

Greenbelt City Council
Work Session

Greenbelt Station Residents/
WMATA Trail

Monday, April 16, 2018
8:00 PM

Council Room

**CITY OF GREENBELT, MARYLAND
MEMORANDUM**

TO: Nicole Ard, City Manager
FROM: Terri S. Hruby, Planning Director
DATE: April 12, 2018
SUBJECT: WMATA Trail Update

Background

On September 18, 2017, the City Council received a briefing on the status of the WMATA trail connection. Staff reviewed with Council the comments received from WMATA's Office of Joint Development on the submitted design plans and a draft proposed legal agreement. Staff identified several major issues/comments that would significantly increase the project's scope of work and future maintenance commitment to the City. The major issues included: Requirement for a full traffic signal at the access road crossing, shifting of the trail alignment to the west prior to crossing the northern access road, requirement for a separate electrical power service utility line, need for additional engineering services, project cost, maintenance responsibility and connection agreement.

At the conclusion of the work session staff outlined a series of next steps that included the following:

1. Provide edited draft connection agreement to WMATA
2. Provide response to WMATA's preliminary design comments
3. Request meeting with WMATA staff to discuss major issues and continue negotiations towards agreement
4. Identify additional funding sources

Update & Current Issues

To date, steps 1 through 3 above have been completed. An edited draft connection agreement was submitted to WMATA on October 25, 2017. The City has been informed that WMATA has reviewed the City's proposed revisions and will be providing a revised redlined draft of the agreement in the immediate future. On October 25, 2017, the City submitted responses to WMATA's preliminary design comments, and on February 1, 2018, the City received a response to its comments from WMATA.

WMATA's response (refer to attachment) generated a number of questions and concerns from Woodlawn and City staff with regard to potentially requiring significant design revisions and increases in project scope and cost. On March 27, 2018, city staff, city solicitor, Woodlawn and Woodlawn's traffic consultant had a very productive meeting with WMATA's project review team. While understanding was reached on several issues such as power supply, video surveillance requirements, call box

requirements, HAWK traffic signal requirements and lighting fixture requirements, there remain some significant issues associated with some of these issues as well as new issues that have arisen. The following is a summary of current issues that potentially will have significant financial, design and or maintenance impacts.

A. Access Road Pedestrian Crossing

WMATA hired a transportation consultant to evaluate possible alternatives for providing a safe pedestrian crossing at the access road. The consultants evaluated a full traffic signal (initially required by WMATA), a HAWK signal and a Rectangular Rapid Flashing Beacon (This is the device at the St. Hugh's crossing on Crescent Road). The Study recommended the use of a HAWK (High Intensity Activity Crosswalk) signal, with WMATA requiring it having an electrical back up. The HAWK device is a pedestrian activated beacon. When not activated, the beacon heads are dark, and the pedestrian signal displays a solid DON'T WALK. When activated, the beacons first illuminate a flashing yellow for several seconds, then change to a solid yellow to warn approaching motorists to prepare to stop, then illuminates a solid double red to stop. The pedestrians then get a walk signal to let them know that the beacon is in the proper phase to allow them to cross. At the end of the WALK phase, the red signals toggle back-and-forth, corresponding with the pedestrian signal flashing DON'T WALK phase. This "wig-wag" indication means that drivers may proceed after stopping, if safe. The HAWK signal then goes dark and the pedestrian signal returns to solid DON'T WALK until activated by another pedestrian.

Staff agrees with WMATA's technical review staff that a robust crossing with early warning signage is needed at the access road but has concerns about the use of the HAWK device given concerns about the City accepting ownership and maintenance of a device that is considered not warranted per the Manual of Uniform Traffic Control Devices (MUTCD). Woodlawn's traffic consultant has expressed concerns over liability in the event of an accident occurring where a signal was not warranted. However, WMATA project review staff has made it clear that the HAWK system is the preferred device as a compromise to a full signal system and is to be included in final design plans. The estimated cost for the signal, pole mounted signs, detector cameras, thermo-plastic lines and crossing light is roughly \$180,000.

Woodlawn will be working with its consultants to address the requested sight distance study, placement of the signal, power supply and complementing traffic calming measures. City staff will be reviewing liability concerns with the City solicitor once the revised connection agreement is received from WMATA.

B. Electrical Power Source & Lighting

Initially WMATA indicated that the trail's power source must be supplied from a separate service utility line. Preliminary meetings with PEPCO indicated that a separate power line would need to be supplied from south of the trail prior to Narragansett Run crossing and transition to a private line. Based on the City's latest comments, WMATA

has agreed to allow facilities located north of the WMATA access road (i.e., the northern light pole at the crossing and any additional light poles needed on WMATA parking lot) to be tied into WMATA's electric power source. There continues to be significance costs associated with running electric along the trail and to the HAWK signal.

In order to run the primary power from the South Core development, PEPCO will require an easement from WMATA. The solicitor has agreed to assist Woodlawn in working with PEPCO and WMATA for the attainment of an easement. At this time, the timeline for negotiating an easement is unknown and all parties are working on clarifying this issue.

C. Existing WMATA Stormwater Management Pond

This issue was not addressed in WMATA's initial comments but appears in WMATA's latest review comments. WMATA is requiring that a pond buffer be provided that extends at least 25 feet from the maximum water surface elevation of the pond. WMATA further comments that the proposed trail cannot interfere with mandatory access for pond maintenance. Woodlawn has expressed concerns that these new requirements may require revisions to the trail alignment. As-Built plans for the pond have been requested from WMATA and Woodlawn's engineer consultant will have to undertake a study to determine the impact of this requirement on the design plans.

