

# MARYLAND DEPARTMENT OF TRANSPORTATION AND THE MARYLAND TRANSIT ADMINISTRATION

#### AND

## **PURPLE LINE TRANSIT PARTNERS LLC**

TECHNICAL PROVISIONS
PART 1, SCOPE OF WORK

## **EXECUTION VERSION**

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## Part 1 – Scope

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#### 1 GENERAL

The planned Project includes a 16.2-mile, 21-Station, east-west, light rail transit (LRT) Transitway that will extend from its western terminus just west of Wisconsin Avenue and the Bethesda Metro Station in Montgomery County to its eastern terminus at the New Carrollton Metro Station in Prince George's County, located just inside the Washington, DC area I-495/Capital Beltway (see Exhibit 1.1).

The Project also includes certain other improvements as generally described in this Part 1 of the Technical Provisions:

- Bethesda Metro Station South Entrance;
- Purple Line Mezzanine Connection;
- Reconstruction of the College Park Metro Kiss-n-Ride and Bus Loop;
- Capital Crescent Trail;
- Montgomery County Green Trail; and
- University of Maryland Bicycle Path.

As planned, the Transitway will be largely at grade with one short tunnel section, three sections elevated on structures, and several bridge structures. The Transitway will operate mainly in dedicated or exclusive lanes, serving five major activity centers just north of Washington, DC: Bethesda, Silver Spring, Takoma-Langley Park, College Park/University of Maryland, and New Carrollton. These activity centers are experiencing active development, and major commercial and residential projects are planned. The Washington DC region's Metrorail system (Metrorail), operated by the Washington Metropolitan Area Transit Authority (WMATA), serves four of these major activity centers, while three of these centers are served by MARC, Maryland's commuter rail system. Amtrak services along its Northeast Corridor connect at New Carrollton. The Project will provide passenger transfer capability at each of the major activity centers; however, the Transitway is physically and operationally independent from the Metrorail and MARC operations, and there are no shared operations and no at grade crossings with these operations.

The transit services that connect at these major activity centers include:

- Bethesda Metrorail Red Line (west leg), and major bus service hub for WMATA Metrobus and Montgomery County's Ride On services (generally the western terminus of the Project);
- Silver Spring Metrorail Red Line (east leg), MARC Brunswick Line, as well as major bus hub at Silver Spring Transit Center for WMATA Metrobus and Montgomery County's Ride On services;
- Takoma-Langley Park a transit center under construction as of the RFP date for WMATA Metrobus, Montgomery County's Ride On bus services, and Prince George's County TheBus services;
- College Park/University of Maryland Metrorail Green Line, MARC Camden Line, and University of Maryland Shuttle bus system, as well as WMATA Metrobus and Prince George's County TheBus services; and

 New Carrollton – Metrorail Orange Line, MARC Penn Line, Amtrak Northeast Corridor services, and major bus hub for WMATA Metrobus and Prince George's County TheBus services (generally the eastern terminus of the Project).

In addition to these five centers, there are another 16 Stations serving the residential communities, commercial districts, and institutional establishments between the major activity centers, including three Stations serving the University of Maryland with its approximately 37,000 students (2013), 13,000 employees (2013), and visitors. The Project is expected to attract over 60,000 daily boardings in 2030, with over one-third expected to use Metrorail and/or MARC services for some part of their trip, with the Project typically providing the access or egress connections.

Concessionaire shall finance, develop, design, construct, equip, supply LRVs for, operate and maintain all assets of the Project in accordance with the Contract Documents. See Exhibit 1.1 Project Location Plan.

**Exhibit 1.1 Project Location Plan** 



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#### 2 ALIGNMENT

Concessionaire shall finance, develop, design, construct, equip, supply LRVs for, operate and maintain the Transitway, and finance, develop, design, construct and equip other assets of the Project that will be turned over to other parties for operations and maintenance on and after the Revenue Service Availability Date as described in these Technical Provisions. The Transitway shall consist of a two track configuration along the entire length as shown on the track alignment plans in Book 4 Contract Drawings. The horizontal and vertical position of the tracks, roadways, Stations, facilities, systems, equipment, and other elements are established within the Limits of Disturbance (LOD). Refinement of the alignment, vertical profiles, and lateral and longitudinal position of the Stations and facilities shall be permitted within the defined LOD.

Any such refinement shall not alter the LOD, Project ROW, increase environmental impacts or mitigation requirements, as defined in the ROD, or alter any Project commitments without prior Owner Approval.

Any such refinement shall not alter the configuration of the alignment with respect to at grade versus grade separated intersections and crossings (including configuration of LRT crossing over versus under other facilities) without prior Owner Approval.

## 2.1 Bethesda to Silver Spring Transit Center (4.3 Miles)

The western end of the Transitway shall begin on the former Georgetown Branch right-of-way in Bethesda. The Georgetown Branch right-of-way crosses under Wisconsin Avenue. On either side of the Wisconsin Avenue bridge over the right-of-way, buildings have been constructed above the right-of-way: the Apex building west of Wisconsin Avenue and the Air Rights building to the east. The western terminus shall include a short section of track extending west outside the Apex building for approximately 100 feet for the provision of safe stopping distance if a Train overruns the Station Platform. The Bethesda Station Platform shall be under the current Apex building.

The Project shall include a new entrance to the Bethesda Metro Station at the south end of the Metrorail Red Line Platform (Bethesda Metro South Entrance), located under Wisconsin Avenue, as shown in Book 4 Contract Drawings, drawings A-101 through A-106 inclusive, A301 and as described in the Bethesda South Entrance Technical Provisions in Book 5 Engineering Data. Concessionaire shall provide a direct connection between the street level at Wisconsin Avenue and Elm Street, the Metrorail Red Line and the Transitway. Concessionaire shall design and construct the shaft, all structural work, MEP, elevators, emergency stairs, and associated facilities at this location, including those at the surface, to provide the direct connection to the southern portion of the Metrorail Red Line Platform. At the Red Line Mezzanine Level the Project shall connect to a mezzanine to be constructed by others on behalf of WMATA within the existing Bethesda Metro Station vault. The Work shall also include improvements and reconstruction on Elm Street. Responsibility for operations and maintenance of the Metrorail Red Line entrance and connection on and after the Revenue Service Availability Date will be as delineated in Book 5 Engineering Data.

The Project shall connect the Transitway Station to elevators serving the south entrance to the Bethesda Metrorail Station. Access to the Transitway's Bethesda Station shall be provided from Woodmont Plaza to the west, from Elm Street, and by means of a sidewalk from the Capital Crescent Trail. This sidewalk from the elevator lobby area adjacent to the Project Station and under the Air Rights building shall provide access to the Transitway Station from the east. The Transitway shall continue east under both Wisconsin Avenue and the Air Rights building. After emerging from under the Air Rights building, the Transitway shall continue in the Georgetown Branch right-of-way, crossing under East-West Highway and passing through the Columbia

Country Club on existing ROW. The alignment through the Columbia Country Club shall be developed in accordance with the Book 4 Contract Drawings.

