



Area Advisory Committee Two Meeting #4 Summary  
Wednesday, September 17, 2014, 6:30pm  
Universities at Shady Grove  
9630 Gudelsky Drive, Building 3, Room 3230  
Rockville, MD 20850

**Attendees:**

**Members**

Donna Baron	Toby Lehman
Wayne Berman	Rosalind MacLennan
John Brandt	David McDonough
Lisa Cline	Tami Mensh
John Dunlop	Melanie Weerakoon
Tim Henderson	Sims Zhou
Jefferson Jex	

**Apologies**

Marilyn Fleetwood	Kara Guthro
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**Staff**

<b>Facilitator</b> – Cathy Smith	<b>Urban Design</b> – Lindsey DeHenzel
<b>Station Architect</b> – John Bull	<b>Public Involvement Task Lead</b> – Crystal Saunders
<b>Traffic Engineer</b> – Charles Freeman	<b>Montgomery County DOT</b> – Joana Conklin
<b>Segment Engineer</b> – Karen Kahl	<b>M-NCPPC</b> – Patrick Butler
<b>Storm Water Management</b> – Nimish Desai	<b>M-NCPPC</b> – Tom Alithey
<b>Storm Water Management</b> – Lisa Yang	<b>Logistics Staff</b> – Tori Leonard
<b>Urban Design</b> – Seth Garland	<b>Logistics Staff</b> – Jordan Vann

**Handouts:**

Meeting packets included: Agenda, Natural vs Urban Water Cycle, Stormwater Management, Filter Facilities, Water Quality-ESD and Proprietary SWM Facilities, Quality Management, Stormwater Management Fact Sheet, Stormwater Management Techniques, SWM Rendering, Urban Design Presentation Outline, Urban Design Fact Sheet, Urban Design Considerations, Urban Design: Transit Corridor/Station Area, Site Plans for Universities at Shady Grove, Traville Gateway, LSC Central, DANAC and Crown Farm, Representative Cross Section, Prototype: Center Platform/Side Platform

**Introductions and Overview:**

**Cathy Smith** welcomed attendees and introduced the staff. The meeting was tape recorded by the recording secretary, **Tori Leonard**, for transcription purposes. Cathy introduced a new committee member, **Lisa Cline**, whose application for membership was originally not selected. Lisa expressed her concern that the Upshire Circle community was not represented on the AAC which led to reconsideration by the MTA and the addition of Lisa to AAC Two.

### **Updates since Last Meeting – 15% design:**

**Karen Kahl** provided updates since the last meeting. As of August 15, the team has completed 15 percent design plans including more than 600 sheets of engineering plans for the transitway, stations, utilities and urban design. The plans will be presented at the next public agency stakeholders meeting with State Highway Administration, Montgomery County, the cities of Gaithersburg and Rockville, Maryland-National Capital Park and Planning Commission, WMATA and possibly CSX. Those agencies will then submit their comments and concerns in writing.

When asked why the team was only taking the design to 30 percent, Karen explained that this team will take the project to 30 percent and at that point the MTA will make a decision on how to procure the rest of the design and construction. For example, a team could complete the design to 100 percent and then the MTA would advertise for contractors to bid on it - Design, Bid, Build. Or MTA could stop at 30 percent, advertise and then the contractor's engineer would finish the design and then build it – Design Build. This is different from how the Purple Line is proceeding with a contractor and an operator who will finish the design, then build, operate and maintain the system for a period of time. When asked whether there would be opportunities to change the design after 30 percent Karen explained that there are always opportunities to change the design, but that would be more difficult the further along it gets in the design process.

An AAC Member inquired how written comments for design changes from the agency stakeholders would be handled. Karen explained that the comments are taken into account and discrepancies are discussed—for a project of this size and scope, quite a few comments are expected. The team has been coordinating with all stakeholders for the past two years. Written comments will be addressed with a written response. A question was raised whether any subsequent design changes would be shared with the public and the committee. Karen explained that at this point the changes are not expected to be significant. They might only involve elements like guardrails, sidewalks, etc and not alignment shifts, and those minor changes would not likely be shared. Cathy clarified that any major design changes would be shared with the public.

An AAC Member inquired about changes to the cost estimates as a result of any design changes. Karen explained that the consulting team was working on revising the cost estimate; but it would be MTA's decision whether to release it. The last cost estimate of \$545 million was from 2012 for the 9-mile first phase of the project. A question was raised about what would happen if there were major differences between the revised cost estimate and the previous one. Karen explained that the team would have to justify why the costs have changed—it could be due to something that changed over the two-year period that caused the costs to go up, something that was designed to be too expensive and will have to be redesigned, or there was a problem with the earlier cost estimate. Karen noted the last cost estimate was done during the planning phase with little to no detailed design. The estimate will be in today's dollars, but will be projected to the mid-point of construction.

