MCPB

Item No.: 5B Date: 10-08-20

Boyds Transit Station, Mandatory Referral, MR2020029

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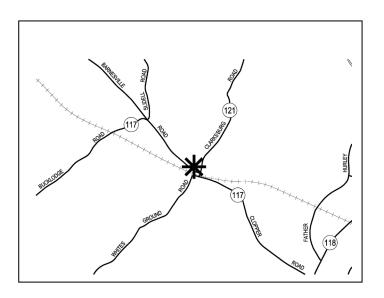
Completed: 10-01-20

Description

Construction of transit station improvements in Boyds, Maryland. The project elements are a 45space parking lot, a bus stop to serve Ride On buses from Clarksburg, a 10-foot wide sidepath along the site frontage on Barnesville Road, and site access improvements on Barnesville Road.

- Applicant: Montgomery County Department of Transportation
- MARC Rail Communities Sector Plan (2019)

Staff Recommendation: Approval to Transmit Comments



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Summary

The Montgomery County Department of Transportation (MCDOT) is proposing transit station lot improvements on the site of the former Anderson property, located in Boyds, Maryland. The project includes the following improvements:

- Construction of a one-way parking loop with 39 parking spaces (2 of these are accessible spaces) on the former Anderson property,
- Construction of three parking spaces on the west side of the property,
- Construction of a concrete bus pad in front of the existing two buildings,
- Retention of the two existing larger buildings, the historic Hoyle's Mill building and the adjacent Poolesville Small Engine Repair Shop. This project includes the mothballing of the historic building to prevent further deterioration. The addition of a small restroom for bus drivers only is planned in the Poolesville Small Engine Repair Shop.
- Design and provision of 20 long-term bicycle parking spaces and 10 short-term bicycle parking spaces,
- Construction of a 5-foot-wide sidewalk on the west side of the property in front of the three parking spaces, running toward Barnesville Road (stops 35 feet short of Barnesville Road within the property),
- Construction of a sidewalk wrapping around the two buildings which will provide pedestrian
 access between the parking lot and the MARC rail station platforms,
- Construction of a 10-foot-wide sidepath with a 5-foot-wide grass buffer along the site frontage on Barnesville Road,
- Crosswalk improvements at the intersection of Barnesville Road with Clarksburg Road, and
- Construction of two site access locations along Barnesville Road, with the western drive providing full two-way access for all vehicles, while the eastern drive will provide bus egress only.

The project location is depicted in Figure 1. The current project, which includes full design and construction cost funding, is listed as CIP Project No. P501915. The current project cost estimate is \$5.65 million, which includes final design cost, land acquisition cost, as well as construction cost. The project is anticipated to be constructed in FY24. The 35 percent design plan presentation drawings are provided as Attachment A to this report. It should be noted that the two existing building structures will be maintained. The existing historic Hoyle's Mill building will be mothballed.



Figure 1: Project Limits and Site Vicinity

Mandatory Referral Review

This proposal for the construction of transit station 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 design typically 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 comments to the Montgomery County Department of Transportation:

1. Prior to filing for any land disturbance permits, MCDOT should reengage with the community to proactively work on a plan for adaptive reuse of the Hoyle's Mill Building.

- 2. Prior to filing for any building demolition permits, MCDOT should also consult with the Maryland Historic Trust on National Register evaluations and the need for further Section 106 review.
- 3. MCDOT should work directly with the HP Office and the Boyds Community on appropriate historical markers or signage to educate and inform visitors about the history of the area.
- 4. Design the grade, cross slope and material of the proposed sidepath to be level across both site driveways.
- 5. The applicant should work with the state to reduce the posted speed limit to 25 mph to match the Master Planned target speed of 25 mph. This will mitigate the sight distance deficiency at the egress drive.
- 6. The bus only egress is problematic and is likely to be used by cars, despite signage. This is a safety hazard because it has deficient sight distance for cars due to the existing vertical curvature. We recommend that additional measures, including a possible bus-activated gate, be considered to prevent autos from using this egress.
- 7. Consider alternatives to move the bus egress further west to avoid sight distance issues, which might require either shortening the bus stop primarily in front of the Poolesville Small Engine Repair Shop or by moving the bus stop further west as well (and this might impact the three parking spaces provided on the western side of the site).
- 8. The proposed shoulder and curb proposed along the eastbound direction along the site frontage is inconsistent with the MARC Rail Communities Sector Plan and should be modified.
- 9. A pedestrian warning signal for approaching trains and improving the at-grade crossing surface should be added at this station in coordination with CSX.
- 10. While we prefer a 6-foot buffer separation between a sidepath and the curb, the 5- foot buffer proposed is acceptable and consistent with Pedestrian Level of Comfort analyses now in use in the ongoing Montgomery County Pedestrian Master Plan. We do note that the Complete Streets Design Guidelines now under review by the Planning Board would likely recommend a minimum 6-foot-wide buffer on this type of street.
- 11. Signage should be added on Barnesville Road indicating the presence of bicycle parking consistent with requirements in Section 6.2.6 of the Montgomery County Zoning Code.
- 12. For the next design phase, more detail should be provided for the bicycle parking. This parking should be designed in conformance to Section 6.2.6 of the Montgomery County Zoning Code. It is important to note that each long-term bicycle parking space must be provided within a building, covered parking garage, or secure parking area located near the building or structure and the street or other bicycle right-of-way.
- 13. The two accessible parking spaces should be relocated to the western side of the site (near the proposed bike parking area) to be more proximate with the CSX platforms.
- 14. A crosswalk should be added to connect the sidewalk leading to the MARC northbound platform and the sidepath proposed along Barnesville Road.
- 15. The existing closed pedestrian underpass should be improved to be ADA accessible and reopened. The existing at-grade crossing is difficult for persons with mobility impairments especially in inclement weather.

- 16. MCDOT should work with CSX to explore the feasibility of adding a sidewalk on the south side of the two buildings, as this is a more direct way between the rail platforms and the parking lot. If this is not done, a fence will be needed to prevent this movement from occurring.
- 17. The channelized right-turn lane on Barnesville Road at Clarksburg Road should be modified to eliminate the channelize island ("hot right"). Crosswalk improvements would then be simpler to construct and safer. MCDOT should work with MDOT SHA to implement this improvement.

Proposal

Project Description

The Montgomery County Department of Transportation (MCDOT) is proposing transit station lot improvements to the former Anderson property site in Boyds, Maryland.

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



Figure 2: Project Limits - Regional Context

The project site is surrounded by the MARC station and railroad tracks and residential and commercial-use properties. To the north is MD 117 (Barnesville Road) and further north is a wooded lot with several residential homes to the northwest. The current Boyds MARC station is adjacent to and south of the project site and consists of railroad tracks, pedestrian platforms and a patron parking area. Further to the south are residential homes along Clopper and White Ground Roads. Adjacent to the west of the project site is the active Boyds Country Store and further west along Barnesville Road is a small business complex.

A concrete bus loop will be provided along the western side of the site and additional parking loop will be provided on the eastern side of the site. The bus loop will consist of concrete pavement whereas the

parking area will be pervious pavement. A Filterra stormwater bioretention structure will be provided in the bus loop. Additional stormwater management facilities will not be provided. The Stormwater Management Concept/Site Development was approved on March 23, 2020. Landscaping and lighting will be provided throughout the site. Montgomery County Department of Transportation will maintain the facility.

A 10-foot-wide sidepath will be added along the frontage of MD 117 (Barnesville Road) as well as room for a future bikeable shoulder along the roadway. Minimal work will be done along existing MD 117 (Barnesville Road) and due to existing conditions, the road will not follow a standard typical section. The sidepath and future bikeable shoulder will allow a connection from the Ride On service to the existing Hoyle's Mill Trail that runs along MD 121 (Clarksburg Road). The addition of a bikeable shoulder follows the Montgomery County Bicycle Master Plan which envisions a bikeable shoulder along MD 121 (Clarksburg Road) and separated bikeways (sidepaths) along MD 121 (Clarksburg Road) and MD 117 (Clopper Road) going east towards Germantown. The Bicycle Master Plan intends to have safe and connected bicycle paths throughout Montgomery County. A sidewalk will be added internal to the site and along the bus stop and ultimately connect to the existing MARC station's northbound platform, the existing pedestrian tunnel, and the existing Boyds Country Store. Coordination with CSX Transportation will be required for the improvements within their right-of-way. A space for short-term and long-term bicycle parking has been provided near the MARC stop.

The existing historic Hoyle's Mill will remain. The adjacent existing hardware store may remain for a bus operator restroom and mechanical area for Ride On. Minimal work will be done to the existing hardware store to make it ADA compliant and therefore the building will not seek LEED Certification. A bus shelter will be provided in front of these buildings for users.

The existing site currently has two overhead utilities present which could interfere with construction. One existing septic field is located along the proposed bus loop and may require relocation. It is understood that there is an existing water well that may require relocation. These utilities will be test-pitted after preliminary engineering to determine their exact location and coordination with Montgomery County is underway.

Project Background

The Boyds MARC station is a stop along the Maryland Transit Administration's (MTA) MARC Brunswick line. It is currently a flag stop with four stops in the morning rush hours and six stops in the afternoon rush hours. Development to the north of the station along Barnesville Road (MD 117) consists primarily of commercial properties while development to the south of the station along Clopper Road is primarily comprised of residential properties. Clopper Road is currently an undivided two-lane two-way county roadway with a posted speed limit of 25 mph. While there are no pedestrian or bicycle facilities along the roadway, there is an existing pedestrian tunnel for access to the other side of the tracks located to the west of the station platform. The pedestrian tunnel has stairs and is not ADA compliant. The Boyds station and part of Clopper Road are located within the Boyds Historic District. Current ridership is in the high teens daily for the Boyds MARC train. The station's existing parking lot, which is owned by CSX Railroad and leased and maintained by MTA, provides fifteen (15) spaces.

In the early 2000s, the MTA considered closing the Boyds MARC station due to its low ridership and proximity to the Germantown station. However, over the years, the county received numerous citizen requests to keep the station open and add additional parking and Ride On routes to the Clarksburg and Germantown area. Given the current and projected growth in Clarksburg and Germantown, the county completed a feasibility study in 2015 with the purpose of adding parking and bus service to the Boyds station to keep the station viable and to potentially increase MARC service to the area.

Through extensive coordination with the Maryland-National Capital Park and Planning Commission (M-NCPPC) and the Boyds Civic Association's (BCA) Advisory Working Group, project purpose was defined and included adding a bus bay and turnaround for Montgomery County's Ride On system to access the Boyds MARC Station and adding parking with at least twenty-five (25) additional parking spaces in the same location. It was assumed implementation could be completed within five to ten years depending on funding and would require right-of-way acquisition and construction plans.

In order to achieve these goals, different sites in the area were researched and evaluated based upon numerous criteria developed by the study team for the feasibility study. Twelve (12) sites were selected to have potential in reaching at least one of the phased goals. The study team coordinated with M-NCPPC and the BCA's Advisory Working Group to select criteria and discuss these potential sites. The Anderson Property, located to the north of the tracks owned by CSX along Barnesville Road (Route 117), across from the existing MARC Station, and approximately 350 feet west of the intersection of Barnesville Road and Clarksburg Road, was selected as a preferred finalist. Combined, the two parcels total 1.16 acres of land. Currently, there are several buildings located on the properties with a gravel parking lot. One of those buildings, the Hoyle's Mill which is situated closest to the CSX tracks, is classified as historic and is located within the Boyds historic boundary. This determination was confirmed through coordination with the Historic Preservation Office.

A conceptual transit and parking option was developed utilizing the Anderson Property that combines sites 7 and 9 from the Boyds Feasibility Study. The goal is to provide a bus bay and turn around for Ride On to access the existing station and also provide parking spaces for commuters at the same location with easy access to the MARC platform. The option developed would satisfy both phases of the project goals identified in the Boyds Feasibility Study. In 2019, the county purchased this parcel for the expansion of the Boyds MARC station.

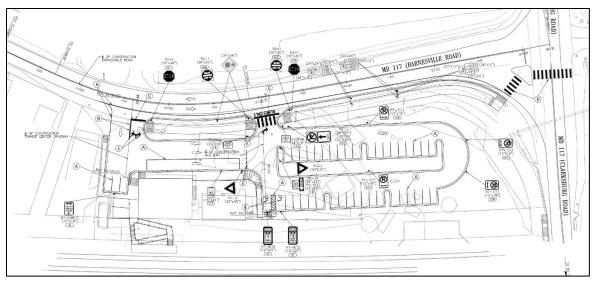


Figure 3 Site Plan – Pavement Marking Plan



Figure 4 Rendering – Proposed Boyds Transit Center looking North

Typical Cross Sections

Typical cross sections have been provided for the site at two locations, one on the western end of the site in the vicinity of the Bus Parking and adjacent to the two buildings (see Figure 5), and the second for the eastern end of the site in the vicinity of the parking loop (see Figure 6). In Figure 5, there will be a 10-foot-wide sidewalk in front of the existing buildings (7-foot minimum), a 12-foot-wide one-way bus

loading area and two 10-foot-wide travel lanes. Given the restriction of exiting traffic at the eastern driveway to bus traffic only, all car traffic will have to enter and exit the site via the western transit center driveway. This is an awkward circulation pattern that results in a large impervious surface area in front of the two buildings. The egress restriction is due to a sight distance deficiency at the eastern driveway for cars but not buses (due to higher driver elevation).

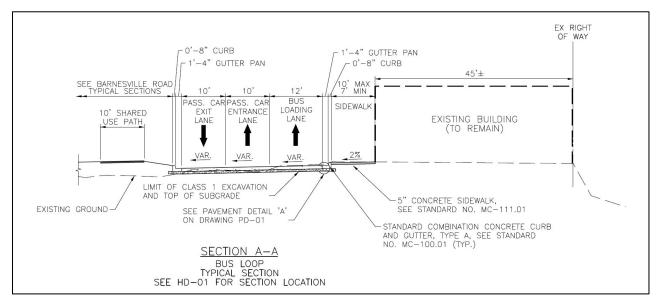


Figure 5 Cross Section – In Front of Existing Buildings

Figure 6 shows the one-way parking loop circulation which will be counterclockwise in direction with 17-foot-wide parking bays with 19-foot-wide travel lanes. No internal sidewalks will be provided in this portion of the site. Pedestrian circulation from parking spaces to the western portion of the side (where a sidewalk is planned) will require pedestrians to walk in the travel lane.

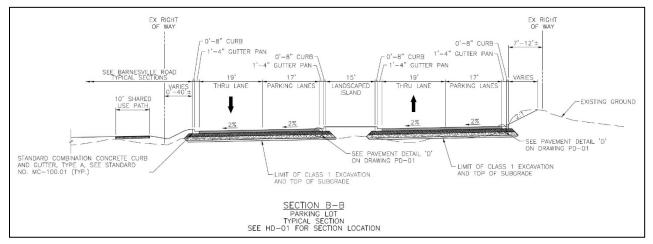


Figure 6 Cross Section – Parking Loop

Typical cross sections have been provided for Barnesville Road at two locations, one on the western end of the site in the vicinity of the bus parking and adjacent to the two buildings (see Figure 7), and the second

for the eastern end of the site in the vicinity of the parking loop (see Figure 8). For both, the proposed sidepath is shown as 10 feet wide with a 5-foot-wide grass buffer. Barnesville Road would be improved to provide a 4-foot-wide bikeable shoulder with curbing on the south or eastbound direction along the site frontage.

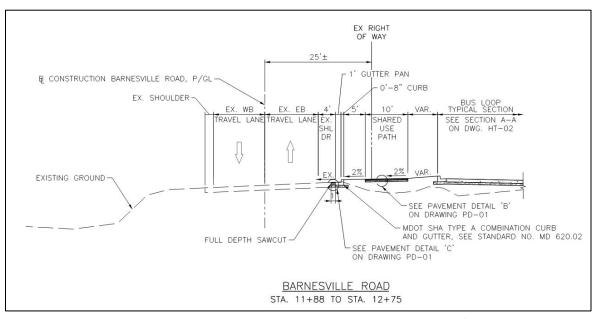


Figure 7 Cross Section – Barnesville Road – Western End of Site

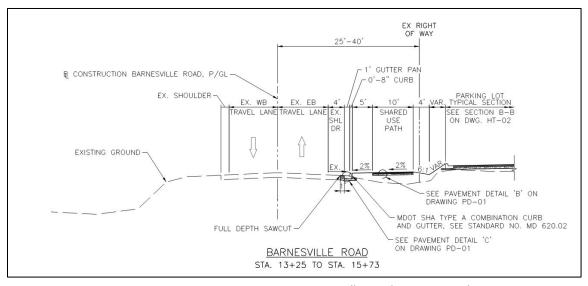


Figure 8 Cross Section – Barnesville Road – Eastern End

The internal site circulation is awkward for this site design, primarily due to a sight distance deficiency at the eastern driveway access. Due to a sight distance deficiency for cars but not buses, MCDOT has proposed that this driveway be restricted to car traffic, allowing this driveway to be used by buses for egress only (and typically a right turn onto Barnesville Road). The existing profile of Barnesville Road is shown in Figure 9. You will note that the proposed transit center drive is located at the crest of the hill, while the eastern drive is located downhill.

