		TO BE REMOVED	YES
	82 83 84	ACER SACCHARINUM ROBINA PSEUDOACACIA	CEDAR SP. NORWAY MAPLE BLACK LOCUST	8 7 11	452 346 855	452 346 855	100% 100% 100%	GOOD GOOD GOOD		TO BE REMOVED TO BE REMOVED TO BE REMOVED	YES YES YES
	85 86	PRUNUS SP. ACER NEGUNDO	CHERRY SP. BOXELDER	6	254 254	254 254	100% 100%	GOOD GOOD		TO BE REMOVED TO BE REMOVED	YES YES
	87 88		BOXELDER BOXELDER	6	254 254 254	254 254 254	100% 100%	GOOD GOOD		TO BE REMOVED	YES
	89 90 91	JUGLANS NIGRA ACER NEGUNDO JUGLANS NIGRA	BLACK WALNUT BOXELDER BLACK WALNUT	8 16	452 1810	452 1810	100% 100% 100%	GOOD GOOD GOOD		TO BE REMOVED TO BE REMOVED	YES YES YES
	92 93	ACER NEGUNDO PICEA SP.	BOXELDER SPRUCE	12 6	1018 254	1018 254	100% 100%	GOOD GOOD		TO BE REMOVED TO BE REMOVED	YES YES
	94 95	PICEA SP. PICEA SP.	SPRUCE SPRUCE	6	254 254 254	254 99 254	100% 39% 100%	GOOD GOOD		TO BE REMOVED	YES YES
	97 98	PICEA SP. PICEA SP. ACERNEGUNDO	SPRUCE SPRUCE BOXELDER	6 18	254 254 2290	254 254 2290	100% 100% 100%	GOOD GOOD GOOD		TO BE REMOVED TO BE REMOVED	YES
	99 100	ACER SACCHARINUM ACER SACCHARINUM	SILVER MAPLE SILVER MAPLE	7 10	346 707	346 707	100% 100%	GOOD GOOD		TO BE REMOVED TO BE REMOVED	YES
	101 102	ACER SACCHARINUM CARYA SP.	SILVER MAPLE HCKORY SP.	8	452 452 246	452 452	100% 100%	GOOD GOOD		TO BE REMOVED TO BE REMOVED	YES
	103 104 105	PICEA SP. PICEA SP. PICEA SP.	SPRUCE SPRUCE	7	346 346 346	53 80	18% 15% 23%	GOOD GOOD GOOD		SAVE AND PROTECT SAVE AND PROTECT SAVE AND PROTECT	YES
	106 107	PICEA SP. JUGLANS NIGRA	SPRUCE BLACK WALNUT	7 23	346 3739	35 668	10% 18%	GOOD GOOD		SAVE AND PROTECT SAVE AND PROTECT	YES
	108 109	ROBINA P SEUDOACACIA ACER SP.	BLACK LOCUST MAPLE SP.	8 11	452 855	452 855 254	100% 100%	GOOD GOOD		TO BE REMOVED TO BE REMOVED	YES
	110 111 112	ROBINA PSEUDOACACIA ROBINA PSEUDOACACIA ACER SP.	BLACK LOCUST BLCK LOCUST MAPLE SP.	6 7	254 254 346	254 254 0	100% 100% 0%	GOOD GOOD GOOD		TO BE REMOVED TO BE REMOVED SAVE AND PROTECT	YES
	113 114	ACER SP. ACER SP.	MAPLE SP. MAPLE SP.	8 7	452 346	0 24	0% 7%	GOOD GOOD		SAVE AND PROTECT	NO YES
	115 116	ACER SP.	MAPLE SP. MAPLE SP.	6 15	254 1590	24 0	9% 0%	GOOD GOOD		SAVE AND PROTECT SAVE AND PROTECT	NO NO
	117 118 119	ACER SP. ACER SP. ACER SP.	MAPLE SP. MAPLE SP. MAPLE SP.	22 12 7	3421 1018 346	0 0 0	0% 0%	GOOD GOOD GOOD		SAVE AND PROTECT SAVE AND PROTECT	
	120 121	ACER SP. ACER SP.	MAPLE SP. MAPLE SP.	8 10	452 707	0 0	0% 0%	GOOD GOOD		SAVE AND PROTECT SAVE AND PROTECT	YES
	122 123	ACER SP. ULMUS SP.	MAPLE SP. ELM	14 20	1385 2827	68 0	5% 0%	GOOD GOOD		SAVE AND PROTECT SAVE AND PROTECT	YES NO
	124 125	ULMUS SP.	E.M E.M	15 7	1590 346		0% 0%	GOOD GOOD		SAVE AND PROTECT SAVE AND PROTECT	NO NO
S-PLANNERS-SURVEYORS-CONSTRUCTION MANAGERS				[~] BOLD TYPE	DENOTES SPECIME	Condition Scoring S	ystem Excellent				
an rouau, Julie 200 ey, Maryland 21030 2002 Tol / 410 667 0025 Eax						Minor Problems	Good				

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Tree Protection Fence Detail Not to scale



NOTE:

DATUM: NAD 83/91 HORIZONTAL

REVISION

NAVD^{'88} VERTICAL

DATE

SIGNAGE FOR FOREST RETENTION AREA TO BE PLACED 30' O.C. WHEN PLACED ON FENCE 1. Attachment of signs to trees is prohibited.

2. Signs should be properly maintained.

3. Avoid injury to roots when placing posts for the signs.

PROPOSED LANDSCAPE PLANT SCHEDULE

	KEY	BOTANICAL NAME	COMMON NAME		SIZE	FORM	SPACING	QUANTITY
		TREES						
	NS	NYSSA SYLVATICA	BLACKGUM		2" CAL.	B&B	SHOWN	13
	PA	PLATANUS X ACERIFOLIA	LONDON PLANET	2" CAL.	B&B	SHOWN	12	
	QR	QUERCUS RUBRA	NORTHERN RED	ОАК	2" CAL	B&B	SHOWN	1
		MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATIO 100 EDISON PARK DRIVE, 4TH FLC GAITHERSBURG, MD 20878	PL FI	AN S NAL	SHEI FOR	ET L- EST	1.9	
	F	INAL FOREST CONSERV Plan – notes & de	CONSER MD 35 SHA	VATIO 55 - C ARED	ON P LARI USE	LAN N (SBUF PATH	IOTES RG	
								07/2018
BY	Designe	d by : H.J. Drawn by : H.J. Checke	d by: M.N.	Project No. : C.I.P. PR. 🛔	\$501744	SHEET	71 .	of 88



NOTES:

1. RETENTION AREAS WILL BE SET AS PART OF THE REVIEW PROCESS AND PRECONSTRUCTION MEETING.

2. BOUNDARIES OF RETENTION AREAS MUST BE STAKED AT THE PRECONSTRUCTION MEETING AND FLAGGED PRIOR TO TRENCHING.

3. EXACT LOCATION OF TRENCH SHALL BE DETERMINED IN THE FIELD IN COORDINATION WITH THE FOREST CONSERVATION (FC) INPECTOR .

4. TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH EXCAVATED SOIL OR OTHER ORGANIC SOIL AS SPECIFIED PER PLAN OR BY THE FC INSPECTOR.

5. ROOTS SHALL BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE EQUIPMENT.

6. ALL PRUNING MUST BE EXECUTED WITH LOD SHOWN ON PLANS OR AS AUTHORIZED IN WRITING BY THE FC INSPECTOR.

NTS

ROOT PRUNING DETAIL

JNE ONLY DEAD, DECAYED, BROKE RBORTIE FASTENED TO TREE AND REE MOVEMEN TYPICAL ARBORTIE GUYING MATERIAL INSTALLATION RS FLAGGING (WHITE) SPECIFIED ARBORTIE GREEN (OR WHITE) STAKING AND GUYING MATERI HE TRUNK IS TO BE FLAT WOVEN POLYPROPYLENE MATERIAL. 3/4" (19.05MM) WIDE 900 LB. BREAK STRENGTH. ARBORTIE SHALL BE FASTENED TO STAKES IN A MANNER WHIC –6' HARDWOOD STAKE AT 90 ANGLE TO WIRE (2' INTO UNDISTURBED EARTH), 3 STAKES PER TREE TREE MOVEMENT AND SUPPORTS THE TREE. EXISTING GRADE / UNDISTURBED SOI CUT BURLAP, ROPE AND WIREBASKET FROM TOP 1/2 OF BALL --NATIVE SOIL WITH INOCULANT ∽∽ ∽∽ SECTION N.T.S. WIDTH = 2X ROOTBALL OR CONTAINER DIA. MIN. NOTES: 1. STAKES AND WIRES MUST BE REMOVED NO LATER THAN 12 MONTHS AFTER PLANTING. 2. PLANTING HOLE SHALL BE DUG BY A BACKHOE OR OTHER MACHINE AND FINISHED BY HAND. IF SURROUNDING SOIL IS COMPACTED AS DETERMINED BY M-NCPPC PLANNING DEPT INSPECTOR, AN AREA UP TO 5 TIMES THE DIA. OF THE ROOT MASS SHALL BE EXCAVATED OR ROTOTILLED TO A 1' DEPTH AND THE SOIL SHALL BE AMENDED. 4. DO NOT DAMAGE OR CUT LEADER. 5. ROOT FLAIR EVEN WITH LEVEL OF UNDISTURBED GROUND. DECIDUOUS PLANTS - (2" Caliper or Larger) d-National Capital Park and Planning

CERTIFICATION OF QUALIFIED PROFESSIONAL I HEREBY CERTIFY THAT THE PLAN SHOWN HEREON HAS BEEN PREPARED IN ACCORDANCE WITH MARYLAND STATE, MNCP&PC AND MONTGOMERY COUNTY FOREST CONSERVATION LAWS.

9-27-19 DATE

MICHAEL A. NORTON MDNR / COMAR 08.19.06.01 QUALIFIED PROFESSIONAL



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		GEND	L-0.7 L-0.6 L-0.5 L-0.4 SITE L-	-0.8 CINITY MAP 1"=2000'	2 De la compañía de l			
QP) 14"REI	^{d oak} e	XISTING TI	REE				
ى . كى يى	2	F	ROPOSED	CANOPY T	REE			
	םו —— מו	L	IMITS OF		ICE			
652 		PROPERTY BOUNDARY EX. CONTOUR EXISTING STREAM EASEMENT						
		P		SHARED	USF PATH			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		TURFGRASS SOD ESTABLISHMENT						
· 🐟		Ρ	ROPOSED	LIGHT PO	LES			
-TTTTTTTTTTP/RP TP/R ■	—T— ?P ——— I	TR FE TR TR SIC	EE PROTEG NCE (TEMI MPORARY ENCH/TRE MPORARY GNAGE (AP	CTION PORARY) COMBINED E PROTEC TREE PRO PROX. 20'	ROOT PRUN TION FENCE TECTION ' O.C.)	1E		
NOTE: SEE FOREST C CLEARING & R HEDULE	ONSERVA EFOREST	ATION PL ATION IN	AN FOR F IFORMATIOI	OREST N.				
COMMON NAME	SIZE	FORM	SPACING	QUANTITY	COMMENTS			
					I			
BLACKGUM	2" CAL.	B&B	SHOWN	4				

ALL FESCUE/KENTUCKY BLUGRASS	TURFGRASS SOD ESTABLISH.	TURFGRASS SOD ESTABLISH.	SQUARE YARD	10,226	STABILIZATION	
GOMERY COUNTY T OF TRANSPORTATION PARK DRIVE, 4TH FLOOR SBURG, MD 20878		PL LAN	AN SHE Idscapi	EET L E PLAI	-2.1 N	
		MD 35 SHA	55 - CLAF ARED US	RKSBU E PAT	RG H	2018
wn by : H.J. Checked by : M.N	l. Project I		501744 SHE	ET 72	of 88	



MISS UTILITY

CALL "MISS UTILITY AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. BEFORE EXCAVATION THE CONTRACTOR IS RESPONSIBLE FOR CALLING TICKET CHECK AT 1-866-821-4226 TO VERIFY THAT ALL UTILITIES HAVE BEEN MARKED, 48 HOURS AFTER CALLING MISS UTILITY. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

*NOTE: TREE CONSERVATION MEASURES, SUCH AS ROOT TREE FERTILIZING, AND OTHER MEASURES PRESCRIBED BY THE PROJECT'S ARBORIST AT THE TIME OF THE LOD LAYOUT AND/OR INSTALLATION OF E&S MEASURES, MAY BE REQUIRED ALONG THE TOCF



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(IN FEET) 1 inch = 20 ft. NORTON LAND DESIGN LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING 5146 DORSEY HALL DRIVE, 2ND FLOOR ELLICOTT CITY, MD 21042 BALT.443.542.9199 x101 DC 240.342.2329x101 WWW.NORTONLANDDESIGN.COM DATUM: NAD 83/91 HORIZONTAL NAVD 88 VERTICAL WATER CLASS I,P/IV,P FEMA FLOODPLAIN WATERSHED LITTLE SENECA CREEK TRIBUTAR 24031[°]C 0160D ROCK CREEK **EW341,EW121** 200 SHEET 233NW13 232NW13,233NW14 TAX MAP ADC MAP PAGE **9** B-3 Grid **C-3,4** SHEET NO. L-2.2 SCALE PROJ. NO. AS SHOWN SEPTEMBER 2019 15-138 Designed by : H.J. REVISION DATE

