D. Bridge Capacity (Emergency Vehicle Access)

WMATA has indicated that the bridge and boardwalk need to be designed for vehicular access with regard to load rating and width. This requirement will have significant impact on construction costs. The concerns expressed from WMATA police and emergency personnel are that the bridge, boardwalk and trail shall be designed to accommodate a fire truck. The position of the City is that since the trail can be accessed from both the north and south side of the bridge, designing for large vehicular loads is not necessary.

WMATA project review staff has indicated that they are not willing to revise this requirement at this time, but did agree that since the trail will primarily be maintained and policed by the City, that it would like to hear directly from the City's police and emergency response agencies on their trail design requirements and is willing to revisit its comments/requirements, if appropriate. City staff will be following up with the City's Police Chief and Fire Chief in the next two weeks and working to arrange a meeting with all parties.

E. Engineering

Additional professional service work is needed to respond to WMATA's latest technical comments and to develop new engineered plans. This includes development of a storm water management concept plan, a sediment control plan, a tree conservation plan, creation of profile and cross sections, grading and drainage plans, electrical and

lighting site plan with photometrics (including the completion of a photometrics study), signal and signage plan and updates to existing plans in response to WMATA comments and questions. Environmental reviews will need to be undertaken by County and State agencies before a permit level plan can be developed.

F. Connection Agreement & Maintenance Responsibility

Throughout WMATA's comments and in the draft connection agreement, WMATA states that the City would be responsible for maintaining all aspects of the project, including access roadway striping, HAWK beacon, snow removal, lighting, emergency phones, landscaping, etc. The wording of WMATA's comments indicates that this responsibility would be for the entire length of the new trail.

Additional discussion between staff and WMATA review staff is needed to clarify and reach agreement on maintenance responsibilities and maintenance boundaries of the project. Staff's understanding is that the connection agreement is the mechanism to establish maintenance responsibilities and staff is awaiting the latest draft of the agreement from WMATA.

G. Cost

Staff has been working with Woodlawn Development to update the trail's cost estimate in response to WMATA's latest comments. The current cost estimate is incomplete and cannot be calculated until we are able to finalize the design plans more.

At this time, the current project estimate is approximately \$1.2 million. Based on the language and exhibits of the Development Agreement, Woodlawn Development is obligated to provide \$516,000 toward funding the trail. Additional funding to cover increased costs of the project is required. The Mayor recently testified at the bond bill hearings in support of the allocation of \$75,000 State bond funding.

Steps Forward

City staff will continue to work with Woodlawn and WMATA on finalizing design requirements and revising engineering plans accordingly. In order for Woodlawn to complete plan revisions there are a number of studies that need to be completed and several of them require that Woodlawn's consultants have as-built plans, design specifications and standards from WMATA. Woodlawn has submitted a request to WMATA for this information and is awaiting a response. The issue of emergency access requirements needs to be resolved as well.

It is anticipated that revised engineering plans will take approximately 6 months to prepare once all necessary information is obtained by Woodlawn. Once completed, the plans will be submitted to WMATA, Prince George's County, City of Greenbelt and Maryland Department of Environment for review and approval. This process can take up

to a year. In addition, concurrently with this process, Woodlawn and the City will be working to obtain an agreement between PEPCO and WMATA in order for PEPCO to install the required utility lines on WMATA property. The City will also be working with the city solicitor and WMATA on the connection agreement. Woodlawn has indicated that a project schedule cannot be provided at this time since the necessary information is not in hand.



Bike/Pedestrian Connection Routes

- Legend**
- Indian Creek Trail Route
 - WMATA Trail Route

~ 0.8 Miles

~ 1.68 Miles

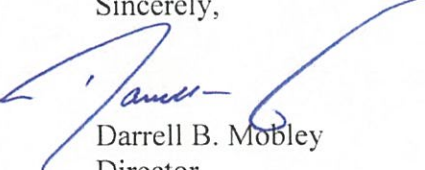
2000 ft

Google Earth

Ms. Nooshin M. Amirpour, P.E.
March 22, 2018
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If you have additional questions or concerns, please contact Mr. Anthony Foster, Chief of Transit Planning, at (301) 883-5677 or via e-mail acfoster@co.pg.md.us.

Sincerely,



Darrell B. Mobley
Director

DBM/DLW/acf

cc: Martin L. Harris, Deputy Director, DPW&T
D'Andrea L. Walker, Associate Director, DPW&T
Semia L. Hackett, Assistant Associate Director, DPW&T
Anthony Foster, Chief, Transit Planning, DPW&T



Rushern L. Baker, III
County Executive

PRINCE GEORGE'S COUNTY GOVERNMENT

Department of Public Works and Transportation
Office of the Director



Darrell B. Mobley
Director

March 22, 2018

Ms. Nooshin M. Amirpour, P.E.
Land Development Manager
Woodlawn Development Group
11700 Plaza America Drive, Suite 310
Reston, Virginia 20190

RE: COUNTY TRANSIT – ROUTE 15X – Greenbelt Station Community

Dear Ms. Amirpour:

This letter provides an update regarding the County Transit – Route 15 X – Greenbelt Community Station Community. As you know, the Department of Public Works and Transportation (DPW&T) and NVR/MS Cavalier Greenbelt, LLC entered into a pilot agreement to provide fixed route transit service to the community, by extending the County's existing *TheBus* Route 15X (NASA Goddard – Greenbelt Metro) bus line. This 18-month agreement, which became effective on April 24, 2017, stipulated that the community would receive transit service every 40 minutes during the morning peak hours, 6:00 a.m. to 9:30 a.m., and evening peak hours, 3:00 p.m. to 7:00 p.m.