### **Stormwater Management:**

**Nimish Desai**, Stormwater Management Lead, started the discussion by explaining the natural water cycle (the existing conditions) and then comparing it to the urban water cycle (the CCT).

Nimish explained that a small portion of water that is not absorbed into the ground will runoff, flow into a stream and eventually flow into the Chesapeake Bay. When the project is built, there will be additional water runoff, because of the additional pavement, that will eventually flow to the Chesapeake Bay. The run-off will contain pollutants that could include nitrogen, phosphorus, copper, zinc and sediments (dirt, debris). Stormwater management is critical to maintaining the health of the bay. Nimish explained that stormwater management (SWM) is a landscaping feature that attempts to restore/mimic the natural water cycle in an urban environment. SWM helps to clean the water from pollutants in an urban setting.

The project is bound by criteria of the Maryland Department of the Environment (MDE) which requires SWM within the project limits. This used to be accomplished with large SWM ponds, but now water has to be managed within the site. In 2009, MDE established new criteria requiring SWM treatment at the source.

For this type of project, several types of SWM facilities are being considered, including bio-swales (a depression with filtering layers underneath), micro-bioretenion planter boxes and bioretention (planted green space). He explained that conventional storm drain systems are not adequate for the project to meet the SWM requirements. Therefore, the team is proposing the use of water quality inlets, which look like a standard inlet with a tree on top of it. Water quality inlets would not require additional right-of-way acquisition. Additionally, in areas where right-of-way is limited, bioretention areas with underground filter layers will be considered to help meet the water quality requirements.

Another component of SWM is quantity management. Because some areas that are now grass will be converted into pavement, or impervious surfaces, the volume of water runoff generated will increase. Water must be collected in a retention system and released slowly into the existing ditches, mimicking existing conditions. Ponds will be used where open space is available. Underground (beneath the transitway) detention vaults are being considered for all the facilities. In response to a question about the detention vaults, Nimish explained that a detention vault is a structure or chamber underneath the transitway, similar to a box or reservoir. An AAC Member inquired whether use of an underground detention system has been successful in other areas or was this method experimental—can they handle a large volume of water and/or debris and are they high-maintenance? Nimish explained that the MTA has used metal chambers for Baltimore's Light Rail system, specifically at the Falls Road station parking lot. They do tend to be high maintenance and require cleaning out. Karen emphasized that all of these treatments are high-maintenance and all have been tested and used on other systems—which MDE requires.

An AAC Member asked what type of SWM was used currently in the median of Great Seneca Highway. Nimish explained that feature is a first-generation infiltration trench, stone on the surface, with sand and other layers underneath. This type of infiltration trench does not tend to have a long life span and is very high-maintenance which would make it impractical for consideration for the CCT project.

An AAC Member inquired how a tree is planted on top of a storm drain. Nimish explained that underneath the inlet is a chamber with filtering layers including manufactured soils mix. Certain species of trees have been planted in this way in downtown Baltimore and in the CCT corridor on Discoverly Drive for the construction of the Crown Farm development.

An AAC Member asked whether the project considered reducing the amount of impervious surface down the middle of the transitway itself and using porous asphalt. Nimish explained that the transitway was originally much wider, but is now narrower to reduce the amount of impervious surface. Karen noted that the transitway had been four to six feet wider and was now at 28 feet wide. Nimish explained that the project was evaluating using green space in the area between the lanes, but that porous asphalt could not handle the bus loads, but might be useful in parking areas.

Nimish noted that the SWM approach and design considers a number of factors, including topography and visual aesthetics. Bioretention requires a flat area; a sloping terrain makes installation difficult. Other factors include available right-of-way, initial installation costs and long term maintenance costs. Nimish described SWM treatments being considered at specific areas along the alignment. A bioswale is proposed for the alignment at Great Seneca Highway due to its steep slopes and proximity to the roadway. At the turn onto Muddy Branch Road, the alignment goes into the median, limiting the space available for SWM — a variety of SWM treatments including bio-swale, micro-bioretention and surface ponds are being considered.