Continuing along the Georgetown Branch right-of-way, the Transitway shall cross over Connecticut Avenue on a new bridge. The Chevy Chase Lake Station shall be on the east side of Connecticut Avenue, elevated at the level of the Connecticut Avenue bridge with connections to street level provided by stairs and elevators. The Transitway shall continue east, returning to grade, and then pass under a new highway bridge for Jones Mill Road. A new bridge shall carry the Transitway across Rock Creek. The bridge and adjoining abutments shall be developed in accordance with the requirements of Montgomery County's Maryland-National Capital Park and Planning Commission and the National Capital Planning Commission. The Lyttonsville Yard shall be located on the north side of the Transitway, mostly west of the Lyttonsville Place roadway bridge over the Project. The Lyttonsville Station shall be located east of the bridge. Concessionaire shall replace the existing WSSC communications tower located at station 244+00, including associated equipment both on and adjacent to the existing tower in accordance with the requirements described in Book 5 Engineering Data. The tower and equipment work shall be coordinated with WSSC with respect to relocation site within WSSC property, the timing of the relocation, and the duration of any service outages. Continuing east in the Georgetown Branch right-of-way to the CSXT Metropolitan Division right-of-way, the Transitway shall continue parallel to the CSXT Metropolitan Division right-of-way on the southwest side.

The Transitway shall pass under the modified or reconstructed bridges at Talbot Avenue, 16th Street, and Spring Street within or adjacent to the CSXT right-of-way. The Woodside Station shall be just east of the 16th Street Bridge. East of the Falkland Chase Apartments, the Transitway shall cross over the WMATA Metrorail / CSXT tracks on an aerial structure and enter the Silver Spring Transit Center (SSTC) parallel to, but higher than, the existing CSXT/Metrorail tracks level. The Transitway's SSTC Station Platform shall be located between the SSTC and the existing CSXT railroad tracks. The Project shall include a new connection between the Transitway's SSTC Station Platform and the southern portion of the WMATA Metrorail Red Line Silver Spring Station Platform (Purple Line Mezzanine Connection with South End of Metrorail Red Line Silver Spring Station Platform), as shown in Book 4 Contract Drawings, drawing A1.2. Concessionaire shall provide Silver Spring Metrorail mezzanine and connecting bridge, architectural enclosure, station kiosk including all monitoring and control equipment, vertical circulation (escalators, stairs, and elevators) and associated plumbing, electrical mechanical, and communications systems and connections to existing WMATA facilities in accordance with WMATA design criteria. Concessionaire shall provide conduit for power and communications cables to all the WMATA fare equipment that is included in this connection (provision, installation and test of WMATA fare equipment will be by others). Concessionaire shall provide capacity in the station electrical power distribution system for all WMATA fare system equipment and circuit breakers in an electrical power distribution panel for each item of the WMATA fare equipment included in this connection. The Project alongside and over the CSXT and WMATA facilities shall be developed in accordance to the Third Party Agreement Requirements. Operations and maintenance of the connecting bridge and Silver Spring Metrorail mezzanine between the Purple Line Silver Spring Transit Center Station and Metrorail Red Line on and after the Revenue Service Availability Date will be the responsibility of WMATA. The current delineation of the WMATA operations and maintenance areas and that of the Concessionaire is provided in the Contract Documents. The final delineation of such areas is subject to the final design of Project.

## 2.2 Silver Spring Transit Center to Takoma/Langley Transit Center (3.2 Miles)

East of the SSTC, the Transitway shall turn eastward and descend to grade on the south side of Bonifant Street in dedicated lanes. The Transitway shall cross Georgia Avenue at grade, shifting

to the north side of Bonifant Street with Track 1 in a mixed-use lane and Track 2 in a dedicated lane. Just before reaching Fenton Street, the Transitway shall turn north to pass through a space established for the Transitway in the Silver Spring Library building (under construction as of 2014) for the alignment and a Station, and enter the intersection of Fenton Street and Wayne Avenue. The Transitway shall continue along Wayne Avenue in Mixed-Traffic Alignment in the center of the existing roadway. The Project shall have a Station in the center of Wayne Avenue east of Dale Drive. The Transitway shall continue along Wayne Avenue.

After crossing the intersection of Sligo Creek Parkway, the Transitway shall enter the tunnel from Wayne Avenue east of Manchester Road. The Transitway includes a Manchester Place Station which shall be located in the portal of the tunnel and accessed both at grade from Wayne Avenue and by stairs and elevators from Plymouth Street above. The Transitway shall emerge from the tunnel on the south/west side of Arliss Street in dedicated lanes and shall continue to the intersection of Piney Branch Road. The Long Branch Station shall be on the west side of Arliss Street near this intersection.

The Transitway shall run in the median of Piney Branch Road in dedicated lanes to the intersection with University Boulevard. Piney Branch Road shall be widened by Concessionaire to accommodate the two new transit lanes.

The Piney Branch Station shall be in the median of University Boulevard at this intersection. The Transitway shall continue south in dedicated lanes in the median of University Boulevard to a Station at the intersection with New Hampshire Avenue, adjacent to the Takoma-Langley Transit Center, currently under construction as of 2014 by the Owner at the northwest corner of the intersection of University Boulevard and New Hampshire Avenue. On University Boulevard the Transitway shall be placed in the two existing center traffic lanes.

## 2.3 Takoma-Langley Transit Center to College Park-University of Maryland Metro Station (4.0 Miles)

Continuing along University Boulevard, the Riggs Road Station shall be in the median of University Boulevard on the west side of the Riggs Road intersection. The design shall accommodate a future pocket track immediately west of the Riggs Road Station with storage for, at minimum, a 200 foot long Train. The Transitway shall continue on University Boulevard, crossing Adelphi Road at grade to enter the University of Maryland (UMD) campus. The Adelphi Road/West Campus Station shall be located directly across from the UMD University College facility and at the entrance of the UMD campus.

The Transitway shall turn left at Presidential Drive and follow a future extension of Union Drive, as shown in the UMD 2011-2030 Facilities Master Plan, in an area which currently contains parking lots to connect to the existing Union Drive and continue to Campus Drive. The Campus Center Station shall be located adjacent to the Cole Student Activities Building. The Transitway shall continue on Campus Drive to Regents Drive. Campus Drive shall be rebuilt by Concessionaire as a three-lane roadway, with the outside lanes shared by Purple Line System LRVs and buses operated by other service providers, and the center lane as a one-way lane for general traffic and a managed lane during special events on campus. The Transitway shall continue at grade in a new exclusive Transitway from Regents Drive, along the parking lots adjacent to the Armory, behind the Visitors Center to Rossborough Lane. The traffic circle at Campus Drive and Regents Drive shall be converted into a four-legged intersection and the "M" currently located in the center of the existing traffic circle shall be relocated to the east of the intersection.

The Transitway shall cross US 1 at grade on Rossborough Lane. The East Campus Station will be on Rossborough Lane just east of US 1. The Transitway shall continue east to Paint Branch Parkway in dedicated lanes along the curb and shall continue on Paint Branch Parkway in

Mixed-Traffic Alignment. Immediately east of the existing College Park-UMD Metro Station parking garage, the Transitway shall turn and enter the College Park-UMD Metro Station area and shall run adjacent to, but independent of, the Metrorail tracks. The Transitway's College Park-UMD Station shall be located south of the existing Metrorail Station entrance. The Project shall replace the displaced WMATA bus access and loop facilities as required (Reconstruction of the College Park Metro Kiss-n-Ride and Bus Loop). Operations and maintenance of the replacement bus access and loop facilities on and after the Revenue Service Availability Date will be the responsibility of WMATA. The current delineation of the WMATA operations and maintenance areas and that of the Concessionaire is provided in the Contract Documents. The final delineation of such areas is subject to the final design of the Project. The Transitway shall turn toward River Road.

The Project on UMD campus shall be developed in accordance with the Third Party Agreement Requirements and as described in the Contract Documents.