	SIZE	FORM	SPACING	QUANTITY	COMMENTS						
	2" CAL.	B&B	SHOWN	5		-					
	2 CAL.	D&D	SHOWN	5							
ASS	TURFGRA SOD		QUARE YARD	10,226	STABILIZATION						1
				1	1	1					
						SB SB SB	EX. H	OUSE #6B 36"SILVER MAPLE	01.11	01/W	0HW 0HW 0HW
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/	/	/	/		DRI	IVEWAY ohw	0++++				523
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01111	01111	0++++	OHW	. 50	3	522					* * *
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							5 · · · · · · · · · · · · · · · · · · ·	• • <th></th> <th></th> <th>#5 40"SILVER MAPLE</th>			#5 40"SILVER MAPLE
			#10								PUCKET MAF L. 109 TM E
ER	EX. HOU	y y	30"SILVER MAPLE	#6A 24"	CEDAR			FOREST CONSERVATION PL EXEMPTION: 42018006E PREVIOUS APPROVED NRI/FSD_PLAN: 420182000	AN		
/					7 8°CEDAR	, 			20	0	GRAPHIC SCA
		//									(IN FEET) 1 inch = 20 ft.
/	5146 DOR BALT.443	NO LANDSO RSEY HALL .542.9199 x	RTON CAPE ARCH DRIVE, 2ND FLC 101 DC 240.342.	NLA ITECTURE + POR 2329x101	NDC ENVIRONME EL WWW.NOR	DESIGN ENTAL PLANNING LICOTT CITY, MD 21042 RTONLANDDESIGN.COM) DATUM: NAD 8.3/91 ⊢	IORI70NTAI		MON ⁻ DEPARTMEN 100 EDISON GAITHEI
	WATER CLA TRIBUTARY TAX MAP	ASS I,P/ ROCK C	IV,P WATH REEK LIT W121 200	ERSHED TLE SENECA	CREEK	FLOODPLAIN PANEL # 24031C 0160D		NAVD 88 V	ERTICAL		
	SCALE	SHOWN		<u>32NW13,233</u> R 2019	<u>nw14</u> <u> </u> PAGE J. NO. 15−138	y GRID C-3.4 SHEET NO. L-2.5		PEVISION	DATE		Designed by : H.J. D





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	Image: State of the state o
~	LEGEND 14"RED OAK EXISTING TREE
	PROPOSED CANOPY TREE
PA PA IJ H H H H H H H H H H H H H	PROPERTY BOUNDARY 90 EX. CONTOUR EXISTING STREAM EASEMENT
	PROPOSED SHARED USE TRAIL TURFGRASS SOD ESTABLISHMENT
	T T TREE PROTECTION FENCE (TEMPORARY) TP/RP TEMPORARY COMBINED ROOT PROPOSED TEMPORARY COMBINED ROOT PRUNE TP/RP TEMPORARY COMBINED ROOT PRUNE TRENCH/TREE PROTECTION FENCE TEMPORARY TREE PROTECTION SIGNAGE (APPROX. 20' O.C.) SIGNAGE (APPROX. 20' O.C.)
LE	REST CONSERVATION PLAN FOR FOREST G & REFORESTATION INFORMATION.
GOMERY COUNTY NT OF TRANSPORTATION PARK DRIVE, 4TH FLOOR RSBURG, MD 20878	PLAN SHEET L-2.6 LANDSCAPE PLAN
rawn by : H.J. Checked by : M.N.	MD 355 - CLARKSBURG SHARED USE PATH 07/2018 Project No. : C.I.P. PR. #501744 SHEET 77 of 88



PLANT SC	HEDULE					
	COMMON NAME	SIZE	FORM	SPACING	QUANTITY	COMMENTS
	CHINESE FRINGETREE	7'-8'	B&B	SHOWN	4	
.UMBIA'	COLUMBIA LONDON PLANETREE	2" CAL.	B&B	SHOWN	8	
		4		,	1 '	

	HMENT- TALL FESCUE/KENTUCKY BLUGRASS	TURFGRASS SOD ESTABLISH.	TURFGRASS SOD ESTABLISH.	SQUARE YARD	10,226	STABILIZATION
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		ONLAND	DESIGN					MONT DEPARTMEN 100 EDISON GAITHER
ihe ity	5146 DORSEY HALL DRIVE, 21 BALT.443.542.9199 x101 DC 2	ND FLOOR 40.342.2329x101 WW	ELLICOTT CITY, MD 21042 /W.NORTONLANDDESIGN.COM	Г)ATUM: NAD 83/91 H			
/ ORF	WATER CLASS I,P/IV,P WATERSHED FEMA FLOODPLAIN				NAVD 88 V			
KET =	TRIBUTARY ROCK CREEK	LITTLE SENECA CREEK	24031C 0160D					
-	TAX MAP EW341,EW121	200 SHEET 233NW13 232NW13,233NW14	ADC MAP B-3 PAGE 9 GRID C-3.4					
J	SCALE AS SHOWN SEP	PROJ. NO. IEMBER 2019 15-138	SHEET NO. L-2.7	NO.	REVISION	DATE	BY	Designed by : H.J. Dr