Shortly after implementation of the pilot, DPW&T observed steady ridership growth at the two bus stops within the Greenbelt Station Community. Our records show that average daily ridership grew steadily from 8 to 17 people per day over the period May 2017 to February 2018. These statistics exceed our agreed upon performance standards as stipulated in *Section 3 – Ridership* of the funding agreement. Consequently, DPW&T will continue to provide service to the Greenbelt Station Community for the remainder of this fiscal year (FY18), which ends on June 30, 2018. Then DPW&T will incorporate this route extension as part of normal operations beginning on July 1, 2018, the start of FY19.

We appreciate your partnership in this successful joint pilot. DPW&T believes this extension has benefited residents by providing access to regional and local destinations including the Greenbelt and New Carrollton Metrorail Stations. DPW&T looks forward to providing transit service within this community and the possibility of future partnership endeavors.

9400 Peppercorn Place, Suite 300, Largo, Maryland 20774

(301) 883-5600

FAX (301) 883-5709

Maryland Relay 711

GREENBELT WEST INFRASTRUCTURE FUND

This fund was established to account for planned public improvements to be funded by required contributions from the developers of Greenbelt Station. These improvements were obtained through negotiation to help address impacts of this new development. There may be additional contributions in future years.

BUDGET COMMENTS

- 1) A payment of \$1.3 million was received in February 2014. An additional payment of \$500,000 was received in April 2016. These payments are in accord with the covenants in the Greenbelt Station South Core development agreement.
- 2) Construction of townhomes began in the South Core as of spring 2014 and apartments began in 2015.
- 3) Funds are budgeted for the WMATA Trail and the City's match for the Cherrywood Lane Green Street design projects.



GREENBELT WEST INFRASTRUCTURE FUND	Estimated Project Total	Trans. Thru FY 2017	FY 2018 Adopted Budget	FY 2018 Estimated Trans.	FY 2019 Proposed Budget	FY 2019 Adopted Budget
BALANCE AS OF JULY 1			<u>\$1,267,894</u>	<u>\$1,858,309</u>	<u>\$1,782,009</u>	
REVENUES						
Greenbelt Station Payments (\$3,578,000)						
South Core Share	\$1,949,000	\$1,916,509	\$0	\$0	\$516,000	
North Core Share	1,639,000	0	0	0	0	
General Fund Transfer (TIF)	0	0	0	0	0	
Special Taxing District	0	0	0	0	0	
Revenue Bond Proceeds	8,400,000	0	0	0	0	
Miscellaneous	0	152,468	0	0	0	
State Bond Bill	0	0	0	0	75,000	
Chesapeake Bay Trust	0	0	0	0	56,000	
Interest	0	16,332	5,000	7,000	5,000	
TOTAL REVENUES	\$11,988,000	\$2,085,309	\$5,000	\$7,000	\$652,000	\$0
EXPENDITURES						
North/South Connector Road	\$8,400,000	\$120,514	\$0	\$40,000	\$0	
Cherrywood Streetscape	500,000	3,591	0	0	86,000	
Cherrywood Sidewalk	278,000	0	0	0	0	
Public Recreation Facilities (\$2,000,000)						
Rec. Facility Master Plan	50,000	6,654	0	43,300	0	
Other	1,950,000	0	0	0	0	
Police Station Addition	500,000	96,241	0	0	0	
Interpretive Center/Trails	300,000	0	0	0	1,000,000	
Public Art	10,000	0	0	0	0	
TOTAL EXPENDITURES	\$11,988,000	\$227,000	\$0	\$83,300	\$1,086,000	\$0
FUND BALANCE AS OF JUNE 30		<u>\$1,858,309</u>	<u>\$1,272,894</u>	<u>\$1,782,009</u>	<u>\$1,348,009</u>	<u>\$0</u>

PCN 251554 Greenbelt Station Proposed Pedestrian Trail
COMMENT & RESPONSE MATRIX
May 10, 2017