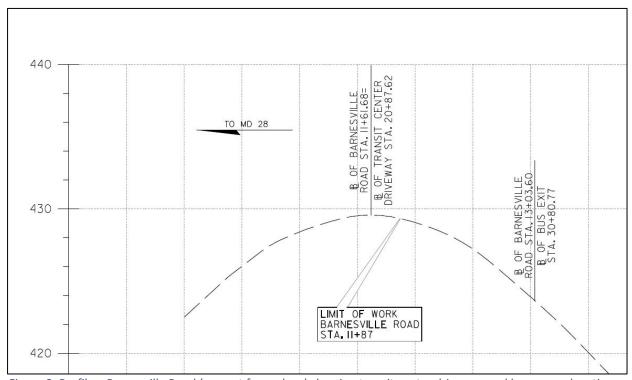


Figure 9: Profile – Barnesville Road (excerpt from plans) showing transit center driveway and bus egress locations

Site Circulation/Parking and Bicycle Parking

Figure 10 displays a site plan showing the different paving treatments proposed within the site and along the proposed sidepath, arrows highlight the proposed traffic circulation within the site, and the short and long-term bicycle parking locations. The dark areas on the figure indicate pervious pavement, which is proposed for the parking loop, the lighter shaded area is impervious concrete, and a small area located to the west of the two structures is paved with brick. The brick section has a surface area of 400 square feet, which is where the short and long-term bicycle parking spaces will be provided. No details on type and layout for bicycle parking were provided in this submission. Conformance with Section 6.2.6 of the Montgomery County Zoning Code is required. The site contains two accessible parking spaces which is consistent with Americans with Disabilities Act (ADA) requirements per the US Access Board.¹

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 $^{^{1}\} https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards/ada-standards$

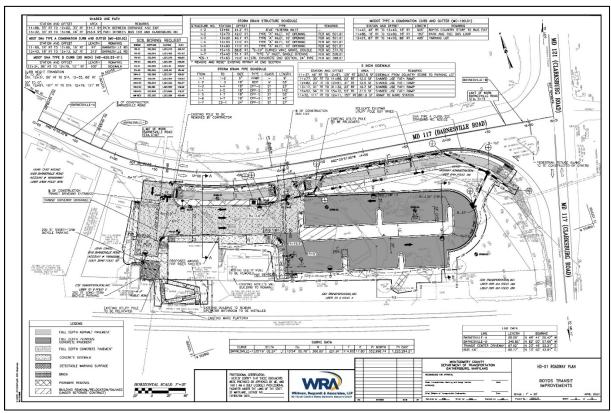


Figure 10: Pavement and Circulation Plan

Transportation Analysis

Design Elements - Transportation

<u>General Comment</u>: The proposed 10-foot-wide sidepath is consistent with the default sidepath width in the approved Bicycle Master Plan and the ongoing Complete Streets Design Guidelines. The 5-foot grass buffer is acceptable and consistent with Pedestrian Level of Comfort analyses now in use in the ongoing Montgomery County Pedestrian Master Plan. We do note that the Complete Streets Design Guidelines now under review by the Planning Board would likely recommend a minimum 6-foot-wide buffer on this type of street.

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 south side of Barnesville Road between the Boyds MARC rail station and Clarksburg Road (MD 121). On Clarksburg Road, the Bicycle Master Plan recommends a sidepath (east side) and bikeable shoulders between Ten-Mile Creek and Clopper Road.

The 2018 Master Plan of Highways and Transitways classifies Barnesville Road between Boyds Post Office and Clarksburg Road as a two-lane Country Road with a master plan right-of-way of 62 feet. The Master Planned Target Speed is 25 mph on Barnesville Road. Clarksburg Road is classified as a two-lane Arterial with a master plan right-of-way of 80 feet and master planned target speed of 30 mph.

The Boyds MARC rail station has been master planned in the 2018 Bicycle Master Plan to provide 20 long-term bicycle spaces and 10 short-term bicycle parking spaces. The project provides space for both long and short-term bicycle parking; however, no layout and related details have been provided at this stage of design.

Master Plan - Major Recommendations

The mandatory Referral for the Boyds MARC Station generally complies with the MARC Rail Communities Sector Plan; however, there are some inconsistencies.

- On page 16 of the Plan under Priorities, the Plan states "create a commuter-serving facility at the
 historic Hoyle's Mill site, integrating the mill as part of the facility." The design calls for the
 existing facility to be mothballed so that it does not undergo further deterioration. Hopefully,
 in the future the historic structure will be renovated and better incorporated into the station
 area.
- 2. On page 39, Connect Goal 1: Support the future viability of MARC rail through measures to expand ridership and service, while improving connections to the station. The Boyds-related recommendations include the following:
 - a. Retain the existing Boyds MARC stop and its function at its current location, and the existing MARC parking lot on Clopper Road south of the railroad tracks (Site BE).
 - b. Expand the supply of commuter parking at the Boyds station by utilizing the Anderson properties on the north side of the MARC stop near the intersection of Barnesville and Clarksburg Roads as a commuter-serving parking lot. The project provides 42 parking spaces (Two of these spaces will be accessible).
 - d. Establish regular Ride On bus service to the Boyds MARC Station, including appropriate bus-related facilities at the station, to accommodate additional MARC riders. A Ride On bus loop is being provided at the station. It is a little wider than what we anticipated, but understandable given further sight distance analysis of Barnesville Road.
 - e. Provide enhanced bicycle and pedestrian connections along and across the tracks near the Boyds MARC Station.
 - Connect the expanded commuter parking lot and new bus facilities to the MARC
 platform with ADA-compliant walkways and facilities. Because there will not be
 a grade-separated ADA-accessible facility to connect the site with the
 southbound tracks, this goal is only partially met.
 - Upgrade the existing pedestrian underpass with ADA-compliant ramps, wheelchair lifts, improved lighting on the ramps and entrance canopies to allow use during inclement weather. The project does not touch the existing pedestrian underpass. It is hoped that in the future this pedestrian underpass will be upgraded to provide a safer crossing alternative to the current at-grade crossing.
 - Improve the safety of the at-grade crossing over the railroad tracks for pedestrians, such as by installing a pedestrian warning signal for approaching trains and improving the at-grade crossing surface. **These improvements were**

not included with the applicant's submission, and in coordination with CSX, these project elements should be added.

- 3. On page 46, the Plan provides guidance on better pedestrian and bicycle connectivity along Barnesville Road. "c. Preserve the rural character of Barnesville Road in the historic district by minimizing changes to the road, its width, alignment and elements along the edges, such as trees and slopes created by the roadway." The project includes a shoulder and curbing, which is inconsistent with the classification of Barnesville Road as a Country Road.
 - Install a sidewalk along the south side of Barnesville Road, from the Boyds Post Office at the western plan boundary to the MARC station. Design a sidewalk with an informal, meandering alignment to limit the loss of trees and the need for retaining walls. The design upgrades the sidewalk to a 10-foot wide shared use path.
- 4. On page 70 in the Renew Chapter, the Plan provides additional guidance on the enhanced MARC station.
 - Provide a MARC and Ride On shelter possibly with a restroom. Existing or sensitively-designed
 new structures may be used for this purpose. These structures provide a co-location
 opportunity for community uses. The restrooms in the Poolesville Small Engine Repair Shop
 will be available for the bus drivers only, not the general public. This is inconsistent with
 the Sector Plan recommendation.
 - Create a plaza area and green space within the bus loop. Preserve the green area to protect the existing septic field. The project eliminates the green area in order to mitigate a sight distance deficiency. This is inconsistent with this recommendation.
 - Design the new walkways connecting the parking area and bus loop to the MARC platform for compatibility with the historic Hoyle's Mill and other resources. Sensitively design canopies over the pedestrian underpass with guidance from Historic Preservation staff to assure visual compatibility. The Poolesville Small Engine Repair Shop will have an awning in front for commuters. The walkways from the parking lot to the MARC platform will be made of concrete. All of these should be reviewed by the Historic Preservation staff to ensure that they are consistent with the historic resource, Hoyle's Mill, and its setting. Site lighting would be designed to be pedestrian -scaled and consistent with the Boyds Historic District.

The project attempted to limit impervious surfaces to some extent with the use of pervious pavement in the parking loop; however, the wide paved area within the site is also inconsistent with Recommendation 2b on page 42 as follows: "Minimize roadway and pavement widths to minimize impervious surfaces that adversely impact the water quality of Little Seneca Lake and its watershed."

The project is inconsistent with the MARC Rail Communities Sector Plan in the provision of curbing and shoulders as identified in Recommendation 3c (Boyds) on page 46, which specifically states "Classify Barnesville Road as a country road. Shoulders [and curbing] should not be added to the roadway to maintain the rural character of the area."

Environmental Analysis

Natural Resources Inventory/ Forest Stand Delineation

The Application meets the requirements of Chapter 22A of the Montgomery County Forest Conservation Law. A Natural Resources Inventory and Forest Stand Delineation (NRI/FSD) #420200900 for the Property was approved by staff on February 20, 2020. The Property is located in the Little Seneca Creek watershed Use Class I-P waters.

There are no streams, wetlands, or environmental buffers on or affecting the Property.

The Application meets all applicable requirements of the Environmental Guidelines. (see attached Forest Conservation report – Item 5A).

Forest Conservation

The Application meets the requirements of Chapter 22A of the Montgomery County Forest Conservation Law. A Forest Conservation Plan with a Tree Variance Request has been submitted for review and is recommended for approval as a separate action by the Planning Board as part of this Mandatory Referral review (see attached Forest Conservation report – Item 5A).

Note: For a complete analysis of conformance with Chapter 22A, please refer to the Final Forest Conservation Plan Staff report being considered concurrently with this Mandatory Referral review.

Historic Resources Analysis

The project is immediately adjacent to the Boyds Master Plan Historic District. The project appears to be partially located within a portion of the National Register-eligible historic district. The latter is governed by the Maryland Historic Trust and all project improvements must be reviewed by MHT through the section 106 review process for a finding of no adverse effect. For the Master Plan Historic District, the project improvements are occurring just at the District boundaries. The recently adopted MARC Rail Communities Plan noted the following goals for the property and adjacent historic mill:

- Plan Goal: Coordinate the design of improvements, such as sidewalk materials and retaining
 walls, within the historic district with Montgomery Planning's Historic Preservation Office staff.
 Historic Preservation staff have reviewed and will continue to review the design.
- Prior to any changes, additions and/or removals, assess all the structures on the site for National Register of Historic Places significance. This site falls within the National Register Historic District. Review all potential changes to the mill with the county's Historic Preservation Commission, remove the large, Dutch-gabled building and the small block building adjacent to Barnesville Road to create the room for a Ride On bus loop and drop off, provide a MARC and Ride On shelter possibly with a restroom. Existing or sensitively designed new structures may be used for this purpose. These structures provide a co-location opportunity for community uses. Create a plaza area and green space within the bus loop. Preserve the green area to protect the existing septic field. Design the expanded MARC parking area with an extensive tree canopy and stormwater management treatments to protect the water quality of Little Seneca Lake. Screen all parking with

landscaping and low walls to protect the historic resources and community character. Design the new walkways connecting the parking area and bus loop to the MARC platform for compatibility with the historic Hoyle's Mill and other resources. Sensitively design canopies over the pedestrian underpass with guidance from Historic Preservation staff to assure visual compatibility.

- The first recommendations must be coordinated with the Maryland Historical Trust. The screening and landscape design are adequate. The pedestrian underpass is not being altered at this time.
- Adaptively reuse the historic Hoyle's Mill within the Boyds Historic District and explore reuse of the nearby barn building outside of the historic district to establish a focal point for the Boyds commercial area (Site BE) (See Appendix A for MCDOT's Concept Study): Assess all of the structures on the site with the historic Hoyle's Mill, Parcels 155 and 157, for National Register eligibility prior to any changes, additions and/or removals. Commemorate historical uses on the parcel, including, among others, the location of the former station house, which is no longer standing. Redesign the site to support the reuse of the mill building. Coordinate all changes to the mill with the Montgomery County Historic Preservation Commission. Design alterations to the repurposed mill and any other buildings—including landscaping, lighting and walkways—in a manner that is sensitive to the surrounding historic district. Design landscaping, lighting, signage, paths and structures that support and are sensitive to the character of the historic district. Explore relocation and reuse of the Quonset hut and the barn building, if possible.
- Adaptive Reuse of the Mill is a Plan Goal, but this is not being addressed directly in this application. The adjacent warehouse/office building is also being retained; this will help to further the adaptive reuse of the mill site by providing a potential adjacent location that has water and electrical hookups that the mill lacks. There is no interpretation proposed in the application. MCDOT should work directly with the HP Office and the Boyd's Community on appropriate historical markers or signage to educate and inform visitors about the history of the area. Relocation and Reuse of the Quonset Hut and Barn were not explored.

Community Outreach and Notification

This application was noticed in accordance with the Uniform Standards for Mandatory Referral Review. Presentations to the Boyds Civic Association occurred on July 18, 2019 and October 18, 2019. A public meeting was held on October 22, 2019 at Ronald McNair Elementary School in Germantown to discuss this project and design consideration. Additionally, numerous meetings with the Boyds Civic Association and a public meeting were held for the feasibility study prior to this project.

Conclusion

Based on information provided by the applicant and the analysis contained in this report, staff concludes that the proposed Boyds Transit Station project can be designed with some modifications to meet transportation standards as specified on pages 3 through 5 of this staff report.

Attachments

A. Proposed Project Plans



Hadi Mansour

Mr. Jason Cosler, PE Whitman, Requardt & Assoc 801 South Carolina Street

Baltimore, MD 21231 Via email: jcosler@wrallp.com

> COMBINED STORMWATER MANAGEMEN CONCEPT/SITE DEVELOPMENT Boyd Transit Center Address: 15100 Barnesville RD Tract Size: 1.21 ac

> > Total Concept Area: 1.21 a

Watershed: Seneca Creek

Dear Mr. Cosler

Based on a review by the Department of Permitting Services Review Staff, the stormwater management concept for the above mentioned site is acceptable. The stormwater management concept proposes to meet required stormwater management goals via permeable paving. This approval includes the granting of a partial waiver from the requirements to provide on-site SWM

The following items will need to be addressed during the detailed sediment control/stormwate management plan stage:

- 1. A detailed review of the stormwater management computations will occur at the time of detailed plan review
- An engineered sediment control plan must be submitted for this development.

Stormwater Management Regulation 4-90 is required.

3. All facilities must be designed using latest available MCDPS guidance documents This list may not be all-inclusive and may change based on available information at the time.

Payment of a stormwater management contribution in accordance with Section 2 of the

March 23, 2020 Page 2 of 2

This letter must appear on the sediment control/stormwater management plan at its initial submittal. The concept approval is based on all stormwater management structures being located outside of the Public Utility Easement, the Public Improvement Easement, and the Public Right of Way unless specifically approved on the concept plan. Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended stormwater management requirements. If there are subsequent additions or modifications to the development, a separate concept request shall be required.

If you have any questions regarding these actions, please feel free to contact Mary Fertig at 240-777-6340 or at mary.fertig@montgomerycountymd.gov.

Mark C. Etheridge, Manager Division of Land Development Services

MCE: MMF SM File # 285472

DEVELOPER'S/BUILDER'S CERTIFICATION

I HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE OF A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

DATE

TIMOTHY H. CUPPLES, P.E., CHIEF DIVISION OF TRANSPORTATION ENGINEERING

DESIGN CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES EXECUTIVE REGULATIONS 5-90, 7-02AM AND 36-90, AND MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION "STORM DRAIN DESIGN CRITERIA" DATED JUNE. 2014.

DATE

TREE CANOPY REQUIREMENTS TABLE To be completed by the consultant and placed on the first sheet of the Sediment Control / Stormwater Management plan set for all projects. Exempt: Yes No If exempt under Section 55-5 of the Code, please check the applicable exemption category below.

square feet Trees Proposed to be Planted
Trace Proposed to be Planted
Troos Proposed to be Planted
Trees Proposed to be Planted
\$

Required Number of Shade Trees

Area (sq. of Disturb	ft.) of the Limits pance	Number of Shade Trees Required						
FROM 1 6,001 8,001	<u>TO</u> 6,000 8,000 12,000	3 6 9						
12,001	14,000	12						
14,001	40,000	15						

If the square footage of the limits of disturbance is more than 40,000, then the number of shade trees required must be calculated using the following formula:

(Number of Square Feet in Limits of Disturbance $\div 40,000$) × 15

EXEMPTION CATEGORIES:

55-5(a) any activity that is subject to Article II of 55-5(b) any commercial logging or timber arvesting operation with an approved exemption fro Article II of Chapter 22A; 55-5(f) any activity conducted by the County Parl 55-5(g) routine or emergency maintenance of an

existing stormwater management facility, including ar

existing access road, if the person performing the

intenance has obtained all required permits; 55-5(h) any stream restoration project if the erson performing the work has obtained all ecessary permits: 55-5(i) cutting or clearing any tree to comply with applicable provisions of any federal, state, or local law

OTHER: Specify per Section 55-5 of the Code.

overning safety of dams;

JASON D. COSLER, P.E. MD REGISTRATION NO. 28467

CERTIFICATION OF QUANTITIES

I FURTHER CERTIFY THAT THE TOTAL AMOUNTS OF EXCAVATION AND FILL AS SHOWN ON THESE PLANS HAVE BEEN COMPUTED TO BE 3,960 CUBIC YARDS OF EXCAVATION AND 475 CUBIC YARDS OF FILL AND THAT THE TOTAL AREA TO BE DISTURBED AS SHOWN ON THESE PLANS HAS BEEN DETERMINED TO BE A MAXIMUM OF 51,898 SQUARE FEET OR 1.19 ACRES.