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	7.1 SHA LANDSCAPE NOTES: Landscape construction within rights of way of the Maryland State Highway Administration (SHA) and within SHA property, easement areas and lands to be conveyed to SHA shall conform to these Notes. For guidance regarding design modifications during construction, refer to SHA Landscape Design Guide, SHA Landscape Estimating Manual, and SHA Environmental Guide for Access and District Permit Applicants at http://www.roads.maryland.gov/index.aspx?PageId=25	 7.11 Soil Stabilization Matting: Shall be installed in conformance with Section 709 of the SHA Standard Specifications, in conjunction with Turfgrass Establishment per Section 705 or Meadow Establishment per Section 707 as follows: 1. Areas Flatter than 6:1. Type A or Type E matting may be installed in lieu of straw mulch and hydromulch binder in conjunction with Turfgrass Establishment. 2. Areas Steeper than 6:1 and Flatter than 4:1. Type A or Type E matting shall be installed in lieu of straw
	7.2 SHA Standard Specifications: Landscape construction shall conform to Sections 701 through 716, and landscape materials shall conform to Section 920 of the most recent revision of SHA Standard Specifications for Construction and Materials, including all revisions and supplements, and as specified in these notes. These requirements shall supersede all other specifications for work on SHA property. All SHA specifications for	Installed in field of straw mulch and hydromulch binder in conjunction with rangings Establishment, unless delineated and noted otherwise. 3. Channels, Stormwater Management Facilities, and Slopes 4:1 and Steeper Type A Soil Stabilization Matting shall be installed in lieu of straw mulch and hydromulch binder in conjunction with Turfgrass Establishment, unless delineated and noted otherwise.
	landscaping and landscape materials published in 2008 have been replaced. Current Specifications are at http://www.roads.maryland.gov/Index.aspx?PageId=44. 7.3 Erosion and Sediment Control Manager (ESCM): Soil disturbance such as grading, excavation, soil placement or other activities that involve soil disturbance shall be	7.13 Tree Preservation Areas: Temporary Orange Construction Fence (TOCF) shall be installed in locations delineated on the plans as Tree Preservation Areas (TPA) in conformance with Section 120 of the SHA Standard Specification to protect existing trees and other vegetation during construction. Areas within TOCF shall be protected from all prohibited and restricted activities, per Section 120.
	SHA Standard Specifications and any applicable Erosion and Sediment Control Permit. 7.4 SHA Standard Details for Trees, Shrubs and Planting Beds: The installation of trees, shrubs, planting beds and other landscape construction related to Section 710 of the SHA Standard Specifications shall conform to the "SHA Book of Standards for Highway & Incidental Structures - Category 7"	7.14 Roadside Tree Permit: Tree removal, tree installation, tree root and branch pruning, and other regulated impacts to trees in the SHA right of way shall conform to the requirements of the Roadside Tree Permit (RTP) issued by the Maryland Department of Natural Resources, or the approved Forest Conservation Plan (FCP) of the local
	at http://apps.roads.maryland.gov/ BusinessWithSHA/bizStdsSpecs/desManualStdPub/publicationsonline/ohd/bookstd/tocc at7.asp. 7.5. Temporary Stabilization:	authority. 1. A copy of the RTP or FCP shall be submitted to the SHA Office of Environmental Design before work is performed, and a copy of the RTP or FCP shall be reproduced in the plans or be in possession of the applicant at the project site when the permitted work is performed. 2. A Maryland Licensed Tree Expert shall perform the specified tree operations in
	Shall be installed in conformance with Section 704 to ensure that areas of soil disturbance are protected from wind, rainfall and flowing water until permanent stabilization is installed: 1. Temporary Mulch, either as temporary straw mulch or temporary matting mulch, shall be installed at the end of each working day to provide "same day stabilization" unless	conformance with the SHA Standard Specifications and ANSI A300 Standards for Tree Care Operations. 7.15 Trees and Other Plant Material Installation: Trees, shrubs, perennials, annuals,
	other approved stabilization is installed. 2. Temporary straw mulch shall be installed on areas and slopes flatter than 4:1; temporary matting mulch shall be applied on slopes 4:1 and steeper, and to areas within channels. 3. Temporary Seed shall be installed in lieu of Temporary Mulch when soil redisturbance is expected more than 30 days after soil disturbance. The required	bulbs, landscape beds, bark mulch and similar materials shall be installed in conformance with Section 710 and 711 of the SHA Standard Specifications. Tree and shrubs shall be pruned at the time of installation to ensure sidewalk clearance for pedestrians is maintained to a height of 8 feet. No tree or shrub shall be installed within 3 feet of curbs, sidewalks, or pavement edges
	application rate shall be 100 lbs per acre of 37-0-0 (SCU) fertilizer. 7.6 Roadway Pavement Removal: Areas of roadway pavement removal shall be excavated to remove pavements, aggregate base, and compacted soil to a minimum	7.21 Tree Branch Pruning: Shall be performed or directly supervised by a Maryland Licensed Tree Expert in conformance with ANSI A300 standards per Section 712 as necessary for any of the following: To install Temporary Orange Construction Fence (TOCF) along delineations on plans; to perform Tree Root Pruning along delineations on plans; to provide
	depth of 10 inches below the pavement surface, or as necessary to remove all materials unsuitable for landscaping. The excavated areas shall be restored with subsoil and topsoil as part of Soil Restoration. 7.7 Excavation and Debris Removal:	8-foot clearance above slaewalk pavements and to-root clearance above rodaway pavements; to repair tree wounds; and to perform other recommended cleaning, thinning, reducing, and pruning necessary to accommodate utilities. All debris shall be removed from SHA property
	Debris related to the demolition of sidewalks, driveways, curbs, trees, stumps, roots, fencing, pipes, and other materials that may interfere with landscape installation or future maintenance shall be excavated as necessary for their complete removal and disposal.	7.22 Tree Root Pruning: Shall be performed along the line shown on the plans in conformance with Section 715. Tree Root Pruning shall be completed before beginning excavation or construction adjacent to trees to be preserved.
	7.8 Soil Restoration: Areas of pavement removal, excavation or drilling in landscaped areas shall remove excavated debris and restore the subgrade with approved subsoil and topsoil placed in conformance with Section 701 of the SHA Standard Specifications. 1. A layer of approved topsoil of at least a 4-inch depth shall be placed on all disturbed areas flatter than 2:1 and in all channels prior to seeding, sodding or other	7.23 Tree Fertilizing: Shall be performed in conformance with Operation 3 — Broadcast Fertilizing per Section 716. 20—16—12 fertilizer shall be applied to the soil surface under the dripline of trees at the rate of 200 lbs. per acre.
	 Index nation 2.11 and in an onomine prior to extrang, extrangly index nation 2.11 and stepping in an onomine prior to extrangly extrangly index of approved topsoil of at least a 2-inch depth shall be placed on all disturbed areas 2:1 and steeper prior to seeding, sodding or other landscaping, unless otherwise specified. Bioretention Soil Mix (BSM) and other materials installed in conjunction with SPI 316 - Stormwater Filtration Facilities and SHA stormwater details shall be installed in conformance with SHA Landscape Notes and landscape plans. Plant materials and mulch shall be installed in BSM in conformance with stormwater details, Section 710 or other SHA Specifications. 	7.25 Future Maintenance: Additional maintenance that may be required after hardscape, street furniture or plant materials are installed and accepted by SHA such as replacement, watering, weeding, mulching or pest control may be provided by the applicant when a permit for the proposed work is issued by the SHA District Office.
	7.9 Turfgrass Sod Establishment: Shall be performed in all disturbed areas, or within the areas indicated in the plans, in conformance with Section 708 of the SHA Standard Specifications. The required application rate of 20–16–12 fertilizer shall be 200 lbs per acre, and no fertilizer shall be applied from November 15 to March 1.	

