

ANDERSON PROPERTY SITE ANALYSIS

Introduction

The Montgomery County Department of Transportation (MCDOT) initiated a feasibility study in the fall of 2012 to evaluate the need for transit service expansion to the existing Boyds MARC Station on Clopper Road in Boyds, Maryland. The study area is shown in Figure 1. Due to future development, MCDOT's Ride On service may expand in the future to Clarksburg and would provide service to the Boyds MARC station, Clarksburg's closest station. The Boyds MARC Station Project was initiated as a result of a request from the Boyds Civic Association for greater frequency of stops of the MARC Brunswick line at the Boyds station. The Boyds Transit Improvements Feasibility Study, November 2015 summarized existing conditions, identified goals for the station to meet the expanded service request, evaluated potential sites, and recommended the improvements that could accommodate the projected expansion needs. After the completion of the feasibility study, one of the adjacent sites considered for the improvements (Anderson Property) has become available for purchase, see Figure 2, sites 7 and 9. As a result, a concept layout was developed to provide bus access and additional parking for the existing Boyds MARC station on these two adjacent sites. This site analysis will briefly summarize existing conditions, identify the goals developed in the feasibility study for the station to meet the expanded service request, evaluate the feasibility study for the Anderson Property.



FIGURE 1: STUDY AREA

801 South Caroline Street

Baltimore, Maryland 21231

March 2017

Existing Conditions

The Boyds MARC station is along the Maryland Transit Administration's 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 118) consists primarily of commercial properties while development to the south of the station along Clopper Road is primarily 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 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 existing parking lot at the station provides fifteen (15) spaces. The parking lot and station are owned by CSX Railroad and leased and maintained by MTA.

Goals for the Station

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 goals were established for the Boyds station expansion and broken into two phases. The first phase involves adding a bus bay and turn around for Montgomery County's Ride On to access the Boyds MARC Station. The second phase involves adding a bus bay and an expanded parking lot with at least twenty-five (25) additional parking spaces in the same location. Both phases assume implementation could be completed within five to ten years depending on funding and will 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 criterion 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 represents sites 7 and 9 from the Boyds Transit Feasibility Study, see Figure 2. The Anderson Property is 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. 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, an old mill which is situated closest to the CSX tracks, is classified as historic and is located within the Boyds historic boundary, see Figure 3. This determination was confirmed through coordination with Montgomery County Historic Preservation. This would require a historic area work permit for any improvements on the parcel.

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 was to provide a bus bay and turn around for Ride On to access the existing station and also provide parking for commuters at the same location with easy access to the MARC platform. The option shown in Figure 4 would satisfy both phases of the project goals identified in the Boyds Feasibility Study. The following outlines some site evaluation criteria and analysis pertinent to this option.



Site Evaluation Criteria

The Boyds Feasibility Study assessed twelve site locations for the transit improvements based on a set of evaluation criteria. This analysis evaluates the Anderson property (sites 7 and 9) based on the same set of criteria. The evaluation criteria for assessment include:

- Accommodates buses and provides room for twenty-five (25) or more additional parking spaces
- Potential Impacts to be considered include the following:
 - Impacts to private property
 - Walking distance from existing station (preferably within 1/10th mile of station)
 - Potential safety concerns security, pedestrian and vehicular interaction
 - SHA/CSX coordination issues
- Boyds Civic Association's Working Group Concerns
 - o North of the Tracks
 - Within 1/10 Mile of the Station
 - o Pedestrians Required to Cross Street
 - o Adjacent to a Residence
 - o Enhances Boyds Character

Site Evaluation

Both phases of the project goals involve adding a bus bay and turn around for Montgomery County's Ride On to access the Boyds MARC Station. With the existing buildings in place at the Anderson property, a bus does not have the required area to turn around within the existing gravel area. Therefore, the existing buildings that are not considered historic would need to be demolished in order to provide room for a bus turnaround and for commuter parking. The existing historic mill could be maintained, but only that building would be able to remain. A bus turn around and single parallel bus bay can fit within the property area and could accommodate a 40' commuter bus.

Also, a proposed bus station platform would be located in front of the historic mill. That platform could be approximately 100 feet long. Sidewalks would connect the bus drop-off area to the MARC Station platform, allowing commuters to access the MARC Station. However, grading and/or ADA ramps would be required in order to make the sidewalk ADA compliant. Currently, with the GIS contours provided, there appears to be approximately a 10% grade from the bus drop-off area to the existing MARC Station platform. A maximum grade of 12:1 or 8.33% is acceptable for sidewalks to be ADA compliant, so currently the area is too steep for ADA-compliant sidewalk in the existing condition.