## 2.4 College Park-UMD Metro Station to New Carrollton Metro Station (4.7 Miles)

A pocket track with a minimum of a 200-foot LRV storage track shall be located immediately east of the College Park - UMD Metro Station. The Transitway shall run parallel to the south side of River Road from River Tech Court to Haig Drive. The M Square Station shall be located immediately west of Haig Drive. The existing traffic circle at the intersection of Haig Drive and University Research Court with River Road shall be replaced with a signalized intersection. The Transitway shall continue along the side of River Road, cross over the Northeast Branch, and turn right into the median of Kenilworth Avenue. The Transitway shall rise on an aerial structure that begins near Quesada Street and shall continue over the intersection of Kenilworth Avenue and East West Highway where it shall then turn left onto the south side of Riverdale Road. The Riverdale Park Station shall be on the elevated structure just east of the intersection of Kenilworth Avenue and East West Highway. The Transitway shall return to grade in dedicated lanes adjacent to Riverdale Road on the south side and shall then pass under the Baltimore-Washington Parkway. The existing bridges of the Baltimore-Washington Parkway over Riverdale Road shall be lengthened to accommodate the Project. Design and construction of the lengthened bridges and the Transitway within the US National Park Service (USNPS) property shall be performed in accordance with the USNPS Record of Decision and the Section 106 Programmatic Agreement. The Beacon Heights Station shall be immediately west of the intersection of the Project with Veterans Parkway.

The Transitway shall turn eastward at Veterans Parkway and continue on the south side of the roadway. The Glenridge Maintenance Facility shall be located at and adjacent to the current site of the Maryland-National Capital Park and Planning Commission (M-NCPPC) Northern Area Maintenance—Glenridge Service Center, which will be relocated by others. The Transitway shall cross Annapolis Road at grade to arrive at the Annapolis Road Station. The Transitway shall continue along the south side of Veterans Parkway and turn left at Ellin Road, and travel in the outside lanes of Ellin Road in Mixed-Traffic operations to arrive at the Transitway's eastern terminus at the New Carrollton Metrorail Station. The Project shall replace the existing WMATA bus access and loop, and kiss-and-ride and park-and-ride facilities displaced by the Project. The Project shall also demolish a portion of the existing pedestrian overpass to the existing IRS building on the west side of Ellin Road that is affected by the Project, and replace the horizontal and vertical circulation facilities. The Project shall extend the existing pedestrian tunnel connecting with the Metrorail and Amtrak Platforms and provide the vertical circulation connection between the extended tunnel and the surface. Operations and maintenance of the replacement bus access and loop, kiss and ride facility, parking facilities, and modified pedestrian tunnel on and after the Revenue Service Availability Date will be the responsibility of WMATA. The current delineation of the WMATA operations and maintenance areas and that of

ne Concessionaire is provided in the Contract Documents. The final delineation of subject to the final design of the Project.	such areas

#### 3 TRAILS

#### 3.1 Capital Crescent Trail

As part of the Project, Concessionaire shall design and construct the Capital Crescent Trail (CCT), replacing the current interim trail, within the Georgetown Branch right-of-way for a distance of 3.3 miles between Bethesda and the CSXT Metropolitan Division. At the junction with the CSXT, the trail shall continue parallel to the CSXT Metropolitan Division right-of-way on the southwest side to the Talbot Avenue Bridge. The trail will cross the CSXT Metropolitan Division right-of-way on the replacement Talbot Avenue Bridge. The trail shall continue parallel to the CSXT Metropolitan Division of the northeast side to the SSTC.

Concessionaire shall design and construct the CCT between Bethesda and Silver Spring concurrently with the design and construction of the Transitway. The CCT will be owned, operated, and maintained by Montgomery County no later than Final Completion. Montgomery County has established certain design requirements, including, at a minimum, trail width, surface type, and inclusion of additional amenities such as lighting, as defined in the Third Party Agreement Requirements, the applicable Montgomery County design standards, and other Contract Documents.

The portion of the CCT designed and constructed by Concessionaire shall be a paved trail, generally 12 feet wide with 2-foot unpaved shoulders, except that it may be narrower in locations where the width is physically constrained. The trail shall be separated from the Project Transitway by 10-feet landscaped buffers, except where site or other constraints necessitate a modification to this requirement.

At Bethesda Station, the Project shall include a sidewalk connection from the CCT to the Bethesda Station Platform to enable pedestrians to access the Project Station, the elevators to the Metrorail Red Line Station and Elm Street, and to continue to Woodmont Plaza via the Transitway Station Platform. Montgomery County will be responsible for constructing the atgrade connection between the CCT in Bethesda and Elm Street Park.

From Elm Street Park on the south side of the Project ROW, the CCT shall cross over the Transitway on an elevated structure. Once on the north side of the Transitway the trail shall descend to ground level. Between a location just east of Pearl Street and Rock Creek, the trail shall be on the north side of the Transitway.

The CCT shall cross over Connecticut Avenue on a separate bridge adjacent to the Transitway and shall provide pedestrian and bicycle access to the Chevy Chase Lake Station. The trail shall continue east, passing under Jones Mill Road and crossing Rock Creek on a separate bridge that shall be at a lower elevation than the Transitway bridge to allow unobstructed views of the Rock Creek valley to the south. Concessionaire shall coordinate the design and aesthetics of the bridge and adjoining abutments with Montgomery County Maryland-National Capital Parks and Planning Commission and the National Capital Planning Commission. After crossing Rock Creek, the CCT shall pass under the Transitway to the south side.

Between Bethesda and Stewart Avenue in Lyttonsville, the CCT shall parallel the Transitway in a similar location as the existing trail. The trail shall follow the Transitway until crossing to the northeast side of the CSXT right-of-way via a new Talbot Avenue Bridge constructed by Concessionaire. The trail will continue along the northeast side of the CSXT Metropolitan Division to the Silver Spring Transit Center.

#### 3.2 Montgomery County Green Trail

Concessionaire shall reconstruct the existing Montgomery County Green Trail along the north side of Wayne Avenue between Fenton Street and Cedar Street and shall construct a new

segment of the Green Trail along the north side of Wayne Avenue between Cedar Street and its connection to the Sligo Creek Trail along Sligo Creek Parkway. The Green Trail shall be owned, operated, and maintained by Montgomery County no later than Final Completion. Montgomery County has established certain design elements, including, at a minimum, trail width, surface type, and inclusion of additional amenities, such as lighting, as defined in the Third Party Agreement Requirements, Montgomery County design standards, and other Contract Documents.

## 3.3 University of Maryland Bicycle Path

The Concessionaire shall design and construct a bicycle path paralleling the Purple Line System from the intersection of Campus Drive and Presidential Drive to US Route 1, including pedestrian-style lighting in areas that are currently unlit. No later than Final Completion of the bicycle path (together with the transfer of all applicable warranties to the University), the University will own the bicycle path and operate, maintain, and replace it at the University's sole cost.

#### 4 STATIONS

The Transitway shall include the 21 Stations summarized in Exhibit 4.1. Station vertical style and Platform type shall be as shown in Exhibit 4.1. Station horizontal and vertical location shall be as shown in the Book 4 Contract Drawings except that Concessionaire may adjust the location of the Stations along the Transitway alignment within the LOD only as approved by Owner.

Concessionaire shall design Platforms to not less than 200' in length available for boarding and alighting. Concessionaire may construct Platforms to the length required for boarding and alighting from all doors of the maximum length Train at Service Level 3 and meeting the LOS requirements of Part 2B, Section 8.3.7 of the Technical Provisions, provided that Concessionaire shall not preclude future extension of the Platforms to the full 200' length. At grade-separated stations, Concessionaire shall in all cases construct VCE in the quantities and locations shown in the Contract Drawings, regardless of reduced platform length.