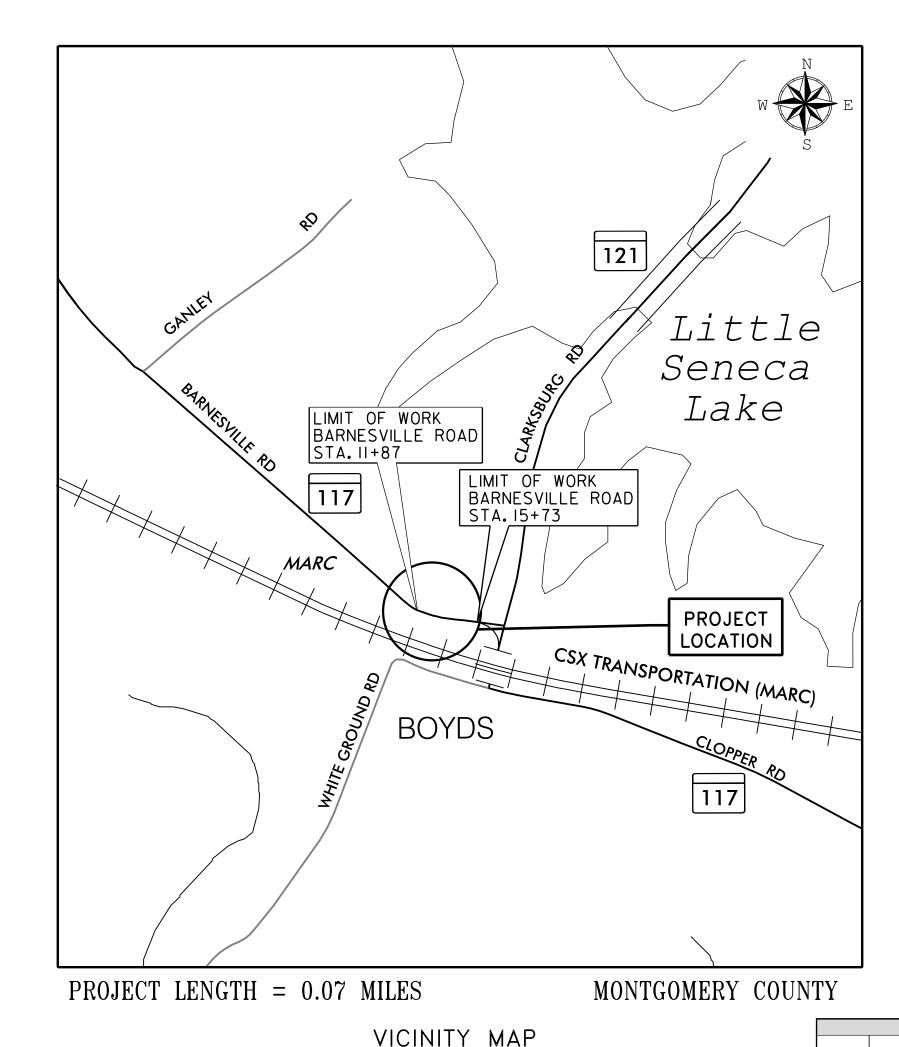
PAMELA H. DESTINO, P.E. MD REGISTRATION NO. 42708

DATE

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

BOYDS TRANSIT IMPROVEMENTS -35% DESIGN

C. I. P. PROJECT 509337



SCALE : 1"= 500'

GENERAL NOTES

- 1. SITE CLEANUP, DEMOLITION AND GROUNDWATER REMEDIATION SHALL BE DONE UNDER A SEPARATE CONTRACT.
- 2. THE SPECIFICATIONS FOR THIS CONTRACT WILL BE THOSE OF THE MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION DATED JULY 2019, ALL ERRATA AND ADDENDA THERETO. THE MARYLAND DEPARTMEMNT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION BOOK OF STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES, WASHINGTON SUBURBAN SANITARY COMMISSION (W.S.S.C.) STANDARDS, MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION STANDARDS, AND SOIL CONSERVATION SERVICE POND CONSTRUCTION SPECIFICATIONS FOR MARYLAND.

REQD NOT REQD

X

PERMIT NO.

EXPIRATION DATE

RESTRICTION DATE

TYPE OF PERMIT

Floodplain District WATERWAY/WETLANDS a. Corps of Engineers

b. M.D.E.

c. M.D.E. Water

Quality Certification

M.D.E. Dam Safety

DNR Roadside Tree Care Permit

DPS Roadside Tree

Protection Plan

NOTICE OF INTENT

M.C.D.P.S. STORMWATER

MANAGEMENT

M.C.D.P.S. SEDIMENT

- 3. HORIZONTAL DATUM: NAD 83(1991) VERTICAL DATUM: NAVD 88.
- 4. TYPES OF STORM DRAIN STRUCTURES REFER TO THE "DESIGN STANDARDS" OF MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION.
- 5. WHEN THE DROP ON THE MAIN LINE THROUGH A STORM DRAIN STRUCTURE CAN BE ACCOMMODATED BY AN INVERT SLOPE OF 1.5:1 OR FLATTER, A ROUNDED CHANNEL LINED WITH SEWER BRICK ON EDGE SHALL BE BUILT TO THE CROWN OF THE PIPES. WHEN THE INVERT SLOPES WOULD BE GREATER THAN 1.5:1 A SPECIAL INVERT SHALL BE CONSTRUCTED AS NOTED.
- 6. ALL STORM DRAIN PIPE SHALL BE INSTALLED WITH CLASS "C" BEDDING UNLESS OTHERWISE SPECIFIED.
- 7. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS TO STORM DRAIN STRUCTURES, WHEN NECESSARY, TO MEET EXISTING CONDITIONS, AS APPROVED BY MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION'S PROJECT INSPECTOR.
- 8. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATIONS 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 OR SIX (6) INCHES, WHICHEVER IS LESS, CONTACT MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION'S PROJECT INSPECTOR AND THE APPROPRIATE UTILITY OWNER BEFORE PROCEEDING WITH CONSTRUCTION.
- 9. REPAIRS TO UTILITIES OR PROPERTY DAMAGE AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE OR METHOD OF OPERATION MUST BE MADE AT THE CONTRACTOR'S EXPENSE BEFORE PROCEEDING WITH CONSTRUCTION.
- 10. CLEARING IS TO BE LIMITED TO THE "LIMIT OF GRADING" AS SHOWN ON THE PLANS.
- 11. ALL GRADING SHALL BE DONE IN SUCH A MANNER AS TO PROVIDE POSITIVE DRAINAGE.
- 12. DISTURBED AREAS ADJACENT TO ESTABLISHED LAWNS SHALL BE SODDED. OTHER DISTURBED AREAS SHALL BE SEEDED AND MULCHED.
- 13. THE CONTRACTOR SHALL OBTAIN A ROADSIDE TREE PERMIT FOR ANY MAINTENANCE, TREATMENT, PLANTING, REMOVAL, OR ROOT CUTTING ON TREES WITHIN THE PUBLIC RIGHT OF WAY. PERMIT REQUIREMENTS MAY BE OBTAINED FROM THE DEPARTMENT OF NATURAL RESOURCES, MARYLAND FOREST, PARK AND WILDLIFE SERVICE, TELEPHONE 301-854-6060.
- 14. 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 SUPERVISION OF CALL WSSC 301-206-9772.
- 15. ALL UTILITY POLES NOTED FOR RELOCATION SHALL BE PERFORMED BY OTHERS.
- 16. PRIOR TO VEGETATIVE STABILIZATION, ALL DISTURBED AREAS MUST BE TOPSOILED PER THE MONTGOMERY COUNTY "STANDARDS AND SPECIFICATIONS FOR TOPSOIL".
- 17. 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 UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

h				
	measure number	type of measure	dr a m	
	ESD			
	PC-1	Permeable	0 3	

number	measure	area to	area to	76 Impervious	calculations	וווווו באטע	INIAX ESDV	volu
Harriber	illeasure	measure	measure		calculations			VOIC
ESD								
PC-1 P	Permeable	0.35 ac.	0.35 ac.	100	0.95	-	3120 cf	3120
Total		0.35 ac.	0.35 ac.					3120
Structural								
Total		N/A	N/A					N/A
Does not dra	ain to a S	NM measu	re					
QN Waiver	acres and	% impervio	ous					2,60
QL Waiver a	rcres and	% impevio	us					N/A
Project								
Total		1.19 ac.	0.81 ac.	68	0.70	2862 cf	5725 cf	5,725
				_				
ESDv Requir	ed	5,725 (ESD	Target)/ 2,86	2 (ESD Min)				
ESDv Provid	ed	5,725 cf						
Structural Re	equired	N/A						

Rv for ESD

			MCDF	PS-SC/SWM	SHEET	NO. 1	OF	10
MONTGOMERY COUNTY DE PERMITTING SERVICES APP	NEGATE	APPROVAL D THE NEED F ACCESS PER	OR A					
STORMWATER MANAGEMENT	SEDIMENT CONTROL	. TECHNICAL REQUIRE	EMENTS	ADMIN	ISTRATIVE RE	QUIREMENTS		
	Reviewed	Date		Reviewed	TBD	Date		
Reviewed Date	Approved	Date					_	
Approved Date S.M. FILE NO.				MCDPS APPROVAL THE DATE OF APP		OJECT HAS NO	T STARTE	
S.M. FILE NO.				UNECSS	IIIC I CIMIT HAS	DECIN EXTENDED		

REBECCA PARK, P.E. 240-777-7263

OWNER/ADDRESS: MONTGOMERY COUNTY

DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE. 4TH FLOOR

GAITHERSBURG, MD 20878

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

	Strucutural Provided N/A					S.M. FILE NO.		MCDPS APPROVAL OF THIS PLAN WIL THE DATE OF APPROVAL IF THE PR UNLESS THE PERMIT HAS	OJECT HAS NOT STARTED
				MONTGOMER DEPARTMENT OF GAITHERSBURG	TRANSPO	RTATION	TI-	01 TITLE SHEET	
				Chief, Transportation Planning and Design Section APPROVED	ion	Date		YDS TRANSIT PROVEMENTS	
				Chief, Division of Transportation Engineering		Date	SCALE : NTS		APRIL 202
NO.	REVISION	DATE	BY	Designed by: <u>PHD</u> Drawn by:	AMU	Checked by: <u>JAG</u>	Project No. : <u>509337</u>	SHEET <u>1</u>	of18

INDEX OF SHEETS

SHEET NO.	SC/SWM NO.	DRAWING DESCRIPTION
1	1	TITLE SHEET
2	2	INDEX OF SHEETS, LEGEND, AND ABBREVIATIONS
3		GS-01 - GEOMETRIC LAYOUT SHEET
4	3	HT-01 - TYPICAL SECTIONS
5	4	HT-02 - TYPICAL SECTIONS
6	5	HT-03 - TYPICAL SECTIONS
7		PD-01 - PAVEMENT DETAILS
8	6	HD-01 - ROADWAY PLAN
9		CL-01 - CURB LAYOUT
10		HP-01 - ROADWAY PROFILE
11		HP-02 - ROADWAY PROFILE
12	7	GR-01 - SITE GRADING PLAN
13		TCP-A - TRAFFIC CONTROL PLAN GENERAL NOTES
14		TCP-01 - TRAFFIC CONTROL PLAN
15		SN-2.01 - SIGNING AND MARKING PLAN
16	8	FI-01 - FOREST IMPACT PLAN
17	9	LD-01 - LANDSCAPE PLANS
18	10	LD-02 - LANDSCAPE DETAILS

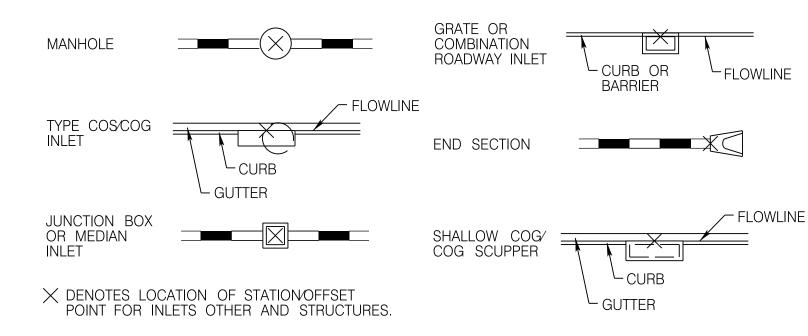
LEGEND

\overline{T}	TELEPHONE MANHOLE		
			EXISTING W-BEAM
(WM)	WATER METER	<u> </u>	PROPOSED W-BEAM
\bowtie	WATER VALVE	WB	WETLAND BUFFER
SS	SEWER MANHOLE	<u>\</u>	
(D)	STORM DRAIN MANHOLE	Silve	WETLAND
	GAS VALVE	– x – — x –	PROPOSED FENCE
(c) (c)		-x x	EXISTING CHAINLINK FENCE
⊙ . I .	SIGN		INDEX CONTOUR
*	LIGHT POLE	— — 300 — -	INTERVAL CONTOUR
Ø	UTILITY POLE		
\searrow	FIRE HYDRANT	— — С — —	TOP OF CUT
	PARKING METER	⊢— F —— ⊣	TOE OF FILL
			EXISTING RIGHT OF WAY LINE
	TREE	—— LOD ——	LIMIT OF DISTURBANCE
	BORING		
	INLET	———TCE <i>—</i> —	TEMPORARY CONSTRUCTION EASEMEN
(MH)	MANHOLE	— — PE — —	PERPETUAL EASEMENT
\sim			

ABBREVIATIONS

A.S.H.T.O	American Association of State Highway	LP	Low Point
	Transportation Officials	LT	Left
PPROX	Approximate	MAX	Maximum.
or B/L	Baseline	MOD	
C.C	Center of Curve	MIN	
or C/L	Centerline	N	
	Cast Iron Pipe		Northbound
.м.Р	Corrugated Metal Pipe	NE	
.0	Corrugated Metal Pipe, Smooth Interior	NTS	Not To Scale
OMB	Cleanout	O.C	On Center
ONC	Combination	P.C	Point of Curvature
ONSTR	Concrete	P.C.C.	Point of Compound Curve
	Construction	P/C	Point of Crown
	Corrugated Polyethylene Pipe	P/GF	Profile Grade Elevation
.В.Н.	Diameter Breast Height	P.G.F.	Profile Ground Elevation
C	Degree of Curve	P G I	Profile Grade Line
H V	Design Hourly Volume		Profile Ground Line
	Drop Inlet	P/R	Point of Rotation
IA	Diameter	P I	Point of Intersection
,, (,	Double Opening		Point on Curve
·····	Fast		Point on Tangent.
	Flectric	PPWP	Polyvinyl Chloride Profile Wall Pip
	Electric External Distance	PROP	Proposed
A	Fach	PT	Point
	Eastbound.		Point of Tangency
LEV	Flevation	PVC	Point of Vertical Curve
	Elliptical Reinforced Cement		Polyvinyl Chloride
.11.0.0.1	Concrete Pine	D\/I	Point of Intersection
S	Concrete Pipe End Section	R	Radius
X. or EXIST.	Evicting	PFT \ΜΛΙΙ	Rotainina Wall
r. or exist. [Faat	PT /	Retaining Wall Right
or FL		PW or P W	Right of Way
WD			Reinforced Cement Pipe
····			Reinforced Cement Tipe Reinforced Cement Concrete Pipe
	Gas Horizontal Elliptical Reinforced	S	
.L.I\.C.F ,	Concrete Pine		South Superpave Asphalt Mix
D	Concrete Pipe High Point	SAIVI	Southbound
Γ Ν <i>Ι</i> Λ	Tilgii Foliit		Southbound Storm Drain
	Hot Mix Asphalt		
T			Superelevation
\ \			Silt Fence
1V		۵,۲, ٥٥	Square Feet
VVIDC∪	Length Landscaped	33	Sanitary Sewer
4ND2C	Lanascapea Linear Feet	33D	Stopping Sight Distance Super Silt Fence
	ιπωπ Εσσι	 	SUDAR SIII FANCA

DRAINAGE STRUCTURE STAKEOUT LOCATION



T.C DENOTES TOP OF COVER

T.G DENOTES TOP OF GRATE

DRAINAGE BUBBLES (SAMPLES)

1 MH 1 INLET MANHOLE JUNCTION BOX FIELD CONNECTION BEND ES 1 EW 1 END SECTION END WALL ADJUST EX. STRUCTURE

MCDPS_SC/SWM_SHFFT_NO_2_OF_10

...Station _

Sidewalk

Telephone

Tangent

₋Typical ..Útiٰlity Pole

..Variés

₋Water

...Westbound

_ West

Single Opening
Square Yards

..Terra Cotta Pipe

..Vertical Curve Length

Stormwater Management

				MCDF	-3-3C/3WW .	SHEET NO. Z	Or	10
	ERY COUNTY DE G SERVICES APF	NEGATE T	PPROVAL DOES NOT HE NEED FOR A CCESS PERMIT.					
STORMWA	ATER MANAGEMENT	SEDIMENT CONTROL TECHNICAL REQUIREMENTS		ADMINISTRATIVE REQUIREMENTS				
<u>ESDS A</u>	ND WAIVERS							
		Reviewed	Date		Reviewed	Date XXXXX		
Reviewed	Date	Approved	Date			ENT CONTROL PERMIT NO.	_	
	Dote XXXXX .M. FILE NO.				THE DATE OF APPR	F THIS PLAN WILL EXPIRE TWO OVAL IF THE PROJECT HAS NO HE PERMIT HAS BEEN EXTENDED	STARTE	

AGEMENT PLAN IS FOR DEMONSTRATED COMPLIANCE WITH MINIMUM ENVIRONMENTAL RUNOFF TREATMEN' IVERT OR CONCENTRATE RUNOFF ONTO ANY ADJACENT PROPERTY WITHOUT THAT PROPERTY OWNER'S DITHER RESPONSIBLE PERSON OF PROFESSIONAL LIABILITY OR ETHICAL RESPONSIBILITY FOR THE DOWNHILL PROPERTIES

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



				DPS APPROVAL OF A SEDIMENT CONTROL OR STORMWA' STANDARDS AND DOES NOT CREATE OR IMPLY ANY RIGI PERMISSION. IT DOES NOT RELIEVE THE DESIGN ENGINE ADEQUACY OF THE DRAINAGE DESIGN AS IT AFFECTS UP	TER MANAGEMENT PLAN IS FOR DEMO HT TO DIVERT OR CONCENTRATE RUN ER OR OTHER RESPONSIBLE PERSON PHILL OR DOWNHILL PROPERTIES
				MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND	INDE
				RECOMMENDED FOR APPROVAL	
				Chief, Transportation Planning and Design Section Date APPROVED	[
				Chief, Division of Transportation Engineering Date	SCALE : NTS
)	REVISION	DATE	BY	Designed by: <u>PHD</u> Drawn by: <u>JDG</u> Checked by: <u>JAG</u>	Project No. : <u>509337</u>

BOYDS TRANSIT

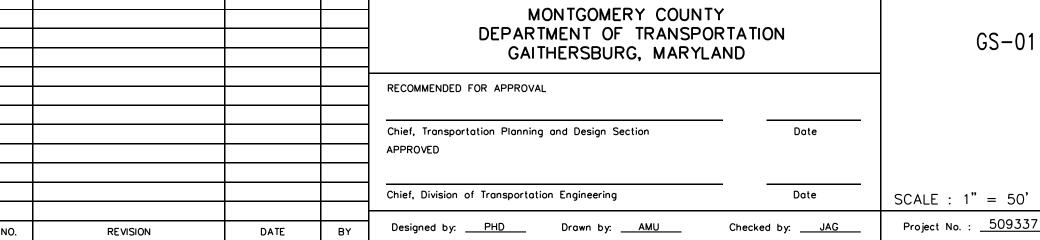
IMPROVEMENTS

INDEX OF SHEETS, LEGEND, AND ABBREVIATIONS

> APRIL 2020 SHEET <u>2</u> of <u>18</u>

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





BOYDS TRANSIT

IMPROVEMENTS

APRIL 2020

SHEET _____3 of ____18

GS-01 GEOMETRIC LAYOUT SHEET

1. HORIZONTAL DATUM: NAD 83(1991) VERTICAL DATUM: NAV 88.

SURVEY CONTROL							
TRAVERSE	NORTH	EAST	ELEVATION				
MER100	552,913.78	1,223,769.59	401.84				
MER101	553,004.33	1,223,277.12	429.05				
MER150	552,912.07	1,223,526.45	418.17				
MER151	552,820.98	1,223,484.05	422.28				
MER152	552,937.51	1,223,419.19	431.62				
MER153	552,935.49	1,223,334.61	429.90				
MER154	552,884.43	1,223,244.72	423.98				
KCI#1/700	552,988.68	1,223,712.71	404.68				
KCI#5/712	552,788.42	1,223,486.78	421.22				
KCI#6/701	552,913.13	1,223,578.80	413.62				