No.	Date	By	Discipline	Reference Document	Document Section	Page	WMATA Reviewer Comment	Date	ODC Response	By	Date	DRAFT WMATA Review Comments 1-31-18	Status
1		C. Lopez	ADAP	Submittal		Dwg 151202-01	Please add a note that the bottom rail shall comply with ADA Standards 405.9.2 Curb or Barrier. A curb or barrier shall be provided that prevents the passage of a 4 inch (100 mm) diameter sphere, where any portion of the sphere is within 4 inches (100 mm) of the finish floor or ground surface.	9/13/2017	The bridge rail design can be altered to comply with ADA standards	Jessica Bellah, Greenbelt Community Planner		City will comply. OK	
2		D. Whiteside	COMM	Submittal		General	The proposed path will cross the access roadway that connects the Capital Beltway to the Greenbelt Station. Vehicular traffic moves through this area at high speeds (35-60mph), and therefore advanced signage and a traffic signal are needed to warn/stop drivers at the at-grade pedestrian crossing and also to warn/stop pedestrians on both approaches of the access roadway crossing. WMATA requires that the above proposed pedestrian crossing be surveilled by installing a camera on an existing or new light pole. WMATA would recommend the Axis Q6000 camera or equivalent capability, which will provides a high resolution 360° view of the entire area, both approaching cars, cyclists and pedestrians can be viewed at the most hazardous crossing area. Data sheet attached to the end of the file, page 6. (See Attachment COMM #1). WMATA recommends a 12BG SDHD on-board storage be utilized for incident investigation.	9/13/2017	A traffic signal is not a feasible or appropriate solution for an interim trail connection which may only be in operation for a few months. It is cost prohibitive and does not solve for the issues at the crossing point. A warrant study is needed to determine whether a signal is appropriate at the new alignment crossing. A prior traffic engineering study considered the speed, volume, and conditions of the access road and did not find that a traffic signal was warranted. Traffic signals are expensive to design, install, and maintain. Improper or unjustified placement of traffic control signals can actually reduce the safety for vehicles and pedestrians, increasing certain types of accidents such as rear-end collisions. The City agrees with WMATA's technical review staff that a robust crossing with early warning signage is needed at the access road, but strongly disagrees that a traffic signal is necessary. It is staff's opinion that there are alternatives to a traffic control signal that would both provide a safer and a more efficient crossing point. Staff believes installation of a solar powered Rectangular Rapid Flash Beacon (RRFB), such as the one installed on Crescent Road at St. Hugh's, would be more effective and more appropriate for the interim trail connection. According to the Federal Highway Administration a RRFB can produce greater driver yield rates than traditional methods, partly because of the novelty and unique nature	Jessica Bellah, Greenbelt Community Planner		Hawk signal is now acceptable to WMATA. City should provide progressive warnings to drivers to slow down from start of I-495. Suggested steps are raised rumble strips on access road straightaway near station, post speed limit signs and pedestrian crossing warning signage starting before the access road curve; speed humps before and at the trail crossing which should be flat at the crossing to meet ADA standards. City must comply with "Future Steps" recommendations in AECOM 12/13/17 "High Level Assessment" including line of sight (sight distance) studies as WMATA anticipates there may be a need to cut some trees on the inside of the curve. City must maintain Hawk signal and trail crossing of WMATA access road. WMATA surveillance camera recommendations stand. Need for 6' high fencing to prevent jay walking by trail users and also to keep trail users from storm water pond. Speed cameras on access road are highly recommended. To meet ADA standards the cross walk must be at a location where the cross-slope is 2% max for the full width of the crosswalk (parallel to the road and perpendicular to the pedestrian path)	
3		G. Collins	PLNT	Submittal		General	It is understood that WMATA is not responsible for operations and maintenance including any roadway crossing striping, removal of snow from the trail, lighting, CCTV, Emergency Phones etc. The operations and maintenance agreement shall also outline maintenance responsibilities of trees, shrubs, and turf within the easement area. WMATA's PLNT is concerned about the proximity of the proposed trail to the driveway of existing Traction Power Sub-Station (TPSS) and the potential conflicts between pedestrians and vehicular traffic during WMATA maintenance periods of the TPSS.	9/13/2017	The new alignment moves the trail away from the TPSS. The City proposes undertaking maintenance responsibilities for the trail connection south of the road but cannot accept maintenance responsibility for sidewalks/trail within the existing WMATA parking and bus loop facilities. The City has proposed language regarding	Jessica Bellah, Greenbelt Community Planner		WMATA's comments on operations and maintenance stand for the trail south of the WMATA access road. WMATA will maintain the trail north of the access road but the city must construct all facilities to WMATA standards.	
4		H. Nguyen	ENGA/Electrical	Submittal		General	Provide electrical/lighting site plan and lighting FC calculations (Photometrics). The minimum maintained illumination levels shall be measured horizontally @3ft. The FC for Average Illumination level is 3FC. The FC for minimum illumination level is 1FC. The power for this trail project shall be supplied from a separate service utility line including a separate power meter provided by the local power authority in coordination with the City of Greenbelt and/or developer.	9/13/2017	Agreement on the trail alignment should be reached prior to finalizing a lighting plan. The running of electrical feed to the trail from Greenbelt Station Parkway is estimated to consume 2/5 of the entire project budget and lighting should be the minimum necessary to provide for the new trail connection. The City cannot be responsible for upgrading existing WMATA lighting facilities or running any electrical feeds north of the WMATA access road onto existing WMATA parking facilities.	Jessica Bellah, Greenbelt Community Planner		Lighting must meet WMATA standards and must include city-funded and installed upgrades of facilities north of the WMATA access road if required. AECOM has stated that batteries can store solar power for the Hawk signal for overcast/night times. WMATA will await Future Steps results before determining if electrical backup is needed.	