Exhibit 4.1 Project Stations	Location	Vertical Style	Platform Type
Bethesda	Georgetown Branch ROW and Elm St., west of Wisconsin Ave., under Apex Building	Under Building	Center
Chevy Chase Lake/ Connecticut Ave.	Georgetown Branch ROW at Connecticut Avenue	Aerial	Side
Lyttonsville	Georgetown Branch ROW at Lyttonsville Place	At Grade	Center
Woodside/16th Street	South of CSXT ROW at 16th Street	At Grade	Side
Silver Spring Transit Center	Silver Spring Metrorail Station	Aerial	Center
Silver Spring Library	Wayne Avenue and Fenton Street	At Grade	Side
Dale Drive	Wayne Avenue at Dale Drive	At Grade	Center
Manchester Place	Wayne Avenue between Manchester Road and Manchester Place	Tunnel Portal	Side
Long Branch	Arliss Street at Piney Branch Road	At Grade	Side
Piney Branch Road	University Blvd. and Piney Branch Road	At Grade	Center
Takoma/Langley Transit Center	University Blvd. and New Hampshire Ave.	At Grade	Center
Riggs Road	University Boulevard and Riggs Road	At Grade	Center
Adelphi Road/West Campus	Campus Drive and Adelphi Road	At Grade	Center
Campus Center	Campus Drive at Cole Student Activities Building	At Grade	Side
East Campus	Rossborough Lane at US 1	At Grade	Side
College Park Metro	River Road at College Park—UMD Metro Station	At Grade	Center
M Square	River Road at Haig Drive/ University Research Court	At Grade	Side
Riverdale Park	Kenilworth Avenue and MD 410	Aerial	Side
Beacon Heights	Riverdale Road at Veterans Parkway	At Grade	Side
Annapolis Road/Glenridge	Veterans Parkway at Annapolis Road	At Grade	Side
New Carrollton	Ellin Road at New Carrollton Metro Station	At Grade	Center

#### **5 FACILITIES**

The Project includes facilities that are a Part of the Purple Line System, support the activities of the Purple Line System, and that are included in Third Party Agreements. Concessionaire shall be responsible for certain facilities at Owner's discretion in accordance with Section 14 of the Agreement as identified in this Part 1, Section 5 of the Technical Provisions.

## **5.1 Operations and Maintenance Facilities**

The Project includes certain activities required for the Purple Line System to be performed at one or more Operations and Maintenance Facilities (OMF). Two sites for the facilities have been identified at Lyttonsville in Montgomery County and at Glenridge in Prince George's County.

#### 5.1.1 Glenridge

Any facility at this location shall be developed in accordance with Part 2B, Section 7 of the Technical Provisions.

Concessionaire shall provide a roadway connection comparable to the existing roadway connection between MD 410 (Veterans Parkway) and the Glenridge Center, a retail facility at the western corner of MD 410 and MD 450 (Annapolis Road) intersection.

#### 5.1.2 Lyttonsville

Any facility at this location shall be developed in accordance with Part 2B, Section 7 of the Technical Provisions.

## 5.2 University of Maryland, College Park Maintenance Facility

Concessionaire shall demolish a University of Maryland, College Park maintenance facility referred to as Building 212. If directed by Owner and in accordance with Section 14 of the Agreement, Concessionaire shall relocate and provide, including outfitting, a facility that serves similar maintenance functions of the University of Maryland, College Park to the Severn Building or another site in accordance with Part 1, Section 8.1 of the Technical Provisions.

#### 5.3 Police Facility

Concessionaire shall construct a police facility if directed by Owner in accordance with Section 14 of the Agreement.

#### 5.4 Parks & Planning Commission Maintenance Facility

Concessionaire shall provide a Prince George's County Department of Parks Maintenance Facility if directed by Owner in accordance with Section 14 of the Agreement. Such maintenance facility may be located at the site referred to as "Polk Street" or other site as designated by Owner.

#### **6 VEHICLES AND SYSTEMS**

## 6.1 Light Rail Vehicles

Concessionaire shall provide ADA-compliant, bi-directional LRVs with a minimum 70 percent low floor to enable level boarding with all Station Platforms. The LRVs shall meet the requirements of Part 2B, Section 12 of the Technical Provisions

#### 6.2 Systems

#### 6.2.1 General

Concessionaire shall analyze the existing electromagnetic levels prior to commencing Construction Work and develop system designs that do not cause interference to the outside environment, do not cause interference to one another, and are not subject to reduced reliability due to outside interference.

Concessionaire shall evaluate the Purple Line System's operational availability and reliability requirements and assign appropriate availability and reliability requirements to each element. Concessionaire shall then design each element to meet the assigned reliability and availability needs.

Concessionaire shall perform hazard analyses, and threat and vulnerability assessments, and design all assets to eliminate or mitigate all identified risks and hazards.

Concessionaire shall test all assets, including various levels of integrated testing, to demonstrate that the Project can perform in accordance will all required performance, functional, safety reliability, and availability requirements.

## 6.2.2 Train Control System

Concessionaire shall provide a Vital Train control system for the exclusive and some semiexclusive areas of the alignment to provide bi-directional control with integral automatic Train protection and Train-to-wayside communication. Functionality shall include:

- enforcement of Train separation, including collision prevention;
- route control at interlockings;
- activation of grade crossings;
- interface to traffic signals at street crossings;
- enforcement of maximum speed limits;
- interface to the Station variable message signs for next Train arrival information; and
- interface to OCC for control and supervision.

For some semi-exclusive portions of the alignment and the shared-use portions of the alignment, the Train control system shall provide Vital control of interlocking routes and enforce zone speed limits. Bar signals shall be used to indicate to the Train operators that the vehicle can proceed at the traffic intersections. Automatic vehicle location shall be provided to report Train locations to the OCC and to drive next Train arrival signs at Stations.

#### **6.2.3 Traction Power Substations**

Concessionaire shall provide traction power substations as required to support specified headways with maximum length Trains. Concessionaire shall perform load flow calculations to determine system operating voltage, substation locations, and substation capacities.

Separate traction power substations shall be provided for mainline sections, yards, and shops.

Special substation architectural treatments will be required at some locations to blend the substations into their surroundings.

All necessary duct banks and cables shall be provided to connect the substations to the Overhead Contact System (OCS).

## 6.2.4 Overhead Contact System

Concessionaire shall provide an OCS to carry traction power from the Traction Power Substations (TPSS) to the LRVs. The type of OCS used shall be determined by the characteristics of the alignment and may be auto tensioned simple catenary or fixed termination single contact wire.

OCS poles shall be epoxy-coated or weathering steel tapered tubular poles when the Transitway is immediately adjacent to the CCT and epoxy-coated tapered tubular steel poles along the remainder of the Transitway except where additional architectural treatment is required by architectural requirements or Third Party Agreement Requirements and where wide flange poles are permitted. Wide flange epoxy painted or galvanized poles may be used in the yards.

Joint use OCS poles shall be considered by Concessionaire when possible for lighting and traffic lights to reduce the total number of poles.

## 6.2.5 Communications Systems

Concessionaire shall provide communications systems to support Project operations and functionality as follows:

- Communications Infrastructure Backbone (CIB) networks, including an independent Purple Line System network and an extension of the MDOT network. The Purple Line System network shall carry the operational data and telephony traffic, shall not extend beyond the LOD, and shall have no connections outside of the Purple Line System. The MDOT network shall carry the security and fare collection data. A Wi-Fi network shall be provided to be used for down loading CCTV and telemetry data from the vehicles. The Wi-Fi system may also be used for other non-vital data transmission;
- telephone systems shall include the administrative telephones, the Wayside Emergency Telephones (WET), and the Station Emergency Telephones (SET);
- radio system for voice and data communications throughout the alignment;
- Public Address (PA) and Variable Message Signs (VMS) at the Stations. PA shall be provided for the yard buildings; and
- systemwide duct bank shall carry the CIB network fiber optics, the Train control/signaling cables, and the local communications cables.