*NOTE: TREE CONSERVATION MEASURES, SUCH AS ROOT PRUNING, BRANCH PRUNING, TREE FERTILIZING, AND OTHER MEASURES PRESCRIBED BY THE PROJECT'S ARBORIST AT THE TIME OF THE LOD LAYOUT AND/OR INSTALLATION OF E&S MEASURES, MAY BE REQUIRED ALONG THE TOCF LINE

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MISS UTILITY

CALL "MISS UTILITY AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. BEFORE EXCAVATION THE CONTRACTOR IS RESPONSIBLE FOR CALLING TICKET CHECK AT 1-866-821-4226 TO VERIFY THAT ALL UTILITIES HAVE BEEN MARKED, 48 HOURS AFTER CALLING MISS UTILITY. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

SITE LANDSCAPE PLANT SCHEDULE

COMMON NAME

KEY BOTANICAL NAME	
TREES	
CR CHIONANTHUS REFUSU	S
NS NYSSA SYLVATICA	
PA PLATANUS HYBRIDA '	COLUMBIA'
QR QUERCUS RUBRA	
SEED MIXES	
TURFGRASS SOD ESTABLISH. TURFGRASS SOD EST	ABLISHMENT- T
9.11.2019 9.11.2019	MONT DEPARTMEN 00 EDISON GAITHER
DATUM: NAD 83/91 HORIZONTAL NAVD 88 VERTICAL	

NORTON LAND DESIGN LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING 5146 DORSEY HALL DRIVE, 2ND FLOOR BALT.443.542.9199 x101 DC 240.342.2329x101 ELLICOTT CITY, MD 21042 WWW.NORTONLANDDESIGN.COM					
WATER CLASS I,P/IV,P	WATERSHED	FEMA FLOODPLAIN MAP PANEL # 24031C 0160D			
ROCK CREEK					
TAX MAP EW341,EW121	200 SHEET 233NW13 232NW13,233NW14	ADC MAP B-3 PAGE 9 GRID C-3.4			
SCALE AS SHOWN DATE SEPT	EMBER 2019 PROJ. NO. 15-13	8 SHEET NO. LS-2.9			



REVISION

NO.

DATE

ITHUS REFUSUS CHINESE FRINGETREE			7'–8'	B&B	SHOWN	4	
SYLVATICA BLACKGUM			2" CAL.	В&В	SHOWN	18	
US HYBRIDA 'COLUMBIA' COLUMBIA LONDON PLANETREE			2" CAL.	B&B	SHOWN	18	
US RUBRA	IS RUBRA NORTHERN RED OAK		2" CAL.	B&B	SHOWN	5	
IIXES							
GRASS SOD ESTABLISHMENT- TALL FESCUE/KENTUCKY BLUGRASS			TURFGRA SOD ESTABLIS	ASS SH. SQI	UARE YARD	10,226	STABILIZATIO
MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE, 4TH FLOOR GAITHERSBURG, MD 20878			F LA	PLAN NDS(N SHE CAPE	EET L - NOT	-2.9 ES
			MD 355 - CLARKSBURG				
			S	HAR	ED US	E PAT	H
	Project		PR #50174/	4 QUE	-T 80	07	
Designed by : 11.0. Drawn by :	Unecked by : IVI.IN.	. Frojecti	NO 0.1.F				01 00

SIZE

FORM

SPACING

QUANTITY COMMENTS





NOTES:

1. RETENTION AREAS WILL BE SET AS PART OF THE REVIEW PROCESS AND PRECONSTRUCTION MEETING.

2. BOUNDARIES OF RETENTION AREAS MUST BE STAKED AT THE PRECONSTRUCTION MEETING AND FLAGGED PRIOR TO TRENCHING.

3. EXACT LOCATION OF TRENCH SHALL BE DETERMINED IN THE FIELD IN COORDINATION WITH THE FOREST CONSERVATION (FC) INPECTOR .

4. TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH EXCAVATED SOIL OR OTHER ORGANIC SOIL AS SPECIFIED PER PLAN OR BY THE FC INSPECTOR.

5. ROOTS SHALL BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE EQUIPMENT.

6. ALL PRUNING MUST BE EXECUTED WITH LOD SHOWN ON PLANS OR AS AUTHORIZED IN WRITING BY THE FC INSPECTOR.

ROOT PRUNING DETAIL

NTS





NORTON LAND DESIGN	9.11.20	MONTGOMERY COUN DEPARTMENT OF TRANSPO 100 EDISON PARK DRIVE, 4 GAITHERSBURG, MD 2		
5146 DORSEY HALL DRIVE, 2ND FLOOR ELLICOTT CITY, MD 21042 BALT.443.542.9199 x101 DC 240.342.2329x101 WATER CLASS I.P/IV.P WATER CLASS WATERSHED	DATUM: NAD 83/91 HORIZONTAL NAVD 88 VERTICAL	LANDSCAPE – NO		
TRIBUTARY LITTLE SENECA CREEK MAP PANEL # TAX MAP EW341,EW121 200 SHEET 233NW13 ADC MAP B-3 TAX MAP EW341,EW121 200 SHEET 233NW13 ADC MAP B-3 GRID C-3.4 C-3.4 C-3.4 C-3.4 C-3.4 C-3.4		DETAILS		
SCALE DATE AS SHOWN DATE SEPTEMBER 2019 PROJ. NO. 15-138 SHEET NO. LS-2.10	NO. REVISION DATE BY	Designed by : H.J. Drawn by : H.J.		

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE, 4TH FLOOR GAITHERSBURG, MD 20878	PLAN SHEET L-2.10 LANDSCAPE - DETAILS				
LANDSCAPE – NOTES & DETAILS	MD 355 - CLARKSBURG SHARED USE PATH				
	07/2018				
by : H.J. Drawn by : H.J. Checked by : M.N.	Project No. : C.I.P. PR. #501744 SHEET 81 of 88				