5		P. Correia	IT/NCS	Submittal		General	The design of the Emergency Phone System shall meet the requirements of the operating agency, City of Greenbelt. There are several types of Emergency Phone Systems that could be used, including cellular and hardline systems. However, WMATA strongly recommends hardline systems. 1. If using a hardline system, the demarcation point between the system and the service provider (Verizon), and the ability of the service provider to actually have Infrastructure available at the demarcation site would need to be determined. 2. If utilizing a cellular system a study would be required to determine the most robust provider in the area that can cover all emergency phones throughout the pathway without degradation of the cellular signal. 3. In either case, standard practice is to have a strobe light and atop the emergency phones for emergency responders to easily identify the location. This will require power to be fed by a utility company through the designs of the operating agency.	9/15/2017	The City notes that the trail is intended to be an interim and temporary connection and therefore must be designed with the understanding that investment in facilities such as call boxes should be considered in context of their potentially short term deployment. Call - boxes can be included in the overall trail design for portions of the trail connection which run south of the access road. Whether the City can support a hardline or wireless connection must be evaluated for feasibility and cost given that all electrical and hard line must run from the south of the project which must cross Narragansett Run. The City recommends that the trail alignment and major issues be finalized between WMATA and the City prior to finalizing the location, type, and number of call-boxes required. The City will be responsible for providing patrol and security for the trail.	Jessica Bellah, Greenbelt Community Planner		Call boxes must meet WMATA standards	
6		B. Borisov	SAFE/ Environmental	Submittal		General	Please refer to WMATA's Environmental comments, which are marked-up on the proposed conceptual trail plans shown on Attachment SAFE Environmental #1	9/26/2017	New trail alignment submittal will address comments. New ESD rules will be considered. WMATA and the City should reach agreement on major issues such as the traffic signal crossing and alignment prior to undertaking reengineering of plan sets. Trash receptacles can be accommodated at the south entrance	Jessica Bellah, Greenbelt Community Planner		Relevant city comments are acceptable	
7		M. Bailey	JDAC	Submittal		General	1. As previously discussed one major concern is the crosswalk adjacent to the existing TPSS. The crosswalk is located at the bottom of the incoming access ramp from the Capital Beltway. This is a major safety concern given the speed of vehicles coming down the ramp. I don't feel a controlled crosswalk with flashing lights will fully address this concern. I feel this is an accident waiting to happen. This portion should be built to the ultimate condition which I understand would be an underground passageway at this crossing. Secondary concern is the crosswalk crosses in front of the entrance to the TPSS. 2. Post signs along trail with contact information for any issues/concerns trail users may have. The contact information on non-WMATA maintained portion needs to be for City of Greenbelt. 3. Provide independent power source for feeding light poles. Light poles and fencing need to be grounded for safety. Also wind load calculations for light poles need to be provided signed and sealed by a professional engineer. 5. Provide a draft maintenance and operations agreement for review and comment. This agreement shall be executed between WMATA and City of Greenbelt identifying areas of responsibility. I.e. snow removal, maintenance of light poles, maintenance of asphalt, maintenance of pedestrian bridge, maintenance of emergency call boxes and cameras. The above mentioned agreement needs to address responsible party should someone unfortunately be injured while using the trail. Note #3 on sheet 1 notes an operations and maintenance agreement is to be recorded. 6. Provide a profile of trail. 7. Provide cross sections of trail. 8. The portion of the trail that WMATA maintains shall meet WMATA standard requirements for light poles/fixture, asphalt, base etc. 9. General note 6 on drawing sheet #1 indicates a portion of the trail will not be ADA compliant. The whole trail needs to be ADA compliant. 10. Detail #1 on drawing sheet #4 DPW&T STD 100.17 indicates Hiker/Biker trail on private easement. (Maintained by Others). Identify who is others. Also the width of the trail is lined through. Identify the width of trail. The width must accommodate emergency response vehicles. The plans indicate 8' wide asphalt trail and 20' trail easement. This needs to be clarified. 12. General note #6 on drawing sheet 1 indicates physical security will be provided by jurisdictionally empowered law enforcement. Identify who this is.	9/26/2017	1. Crossing point will be relocated west away from the TPSS. Please see comment 2 for response to traffic signal. 2. acknowledged. 3. Pepco has indicated that power source must run from south of the trail connection. Selection of light pole can be provided in permit plan sets. 5. WMATA provided the City a draft connection agreement. The City has included our edits to this document and submitted it for WMATA review and concurrence. 6. and 7. can be provided in permit plan submittal 9. The City has proposed that WMATA shall maintain the portion of trail north of the access road but that the initial construction of the trail, ramps, and crossing markings shall be installed by the City. The City cannot install or maintain lighting north of the WMATA access road. The portion of trail WMATA maintains can be constructed to WMATA standards. 9. acknowledged, trail will be ADA compliant.	Jessica Bellah, Greenbelt Community Planner		Relevant city comments are acceptable. Facilities north of the WMATA access road may be tied into WMATA's electric power source.	