#### 6.2.6 Control and Monitoring Systems

Concessionaire shall provide two control centers: a primary Operations Control Center (OCC) and a Backup Operations Control Center (BOCC). The OCC and BOCC shall be at geographically separate locations, and both shall provide the ability to control and supervise the Purple Line System.

Concessionaire shall provide systems support for an Owner Security Center to include workstations for CCTV, Train location overview diagram, intrusion alarms, and fire alarms.

Concessionaire shall provide a control system for Train Traffic Management (TTM) and for Supervisory Control and Data Acquisition (SCADA). Certain functionalities for these systems are defined and others shall be determined by Concessionaire based on a concept of operation for the Project.

Concessionaire shall provide local network connectivity to tie the control centers and the Security Center to all local equipment and systems to be controlled and monitored.

#### 6.2.7 Fire and Security Systems

Concessionaire shall provide a Fire Management System (FMS) to detect fire and smoke conditions and issue alarms. A Fire Management Panel shall be provided at underground and Aerial Stations and be able to monitor and control select devices and systems including:

- tunnel and Station emergency ventilation;
- fire and smoke detection and suppression;
- intrusion access (lock/unlock);
- vertical circulation elements (elevators and escalators); and
- public address through microphone access.

Concessionaire shall provide an access control and intrusion detection system to monitor entry into non-public areas of the Project and to detect unauthorized entries. The system shall provide alarms and detect trouble conditions at Station rooms; wayside enclosures; end of Platform gates; emergency exits and hatches; areas of refuge; ticket vending machines; windows; cabinets and panels; ducts, gratings, and louvers; and Station entrances and related areas and equipment.

Concessionaire shall provide a CCTV camera system to monitor public areas of the Project and certain key non-public areas. The CCTV system shall be integrated with Owner's existing CCTV system on WMATA Metro, MTA Central Light Rail, and MARC and shall be monitored by Owner's Security Center. CCTV images of Station areas shall also be provided to the control centers. Concessionaire shall share some CCTV signals with third parties and shall be responsible for making the technical interface to those third-party systems.

#### 6.2.8 Transit Signal Priority or Pre-emption (TSPP)

Concessionaire shall provide new traffic signal controllers and new traffic signal devices, including bar signals for Trains and supplementary indicators for street traffic. Concessionaire shall coordinate testing of all devices with the applicable AHJ.

Concessionaire shall interface Train locations with the traffic signal systems to request TSPP at each applicable intersection.

#### 6.2.9 Fare Collection

Concessionaire shall provide fare vending and validation equipment at each passenger Station and mobile fare verification equipment for Owner's fare inspectors.

Concessionaire shall connect the fare vending equipment into a networked system and enable validation of debit and credit cards.

## 7 OPERATIONS, MAINTENANCE, HANDBACK REQUIREMENTS

Concessionaire shall establish a program to ensure a safe and reliable transit system and shall operate and maintain the Purple Line System with the main objectives of maximizing public safety, service availability, and system reliability. Concessionaire shall coordinate, plan, and perform the O&M Work required under the Contract Documents in a manner that will provide safe conditions for Users, personnel, and the public who come in contact with the Purple Line System.

Concessionaire shall perform O&M Work and monitor the Purple Line System 24 hours per day, seven days per week and operate service in accordance with the service requirements established by the Contract Documents. In particular, Concessionaire shall provide Incident and Emergency Response and emergency repair 24 hours per day, seven days per week. Concessionaire shall provide the appropriate staffing levels for the hours of operation set forth in the Contract Documents and shall be available to assume these responsibilities from the start of Trial Running until the end of the Term.

From the start of Trial Running until the end of the Term, Concessionaire shall undertake and be responsible for all O&M Work within the O&M Limits. The O&M Limits shall include all of the following:

- the Purple Line System;
- the areas delineated by the maintenance delineation drawings included in Book 5 Engineering Data;
- the following public roadways owned by Third Parties, to the extents and limits as may be further defined in the Third Party Agreement Requirements:
  - Ellin Road from MD 410 Veterans Parkway to MD 450 Annapolis Road in Prince George's County;
  - Paint Branch Parkway from Rossborough Road to the CSXT overpass and from the CSXT Overpass to River Road in Prince George's County;
  - Campus Drive from Adelphi Road to Mowatt Lane;
  - Wayne Avenue from east of US 29 Georgia Avenue to and including the intersection of Wayne Avenue and Flower Avenue in Montgomery County;
  - Bonifant Street from and including its intersection with Ramsey Avenue to the west side of US 29 – Georgia Avenue, and from the east side of US 29 – Georgia Avenue to and including its intersection with Fenton Street in Montgomery County.
- certain traffic signals as described in Exhibit 5.1 of Part 3 of the Technical Provisions;
- Structures, retaining walls and ground mounted noise walls as assigned for O&M Work in Exhibits 3.10, 3.11 and 3.12 of Part 2B in the Technical Provisions;
- storm water management facilities constructed or modified as part of the Project except as assigned to others by the Third Party Agreement Requirements;
- except as otherwise required by this Section or the Third Party Agreement
  Requirements, within County roadways where Trains operate in areas of Dedicated
  Alignment or in shared traffic lanes, the O&M Limits shall be back of outside curb to back
  of outside curb;

- except as otherwise required by this Section or the Third Party Agreement
  Requirements, in areas where Trains operate in a median Dedicated Alignment the O&M
  Limits shall include the entire median from inside of median curb to inside of median
  curb;
- Project elements required to be maintained by Third Party Agreement Requirements; and
- Project elements required to be maintained by Owner Utility Agreements.

From commencement of Construction Work on Paint Branch Parkway until the end of the Term, Concessionaire shall undertake and be responsible for all O&M Work for the Paint Branch Parkway pumping station and associated conveyance systems.

The O&M Limits shall exclude:

- CCT;
- · Montgomery County Green Trail;
- Project elements specifically excluded by the Third Party Agreement Requirements; and
- Project elements specifically excluded by the Owner Utility Agreements.

The scope of the O&M Work to be provided by Concessionaire is described in Part 3 of the Technical Provisions and shall include:

- performing the management and coordination, operations, maintenance and cleaning within the O&M Limits for the duration of the Term;
- performing the asset management and Renewal Work;
- performing Incident Response, Emergency Response and Emergency repair; and
- performing 24 hours per day, seven days per week monitoring.

#### O&M Work shall exclude:

- policing; and
- fare enforcement.

Concessionaire shall manage the Project assets in accordance with an Asset Management Plan and Renewal Work plan.

#### 8 THIRD PARTY AGREEMENT REQUIREMENTS

The Contract Documents include the certain Third Party requirements that the Concessionaire must perform as part of the Work. The Owner Third Party Agreements in their entirety as of the Setting Date have been provided to Concessionaire as Reference Documents.

The Owner has entered or will enter into Third Party Agreements to facilitate the design, construction, equipping, maintenance and operation of the Project. Certain requirements of the Third Party Agreements as specified in this Part 1, Section 8 of the Technical Provisions shall be implemented as part of the Work by the Concessionaire in accordance with the Contract Documents.

## 8.1 University of Maryland

The Owner intends to enter into a Memorandum of Agreement (MOA) with The University of Maryland, College Park. The most recent draft of the University of Maryland, College Park MOA has been provided, with the Third Party's permission, to Concessionaire as a Reference Document. The provisions identified below are incorporated herein by reference into the Contract Documents. Any work item identified in these incorporated provisions, as the obligation of "MTA" or "Concessionaire" shall be implemented by the Concessionaire.