									GR	ADI	NG	TA	ABL	Ξ								
									EXCA	VATION												
N N			CLASS 2						CLASS 1 EROSION & SEDIMENT					EMBA								
۲ ۵	STAT	IONS	CUT FROM	OM TOPSOIL		ROOTMAT			SUITABLE	LOSS DUE AVAIL.	TOTAL SHRINK/ SWELL			ORIGINAL	CLEAN-OUT	F	ILL	CAPPING BORROW		SELECT	BORROW	
l õ	FROM	ТО	XSECTS	CUT	FILL	CUT	FILL	TOTAL	EMBANK.	TO HANDLING	EMBANK.	FROM XSECS	FACTOR (%)	EMBANK.	EXCAVATION	EXCAVATION	FROM XSECT	TOT. REQ. BEFORE DENSIFICATION	CAPPING	TOT. REQ. AFTER DENSIFICATION	FROM XSECT	TOT. REQ. AFTER DENSIFICATION
																				<u> </u>		
	DS.	-01																			_	-
	494+26	498+00	45	3	94	0	0	139	<u>Δ</u> ι	8	33	0	85	0	0	0	218	312	0			0
	434720	430100		5				155				0	05	Ŭ			210	512				
	PS-02																					
GE	498+00	501+50	80	0	47	0	0	127	80	16	64	0	85	0	0	0	54	101	0	0	0	0
STA	PS-	-03																				
	501+50	505+00	42	0	0	0	0	42	42	8	33	0	85	0	0	0	32	32	0	0	0	0
	STAGE I	- TOTAL	167	3	4	0	0	308	163	32	130	0	85	0	0	0	304	445	0	0	0	0
									EXCA	VATION												
₹							CLASS 1						CLASS 2		EROSION	& SEDIMENT	1		EMBA	NKMENT		
	0747		OUT FRAM	тог							A) (A)			A. (A.1)			-				T	

→																						
٨A							CLASS 1						CLASS 2		EROSION 8	& SEDIMENT			EWBA	NKMENI		
١Q	STAT	IONS	CUT FROM	TOF	PSOIL	ROO	TMAT		SUITABLE	SHRINK/ SWELL	AVAIL.	TOTAL	LOSS DUE	AVAIL.	ORIGINAL	CLEAN-OUT	F	ILL	CAPPING	BORROW	SELECT	BORROW
Ő	FROM	TO	XSECTS	CUT	FILL	CUT	FILL	TOTAL	EMBANK.	FACTOR (%)	EMBANK.	FROM XSECS	TO HANDLING	EMBANK.	EXCAVATION	EXCAVATION	FROM XSECT	TOT. REQ. BEFORE DENSIFICATION	CAPPING	TOT. REQ. AFTER DENSIFICATION	FROM XSECT	TOT. REQ. AFTER DENSIFICATION
	PS-	-04																				
	514+50	519+00	229	0	0	85	142	371	44	85	123	0	0	0	0	0	146	289	0	0	0	0
	PS-	-05																				
	519+00	523+50	2,522	0	0	333	45	2,567	2,189	85	I,860	0	0	0	0	0	25	70	0	0	0	0
5																						
AGI	PS-	-06																				
ST/	523+50	528+00	3,174	364	70	40	7	3,251	2,769	85	2,354	0	0	0	0	0	21	98	0	0	0	0
	PS-	-07	48	0	72	0	0	120	47	85	40	0	0	0	0	0	73	145	0	0	0	0
	528+00	532+50																				
	STAGE 2	- TOTAL	5,973	364	142	458	194	6,309	5,149	85	4,377	0	0	0	0	0	265	602	0	0	0	0
			-			•	•		•					•	-			•	•		-	

378

C.Y.

STAGE 1

EXCAVATION		
TOTAL CLASS I EXCAVATION	0	C.Y.
TOTAL CLASS 2 EXCAVATION	308	C.Y.
TOTAL EXCAVATION AVAILABLE FOR EMBANKMENT	130	C.Y.
TOTAL EROSION & SEDIMENT CONTROL EXCAVATION	0	C.Y.
EMBANKMENT		
TOTAL COMMON BORROW REQUIRED	445	C.Y.
TOTAL CAPPING BORROW REQUIRED	0	C.Y.
TOTAL SELECT BORROW REQUIRED	0	C.Y.
WASTE	0	C.Y.
COMMON BORROW REQUIRED	315	C.Y.
BORROW DENSIFIED (20%)	63	C.Y.

STAGE 2

TOTAL COMMON BORROW REQUIRED -

<u>STAUL Z</u>		
EXCAVATION		
TOTAL CLASS I EXCAVATION	6,309	C.Y.
TOTAL CLASS 2 EXCAVATION	0	C . Y .
TOTAL EXCAVATION AVAILABLE FOR EMBANKMENT	4,377	C . Y .
TOTAL EROSION & SEDIMENT CONTROL EXCAVATION	0	C.Y.
EMBANKMENT		
TOTAL COMMON BORROW REQUIRED	602	C.Y.
TOTAL CAPPING BORROW REQUIRED	0	C.Y.
TOTAL SELECT BORROW REQUIRED	0	C.Y.
WASTE	3,775	C.Y.
COMMON BORROW REQUIRED	0	C.Y.
BORROW DENSIFIED (20%)	0	C.Y.

TOTAL COMMON BORROW REQUIRED ------ O C.Y.



EXCAVATION

TOTAL CLASS I TOTAL CLASS 2 TOTAL EXCAVATI TOTAL EROSION

EMBANKMENT

TOTAL COMMON I TOTAL CAPPING TOTAL SELECT WASTE -----COMMON BORROW BORROW DENSIFIE TOTAL COMMON I

PROPOSAL QUANTITIES

CLASS | EXCAVA1 CLASS I-A EXCAV CLASS 2 EXCAVA COMMON BORROW CAPPING BORROW SELECT BORROW

90% SUBM	ITTAL		- 117 To 10	DEF 100
DATUM: NAD 83/91 H NAVD 88 VER	RECOMMENDED FO	R APPROVAL		
			APPROVED	

DATUM: NAD 83/91 HORIZONTAL NAVD 88 VERTICAL						
NO.	REVISION	DATE	BY			

MERY

SUMMARY OF EARTHWORK

EXCAVATION	6,309	C.Y.
EXCAVATION	308	C.Y.
ION AVAILABLE FOR EMBANKMENT	4,507	C.Y.
& SEDIMENT CONTROL EXCAVATION	0	C.Y.

BORROW REQUIRED	I , 047	C . Y .
BORROW REQUIRED	0	C.Y.
BORROW REQUIRED	0	C.Y.
	3,775	C.Y.
REQUIRED	315	C.Y.
ED (20%)	63	C.Y.
BORROW REQUIRED	378	C.Y.

ATION	6 , 350	C.Y.
VATION	635	C.Y.
ATION	320	C.Y.
	400	C.Y.
	0	C.Y.
	0	C.Y.