POINT	CURVE DESCRIPTION		NORTH	EAST					
	₽ CONSTRUCTION MD 117 (BARNESVILLE ROAD)								
1		POT STA. 10+00.00	553,123.9829	1,223,161.3159					
2	BARNESVILLE-1	PC STA. 10+68.01	553,077.3405	1,223,210.8094					
3	BARNESVILLE-1	PI STA. 11+82.61	552,998.7409	1,223,294.2136					
4	BARNESVILLE-1	PT STA. 12+89.91	552,982.8228	1,223,407.7071					
5		POT STA. 16+30.76	552,935.4801	1,223,745.2524					
	B CONSTRUCTION TRANSIT CENTER DRIVEWAY								
6		POT STA. 20+00.00	552,943.4629	1,223,249.3491					
7		POE STA. 20+87.62	553,023.6482	1,223,284.6696					
		₽ CONSTRUCTION BUS	S EXIT						
8		POT STA. 29+50.00	552,855.1202	1,223,385.5559					
1 -									

POE STA. 30+80.77 552,980.9217 1,223,421.2615

CONSTRUCTION CONTROL COORDINATES									
POINT	CURVE	DESCRIPTION	NORTH	EAST					
₽ CONSTRUCTION MD 117 (BARNESVILLE ROAD)									
1		POT STA. 10+00.00	553,123.9829	1,223,161.3159					
2	BARNESVILLE-1	PC STA. 10+68.01	553,077.3405	1,223,210.8094					
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5		POT STA. 16+30.76	552,935.4801	1,223,745.2524					
	B CONSTRUCTION TRANSIT CENTER DRIVEWAY								
6		POT STA. 20+00.00	552,943.4629	1,223,249.349					
7		POF STA 20+87.62	553 023 6482	1 223 284 6696					

POINT	CURVE	DESCRIPTION	NORTH	EAST			
	₽ CONSTRUCTION MD 117 (BARNESVILLE ROAD)						
1		POT STA. 10+00.00	553,123.9829	1,223,161.3159			
2	BARNESVILLE-1	PC STA. 10+68.01	553,077.3405	1,223,210.8094			
3	BARNESVILLE-1	PI STA. 11+82.61	552,998.7409	1,223,294.2136			
4	BARNESVILLE-1	PT STA. 12+89.91	552,982.8228	1,223,407.7071			
5		POT STA. 16+30.76	552,935.4801	1,223,745.2524			
	₽ CONS	BE CONSTRUCTION TRANSIT CENTER DRIVEWAY					
6		POT STA. 20+00.00	552,943.4629	1,223,249.3491			

BARNESVILLE-A

POE 20+87.62 TRANSIT CENTER DRIVEWAY = POC 11+59.57 BARNESVILLE

₽ OF CONSTRUCTION TRANSIT CENTER DRIVEWAY —

	LEGEND
Х-А	HORTIZONTAL LINE ID NUMBER
X-1	HORTIZONTAL CURVE ID NUMBER

-- B OF CONSTRUCTION BARNESVILLE ROAD

LIMIT OF WORK BARNESVILLE ROAD STA. II+37

0 12+00

MERIOI

MERI54 $_{oldsymbol{\Delta}}$

POT 20+00.00

-BARNESVILLE-1

MERI53_▲

POT 29+50.00

POE 30+80.77 BUS EXIT=

MD 117 (BARNESVILLE ROAD)

701<u>∆</u> kci#6

BARNESVILLE-B-

14+00 582° 00′57.66″E 15+00

- B OF CONSTRUCTION

BUS EXIT

700**△** kci#i

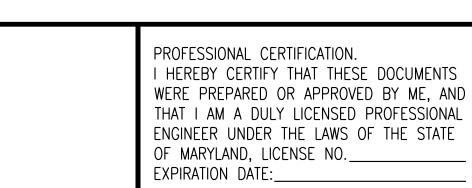
16+00 16+31

LIMIT OF WORK BARNESVILLE ROAD STA. 15+73

CURVE DATA									
CURVE	DELTA	Dc	R	L	Т	Е	PI NORTH	PI EAST	
BARNESVILLE-1 35°	19'02.24" LT	15°54' 55.78"	360.00'	221.91	114.60'	17.80'	552,998.74	1,223,294.21	

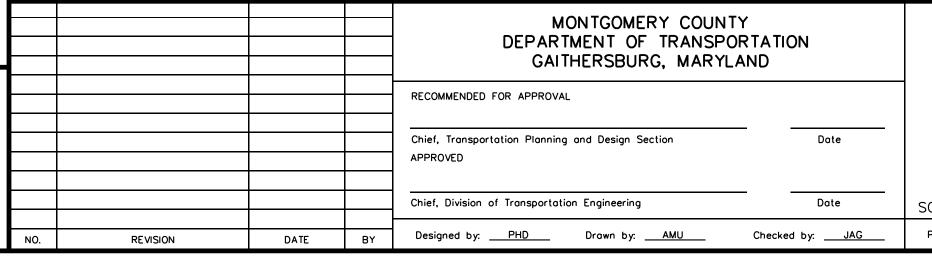
LINE DATA						
LINE	LENGTH	BEARING				
BARNESVILLE-A	68.00'	S 46° 41' 55.42" E				
BARNESVILLE-B	340.85	S 82° 00' 57.66" E				
TRANSIT CENTER DRIVEWAY	87.62'	N 23° 46' 22.21" E				
BUS EXIT	80.77	N 15° 50' 42.91" E				







EXISTING GROUND -



HT-01 TYPICAL SECTIONS

BOYDS TRANSIT **IMPROVEMENTS**

FOR SLOPES 2:1, PLACE 2" TOPSOIL, TURFGRASS ESTABLISHMENT AND TYPE A SSM, UNLESS OTHERWISE NOTED. FOR SLOPES FLATTER THAN 2:1, PLACE 4" TOPSOIL AND TURGRASS ESTABLISHMENT, UNLESS OTHERWISE NOTED. 2. SEE ROADWAY PLANS FOR LIMITS OF CURB AND GUTTER

NOTES:
1. SLOPE TREATMENT:

- 1'-4" GUTTER PAN B CONSTRUCTION TRANSIT CENTER DRIVEWAY — -0'-8" CURB 22'-8" 14' SHARED USE PATH BUS/PASSENGER CAR PASSENGER SEE SECTION A-A ENTRANCE LANE CAR EXIT ON DWG. HT-02 LANE MATCH EXISTING — EXISTING GROUND --SEE PAVEMENT DETAIL 'A' ON DRAWING PD-01 - STANDARD COMBINATION CONCRETE CURB LIMIT OF CLASS 1 EXCAVATION AND GUTTER, TYPE A, SEE STANDARD AND TOP OF SUBGRADE NO. MC-100.01 (TYP.) TRANSIT CENTER DRIVEWAY

STA. 20+45 TO STA. 20+76

- LIMIT OF CLASS 1 EXCAVATION AND TOP OF SUBGRADE

VAR.

LANE

CAR EXIT

TRANSIT CENTER DRIVEWAY, P.G.E., P/GL BUS LOOP TYPICAL SECTION_

₽ CONSTRUCTION

- 1'-4" GUTTER PAN

22'-8" BUS/PASSENGER CAR PASSENGER ÉNTRANCE LANE

EXISTING GROUND -

31'

_ 0'-8" CURB

EX RIGHT OF WAY

5" CONCRETE SIDEWALK, SEE

STANDARD MC-111.01

STANDARD COMBINATION CONCRETE CURB

AND GUTTER, TYPE A, SEE STANDARD

SEE PAVEMENT DETAIL 'A' ON DRAWING PD-01

NO. MC-100.01 (TYP.) TRANSIT CENTER DRIVEWAY STA. 20+00 TO STA. 20+45 EX RIGHT

OF WAY BOYDS COUNTRY STORE DRIVEWAY VARIES 31'-57'

Charles and the second of the - STANDARD COMBINATION CONCRETE CURB LIMIT OF CLASS 1 EXCAVATION AND GUTTER, TYPE A, SEE STANDARD AND TOP OF SUBGRADE NO. MC-100.01 (TYP.) SEE PAVEMENT DETAIL 'A' ON DRAWING PD-01 **BUS EXIT** STA. 30+00 TO STA. 30+44 B CONSTRUCTION BUS EXIT, P.G.E., P/GL 1'-4" GUTTER PAN ¬ ┌ 1'-4" GUTTER PAN

19' - 22'

BUS EXIT LANE

BUS LOOP TYPICAL SECTION

0'-8" CURB-

SHARED USE PATH

SEE PAVEMENT DETAIL 'A'

ON DRAWING PD-01

EXISTING GROUND -

-B CONSTRUCTION BUS EXIT,

┌ 1'-4" GUTTER PAN

_ 0'-8" CURB

/ PARKING LOT LANDSCAPED ISLAND

SEE SECTION B-B

ON DWG. HT-02

_ 0'-8" CURB

SHARED USE PATH

SEE SECTION B-B

STANDARD COMBINATION CONCRETE CURB

AND GUTTER, TYPE A, SEE STANDARD

NO. MC-100.01 (TYP.)

ON DWG. HT-02

P.G.E., P/GL

The same and the s

28'

BUS EXIT LANE

LIMIT OF CLASS 1 EXCAVATION AND TOP OF SUBGRADE -

BUS EXIT STA. 30+44 TO STA. 30+64

SCALE : 1" = 10'Project No. : 509337

SHEET <u>4</u> of <u>18</u>

APRIL 2020

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



MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND RECOMMENDED FOR APPROVAL Chief, Transportation Planning and Design Section Chief, Division of Transportation Engineering Designed by: PHD Drawn by: AMU Checked by: ____JAG___

EX RIGHT OF WAY

> BOYDS TRANSIT **IMPROVEMENTS**

HT-02 TYPICAL SECTIONS

┌ 0'-8" CURB

EXIT

LANE

LIMIT OF CLASS 1 EXCAVATION

0'-8" CURB¬

PARKING LANES

LIMIT OF CLASS 1 EXCAVATION

AND TOP OF SUBGRADE

SECTION B-B PARKING LOT TYPICAL SECTION SEE HD-01 FOR SECTION LOCATION

1'-4" GUTTER PAN ¬

AND TOP OF SUBGRADE

SEE BARNESVILLE ROAD TYPICAL SECTIONS

10' SHARED

USE PATH

_ 0'-8" CURB

┌ 1'-4" GUTTER PAN

THRU LANE

EXISTING GROUND -

EX RIGHT

OF WAY

SEE BARNESVILLE ROAD
TYPICAL SECTIONS

10' SHARED

USE PATH

STANDARD COMBINATION CONCRETE CURB

AND GUTTER, TYPE A, SEE STANDARD

NO. MC-100.01 (TYP.)

┌ 1'-4" GUTTER PAN

PASS. CAR PASS. CAR

ENTRANCE

<u>VAR</u>.

Constitution of the second of

SEE PAVEMENT DETAIL 'A'
ON DRAWING PD-01 -

SECTION A-A BUS LOOP TYPICAL SECTION SEE HD-01 FOR SECTION LOCATION

┌ 1'-4" GUTTER PAN

_ 0'-8" CURB

MIN

SIDEWALK

LOADING

LANE

15'

LANDSCAPED

ISLAND

45'±

EXISTING BUILDING

(TO REMAIN)

-5" CONCRETE SIDEWALK,

NO. MC-100.01 (TYP.)

_ 0'-8" CURB 1'-4" GUTTER PAN ¬\

┌ 1'-4" GUTTER PAN

THRU LANE

- SEE PAVEMENT DETAIL 'D'

ON DRAWING PD-01

SEE STANDARD NO. MC-111.01

- STANDARD COMBINATION CONCRETE CURB AND GUTTER, TYPE A, SEE STANDARD

0'-8" CURB $\sqrt{7'-12'\pm}$

LIMIT OF CLASS 1 EXCAVATION

AND TOP OF SUBGRADE

PARKING LANES

EX RIGHT

OF WAY

-SEE PAVEMENT DETAIL 'D'

ON DRAWING PD-01

EXISTING GROUND

VARIES

SCALE : 1" = 10'

NOTES: 1. SLOPE TREATMENT: FOR SLOPES 2:1, PLACE 2" TOPSOIL, TURFGRASS ESTABLISHMENT AND TYPE A SSM, UNLESS OTHERWISE NOTED.

FOR SLOPES FLATTER THAN 2:1, PLACE 4" TOPSOIL AND TURGRASS ESTABLISHMENT, UNLESS OTHERWISE NOTED.

2. SEE ROADWAY PLANS FOR LIMITS OF CURB AND GUTTER

3. SEE DWG HD-01 FOR SECTION LOCATIONS.

Project No. : <u>509337</u>

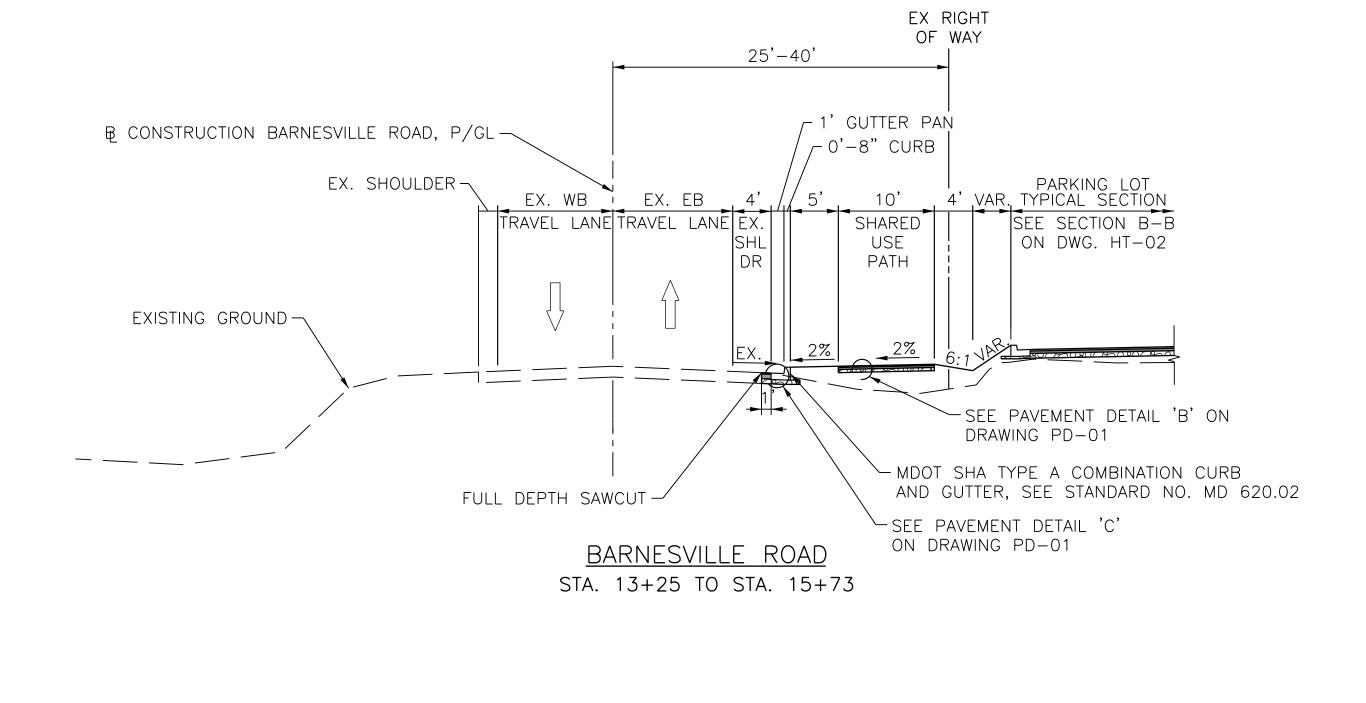
SHEET <u>5</u> of <u>18</u>

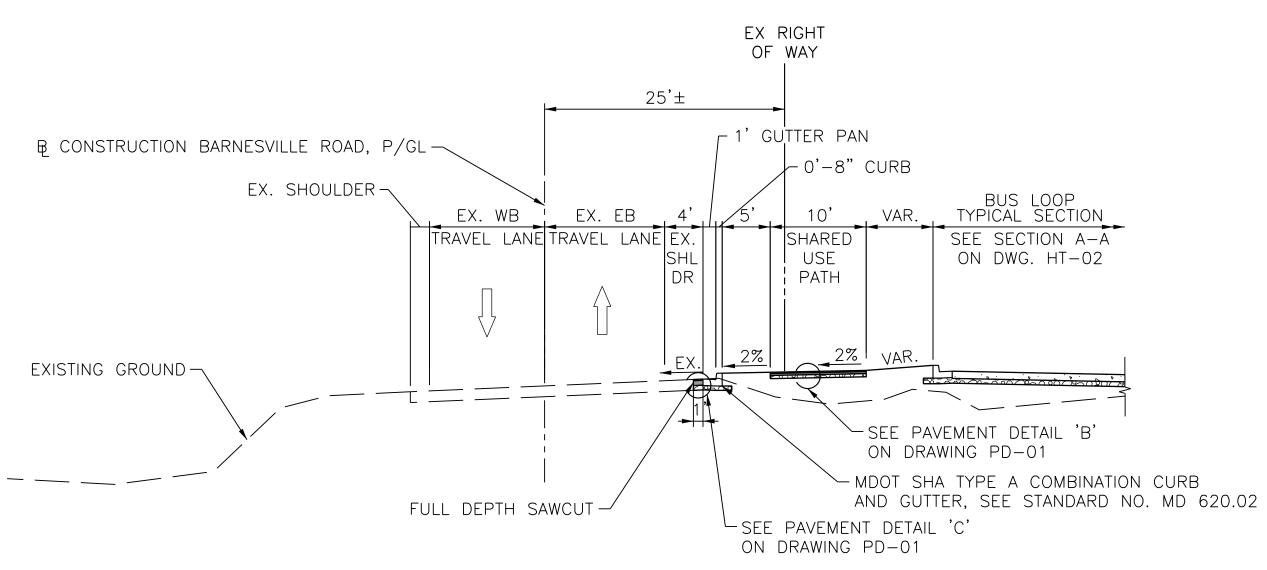
APRIL 2020

PROFESSIONAL CERTIFICATION.