PCN 251554 Greenbelt Station Proposed Pedestrian Trail
COMMENT & RESPONSE MATRIX
May 10, 2017

No	Date	By	Discipline	Reference Document	Document Section	Page	WMATA Reviewer Comment	Date	ODC Response	By	Date	DRAFT WMATA Review Comments 1-31-18	Status
									10.Trail will be 8ft wide with 20ft easement for its entire length. Plans can be updated to clarify. 12. Acknowledged. Greenbelt Police Department serves as jurisdictionally empowered law enforcement.				
8		A. Overman	BUS	Submittal		General	There is no Metrobus service near this new facility, however the last bus bay on the south side of the station may be affected. The trail should end behind the bus bay facilities not at the front door of where the bus will stop. Mainly four buses use this side of the station but we should still maintain needed access and not introduce a bike/ped/bus passenger conflict point when this could be avoided by transitioning the trailhead to the rear of the sidewalk. This may require relocation of whatever that black box above the retaining wall contains; we should discuss feasibility.	9/13/2017	In person meeting with Metro staff indicated a preference on WMATA's end for removal of the last bus bay and installation of a trail access ramp. Please indicate if requirements have changed.	Jessica Bellah, Greenbelt Community Planner		Last bus bay may be removed and used for pedestrian access. Restore curb to a straight curb condition so that it is clearly NOT a bus bay.	
9		E. Medina	LAND	Submittal		General	1. Sheet 1 of 5. a. Are there any part of the 1.91 acres (disturbed area) in the flood plain, wetlands, etc.? b. Is there a breakdown of these 1.91 acres into the different properties impacted (e.g. WMATA, Greenbelt Metro Park, LLC, etc.) c. Items listed under Sheet Index must be updated (e.g. there is no profile on Sheet 4). d. What is the intent of Phase 1 and Phase 2? 2. Sheet 2 of 5 a. Provide details at the transition of: existing SWM Access Road and the 9' Boardwalk, 9' Boardwalk and the Bridge. b. Is the proposed 20' trail easement for the 9' Boardwalk, Bridge and 8' Asphalt Trail? You need temporary easement to extend to the limit of LOD. c. Are the street lights (including the required electrical conduits/wiring) and fencing are all within the 20' trail easement? 3. Sheet 3 of 5 a. See also applicable comments above. b. Provide details of the transition of the 8' asphalt trail with the existing sidewalk. c. INSET A -- is there no need of bollards at the opposite side? Please provide bollards on both approaches of crossing points 4. Sheet 4 of 5 a. Asphalt Trail - complete dimension at the pavement detail/section (e.g. pavement width = 8 feet, easement width = 20 feet, etc.). It should be easement line not property line. 5. Sheet 5 of 5 a. Are the decking of the bridge and boardwalk sloped to the side (asphalt trail is 2%)? 6. Other a. Include geometry and profile of the alignment of the proposed trail.	9/28/2017	Plans can be updated to respond to questions. In general though the trail will have a 20ft easement/LOD along its entire width with all improvements to be located within this area. The Southern trail entrance starts as a non-vehicular boardwalk which shall be signed as such. Please clarify language required on plan since the WMATA provided connection agreement indicated an easement would not be granted for the trail.	Jessica Bellah, Greenbelt Community Planner		Updating plans to reflect comment is ok. There will be a connection agreement and not an easement. Metro police (MTPD) require a 105 inch trail that can carry at all points a 6500 pound vehicle.	
10		R.Lu	ENGA/Structural	Submittal		General	1. Provide the design criteria and specifications for Pedestrian Bridge and Boardwalk in General Notes. 2. Provide a profile for the proposed trail. 3. Provide the minimum horizontal clearance between the inner side of handrail for both pedestrian bridge and boardwalk. This clearance shall meet the minimum design requirements. 4. From the general plan the proposed bridge is crossing over the Narragansett Run. Verify if there are any hydraulic requirements for the proposed bridge. 5. Sheet 5. All final foundation design shall be subject to necessary changes after the geotechnical exploration and analysis are done. 6. Sheet 5. Provide the minimum allowable stress values for structural timber materials. 7. Sheet 5. Provide painting requirements if required. 8. Sheet 5. Specify the design vehicle load if both pedestrian bridge and boardwalk allow vehicles to cross. 9. Sheet 5. 3'-6" rail height is shown. If bicycles are allowed on boardwalk and pedestrian bridge, this height shall be 4'-6" minimum from the deck surface per Standard AASHTO requirement. 