MONTGOMERY CO DEPARTMENT OF TRANS 100 EDISON PARK DRIVE GAITHERSBURG, MD	UNTY SPORTATION , 4TH FLOOR 20878	EARTHWORK & GRADING SUMMARY SHEET GR-01							
RECOMMENDED FOR APPROVAL Chief, Design Section APPROVED	— Date	MD 355 - CLARKSBURG SHARED USE PATH							
Chief, Division of Engineering Services	Date	SCALE : N.T.S. 09/	′2019						
Designed by : J.D.W. Drawn by : J.D.W.	Checked by : S.R.R.	Project No. : C.I.P. PR. # 501744 SHEET 82 of 88							



$\frac{10'}{10'}$		- 90% SUBM	IITTAL	-	DEPAR 100 EDIS GAI
FACE UF WALL)	C	DATUM: NAD 83/91 H NAVD 88 VER	IORIZONTAL TICAL	_	RECOMMENDED FOR APPROVAL
					APPROVED
	NO.	REVISION	DATE	BY	Designed by : M.E.P. Dro

NDOT	SHA	STANDARD	SPECIFICATIONS	FOR	CONSTRUCTION	AND	MATERIALS,
DATED) JUL	Y 2018.					

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, DATED 2017.

ALL CONCRETE SHALL BE MIX NO. 3 (3500 PSI).

REINFORCING STEEL SHALL CONFORM TO A615, GRADE 60, WITH A YIELD STRENGTH FOR DESIGN OF fy = 60000 PSI.

ALL SPLICES, NOT SHOWN, SHALL BE LAPPED AS PER BAR LAP CHARTS. REINFORCING STEEL SHALL BE EPOXY COATED AS NOTED WITH AN EP IN THE PLANS.

MINIMUM CLEAR COVER FOR REINFORCING STEEL SHALL BE 2" EXCEPT FOR THE FOLLOWING LOCATIONS:

FOR TIES AND STIRRUPS, STANDARD ACI BENDING TOLERANCES ARE MODIFIED TO PLUS (+) ZERO INCHES, MINUS (-) NORMAL ACI BENDING TOLERANCES.

NEW STRUCTURAL STEEL SHALL CONFORM TO A709, GRADE 50. INCLUDING THE ADDITIONAL REQUIREMENTS FOR CHARPY V-NOTCH TESTING OF M270, FOR PRIMARY LOAD CARRYING MEMBERS. REFER TO SECTION 909.01.

	C
NULE	S
-	

- 1. FOR GEOMETRIC AND FOOTING LAYOUT, SEE DRAWING RW1-2.
- 2. FOR RETAINING WALL TYPICAL SECTION, SEE DRAWING RW1-3.

RW1–1

MONTGOMERY CO RTMENT OF TRAN ISON PARK DRIVE AITHERSBURG, ME	DUNTY SPORTATION E, 4TH FLOOR) 20878	RETAINING WALL 1 GENERAL PLAN AND ELEVATION
	Date	MD 355 - CLARKSBURG SHARED USE PATH
es	Date	SCALE: AS NOTED 09/2019
Drawn by : C.N.W.	Checked by : D.A.L.	Project No. : C.I.P. PR. # 501744 SHEET 83 of 88



	90% SUBM	ITTAL		STORERY COLUMN	MON DEPARTME 100 EDISON GAITHE
C	ATUM: NAD 83/91 H NAVD 88 VER	ORIZONTAL TICAL		RECOMMENDED FO	R APPROVAL
				APPROVED	
				Chief, Division of	Engineering Services
NO.	REVISION	DATE	BY	Designed by :	M.E.P. Drawn by

CAISSON SCHEDULE								
SON NUMBER	STATION	OFFSET	WALL SECTION	TOP OF CAISSON ELEV.	BOTTOM OF CAISSON ELEV.			
1	522+89.69	49.50 RT.	HP12x53	656.50	644.50			
2	522+89.81	42.09 RT.	HP12x53	656.50	644.50			
3	522+89.94	34.67 RT.	HP12x53	656.50	644.50			
4	522+90.06	27.25 RT.	HP12x53	653.50	641.50			
5	522+98.15	27.37 RT.	HP12x53	653.50	641.50			
6	523+06.23	27.47 RT.	HP12x53	653.50	641.50			
7	523+14.31	27.54 RT.	HP12x53	651.50	639.50			
8	523+22.40	27.59 RT.	HP12x53	651.50	639.50			
9	523+30.48	27.62 RT.	HP12x53	651.50	639.50			
10	523+38.56	27.62 RT.	HP12x53	651.50	639.50			
11	523+46.65	27.59 RT.	HP12x53	649.50	637.50			
12	523+54.73	27.54 RT.	HP12x53	649.50	637.50			
13	523+62.82	27.47 RT.	HP12x53	649.50	637.50			
14	523+70.90	27.37 RT.	HP12x53	649.50	637.50			
15	523+78.98	27.25 RT.	HP12x53	649.50	637.50			
16	523+79.11	33.33 RT.	HP12x53	652.00	640.00			
17	523+79.24	39.42 RT.	HP12x53	652.00	640.00			
18	523+79.38	45.50 RT.	HP12x53	652.00	640.00			

CAISSON INSTALLATION NOTES:

- 1. EXCAVATED SHAFTS FOR CAISSONS BY AUGURING TO A MINIMUM EMBEDMENT OF 12'-0", WITH A MINIMUM ROCK SOCKET OF 5'-0". SEE SECTION ON SHEET RW1-3. ROCK SHALL BE DEFINED AS MATERIAL THAT CAN NOT BE DRILLED WITH A CME 75 DRILL RIG (OR EQUIVALENT) AND HOLLOW STEM AUGERS. WHEN ROCK IS ENCOUNTERED, CORE-DRILLING PROCEDURES WILL BE REQUIRED.
- 2. INSTALL STEEL CASINGS AS EXCAVATION PROCEEDS. CASINGS SHALL BE FULL LENGTH AND WATER TIGHT AND SHALL BE SUFFICIENT TO WITHSTAND ALL STRESSES AND MAINTAIN THE SHAFT WALLS.
- 3. WITHDRAW CASINGS PREGRESSIVELY AS CONCRETE IS PLACED.
- 4. HOLES FOR SUCCESSIVE DRILLED SHAFTS SHALL NOT BE EXCAVATED UNTIL ADJACENT SHAFTS ARE FILLED WITH CONCRTE AND ALLOWED TO SET.
- 5. DRILLED SHAFT TOLERANCES SHALL BE IN ACCORDANCE WITH SECTION 412.