OF MARYLAND, LICENSE NO.__

EXPIRATION DATE:_





BARNESVILLE ROAD STA. 11+88 TO STA. 12+75

NOTES: 1. SLOPE TREATMENT: FOR SLOPES 2:1, PLACE 2" TOPSOIL, TURFGRASS ESTABLISHMENT AND TYPE A SSM, UNLESS OTHERWISE NOTED.
FOR SLOPES FLATTER THAN 2:1, PLACE 4" TOPSOIL AND TURGRASS ESTABLISHMENT, UNLESS OTHERWISE NOTED.

2. SEE ROADWAY PLANS FOR LIMITS OF CURB AND GUTTER

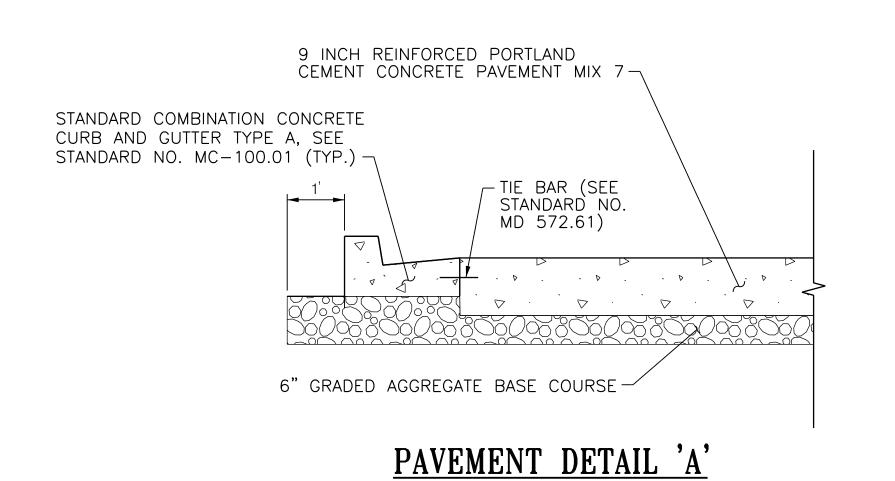
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE Whitman, Requardt & Associates, LLP 801 South Caroline Street, Baltimore, Maryland 21231

				MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND				
				RECOMMENDED FOR APPROVAL				
				Chief, Transportation Planning and Design Section Do	ote			
				Chief, Division of Transportation Engineering Da	ote			
NO.	REVISION	DATE	BY	Designed by: <u>PHD</u> Drawn by: <u>AMU</u> Checked by: _	JAG			

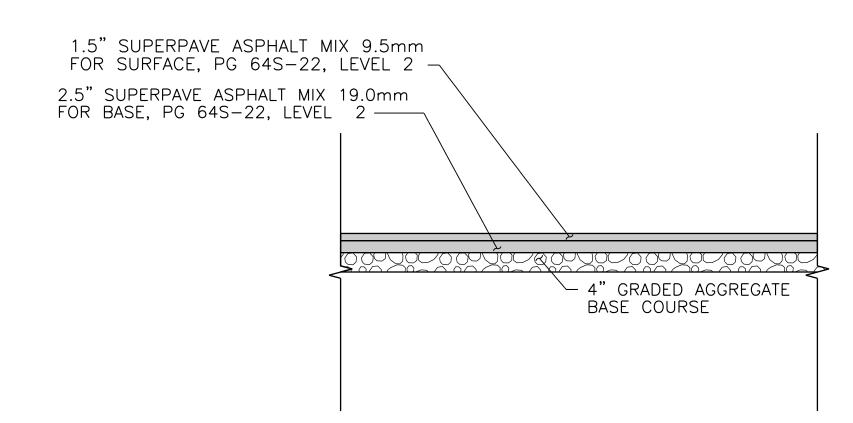
HT-03 TYPICAL SECTIONS

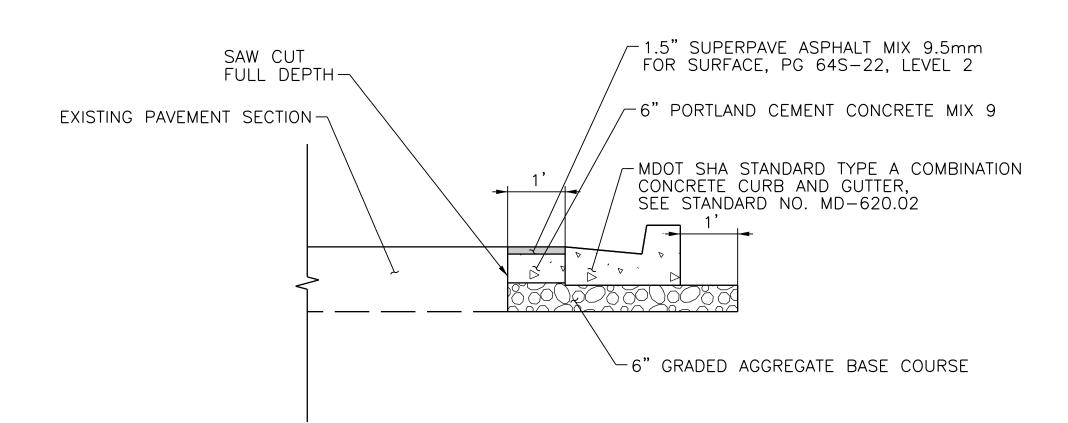
BOYDS TRANSIT **IMPROVEMENTS**

SCALE: 1" = 10'APRIL 2020 Project No. : 509337 SHEET <u>6</u> of <u>18</u>



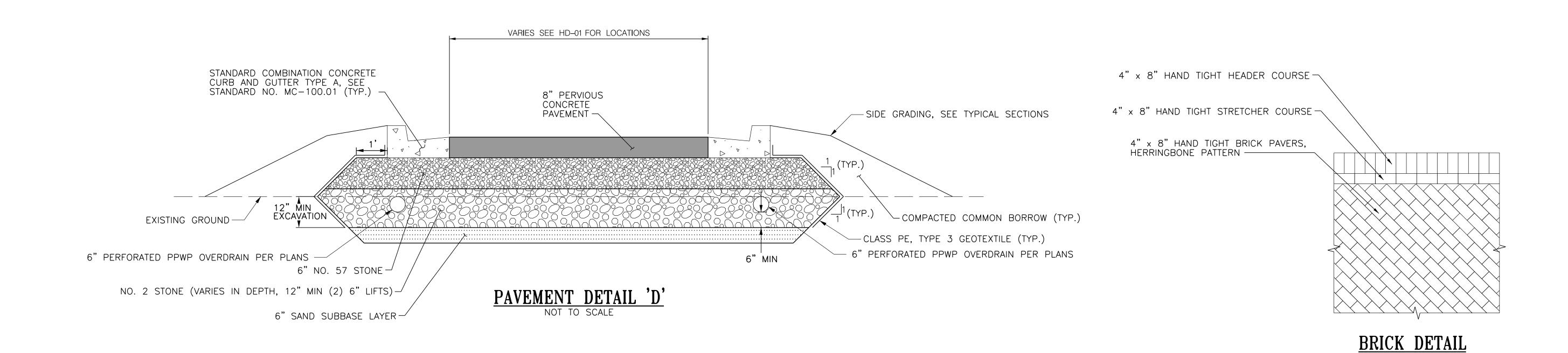
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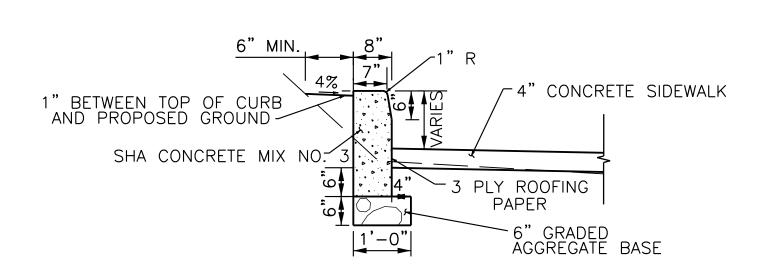




PAVEMENT DETAIL 'B'

PAVEMENT DETAIL 'C'





MODIFIED CONCRETE CURB TYPE D DETAIL *SEE DWG HD-01 FOR PROPOSED CURB HEIGHTS

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EXPIRATION DATE:



				MONTGOMERY COUNTY		
				DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND		
				RECOMMENDED FOR APPROVAL		
				Chief, Transportation Planning and Design Section	Date	
				APPROVED		
				Chief, Division of Transportation Engineering	Date	SCALE
NO.	REVISION	DATE	BY	Designed by: PHD Drown by: AMU Checked by:	JAG	Projec

PD-01 PAVEMENT DETAILS

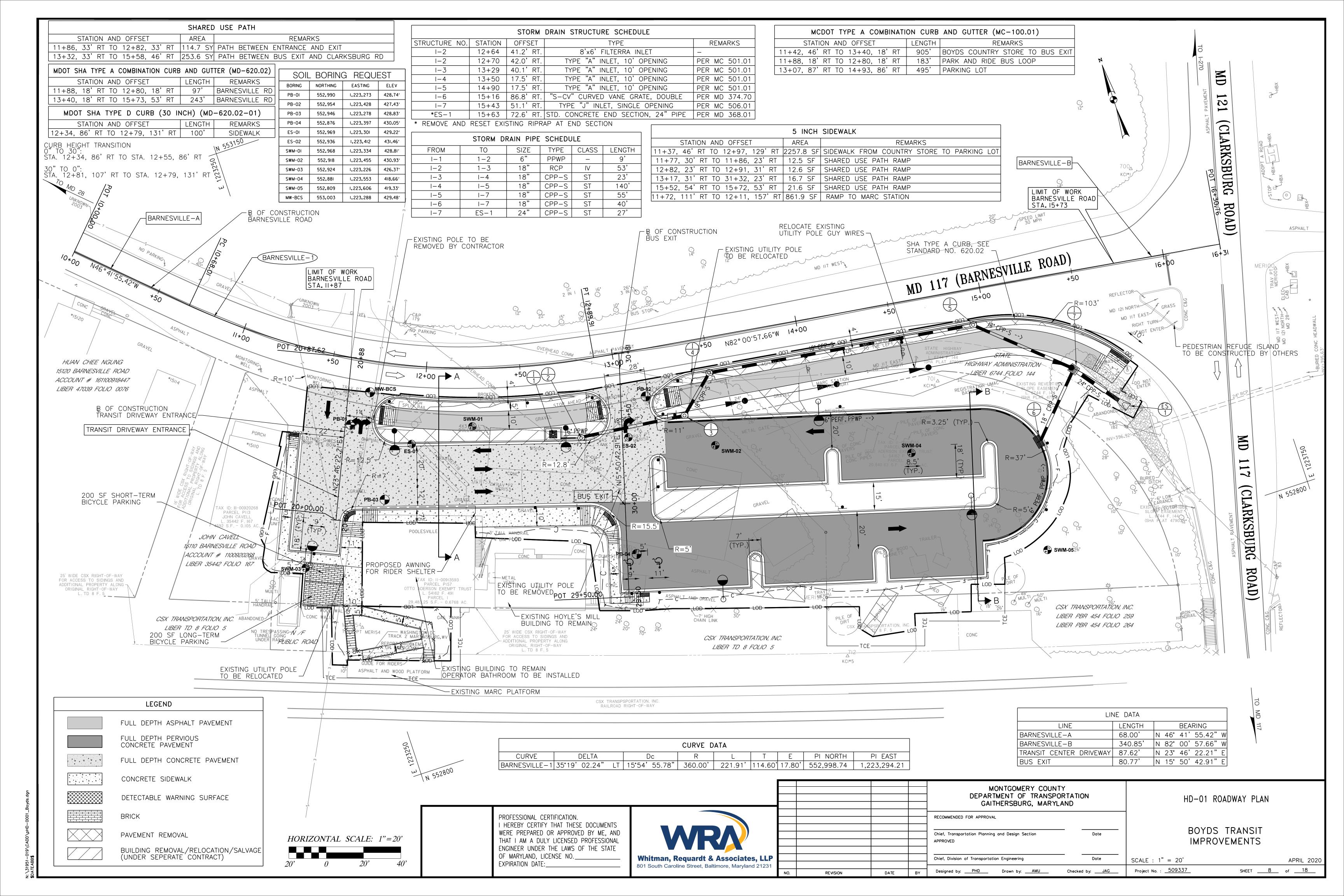
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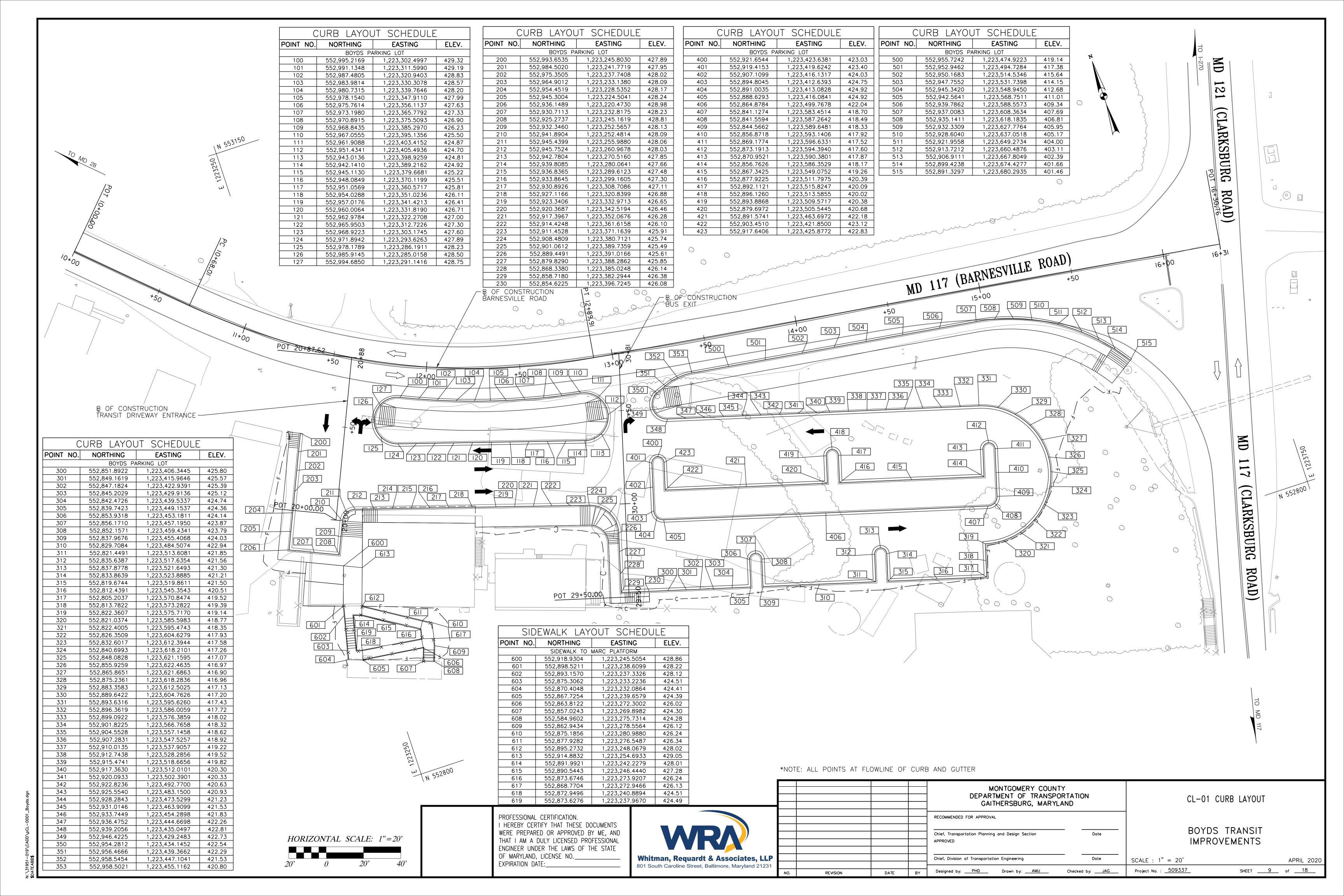
SEE HD-01 FOR LOCATIONS

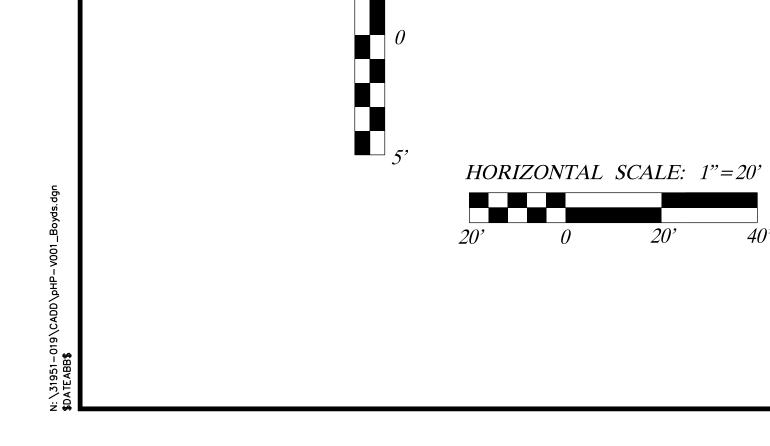
FOR INSTALLATION DETAILS, SEE STANDARD NO. MC-111.02

BOYDS TRANSIT IMPROVEMENTS

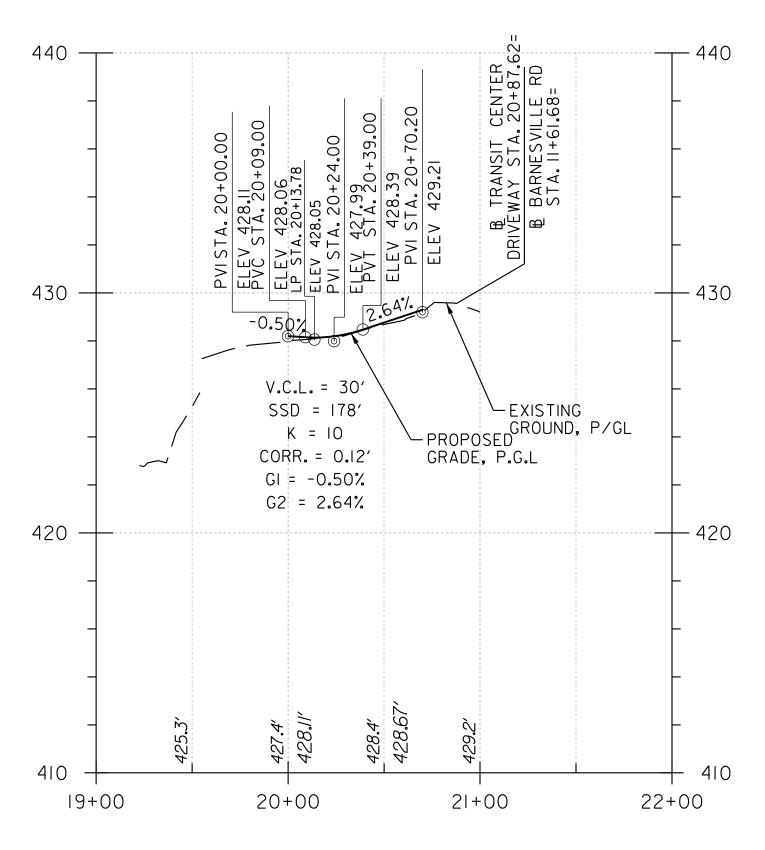
ALE: 1" = 10' APRIL 2020 oject No.: 509337 SHEET 7 of 18