10. Sheet 5. Rails shall meet the crash testing requirements if vehicles are allowed for the proposed trail. 11. Sheet 5. Note 9. The designer shall provide the load limit to the owner. 12. Sheet 5. For the preliminary design, a framing plan, elevation and typical section are main elements. Provide a framing plan for Pedestrian Bridge and an elevation/framing plan for Boardwalk. 13. Sheet 5. Pedestrian Bridge. From the typical section, the proposed superstructure consists of Glulam girders, lateral beams, stringers and decking. Investigate if the design can be simplified to only use Glulam girders and decking by eliminating lateral beams and stringers with more Glulam girders. 14. Sheet 5. Clarify the design intention of Note 10 (Bridge has not been designed for two way traffic. All users shall yield to oncoming traffic). 15. Sheet 5. Boardwalk. From Sheet 2, the proposed boardwalk is connecting to the existing access road but the typical section on Sheet 5 shows the boardwalk has varied heights over the existing grade. As Comment 2 and Comment 12 state, a profile and elevation shall be provided to show the site conditions. 16. Sheet 5. Boardwalk. Justify 100 psf live load specified at Note 1.	10/3/2017	All comments would be addressed by signature bridge during permitting of final bridge design. Boardwalks and bridges are not designed to accommodate vehicles.	Jessica Bellah, Greenbelt Community Planner		See above comment about vehicles. Other comments are acceptable. See comments above about keeping trail users from the pond. Also, a pond buffer should be provided that extends at least 25 feet from the maximum water surface elevation of the pond. Based on aerial imagery, the surface water elevation is within 40-50 feet of the adjacent roadway. These measurements should be confirmed to make sure there is indeed sufficient space between the pond+buffer and the roadway. Additionally, ensure that the proposed trail does not interfere with the mandatory access for pond maintenance (min. 12 feet wide; should allow access to riser and outlet; should allow enough space for vehicles to turn around).	
11		G. Tall-Nouri	PARK	Submittal		General	GENERAL COMMENTS 1. What location were traffic speeds study taken from? 2. Provide environmental impacts and mitigation measures. 3. Provide final site plan drawings. 4. Provide list of trees impacted. 5. Provide a full traffic signal instead of proposed embedded flashing lights at pedestrian crossing of access road. 6. Provide slope percentages of all crosswalks for ADA review. GENERAL STORM DRAIN AND PAVING NOTE COMMENTS 1. Items #2/3 on Sheet 1. Some type of stormwater swales or ditches must be designed. 2. Item #4 on Sheet 1. Roadway construction should comply with WMATA standards. 3. #5 on Sheet 1. Miss Utility only applies to public roads. A private utility locator must be contracted. 4. #6 on Sheet 1. A pre-construction meeting should be arranged with Supervisor of Field Project, Tom Majestic of WMATA's Joint Development and Adjacent Construction (JDAC) Office 5. Item #7 on sheet 1. Project signs to be coordinated with WMATA/JDAC. 6. #8 elevations should meet Metro standards, contact JDAC for information. 7. #9 - Traffic control must be designed and MOT plans must be reviewed by WMATA and approved by JDAC. 8. #10 - Revise to WMATA/JDAC to approvals, not DPJE. 9. #14 - Revise to Add WMATA/JDAC to approvals, not DPJE. 10. #22 - This may apply depending upon alignment decision, and in accordance to WMATA standards, not DPJE. 11. #26 - WMATA needs to review and approve DPWT ramps proposed. Tactile ADA requirements per WMATA standards. 12. #29-Sidewalks to be constructed per WMATA standards. 13. #33 - Pavement coring to be performed according to WMATA standards. 14. #34 - Property corners certifications utilize WMATA standards. 15. #42 - Review by owner of traffic improvements, approval by WMATA. 16. #43 - Revise: Traffic markings, signals, signs to be reviewed, approved by WMATA and installed by third party for WMATA. 17. #44 Delete. This applies to subdivision, not specific to this project.	10/3/2017	General Comments 1. traffic speeds were taken prior to the turn location. New speeds for the new alignment should be recorded. 2., 3., 4. can be addressed in final design. 5. please see city response to comment 2 regarding the traffic signal. 6. can be provided in final design. ST and Paving Pavement coring can utilize coring and geotechnical performed as part of the North Core infrastructure plan approval. All other comments can be addressed in final design plans. Sheet 2 comments - acknowledged.	Jessica Bellah, Greenbelt Community Planner		Comments will be updated once revised engineering plans are provided	