NOTE: FOR GENERAL PLAN AND ELEVATION, SEE DRAWING RW1-1

		RV	N1-2
MONTGOMERY COU RTMENT OF TRANS ISON PARK DRIVE, AITHERSBURG, MD	JNTY PORTATION 4TH FLOOR 20878	RETAINING WALL 1 GEOMETRIC AND FOOTING LAYOU	т
	– Date	MD 355 - CLARKSBURG SHARED USE PATH	Ż
es	- Date	SCALE: AS NOTED 0	09/2019
Drawn by : C.N.W.	Checked by : D.A.L.	Project No. : C.I.P. PR. # 501744 SHEET 84 of 88	















				$D \wedge 1 = 1$
MONTGOME TMENT OF SON PARK THERSBUF	ERY CC TRANS DRIVE RG, MD	OUNTY SPORTATION , 4TH FLOO 20878	DR	RETAINING WALL 1 PRECAST LAGGING DETAILS
		Dat	e	MD 355 - CLARKSBURG SHARED USE PATH
3		Dat	e	09/2019
awn by: C	.N.W.	Checked by :	D.A.L.	Project No. : C.I.P. PR. # 501744 SHEET 86 of 88

		SPE	ECL	ALIZED	
		LNC onstruction eotechnica	ם IN n Quality (1 & Foren	LEERING Control Environmental Consulting sic Engineering	
	CLIEN	IT <u>Wa</u>	allace N	Nontgomery & Associates	PROJEC
	PROJ	ECT N	UMBE	R 167030	PROJEC
	DATE	STAR	TED 7	7/27/18 COMPLETED 7/27/18	GROUN
	DRILL	ING C	ONTR/	ACTOR Connelly and Associates, Inc.	GROUN
	DRILL	ING M	ETHO	D_HSA	A
	LOGG	SED BY	<u>H. N</u>	Iathew CHECKED BY I. Helms	AT
	NOTE	: S <u>Ca</u>	ve-In D	epth: 14.7'	AF
	ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE
			<u>.,,,,</u> ,	TOPSOIL (3")	
		+ - -		FILL: dark brown clayey silt, little concrete pieces, little organics, moist, medium dense	∕ s
			$\left \left \right \right $	SILT AND SAND TO DECOMPOSED	Ms
			$\left\{ \left \left \right \right\} \right\}$	ROCK : reddish brown, sandy, some weathered rock, some mica, moist,	<u> </u>
	655	5	$\left\{ \left \left \right \right\} \right\}$	medium dense, (ML & SM)	
			$\left\{ \left \left \right \right\} \right\}$		∐ s
				DECOMPOSED DOCK reddick brown and	
	 650	10		gray, little silt, some mica, slightly moist to dry	, A <u>s</u>
			死	very dense	
		L.	HI.		
					Mis
	645	15	1		<u> </u>
			流		
			HA I		
	640	20			
17/18			恋		
DT 8/					
US.G			E.L.	End of boring at 23.5 feet	
GINT				End of boring at 23.5 feet.	S
GPJ					
OGS.					
ING L					
BOR					
67030					
TS 1					
1 PLO					
CH BF					
:OTE(
Ъ,				7504 Connelly Drive Suite C. Henever Men	dand 210

BORING FB-6

DATUM EL. 620.00





SE SE	PE NC	CI SIN	ALIZED					I	30
Con Geo	struction stechnical	Quality & Fore lace	Control Environmental Consulting nsic Engineering Montgomery & Associates	PF		NAME	Clarks	sburg Sha	arec
PROJE	CT NU	JMBE	R 167030	PF	ROJECT L	OCAT	ION _F	Route 355	5 an
DATE	START	ED _	7/27/18 COMPLETED 7/27/18	GF	Round E	LEVAT	10N _	660 ft	
DRILLI	NG CC	ONTR	ACTOR Connelly and Associates, Inc.	GF	Round W	/ATER	LEVEL	_S:	
DRILLI	NG ME	etho	D HSA		AT TI	ME OF	DRILL	ING _Dr	/
LOGGE	ED BY	<u>H.</u> N	Aathew CHECKED BY I. Helms		AT E	ND OF	DRILLI	ING Dry	
NOTES	Cav	/e-In [Depth: 11.6'		AFTE	R DRIL	LING		_
ELEVATION (ft)	DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	SAMPLE DEPTH (ft)	RECOVERY %	BLOW COUNTS (N VALUE)	
			TOPSOIL (4")			0.0	78	2-5-7	
			reddish brown, sandy, some mica, slightly		1 3-1	1.5			+
- +	· -		moist, medium dense,(SM)		SS S-2	2.5 4.0	89	4-6-7 (13)	
655	5				SS S-3	5.0 6.5	100	6-8-11 (19)	78
 650	· _		SILT AND SAND TO DECOMPOSED ROCK: brown and gray with black, sandy, some mica slightly moist, loose, (ML & SM)	,	SS S-4	8.5 10.0	100	4-5-5 (10)	
	· -								
645	 15		DECOMPOSED ROCK : gray, some silt, little mica, dry, very dense		SS S-5	13.5 13.8	100	50/3"	
- + - +	· -								
				:	SS S-6	18.5 18.6	100	50/1"	
	· -				21.00	00.5	100	50/01	
			End of boring at 23.8 feet.		S-7	23.5	100	50/3"	\square

BORING FB-9



STATION	OFFSET	NORTHING	EASTING	DEPTH (FT)
522+92.83	14.33′ RT.	574,144.6029	1,231,579.4088	25.00
524+21.47	17.84′ RT.	574,227.6146	1,231,482.1133	25.00

			Γ	RW1–5
MONTGOMERY CC TMENT OF TRANS SON PARK DRIVE ITHERSBURG, MD	OUNTY SPORTATION , 4TH FLOOF 20878	7	BORING LOCATION PLAN	
	Date		MD 355 - CLARKSBU SHARED USE PATH	RG
S	Date		SCALE: AS NOTED	09/2019
awn by : C.N.W.	Checked by :	D.A.L.	Project No. : C.I.P. PR. # 501744 SHEET 87 of	88





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	90% SUBM	ITTAL		MC DEPARTM 100 EDISC GAITH
C	ATUM: NAD 83/91 H NAVD 88 VER	RECOMMENDED FOR APPROVAL		
				APPROVED Chief, Division of Engineering Services
NO.	REVISION	DATE	BY	Designed by : M.E.P. Draw

WORKING POINT DATA						
MARK	STATION	OFFSET	NORTHING	EASTING		
W.P1.0	503 + 12.12	37.89' RT.	572,848.2137	1,233,074.3800		
W.P2.0	503 + 13.55	35.03' RT.	572,847.2967	1,233,071.3143		
W.P3.0	503 + 22.50	29.50' RT.	572,850.0296	1,233,061.1610		
W.P4.0	503 + 49.22	29.50' RT.	572,869.5041	1,233,042.8621		
W.P5.0	503+63.42	35.42' RT.	572,883.9054	1,233,037.4497		
W.P6.0	503 + 75.54	47.64' RT.	572,901.1082	1,233,038.0572		