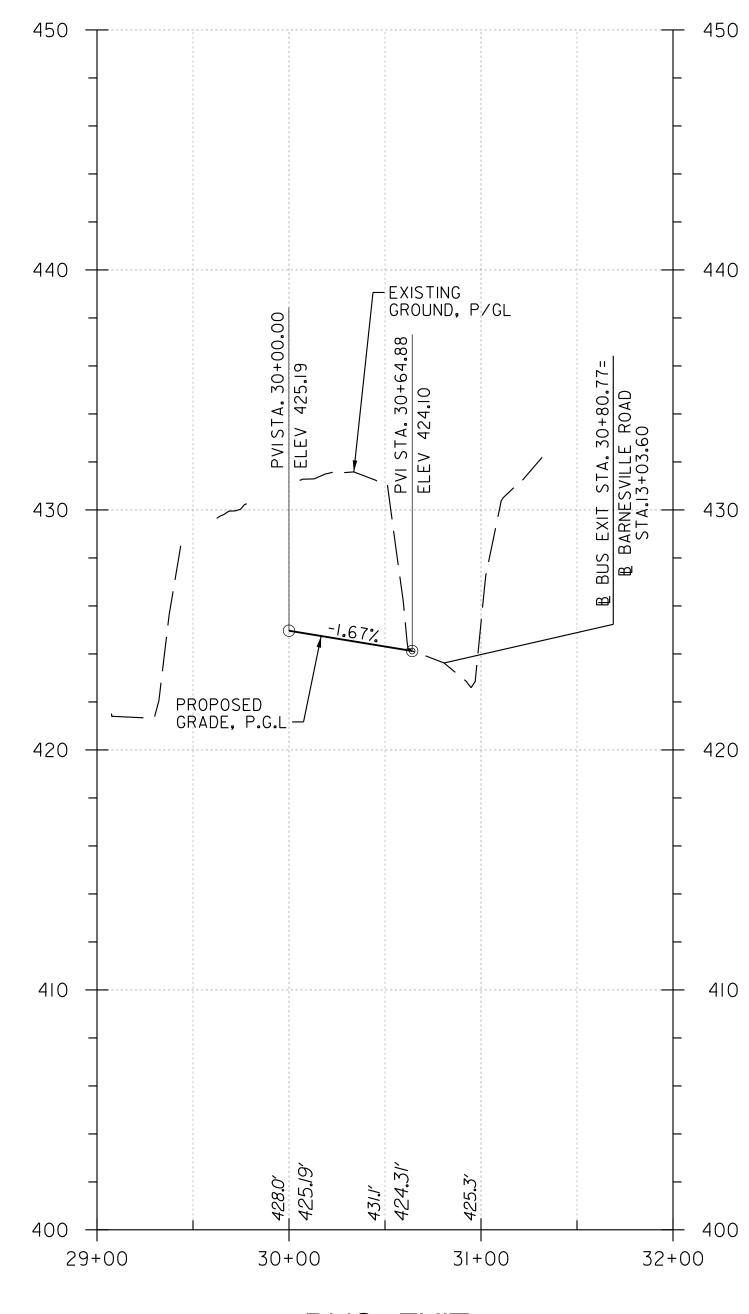


VERTICAL SCALE: 1"=5"





EXPIRATION DATE:_



BUS EXIT

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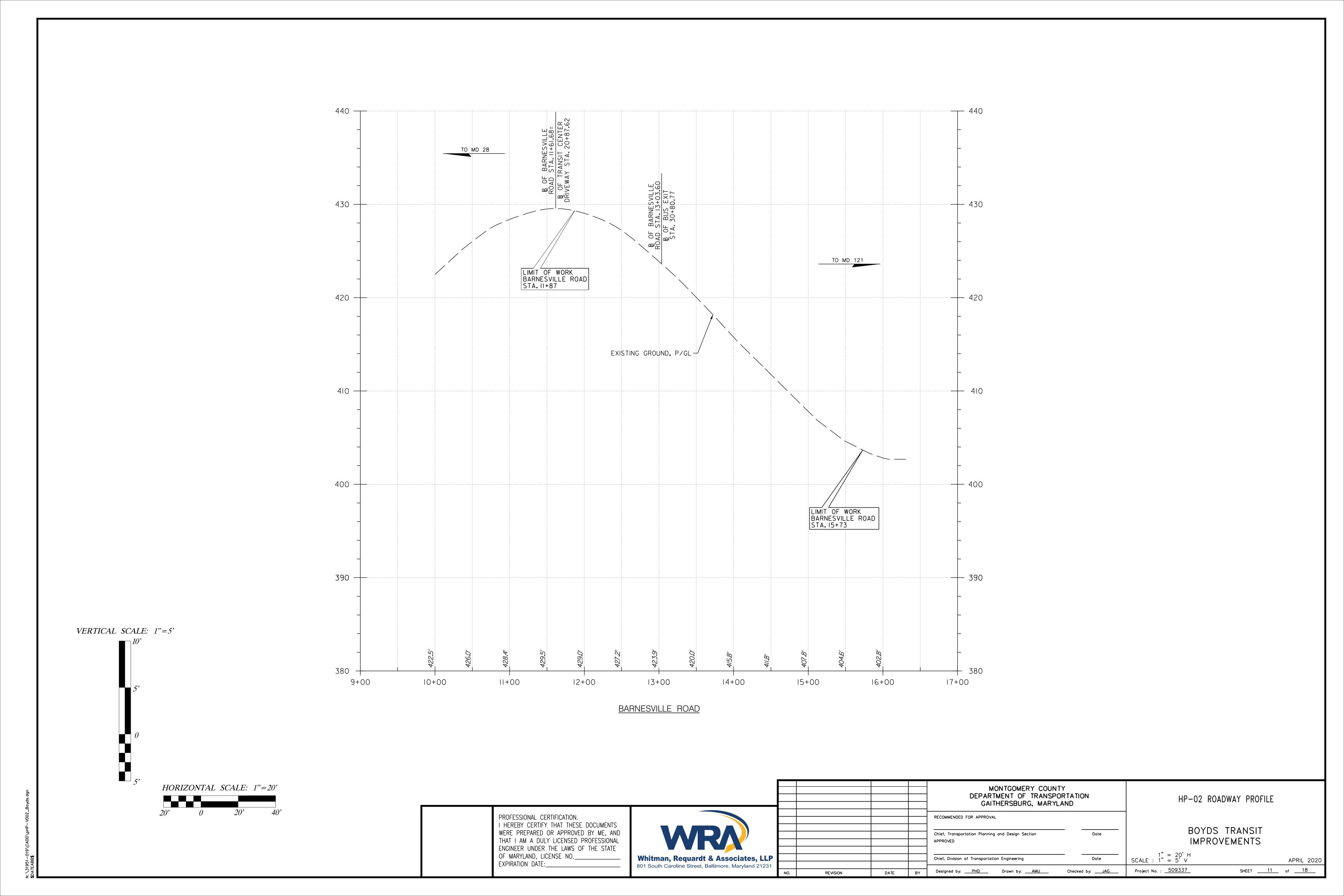
MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
GAITHERSBURG, MARYLAND RECOMMENDED FOR APPROVAL Chief, Transportation Planning and Design Section Date Chief, Division of Transportation Engineering Designed by: PHD Drawn by: AMU Checked by: _____JAG____

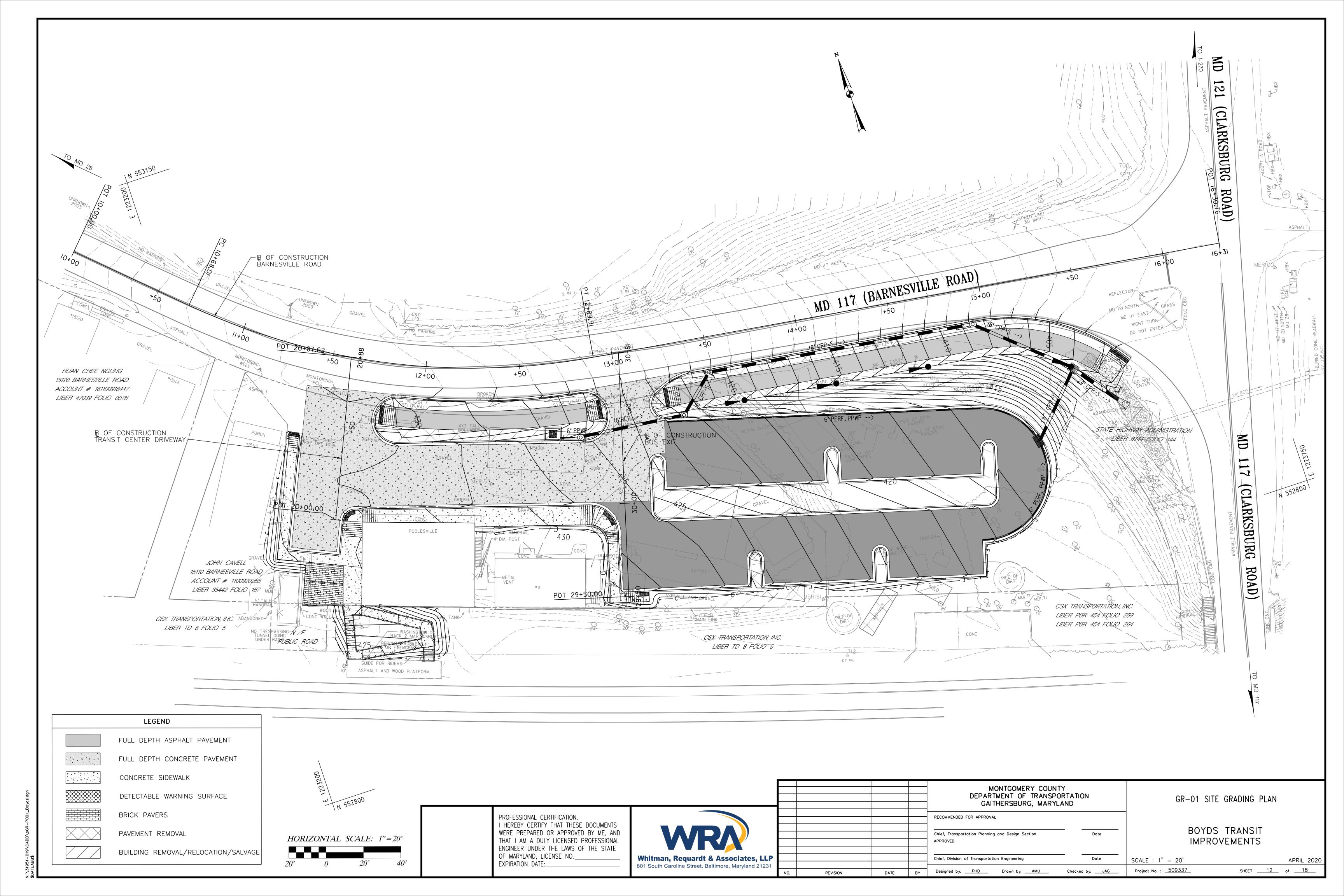
HP-01 ROADWAY PROFILE

BOYDS TRANSIT **IMPROVEMENTS**

1" = 20' H SCALE : 1" = 5' V APRIL 2020 SHEET <u>10</u> of <u>18</u>

Whitman, Requardt & Associates, LLP 801 South Caroline Street, Baltimore, Maryland 21231





TEMPORARY TRAFFIC CONTROL REQUIREMENTS

- I. THE PERMITTEE SHALL REFER TO THE ATTACHED TEMPORARY TRAFFIC CONTROL PLAN (TTCP) DRAWINGS TO SELECT THE APPROPRIATE WORK ZONE TEMPORARY TRAFFIC CONTROLS FOR EACH PHASE OF CONSTRUCTION. WORK ZONE SITUATIONS WHICH ARE NOT ADDRESSED IN THE ATTACHED TTCP SHALL CONFORM TO THE GUIDELINES SET FORTH IN THE MARYLAND MANUAL ON TRAFFIC CONTROL DEVICES, MOST RECENT EDITION, AND MARYLAND BOOK OF STANDARDS FOR HIGHWAYS, INCIDENTAL STRUCTURES, & TRAFFIC CONTROL APPLICATIONS.
- 2. ANY WORK WITHIN THE TRAVELED PORTION OF ROADWAYS SHALL BE RESTRICTED TO THE HOURS OF 9:00 AM TO 3:00 PM. MONDAY THROUGH FRIDAY. WORK ON HOLIDAYS AND WEEKENDS SHALL NOT OCCUR UNLESS AN EXCEPTION IS GRANTED IN WRITING BY THE COUNTY'S DOT INSPECTOR. REFER TO SP 104-01 FOR DETAILS ON LANE CLOSURE TIMINGS.
- 3. CONSTRUCTION ACTIVITY. LOADING OR UNLOADING OF EQUIPMENT SHALL NOT BLOCK ANY TRAFFIC LANE OTHER THAN THOSE DELINEATED WITHIN THE WORK 70NE.
- 4. EXCLUSIVE OF EMERGENCY WORK, THE PERMITTEE SHALL CONTACT OCCUPANTS OF ALL ADJOINING PROPERTIES AND INFORM THEM OF THE SCOPE AND THE TIMING OF CONSTRUCTION. A MINIMUM OF 48 HOURS NOTIFICATION SHALL BE REQUIRED PRIOR TO THE COMMENCEMENT OF ANY ACTIVITY ON THE SITE.
- 5. ACCESS SHALL BE MAINTAINED TO ALL DRIVEWAYS UNLESS PERMISSION FOR CLOSURE IS GRANTED BY THE PROPERTY OWNER/MANAGER. HOWEVER, ACCESSIBILITY FOR EMERGENCY VEHICLES SHALL BE MAINTAINED AT ALL TIMES.
- 6. IF ANY TRAFFIC CONTROL SIGNS ARE TO BE PLACED ALONG A MDOT SHA ROADWAY OR WITHIN THE LIMITS OF AN INCORPORATED AREA. THE PERMITTEE SHALL NOTIFY THE APPROPRIATE AGENCY OF SIGNAGE TO BE INSTALLED.
- 7. NO HAZARDOUS MATERIALS SHALL BE STORED WITHIN PUBLIC RIGHT-OF-WAY. NO MATERIALS OR EQUIPMENT SHALL BE STORED ON THE ROADWAY SURFACE OR SIDEWALK DURING NON-WORK PERIODS.
- 8. ALL EXISTING TRAFFIC CONTROL DEVICES (I.E. SIGNS, MARKING, ETC.) THAT MUST BE REMOVED SHALL BE REPLACED IN THEIR PROPER LOCATION PRIOR TO THE COMPLETION OF THE PROJECT. COST FOR THE REPLACEMENT AND/OR REPAIR OF DEVICES DAMAGED AS A RESULT OF THE PROJECT SHALL BE ASSESSED TO THE PERMITTEE.
- 9. FOR MERGING, SHIFTING, SHOULDER TAPERS, THE MAXIMUM SPACING BETWEEN DEVICES EQUALS THE POSTED SPEED IN FEET.
- IO. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT EDITION OF THE MUTCD. ALL SIGNS, TRAFFIC DRUMS AND CONES SHALL BE FULLY REFLECTORIZED WITH HIGH INTENSITY, REFLECTIVE SHEETING AS PER THE MUTCD.
- II. PROVISION SHALL BE MADE FOR SAFE MAINTENANCE OF PEDESTRIAN AND BICYCLE TRAFFIC, SUBJECT TO APPROVAL OF THE COUNTY'S DOT INSPECTOR. AT LEAST ONE 10-FOOT TRAVEL LANE SHALL BE AVAILABLE FOR TRAFFIC AT ALL TIMES.
- 12. ALL WARNING SIGNS, UNLESS OTHERWISE SPECIFIED, SHALL BE A MINIMUM OF 48" X 48", BLACK SYMBOL OR LEGEND ON ORANGE BACKGROUND AND DIAMOND SHAPED. ALL TEMPORARY TRAFFIC SIGNS SHALL BE PLACED ON PORTABLE SUPPORTS ("WINDMASTERS") AND SHALL BE REMOVED DURING NON-APPLICABLE PERIODS. ALL PORTABLE SIGNS SHALL BE MOUNTED A MINIMUM OF ONE (1) FOOT ABOVE THE LEVEL OF THE ROADWAY. WITH HIGHER MOUNTING HEIGHTS DESIRABLE.
- 13. WHEN PAVEMENT MARKINGS HAVE BEEN OBLITERATED BY THE WORK ACTIVITY, THE PERMITTEE SHALL INSTALL ANY CRITICAL INTERIM PAVEMENT MARKINGS PRIOR TO THE END OF THE WORKDAY AS SPECIFIED BY THE COUNTY'S DOT INSPECTOR AND/OR THE TRAFFIC ENGINEERING AND OPERATIONS SECTION. ON ROAD SECTIONS THAT ARE NOT SCHEDULED TO BE OVERLAID. ALL TEMPORARY PAVEMENT MARKINGS SHALL BE (REMOVABLE) DETOUR GRADE MARKING TAPE.ANY CONFLICTING MARKINGS, WHICH NEED TO BE TEMPORARILY REMOVED, ARE TO BE MASKED USING "3M REMOVABLE BLACK LANE MASK" OR AN APPROVED EQUAL. ON ROAD SECTIONS THAT ARE TO BE OVERLAID, TEMPORARY MARKINGS CAN BE EITHER TAPE OR PAINT. ANY CONFLICTING MARKINGS SHOULD BE REMOVED WITH A PAVEMENT GRINDER.
- 14. CONTRACTOR SHALL INSTALL APPROPRIATE TEMPORARY TRAFFIC CONTROL DEVICES (I.E. CHAIN LINK FENCE/PLASTIC DRUMS) TO PROTECT MOTORISTS AND/OR PEDESTRIANS FROM HAZARDS WITHIN THE WORK AREA DURING NON-WORKING HOURS.
- 15. ALL TCP PLAN SHEETS SHOW SIGNING AND ROADWAY CONDITIONS DURING NON-WORK HOURS. THE CONTRACTOR SHALL FOLLOW STANDARDS AS LISTED UNDER SEQUENCE OF CONSTRUCTION DURING WORK HOURS.
- 16. DURING FLAGGING OPERATIONS. THE TRAVEL LANE NEXT TO THE WORK AREA SHALL BE SEPERATED BY DRUMS AND SPACED AS PER THE MARYLAND BOOK OF STANDARDS FOR THE ENTIRE DURATION OF THE PROJECT.
- 17. THE CONTRACTOR SHALL COVER THE WORK AREA SEGMENT WITH STEEL PLATES AND PLACE APPROPRIATE ADVANCE WARNING SIGNS FOR STEEL PLATES BEFORE OPENING ALL TRAVEL LANES TO TRAFFIC AT THE END OF WORK DAY FOR ENTIRE DURATION OF THE PROJECT.
- 18. ALL TRAFFIC CONTROL DEVICES AND STANDARDS SHALL CONFORM TO THE 30 MPH POSTED SPEED LIMIT AND 35 MPH DESIGN SPEED WITHIN THE ENTIRE PROJECT LIMITS.