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COMMENT & RESPONSE MATRIX
May 10, 2017

No	Date	By	Discipline	Reference Document	Document Section	Page	WMATA Reviewer Comment	Date	ODC Response	By	Date	DRAFT WMATA Review Comments 1-31-18	Status
							18. WMATA has specific requirements for facility pads. SHEET 2 COMMENTS 1. Show sidewalk connection at south end of path. 2. Show a dividing line on plans between WMATA and City of Greenbelt standards and maintenance responsibility. INSET A 1. Delete, replace with new signalized trail crossing. INSET B 1. Delete.						
12		T. Bushnaq	JDAC	Submittal	General		1. All work within 50' of WMATA facilities and/or within the zone of influence of WMATA facilities and/or infrastructure shall be in conformance with the WMATA Adjacent Construction Project Manual (ACPM). For your information and use, please see the link below the WMATA Adjacent Construction Project Manual. 2. Review WMATA Adjacent Construction Project Manual for guidance on applicable general procedures, document request form, coordination, submittal process, design and construction requirements, real estate and insurance requirements, WMATA contractor identification cards, roadway workers protection (RWP) training and Site Specific work plan (SSWP) etc. for construction projects adjacent to, beneath, on, or over existing WMATA property, facilities, and/or operating Rights of Way. 3. Submit WMATA Real Estate permit application to access WMATA property in order to complete work associated with the proposed trail connection. Please see the following URL for permit application and permit form. WMATA permit fee is \$3500 4. Submit detailed design and construction schedule. 5. Execute WMATA Letter of Agreement. Your execution of this letter agreement is necessary for: a. The start of WMATA general coordination and design review of your project, and; b. Confirmation that you, the Owner/Developer/Contractor, will comply with WMATA Standards and Criteria, WMATA Adjacent Construction Project Manual and WMATA operational and safety requirements while working on or adjacent to WMATA property, facilities and operations, be it Metrorail or Metrobus and; c. Confirmation that you, the Owner/Developer/Contractor, will pay WMATA for its staff costs for general coordination, design review and construction monitoring. d. It is WMATA policy that the Owner/Developer/Contractor fully funds the WMATA staff costs for adjacent construction projects. WMATA and City of Greenbelt shall execute an operation and maintenance agreement to document terms, conditions, responsibilities, liabilities, etc. prior to the opening of the proposed trail. 6. WMATA ID cards are required for every contractor staff/person that work on WMATA property or easement areas. The RWP training is required for contractors staff who are planning to enter with WMATA Escort(s) the WMATA Right Of Way (ROW) and/or the WMATA service rooms. The Site Specific Work Plan (SSWP) is required if applicable when you request power outage to perform any work that might impact WMATA facilities and/or utilities.	10/3/2017	Final alignment and connection agreement should be negotiated prior to preparation of permit level plans.	Jessica Bellah, Greenbelt Community Planner		Explicitly concur with the WMATA comments or indicate non-concurrence if such is the case.	
		T. Bushnaq	JDAC	Submittal	General		7. Add the following preliminary comments to the General Notes of construction document permit set: a. All working plans shall include specific reference to the WMATA Adjacent Construction Project Manual for work which will involve and or impact WMATA interests; such as but not limited to work hours, rail road protective liability insurance, no driving of sheet pile within 25' of the WMATA Right-of-way, construction sequence plan and staging plan, equipment positioning plan, contingency and monitoring plan etc. b. Contractor shall verify and locate any underground utilities (both horizontally and vertically) in the vicinity of WMATA utilities or those serving WMATA facilities, and the proposed gas and water lines (to be installed prior to the start of this project) by private utility company prior to performing any work. Contractor shall undertake test pits if necessary to verify locations and depths of utilities located on WMATA property, easements or serving WMATA facilities. c. Contractor shall keep the equipment and machinery to be used for the execution of work inside the fenced or barricaded areas and not to restrict the WMATA use of its access and facilities. d. Contractor shall restore the WMATA permitted premises in accordance with WMATA specifications and requirements upon completion of the work as described in the WMATA approved work plan. e. Contractor shall provide indemnification and insurance to WMATA in accordance with the requirements of WMATA's ACPM and WMATA's Real Estate Permit requirements. f. Contractor shall submit as-built plans per the requirements outlined in the WMATA's ACPM. 8. Provide detailed grading and drainage plans. 9. Provide grounding and bonding per WMATA standards and specifications. Provide ground resistance/continuity test results for compliance. 10. Submit detailed design and construction schedule. 11. Provide sequence of construction and maintenance of traffic plans. 12. Provide jurisdictional comments. 13. Provide forest conservation plans.	9/27/2017	Comments to be addressed during permit plan review once a final alignment and connection agreement is reached between WMATA and the City.	Jessica Bellah, Greenbelt Community Planner		WMATA comments will be updated once revised engineering plans are provided. However, relevant comments should be addressed in revised plans	
		T. Bushnaq	JDAC	Submittal	General		14. The proposed trail crossing of the access roadway that connects the Capital Beltway and the station near the entrance to the Greenbelt Traction Power Substation (TPSS) does not meet minimum ADA requirements, safety and engineering standards and/or WMATA standards for trails and sidewalks. As discussed at a joint site meeting held on April 26, 2017 between representatives of WMATA and the City of Greenbelt/Woodlawn Development, LLC, WMATA requires that the trail crossing be moved approximately 500' to the east and be signalized in order to provide an ADA compliant and safe crossing that meets minimum engineering standards (See Attachment - Proposed New Trail Crossing). 15. Provide site distance triangles superimposed on horizontal and vertical alignment of access roadway. 16. Provide 8' minimum and preferably 10' wide sidewalk/trail throughout the entire length of trail connection. 17. Reconfigure the curb of the WMATA's southern most bus bay in order to provide a perpendicular crosswalk. 18. Provide detailed trail signage and directional signage between the station entrance and the South Core residential development. 19. Provide landscape/hardscape plan that shows proposed trees, benches, trash receptacles, etc.	9/27/2017	Trail Alignment has been moved west away from TPSS. A warrant study for the traffic signal would evaluate sight distance triangles. Trail signage can be provided and maintained by the City and WMATA respective to maintenance agreement.	Jessica Bellah, Greenbelt Community Planner		City to include responses to each WMATA comment in revised plans	

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No.	Date	By	Discipline	Reference Document	Document Section	Page	WMATA Reviewer Comment	Date	ODC Response	By	Date	DRAFT WMATA Review Comments 1-31-18	Status
13		E. Tombs	BUS/Traffic Engineering	Submittal		General	1. The traffic signal warrant analysis should consider the following – - o Pedestrian actuated Traditional Three Head Signal - o Accessible Pedestrian Signal (APS) - o Existing traffic conditions such traffic speeds - o Existing and future pedestrian and vehicular traffic projections - o Placement, phase sequencing 2. Recommend that an Memorandum of Understanding (MOU) be developed, identifying all agency participants (roles and responsibilities), funding for the installation of traffic signal, impacts of pending projects, maintenance/responsibility of traffic signal and other traffic control devices, 3. Consideration should be given to modifying the plans to include advance signing notifying motorists exiting the metro parking area (double left), as well as traffic exiting I-495 (to the Metro Station) of the approaching traffic signal. 4. The Pedestrian Crossing Recommendation(s) Plan Sheet prepared by the Traffic Group denotes a series of pedestrian crossing signs (with supplemental plaques), as fluorescent yellow-green. The MUTCD states this signing color scheme is reserved for school area pedestrian traffic. It is recommended that the color for the proposed warning signs be revised to black on yellow scheme. 5. The proposed shared path should provide advanced signing informing pedestrians and bicyclists of the proposed signalized crossing.	10/3/2017	1. please see comment 2 for response to traffic signal request. Trail is to provide a temporary connection to the station and it is unclear the relevance of future pedestrian and vehicular traffic projections for determining requirements of the crossing. 2. Trail is to serve as interim connection and should therefore be designed as such. 3. advanced signage would be included as part of crossing design. 4. Acknowledged. 5. Acknowledged.	Jessica Bellah, Greenbelt Community Planner		Meaning of city's number 2 comments is unclear. City should respond to each WMATA comment in revised plans	