Nimish reviewed additional considerations including aesthetics. A surface pond is proposed for the the corner of the Belward campus and Muddy Branch area. Because of limited space further along the alignment, water quality inlets and planting areas (high flow media devices) are proposed. An AAC Member asked whether these designs were being coordinated with features included in designs by the designers/developers of Belward Campus and others. Nimish responded that they have not talked specifically about SWM, but plan to address the issue in the upcoming months. Concerns were raised about grading of the road and snow removal, location of the (dry) pond and whether it would be fenced. Nimish explained that some grading would be required, but could not address specific maintenance issues as roadway maintenance is handled by Montgomery County. The pond is located at Darnestown Road and Muddy Branch Road seemed to be extremely large. Nimish clarified that it was just a rendering that was not to scale and that the pond would not be as large as shown in the rendering. Nimish was not sure of the size because the detailed design will be developed at a later date.

### **Urban Design:**

Seth Garland, Urban Design Lead, explained that urban design is the intersection of architecture, landscape design and civil engineering— it is focused on the public realm divided among two main functional areas—the areas between stations (mainly the transitway) and the station areas. Among the elements considered to enhance the environment are paving, crosswalks, pedestrian lighting, landscape design, and stormwater management.

Seth explained that the segment of the alignment in the AAC Two area contains nearly every possible element — typical station types (except aerial), median running and side-running alignments, side platforms and center platforms. His presentation included renderings of prototype stations and plans of specific stations.

Some BRT systems use different-colored concrete to distinguish between the transitway and the roadway. Landscaping and bicycle parking (covered and uncovered) could also be integrated into the buffer zone between the transitway and adjacent sidewalk/path. Seth noted that pedestrian

lighting differs from street lighting in that it is lower and helps to see details such as faces, creating a safer environment. An AAC Member asked why no fare payment areas were shown on the platform in the drawing. Seth responded that platform details will be presented in the station design. Payment would take place on the platform similar to light rail systems in other parts of the country, using the honor system and spot checks. There will be no fare gates or turnstiles like those used on the Metro system. Concern was expressed about barriers to vehicle traffic and whether the use of colored concrete could be extended further into the intersection and also whether rumble strips would be used. Seth indicated that these options are being evaluated and explained that there would be signage and passive measures, structured planting areas, etc. but was not sure rumble strips would work for the CCT.

Seth noted that center platform stations are more common for this portion of the corridor and tend to be in more developed areas. As such, sidewalks would have more of an 'urban' treatment. An AAC Member asked about pedestrian barriers between the transitway and the roadway, such as an architectural fence. Seth responded that in stations with parking, parked cars could act as a barrier as well as non-mountable curbs. The project is also looking at what could be done at the sidewalk level to prevent people from crossing the transitway.

An AAC Member suggested that the project include parking for more than four bikes at stations noting that at the newly-opened Silver Line station at McLean, more commuters were accessing by bike than cars. Seth noted that bike parking in the 15 percent plans were not that detailed. Future plans would establish bike parking needs based on ridership numbers at each station.

An AAC Member asked whether the project would consider a pedestrian overpass across Great Seneca Highway at Muddy Branch Road, for the safety of runners, families, etc. Seth responded that the issue is more of a County policy decision. Karen explained that no pedestrian overpass has been included in the CCT for this intersection. An overpass was considered in the area between MedImmune and Kentlands, but MedImmune does not want a pedestrian bridge connecting directly to their campus. There is discussion about moving it east to Kentlands Boulevard over Great Seneca Highway.

An AAC Member commented that urban design is more than colored pavement, trees and bicycle parking. Urban design should be complete in terms of access to the stations, and the project presents an opportunity to integrate the transitway with better walking/bicycle paths on Great Seneca Highway. In terms of urban design, livability and sustainability would be of greater value due to the level of growth of an active population in Washingtonian Woods, Crown Farm, etc. Seth responded that the project is aware of the County's plans for bike routes and shared use paths along the alignment and is coordinating accommodations. An AAC Member expressed an interest in meeting with the MTA and the County to further explore this issue. Seth noted that as design advances, more details would emerge in plans for areas between the stations. Committee members pointed out that these elements should also enhance the environment for residents as well as CCT commuters and not including walking/bike paths along Great Seneca Highway would be a missed opportunity.

An AAC Member commented that the bicycle network for the CCT and access to stations by bike deserved closer consideration now that station locations are known and suggested a meeting on that specific topic. Maryland National Capital Parks and Planning (MNCPPC) will be hiring

a bike planning consultant to evaluate bicycle and pedestrian accommodations in the LSC area. To a question about why separate consultants were needed, Karen explained that the consultants would have specific expertise in bicycle and pedestrian planning. An AAC Member commented that if stations are accessible by more than just cars, ridership would increase.

Cathy introduced **Patrick Butler** from Maryland-National Capital Park and Planning Commission and suggested that interested parties could meet to discuss the bicycle issue further—either as part of an AAC meeting or separately.