FLAGGING OPERATIONS

- I. WHEN POSSIBLE. TWO-WAY TRAFFIC SHALL BE MAINTAINED. OTHERWISE. FLAGGERS SHALL BE USED TO CONTROL TRAFFIC.
- 2. FLAGGERS SHALL BE MARYLAND STATE HIGHWAY ADMINISTRATION OR AATSA APPROVED FLAGGERS AND SHALL BE USED AT THE DIRECTION OF THE COUNTY INSPECTOR. FLAGGERS SHALL USE STOP/SLOW PADDLES TO DIRECT TRAFFIC.
- 3. RADIO COMMUNICATION SHALL BE REQUIRED BETWEEN FLAGGERS AT THE DISCRETION OF THE COUNTY INSPECTOR OR UNDER THE FOLLOWING CONDITIONS: * IF THE FLAGGERS CANNOT SEE EACH OTHER

* IF THE LANE CLOSURE EXCEEDS 200 FEET

PAVEMENT DROP-OFF

- I. ANY EXCAVATION(S) IN THE ROADWAY SHALL BE PAVED TO LEVEL GRADE OR PLATED AND THE ROADWAY REOPENED TO ITS FULL CROSS-SECTION PRIOR TO THE END OF EACH WORKDAY. "STEEL PLATES AHEAD" (W2I-9) SIGNS SHALL BE PLACED APPROXIMATELY 250 FEET IN ADVANCE OF ANY STEEL PLATE. ANY EXCAVATIONS IN THE SIDEWALK SHALL BE BACKFILLED OR PLATED PRIOR TO THE END OF EACH WORKDAY AND SIDEWALK REOPENED TO ITS FULL CROSS SECTION.
- 2. TRAFFIC SHALL NOT BE PERMITTED WITHIN TEN (10) FEET OF ANY EXCAVATION THAT RESULTS IN A VERTICAL DROP-OFF OF MORE THAN FIVE (5) INCHES IN THE LEVEL OF PAVEMENT DURING NON-WORKING HOURS UNLESS PROTECTED BY TEMPORARY CONCRETE BARRIERS OR RAMPED WITH AGGREGATE MATERIAL AT A 3:1 OR FLATTER SLOPE FROM THE EDGE OF PAVEMENT. WHEN RAMPING IS UTILIZED. TTC DRUMS SHALL BE POSITIONED ADJACENT TO THE EDGE OF THE WORK AREA ON THE TRAFFIC SIDE OF THE SLOPE.
- 3. TRAFFIC SHALL NOT BE PERMITTED WITHIN TWO (2) FEET OF ANY EXCAVATION THAT RESULTS IN A VERTICAL DROP-OFF OF MORE THAN TWO (2) INCHES BUT NO MORE THAN FIVE (5) INCHES IN THE LEVEL OF PAVEMENT DURING NON-WORKING HOURS UNLESS EITHER RAMPED WITH AGGREGATE MATERIAL AT A 4:1 OR FLATTER SLOPE, PROVIDED WITH AN ABUTTING WEDGE OF BITUMINOUS MATERIAL AT A 3:1 OR FLATTER SLOPE OR PROTECTED BY TRAFFIC DRUMS.

TRAFFIC CONTROL GENERAL NOTES (CONT.)

INSPECTOR AUTHORITY

- I. THE COUNTY'S DEPARTMENT OF TRANSPORTATION (DOT) INSPECTOR HAS THE AUTHORITY TO MODIFY THE TTCP AS DEEMED NECESSARY. THE INSPECTOR HAS THE AUTHORITY TO ORDER THE PERMITTEE TO STOP WORK AND VACATE THE PUBLIC RIGHT-OF-WAY IF THE TTCP IS NOT COMPLIED WITH.
- 2. THE IMPLEMENTATION DATE AND CONTINUANCE OF WORK ACTIVITIES MAY BE ALTERED AT THE DISCRETION OF THE COUNTY'S DOT INSPECTOR IN THE EVENT OF CONFLICTS WITH PREVIOUSLY APPROVED OR EMERGENCY ACTIVITIES.

MISCELLANEOUS

- I. THE PERMITTEE WILL BE SOLELY RESPONSIBLE FOR ALL ACCIDENTS AND/OR DAMAGE TO PERSONS AND/OR PROPERTY DAMAGE RESULTING FROM HIS OPERATIONS.
- 2. HAZARDOUS MATERIAL SHALL NOT BE STORED WITHIN PUBLIC RIGHT-OF-WAY. NO MATERIALS OR EQUIPMENT SHALL BE STORED ON THE ROADWAY SURFACE OR SIDEWALK DURING NON-WORKING PERIODS. ALL STORED MATERIALS AND EQUIPMENT SHALL BE SET BACK AT LEAST SIX (6) FEET BEHIND THE CURB ALONG A CLOSED SECTION ROADWAY AND AT LEAST TWELVE (12) FEET FROM THE EDGE OF OPEN SECTION ROADWAY.
- 3. ALL TTC DEVICES SHALL BE REMOVED AS SOON AS PRACTICAL WHEN THEY ARE NO LONGER NEEDED. WHEN WORK IS SUSPENDED FOR SHORT PERIODS OF TIME, TTC DEVICES THAT ARE NO LONGER APPROPRIATE SHALL BE REMOVED OR COVERED.
- 4. AT THE COMPLETION OF WORK ACTIVITIES, CONDITIONS WITHIN THE PUBLIC SPACE SHALL BE FULLY RESTORED TO THOSE THAT EXISTED PRIOR TO THE WORK ACTIVITY. CONTACT INFORMATION
- I. CONTACT THE MCDOT TRANSPORTATION MANAGEMENT CENTER 240-777-2100 BETWEEN 5:00 AM AND 11:00 PM TO INFORM THEM OF TEMPORARY LANE CLOSURES IN THE VICINITY OF ANY TRAFFIC SIGNALS.
- 2. THE PERMITTEE SHALL CONTACT THE TRANSPORTATION SYSTEMS ENGINEERING TEAM AT 240-777-2100 AT LEAST TWO WEEKS IN ADVANCE TO COORDINATE ANY MINOR TRAFFIC SIGNAL WORK. MAJOR TRAFFIC SIGNAL WORK SHALL BE COORDINATED A MINIMUM OF THIRTY (30) DAYS IN ADVANCE OF THE PROJECT. THE PERMITTEE SHALL CONTACT THE MONTGOMERY COUNTY TRAFFIC MANAGEMENT CENTER AT 240-777-2100 A MINIMUM OF 72 HOURS PRIOR TO BEGINNING WORK TO HAVE EXISTING TRAFFIC SIGNAL EQUIPMENT MARKED.
- 3. THE PERMITTEE SHALL CONTACT TRAFFIC ENGINEERING STUDIES SECTION (TES) AT 240-777-6000 AT LEAST TEN (10) WORKING DAYS IN ADVANCE OF THE FINAL PAVING OPERATIONS TO SCHEDULE THE INSTALLATION OF PERMANENT PAVEMENT MARKING AND SIGNS.
- 4. THE PERMITTEE SHALL CONTACT THE DIRECTOR OF THE UPCOUNTY REGIONAL SERVICES CENTER AT 240-777-8040 AND THE DISTRICT 5 TRAFFIC SERGEANT OF THE MONTGOMERY COUNTY POLICE DEPARTMENT AT 240-773-6200, A MINIMUM OF ONE WEEK PRIOR TO THE BEGINNING OF ANY WORK ACTIVITIES.
- 5. FIELD ASSISTANCE BY THE MCDOT, DIVISION OF TRAFFIC ENGINEERING DESIGN AND OPERATION SECTION (TEDO) IS AVAILABLE UPON REQUEST. CONTACT TRAFFIC ENGINEERING DESIGN AND OPERATION SECTION (TEDO) AT 240-777-6000.

MAINTENANCE OF TRAFFIC SEQUENCE OF CONSTRUCTION

STAGE I

- I. CONSTRUCT ALL COMPONENTS OF TRANSIT FACILITY, AND NEW CURB, NEW DRAINAGE DEVICES, AND NEW SHARED USE PATH ALONG BARNESVILLE ROAD.
- 2. TRAFFIC WILL BE MAINTAINED ALONG THE TWO EXISTING TRAVEL LANES. PLACE DRUMS AT EDGE OF CONSTRUCTION AREA. ALONG PROPOSED SHOULDER STRIPE ON BARNESVILLE ROAD.

Whitman. Requardt & Associates. LLP 801 South Caroline Street, Baltimore, Maryland 21231

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION GAITHERSBURG, MARYLAND RECOMMENDED FOR APPROVAL Chief, Transportation Planning and Design Section

Chief, Division of Transportation Engineering

Checked by: _____JAG___

IMPROVEMENTS

Project No. : <u>509337</u>

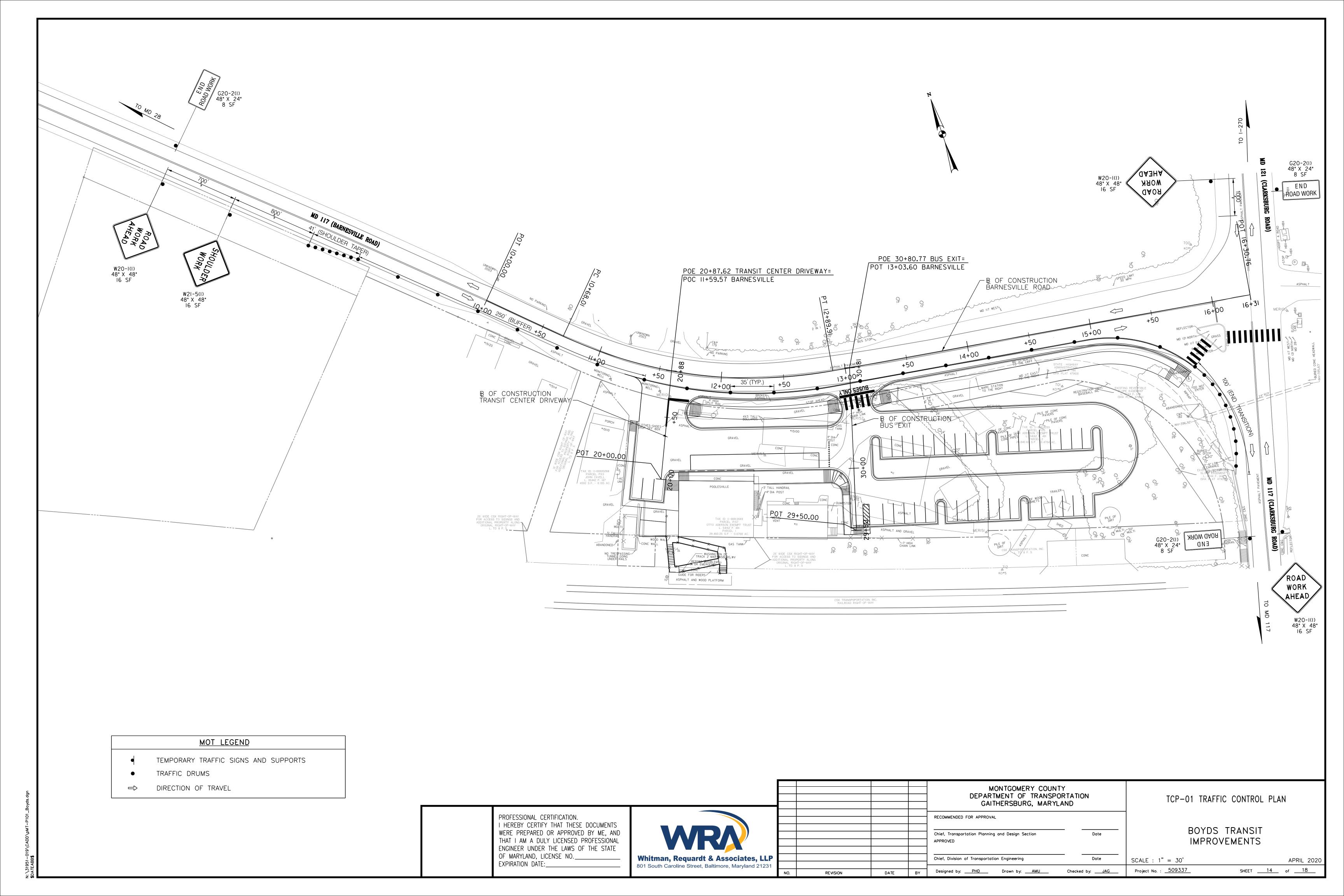
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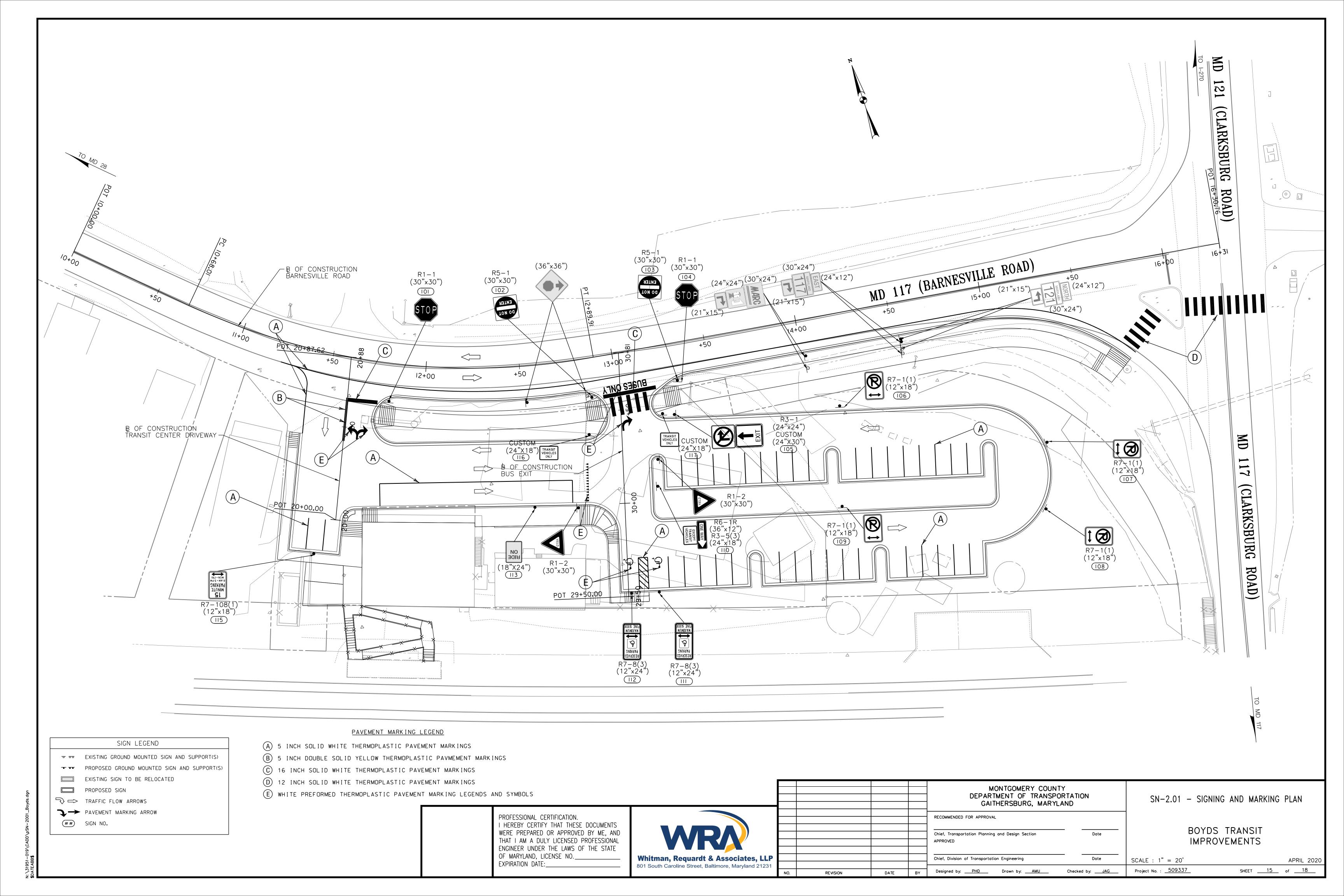
SHEET ____13___ of ___18___