- ARTICLE I DEFINITIONS. Defined terms in Article I are incorporated only for the purpose
  of and to the extent such terms are used and incorporated below in provisions shown in
  this Part 1, Section 8.1 of the Technical Provisions;
- ARTICLE II PROJECT DESCRIPTION, in its entirety;
- ARTICLE IV RIGHT OF WAY AND REAL ESTATE, excluding cost of improvements to the Severn Building;
- ARTICLE V RESPONSIBILITY FOR PROJECT COSTS, only Section C;
- ARTICLE VI DESIGN AND CONSTRUCTION, in its entirety;
- ARTICLE VII DESIGN REVIEW & APPROVAL, in its entirety;
- ARTICLE VIII DESIGN AND CONSTRUCTION ADDITIONAL MTA OBLIGATIONS, in its entirety;
- ARTICLE IX BETTERMENTS AND DIRECTED CHANGES, only Sections A and E;
- ARTICLE X OPERATIONS AND MAINTENANCE, in its entirety;
- ARTICLE XI SAFETY AND SECURITY, in its entirety;
- ARTICLE XII AUTOMOBILE, PEDESTRIAN, AND BICYCLE MOVEMENT AND PARKING ON CAMPUS, in its entirety;
- ARTICLE XIII MINIMIZING INTERFERENCE WITH UNIVERSITY RESEARCH FACILITIES, only Sections A-C;
- ARTICLE XIV UTILITIES, STORMWATER MANAGEMENT, AND ENVIRONMENTAL MITIGATION, in its entirety;
- ARTICLE XV REGARDING CAMPUS DESIGN, PLANNING AND GROWTH, in its entirety:

- ARTICLE XVI INSURANCE AND INDEMNIFICATION, in its entirety;
- EXHIBIT B DESCRIPTION OF CAMPUS, in its entirety;
- EXHIBIT E UNIVERSITY MANDATORY REQUIREMENTS, in its entirety;
- EXHIBIT H FORM OF RIGHT OF ENTRY PERMIT, in its entirety;
- EXHIBIT J NEW LOCATION OF THROWING FIELDS, in its entirety;
- EXHIBIT L CAMPUS CORE AREA, in its entirety; and
- EXHIBIT M NPDES STORMWATER PERMIT, in its entirety.

## 8.2 Maryland-National Capital Park & Planning Commission (with regard to its Montgomery County jurisdiction)

The Owner intends to enter into a Memorandum of Agreement (MOA) with the Maryland-National Capital Park & Planning Commission (with regard to its Montgomery County jurisdiction). The most recent draft of the National Capital Park & Planning Commission MOA has been provided, with the Third Party's permission, to Concessionaire as a Reference Document. The provisions identified below are incorporated herein by reference into the Contract Documents. Any work item identified in these incorporated provisions, as the obligation of "MTA" or "Concessionaire" shall be implemented by the Concessionaire.

\*Note text below in all capital letters are subtitle in use for clarity and are not incorporated as Contract Provisions.

- ARTICLE I DEFINITIONS. Defined terms in Article I are incorporated only for the purpose of and to the extent such terms are used and incorporated below in provisions shown in this Part 1, Section 8.2 of the Technical Provisions;
- ARTICLE II PROJECT DESCRIPTION, in its entirety;
- ARTICLE IV PROJECT EXECUTION PLAN, in its entirety;
- ARTICLE VI REVIEW AND APPROVAL OF THE PROJECT AND THE PARKS PROJECT, only Sections A,B and C;
- ARTICLE VII PROCEDURES FOR INSPECTION AND ACCEPTANCE OF CONSTRUCTION WORK PERFORMED ON PARKS PROPERTY, in its entirety;
- ARTICLE IX SPECIAL PROVISIONS REGARDING PARKS PROJECTS, only Section A;
- ARTICLE XI REAL ESTATE AND RIGHT-OF-WAY, only Section D; and
- ARTICLE XIII GENERAL PROVISIONS, only Sections D and J.

#### 8.3 Prince George's County

The Owner intends to enter into a Memorandum of Agreement (MOA) with Prince George's County. The most recent draft of the Prince George's County MOA has been provided, with the Third Party's permission, to Concessionaire as a Reference Document. The provisions identified below are incorporated herein by reference into the Contract Documents. Any work item identified in these incorporated provisions, as the obligation of "MTA" or "Concessionaire" shall be implemented by the Concessionaire.

\*Note text below in all capital letters are subtitle in use for clarity and are not incorporated as Contract Provisions.

- ARTICLE I DEFINITIONS. Defined terms in Article I are incorporated only for the purpose
  of and to the extent such terms are used and incorporated below in provisions shown in
  this Part 1, Section 8.3 of the Technical Provisions;
- ARTICLE II PROJECT DESCRIPTION, in its entirety;
- ARTICLE V PROJECT EXECUTION PLAN, in its entirety;
- ARTICLE VI REVIEW AND PERMITTING OF THE PROJECT, only paragraphs C2, and C4;
- ARTICLE VII OPERATIONS AND MAINTENANCE OF THE PROJECT AND COUNTY FACILITIES, in its entirety, except that if requested by the County and MTA, Concessionaire shall perform routine bridge maintenance work and/or inspections at the County's direction and expense for County owned bridges that cross over the Purple Line;
- ARTICLE VIII SAFETY AND SECURITY, in its entirety;
- ARTICLE IX UTILITIES, TRAFFIC SIGNALS AND STORMWATER MANAGEMENT, in its entirety, except that where Concessionaire is responsible for routine maintenance and repair of county roadways, including Lateral Conveyances for drainage and/or SWM facilities, Concessionaire shall also be responsible for routine maintenance of Trunk Lines for drainage and/or SWM facilities;
- ARTICLE X REAL ESTATE AND RIGHT-OF-WAY, only Sections D, E and I;
- ARTICLE XI CONSTRUCTION, MODIFICATION, INSPECTION, AND MAINTENANCE OF FACILITIES CURRENTLY OR TO BE OWNED BY THE COUNTY, in its entirety;
- ARTICLE XII MISCELLANEOUS PROVISIONS, only paragraph B1b;
- ARTICLE XIV GENERAL PROVISIONS, only Sections D, F, J, and K;
- EXHIBIT \_\_\_\_ SCOPE OF ROUTINE BRIDGE MAINTENANCE WORK for the CSXT bridge over Paint Branch Parkway beginning on line 224; and
- EXHIBIT \_\_\_ SCOPE OF ROUTINE ROADWAY MAINTENANCE WORK.

#### 8.4 Montgomery County

The Owner intends to enter into a Memorandum of Agreement (MOA) with the Montgomery County. The most recent draft of the Montgomery County MOA has been provided, with the Third Party's permission, to Concessionaire as a Reference Document. The provisions identified below are incorporated herein by reference into the Contract Documents. Any work item identified in these incorporated provisions, as the obligation of "MTA" or "Concessionaire" shall be implemented by the Concessionaire.