There is no passing room available for one bus to pass a parked or disabled bus, so it is likely only one bus would be able to access the site at a time. Buses could use the bus loop by entering in the northwest corner of Site 7, traveling counterclockwise, and then exiting in the northeast corner of the Site 7 property approximately 270 feet west of the Barnesville Road/Clarksburg Road intersection. Buses would directly exit onto eastbound traffic along Barnesville Road. No major changes would need to be done to Barnesville Road such as widening or changes in lane configuration. Additionally, it appears there should be no sight distance issues for buses exiting onto Barnesville Road. With a proposed 35 MPH design speed (30 MPH posted speed), the exit from the parcel would meet the required 287' of sight distance in the most conservative condition (assuming a 9% downgrade along Barnesville Road).

A proposed parking area could include 40-50 parking spaces on sites 7 and 9. Setback requirements require that parking spaces be a minimum of 10 feet from the existing public right-of-way. The parcels include non-linear right-of-way lines, which limit how many parking spaces could fit on the parcels. Commuters would enter and exit the transit area at the same entrance the buses would use to exit onto Barnesville Road. The entrance would likely need to be



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approximately at least 30-35 feet wide to allow room for cars to enter the transit area while buses are waiting to pull out. Constructing the parking lot would require grading with a proposed closed drainage system. Currently, site 9 consists of steep sloped areas, some of which have an existing 2:1 slope according to GIS contours. The GIS topographic information indicates that the proposed parking lot could be constructed on fill and would not require retaining walls. The parking lot would be located on an elevated section, and it is likely a closed drainage system could be configured appropriately on the site.

No formal traffic analysis for sites 7 and 9 for this configuration was completed. However, utilizing the traffic counts from SHA dated October 22, 2014 and November 5, 2014, existing conditions during peak hour operations can be evaluated. The biggest concern from a Ride On operation standpoint for the use of sites 7 and 9 is the ability to enter and exit the site efficiently without significant travel delay in order for MARC and Ride On patrons to make timed transfers. The primary movements of concern are traveling eastbound on Barnesville Road (MD 117) and turning right or left onto Clarksburg Road (MD 121). The intersection operates at a Level of Service B and C for the left turn and right turn movements, respectively, for the 7:30 AM peak. The intersection operates at a Level of Service D and A for the left and right turn movements respectively, for the 4:30 PM peak. It is not anticipated that incorporating Ride On service and a park and ride lot at site 7 and 9 would increase the trip volume to change the level of service for the intersection. The operation of the intersection would potentially improve the level of service based on the results of studies, and improvements currently being proposed by SHA at the MD 117 and Clopper Road intersection to the south.

The Anderson concept layout would meet the Boyds Civic Association's Working Group concerns and the Montgomery County site criteria. The site is north of the railroad tracks, and is within one tenth of a mile of the existing station. Pedestrians would access the station directly from the bus bay and parking area and would not require any roadway crossings. The concept location is not adjacent to any residences. The concept would maintain the existing historic mill building on the Anderson property and could be constructed in a style that would maintain or enhance the Boyd's surrounding character.

The concept would require acquisition of private property, which is currently for sale, and would require a considerable amount of site work. An environmental database search on Merlin, McAtlas, USFWS, PAC, and EJ screen shows there are no USFWS species and no environmental flags for the Anderson Properties. Note that no online sites are available to evaluate the property for HAZMAT concerns. This would need to be completed as part of the property acquisition process. It would require demolition of two single story structures and one two-story structure. Grading would be required to construct the parking lot and provide pedestrian access to the existing station but would not likely require retaining walls. It would require coordination with CSX to provide pedestrian access to the station, and coordination with SHA to provide vehicular access to Barnesville Road. Lighting will be required for the parking lot and for pedestrian safety. Cars and buses would exit the facility approximately 270 feet from the existing Barnesville Road/Clarksburg Road intersection. The entrance and exit would not require further modification to existing Barnesville Road and would not likely impact any possible future improvements to the Barnesville Road/Clarksburg Road intersection being considered by SHA. Additional pavement width along Barnesville Road to provide a left turn lane into the parking lot would be a possible solution to address traffic congestion concerns but would require coordination with SHA.





Figure 2: Potential Sites



Figure 3: Historic boundary



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