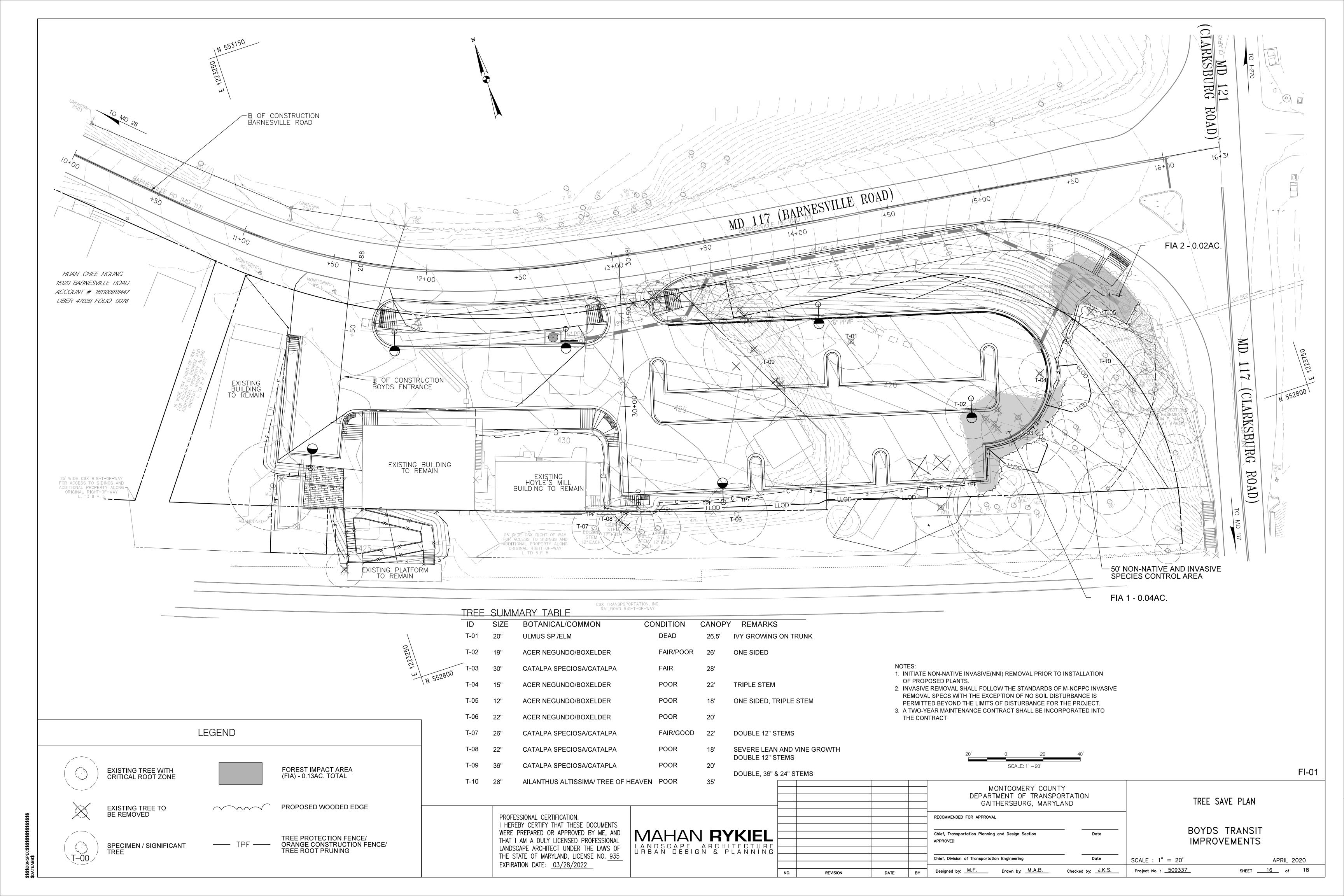
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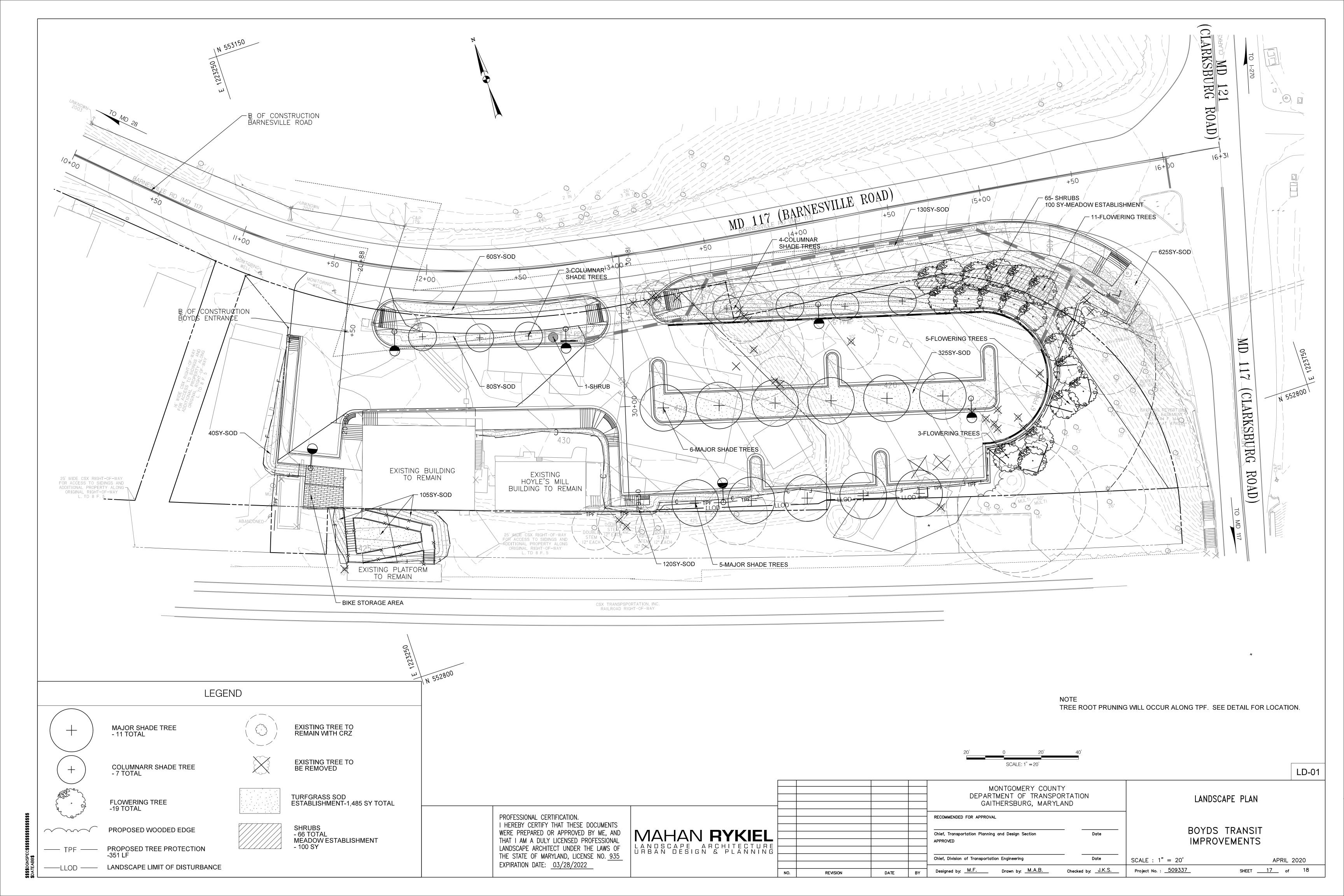
TCP-A TRAFFIC CONTROL PLAN

GENERAL NOTES

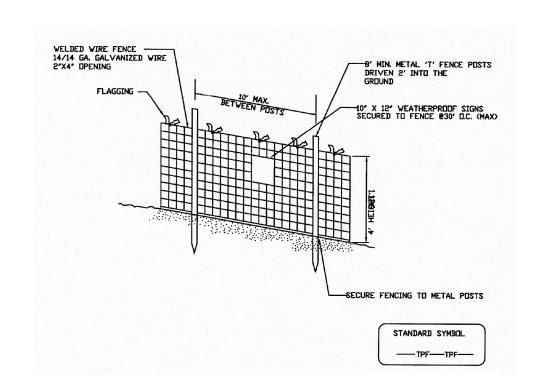








Tree Protection Fence Detail Not to scale



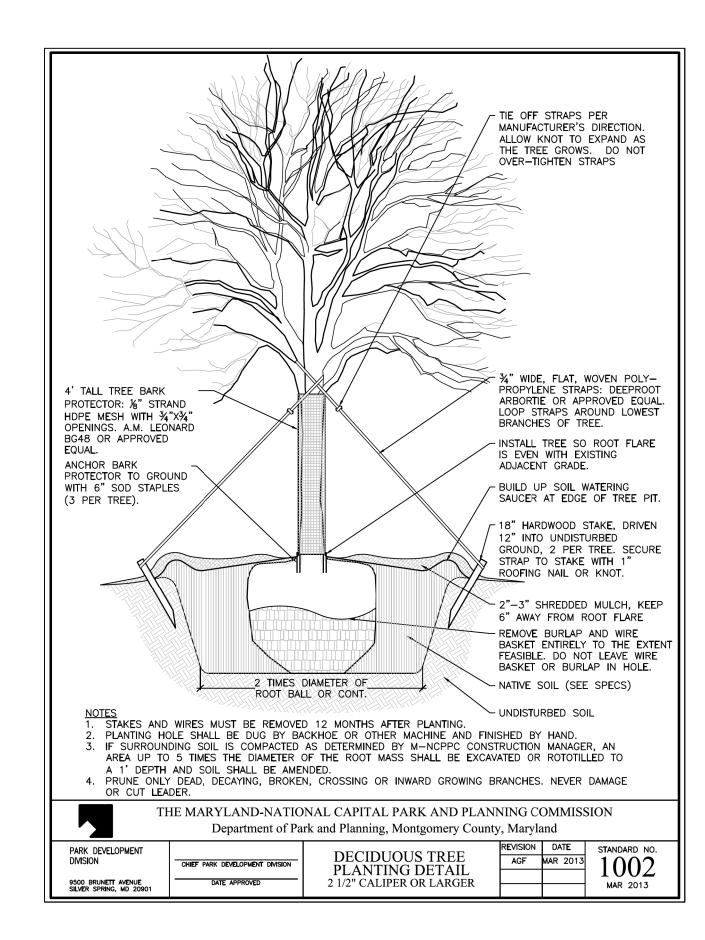
NOTES

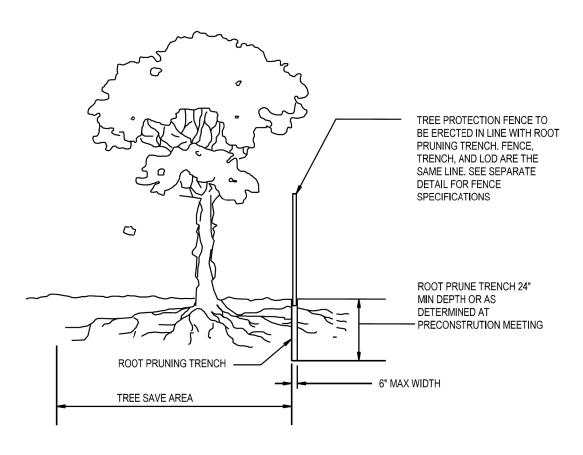
- I. Practice may be combined with sediment control
- Location and limits of fencing should be
- coordinated in field with arborist.

 3. Boundaries of protection area should be staked prior to installing protective device.
- 4. Root damage should be avoided.
- 5. Protection signage is required.
- 6. Fencing shall be maintained throughout construction.

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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.

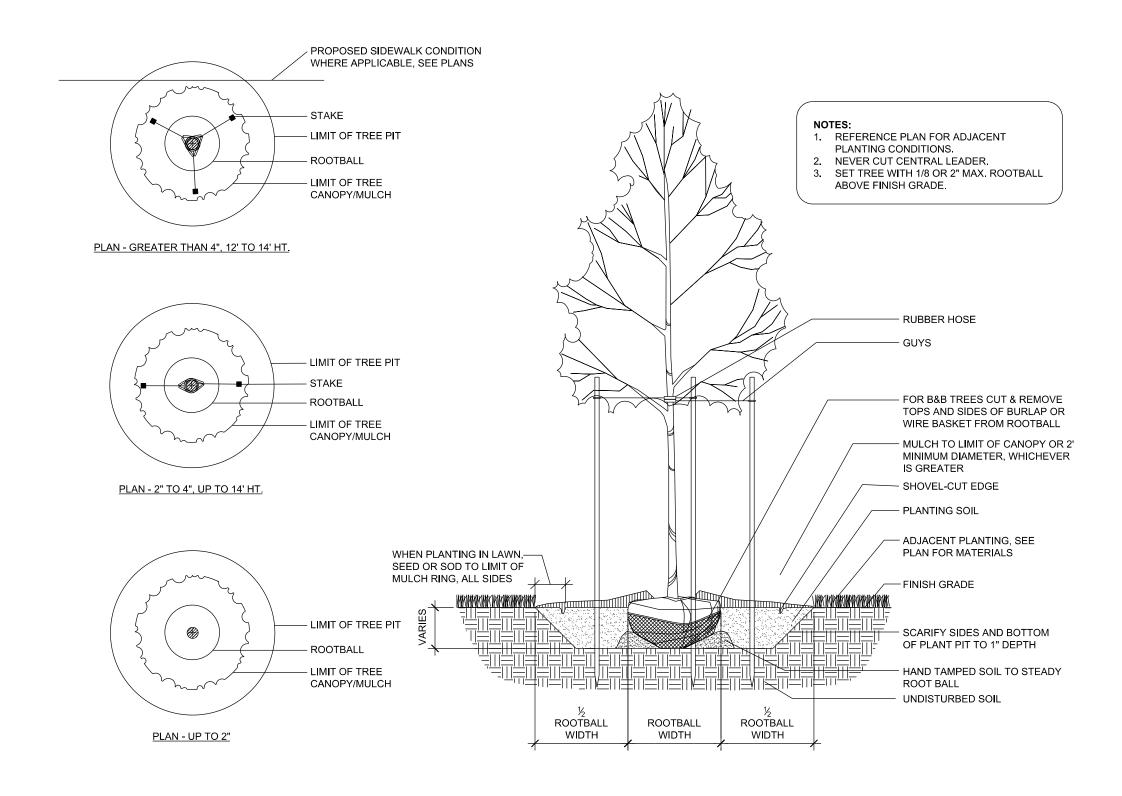
4. TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH EXCAVATED SOIL OR OTHER ORGANIC SOIL AS SPECIFIED PER PLAN OR BY THE FC INSPECTOR.

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



TREE PLANTING

INSPECTIONS

All field inspections must be requested by the applicant.

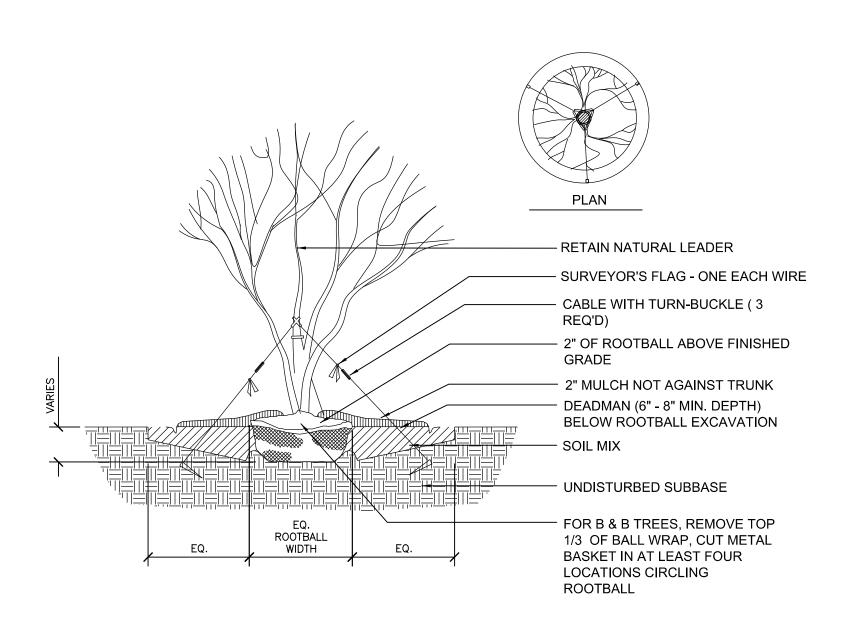
Field Inspections must be conducted as follows:

Plans without Planting Requirements

- 1. After the limits of disturbance have been staked and flagged, but before any clearing or
- After necessary stress reduction measures have been completed and protection measures have been installed, but before any clearing and grading begin and before release of the
- 3. After completion of all construction activities, but before removal of tree protection fencing, to determine the level of compliance with the provision of the forest

$\underline{\textbf{Additional Requirements for Plans with Planting Requirements}}$

- 4. Before the start of any required reforestation and afforestation planting.5. After the required reforestation and afforestation planting has been completed to verify that the planting is acceptable and prior to the start the maintenance period.
- 6. At the end of the maintenance period to determine the level of compliance with the provisions of the planting plan, and if appropriate, release of the performance bond.



MULI-STEM TREE PLANTING

NTS

LD-02

PROFESSIONAL CERTIFICATION.

I HEREBY CERTIFY THAT THESE DOCUMENTS
WERE PREPARED OR APPROVED BY ME, AND
THAT I AM A DULY LICENSED PROFESSIONAL
LANDSCAPE ARCHITECT UNDER THE LAWS OF
THE STATE OF MARYLAND, LICENSE NO. 935
EXPIRATION DATE: 03/28/2022

MAHAN RYKIEL

LANDSCAPE ARCHITECTURE

URBAN DESIGN & PLANNING

MONTGOMERY COUNTY
DEPARTMENT OF TRANSPORTATION
GAITHERSBURG, MARYLAND

RECOMMENDED FOR APPROVAL

Chief, Transportation Planning and Design Section
APPROVED

Chief, Division of Transportation Engineering
Date
SC

NO. REVISION
DATE BY Designed by: M.F. Drawn by: M.A.B. Checked by: J.K.S. F

DETAILS AND NOTES

BOYDS TRANSIT IMPROVEMENTS

 SCALE : NTS
 APRIL 2020

 Project No. : 509337
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