Seth pointed out characteristics of the stops in the AAC Two area. Due to time constraints, Seth did not get a chance to review the handout outlining the urban design elements that may be integrated in the areas between the stations and at the stations.

An AAC Member expressed a concern about safety and security and whether the project was working with law enforcement on video surveillance at the stations. John explained that there would be closed-circuit TV cameras and Karen noted that a whole systems plan was being developed that would include cameras on buses and platforms. There is a group within the project team that evaluates the safety and security of the entire BRT system and its users. John explained that stations were designed with visibility and openness in mind, for example, some stations were kept as close to intersections as possible so that grade changes would not obscure the stations. Seth emphasized that sightlines and pedestrian lighting were key factors in the safety of stations and crosswalks. An AAC Member referred attendees to ‘Crime Prevention Through Environmental Design’ a reference document that explains how design can enhance the ability to perform surveillance and how angles of lighting are used to create safer environments.

Questions were raised about hours of operation, deterring graffiti, and ADA accessibility. Karen replied that current plans call for the CCT to operate the same hours as the Metro and maybe even slightly later for the CCT to accommodate Metro riders (this information is in the binders in tab 7 or on the website in the AAC Two Meeting #2 Handouts - “Operations Plan Overview”). Seth explained that lighting and materials used in the station design were selected for durability and ease of cleaning, which would not always deter graffiti but would make it easier to remove quickly. All stations and pathways to the stations will be ADA accessible.

### **General Discussions – Muddy Branch Road:**

During the Storm Water Management presentation AAC members raised several questions regarding the alignment and impacts of the CCT at the Great Seneca Highway and Muddy Branch Road intersection and along Muddy Branch Road.

An AAC Member was concerned about the impacts to the wetlands at the corner of Muddy Branch Road and Great Seneca Highway because the member believed there would be 10 or 11 lanes at this intersection once the CCT is built. Karen clarified that there would be eight lanes - two southbound lanes on Muddy Branch Road, two CCT lanes, one northbound left-turn lane, two northbound straight lanes and one northbound right-turn lane. The AAC Member felt there would be a need for many more traffic lanes along Muddy Branch Road plus the turn lanes at the Great Seneca Highway intersection to accommodate the additional traffic that will result from the future development of Belward Farm. The AAC Member also cited that the County Master Plan calls for six lanes along Muddy Branch Road and noted that at some point the discrepancy

between the two projects would need to be resolved. Karen clarified that the project would impact the wetlands on the east side at Muddy Branch Road and Great Seneca Highway, but not the first house on Mission Drive. She was not sure how many lanes would shift into the wetlands but would check the plans to provide an answer at the next meeting.

**Joana Conklin** noted that the County DOT is not currently in support of the median alignment with four through lanes but that the County is still in discussions with MTA. She said the County has prioritized the CCT as one of their top transportation projects, but on this particular point they are in disagreement. Joana agreed with the AAC Member that this segment is difficult to address the various differing project needs. The County feels that the CCT should be consistent with the master plan from the start and be built to meet future needs.

An AAC member asked if Johns Hopkins would be obligated to fund roadway improvements after the development at Belward Farm was built out. It was noted the county planning process requires developers to complete traffic impact studies and pay for incremental increases in traffic improvements as impacts occur.

An AAC Member asked if there were plans to take any more land to widen Muddy Branch Road. Karen responded that the CCT was not proposing to take any land from the west side. An AAC Member commented that if the County decides to widen to a three-lane alignment on Muddy Branch Road, it would encroach on Washingtonian Woods because of the loss of the buffer due to the CCT running in the median. An AAC Member commented that consideration should be given to taking the CCT alignment off Muddy Branch Road entirely. Karen reiterated that the alignment shift decision by the MTA was the result of the study done in the spring. The County disagrees with it, but coordination among high-level MTA and County officials continues. Joana noted that the County would be reviewing the 15 percent design plans.

Cathy suggested that this item be tabled, noting that discussions were continuing between MTA and the County. Staff at this meeting are not the decision-makers but would relay any results of the MTA and County discussions to the committee. An AAC Member expressed that this matter was of greater concern than Storm Water Management or Urban Design. Cathy committed to discussing the issue with the CCT Project Manager Rick Kiegel.

An AAC Member asked if the group could see a side-by-side comparison of the existing lanes and the expanded lanes. Karen responded that that level of detail is available and she would provide it to them.

### **Meeting Wrap-up:**

Cathy announced that the next meeting is November 12<sup>th</sup> at 6:30pm in the same location. She reiterated the commitment to share the group's concerns about Muddy Branch Road with Project Manager Rick Kiegel.

The meeting adjourned at 8:11 p.m.

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