- ARTICLE I DEFINITIONS. Defined terms in Article I are incorporated only for the purpose of and to the extent such terms are used and incorporated below in provisions shown, and incorporated by reference in this Part 1, Section 8.4 of the Technical Provisions;
- ARTICLE IV PROJECT EXECUTION PLAN. Article IV in its entirety;

- ARTICLE VI DESIGN, REVIEW, AND APPROVAL OF PROJECT AND COUNTY-FUNDED PROJECTS. Article VI.A – C, G, H;
- ARTICLE VIII. CONSTRUCTION MANAGEMENT AND MITIGATION REQUIREMENTS. Article VIII in its entirety.
- ARTICLE IX. QUALITY PROGRAM AND DELEGATED INSPECTION. Article IX.B, D –
   G;
- ARTICLE X. SUBSTANTIAL COMPLETION, FINAL ACCEPTANCE AND WARRANTY. Article X in its entirety;
- ARTICLE XI. COORDINATION OF CONSTRUCTION ADJACENT TO THE PURPLE LINE. Article XIB;
- ARTICLE XIII. UTILITIES AND STORMWATER MANAGEMENT. Article XIII. B1, 2a, b, c, g and 3a-c, except that where Concessionaire is responsible for routine maintenance and repair of county roadways, including Lateral Conveyances for drainage and/or SWM facilities, Concessionaire shall also be responsible for routine maintenance of Trunk Lines for drainage and/or SWM facilities;
- ARTICLE XIV. REAL ESTATE AND RIGHT-OF-WAY. Article XIV.B.3;
- ARTICLE XV. RELATIONSHIP BETWEEN THE COUNTY FUNDED PROJECTS AND THE P3. Article XV.A.2.;
- ARTICLE XVII. GENERAL PROVISIONS., XVII.D, G, J and K; and
- With regard to the operation and maintenance of the Purple Line, if requested by the County and MTA, Concessionaire shall perform routine bridge maintenance work and/or inspections at the County's direction and expense for County owned bridges that cross over the Purple Line.

# 8.5 Maryland-National Capital Park & Planning Commission (with regard to its Prince George's County jurisdiction)

The Owner intends to enter into a Memorandum of Agreement (MOA) with the Maryland-National Capital Park & Planning Commission (with regard to its Prince George's County jurisdiction). The most recent draft of the National Capital Park & Planning Commission MOA has been provided, with the Third Party's permission, to Concessionaire as a Reference Document. The provisions identified below are incorporated herein by reference into the Contract Documents. Any work item identified in these incorporated provisions, as the obligation of "MTA" or "Concessionaire" shall be implemented by the Concessionaire.

- ARTICLE I DEFINITIONS. Defined terms in Article I are incorporated only for the purpose
  of and to the extent such terms are used and incorporated below in provisions shown in
  this Part 1, Section 8.5 of the Technical Provisions;
- ARTICLE II PROJECT DESCRIPTION, in its entirety;
- ARTICLE IV PROJECT EXECUTION PLAN, in its entirety;

- ARTICLE V REVIEW AND APPROVAL OF THE PROJECT AND THE DPR PROJECTS, in its entirety;
- ARTICLE VI PROCEDURES FOR INSPECTION AND ACCEPTANCE OF CONSTRUCTION WORK PERFORMED ON DPR PROPERTY, in its entirety;
- ARTICLE XI REAL ESTATE AND RIGHT OF WAY, only Section F;
- ARTICLE XII REQUESTED CHANGES TO THE PROJECT, in its entirety; and
- ARTICLE XIII GENERAL PROVISIONS, only Sections E and L.

## 8.6 CSXT Corporation

The Owner and CSX Transportation Incorporated (CSXT) intend to agree upon an Outline of Terms for Real Property Transfer and Related Agreements. A draft Outline of Terms for Real Property Transfer and Related Agreements has been provided to Concessionaire as a Reference Document. Concessionaire shall implement the following provisions of the Outline of Terms for Real Property Transfer and Related Agreements in accordance with the Contract Documents:

- ARTICLE III CONDITION OF PROPERTY, only Section A;
- ARTICLE IV DESIGN REVIEWS AND APPROVALS, only Section A and D;
- ARTICLE V ACTIVITIES DURING CONSTRUCTION AND OPERATION OF THE PURPLE LINE, only Sections A, B, D, E, except that at least four months prior to the start of construction on or adjacent to CSXT property, Concessionaire shall provide notice thereof to CSX, and CSX will then determine how many flaggers will be required to be at the work sites during the construction period. CSX will post as permanent positions the number of positions that the Project will require for that purpose and will assign those flaggers to the Project on a permanent basis. Concessionaire will reimburse CSXT for the cost of any flagging protection that is required for the Project;
- ARTICLE VII INSURANCE AND INDEMNIFICATION, in its entirety;
- EXHIBIT A AREA MAP, in its entirety; and
- EXHIBIT E CSXT PERMIT TO ENTER, in its entirety.

#### 8.7 Washington Metropolitan Area Transit Authority

The Owner intends to enter into a Memorandum of Agreement (MOA) with the Washington Metropolitan Area Transit Authority. No draft of this agreement has been approved for release to the Proposers. We are providing "Essential Terms of WMATA/MTA Project Coordination" as a Reference Document. The provisions of that document identified below are incorporated herein by reference into the Contract Documents. Any work item identified in these incorporated provisions, as the obligation of "MTA" or "Concessionaire" shall be implemented by the Concessionaire.

- ARTICLE I DEFINITIONS. Defined terms in Article I are incorporated only for the purpose
  of and to the extent such terms are used and incorporated below in provisions shown in
  this Part 1, Section 8.7 of the Technical Provisions;
- ARTICLE II SCOPE OF WORK, in its entirety;

- ARTICLE IV PROJECT REPRESENTATIVES & PROJECT EXECUTION PLAN, in its entirety;
- ARTICLE V DESIGN REQUIREMENTS, in its entirety, except that WMATA shall have 20 business days to respond to Submittals. If WMATA has not responded to a Submittal within 20 business days, Concessionaire shall submit notice of such non-response to WMATA. If WMATA does not respond to Concessionaire's notification within 5 business days, the submittal shall be considered approved by WMATA. If WMATA responds to the written notice by requesting additional time for review, Concessionaire shall make reasonable accommodations for WMATA's review;
- ARTICLE VI CONSTRUCTION REQUIREMENTS, in its entirety;
- ARTICLE VII SCHEDULING, in its entirety;
- ARTICLE VIII QUALITY PROGRAM, in its entirety;
- ARTICLE IX WMATA ACCESS TO AND RIGHTS DURING CONSTRUCTION WORK in its entirety;
- ARTICLE X SUBSTANTIAL COMPLETION AND FINAL ACCEPTANCE, in its entirety;
- ARTICLE XIV INSURANCE, INDEMNITY AND BONDS, in its entirety; and
- ARTICLE XVII NOTICE, in its entirety; and
- Concessionaire shall provide WMATA with third party warranties and guaranties for the WMATA improvements for a period of two years after WMATA Final Acceptance for WMATA's benefit with direct rights of enforcement.

#### 9 OWNER UTILITY AGREEMENTS

The Contract Documents include the certain Owner Utility Agreement requirements that the Concessionaire must perform as part of the Work. The Owner Utility Agreements in their entirety as of the Setting Date have been provided to Concessionaire as Reference Documents.

The Owner has entered or will enter into Owner Utility Agreements to facilitate the design and construction of the Project. Certain requirements of the Owner Utility Agreements as specified in this Part 1, Section 9 of the Technical Provisions shall be implemented as part of the Work by Concessionaire in accordance with the Contract Documents.

## 9.1 Potomac Electric Power Company (Pepco)

The Owner intends to enter into an MOA with Pepco. The latest draft of the Pepco MOA has been provided to Concessionaire as a Reference Document. The following provisions of this Pepco MOA shall be implemented by the Concessionaire in accordance with the Contract Documents:

\*Note text below in all capital letters are subtitles in use for clarity and are not incorporated as Contract Provisions.

- ARTICLE A DEFINITIONS. Defined terms in Article A are incorporated only for the purpose of and to the extent such terms are used and incorporated below in provisions shown in this Part 1, Section 9.1 of the Technical Provisions;
- ARTICLE B PROJECT DESCRIPTION AND SCOPE OF WORK. Article B 2, 3, 5, 6;
- ARTICLE C DESIGN AND REVIEW OF RELOCATION WORK TO BE PERFORMED BY CONCESSIONAIRE. Article C in its entirety;
- ARTICLE D PERFORMANCE OF RELOCATION WORK. Article D in its entirety;
- ARTICLE F COST ALLOCATION, REIMBURSEMENT, AND BILLING. Paragraphs 2, 3 and 7;
- ARTICLE H REGARDING CONSTRUCTION MATERIAL. Article H in its entirety;
- ARTICLE J NOTICES AND COMMUNICATIONS. Article J.5 and 6; and
- ARTICLE K GENERAL PROVISIONS. Paragraphs 4, 7, 10, 11 and 12.

## 9.2 Washington Suburban Sanitary Commission (WSSC)

The Owner expects to enter into a MOA with WSSC. The latest draft of the WSSC MOA has been provided to Concessionaire as a Reference Document. The following provisions of this WSSC MOA shall be implemented by the Concessionaire in accordance with the Contract Documents:

- ARTICLE 1 DEFINITIONS. Defined terms in Article 1 are incorporated only for the purpose
  of and to the extent such terms are used and incorporated below in provisions shown in
  this Part 1, Section 9.2 of the Technical Provisions;
- ARTICLE 2 PROJECT DESCRIPTION, SCOPE OF WORK AND UNIDENTIFIED WSSC FACILITIES, in its entirety;

- ARTICLE 3 DESIGN AND REVIEW OF RELOCATIONS, DIRECTED CHANGES AND BETTERMENTS, only paragraphs a, b, d, and g;
- ARTICLE 4 WSSC BETTERMENTS AND DIRECTED CHANGES, only paragraphs a, b, and c;
- ARTICLE 5 PERFORMANCE OF THE RELOCATION WORK, BETTERMENTS AND DIRECTED CHANGES, in its entirety;
- ARTICLE 7 IMPLEMENTATION OF THIS AGREEMENT, only paragraphs b and c;
- ARTICLE 8 COST ALLOCATION, REIMBURSEMENT, AND BILLING; only paragraphs a, c, d, e, f, and g;
- ARTICLE 10 CONSTRUCTION MATERIAL, in its entirety;
- ARTICLE 11 DISPOSITION OF SALVAGED MATERIALS, in its entirety; and
- ARTICLE 13 GENERAL PROVISIONS, only paragraphs d, h, k, and l.

#### 9.3 Verizon

The Owner entered into a MOA dated June 17, 2015 with Verizon Maryland LLC (Verizon). The Verizon MOA has been provided to Concessionaire as a Reference Document. The specified provisions identified below are incorporated herein by reference into the Contract Documents. Any work item identified, in these incorporated provisions, as the obligation of "MTA" or "Concessionaire" shall be implemented by the Concessionaire.

- SECTION A DEFINITIONS. Defined terms in SECTION A of the Verizon MOA are incorporated only for the purpose of and to the extent such terms are used in provisions shown, and incorporated by reference, in this Part 1, Section 9.3 of the Technical Provisions;
- SECTION C PROJECT DESCRIPTION AND SCOPE OF WORK. C.2, 3,4,5, and 6;
- SECTION D PROJECT EXECUTION PLAN. Section D in its entirety;
- SECTION E PERFORMANCE OF DESIGN WORK. Section E in its entirety;
- SECTION F REVIEW OF SUBMITTALS. Section F.2 through 9;
- SECTION G BETTERMENTS AND DIRECTED CHANGES. Section G.1 and 4;
- SECTION H PERFORMANCE OF RELOCATION WORK. Section H.1-7, 10, 12 13;
- SECTION I COST ALLOCATION, REIMBURSEMENT, AND BILLING. 2.a and c,3, 4, 5, and 7;
- SECTION K CONSTRUCTION MATERIAL. Section K in its entirety;
- SECTION L DISPOSITION OF SALVAGED MATERIALS. Section L in its entirety;
- SECTION M NOTICES AND COMMUNICATIONS. M.6; and
- SECTION N GENERAL PROVISIONS. SECTION N.4, 7, 10, and 11.

## 9.4 Washington Gas

The Owner entered into a MOA dated December 11, 2014 with Washington Gas Light Company (WGL). This agreement has been provided to Concessionaire as a Reference Document. The provisions identified below are incorporated herein by reference into the Contract Documents. Any work item identified, in these incorporated provisions, as the obligation of "MTA" or "Concessionaire" shall be implemented by the Concessionaire.

\*Note text below in all capital letters are subtitles in use for clarity and are not incorporated as Contract Provisions.

- SECTION 1 DEFINITIONS. Defined terms in Section 1 are incorporated only for the purpose of and to the extent such terms are used in provisions shown, and incorporated by reference, in this Part 1, Section 9.4 of the Technical Provisions;
- SECTION 2 PROJECT DESCRIPTION AND SCOPE OF WORK, paragraphs a, c,d,e.f;
- SECTION 3 DESIGN AND REVIEW OF RELOCATION WORK TO BE PERFORMED BY CONCESSIONAIRE, in its entirety;
- SECTION 4 PERFORMANCE OF RELOCATION WORK, in its entirety;
- SECTION 5 PERFORMANCE OF WGL: WORK, in its entirety;
- SECTION 6 PROJECT EXECUTION PLAN, in its entirety;
- SECTION 7 COST ALLOCATION, REIMBURSEMENT, AND BILLING, paragraphs b and c;
- SECTION 9 CONSTRUCTION MATERIAL, in its entirety;
- SECTION 11 NOTICES AND COMMUNICATIONS, paragraph e; and
- SECTION 12 GENERAL PROVISIONS, paragraphs d, j and k.

#### 9.5 Zayo Group, LLC

The Owner entered into a MOA dated February 18, 2015 with Zayo Group, LLC. The Zayo Group, LLC MOA has been provided to Concessionaire as a Reference Document. . The specific provisions identified below are incorporated herein by reference into the Contract Documents. Any work item identified, in these incorporated provisions, as the obligation of "MTA" or "Concessionaire" shall be implemented by the Concessionaire.

- SECTION A DEFINITIONS. Defined terms in Section A are incorporated into the Contract Documents only for the purpose of and to the extent such terms are used in provisions shown, and incorporated by reference, in this Part 1, Section 9.5 of the Technical Provisions;
- SECTION B PROJECT DESCRIPTION AND SCOPE OF WORK., B.3 4;
- SECTION C DESIGN AND REVIEW OF RELOCATION WORK TO BE PERFORMED BY CONCESSIONAIRE. Section C in its entirety;
- SECTION D PERFORMANCE OF RELOCATION WORK. Section D in its entirety;
- SECTION E PERFORMANCE OF ZAYO WORK. E.1,3, 7;

- SECTION F COST ALLOCATION, REIMBURSEMENT, AND BILLING. F. 2, 4, and 7;
- SECTION H CONSTRUCTION MATERIAL. Section H in its entirety; and
- SECTION J GENERAL PROVISIONS. J.4, 7, 10 and 11.

#### 9.6 Miscellaneous Utility Owners

The Owner intends to enter into a Baseline Utility Owner Agreement with each of the following Utility Owners and for the purpose of Part 1, Section 9.7 of the Technical Provisions Utility Owner is defined to include the following entities:

- Comcast;
- Fiberlight Communications;
- Starpower Communications;
- MEDCO;
- MCI Communications;
- AT&T Corporation;
- AT&T LNS;
- CenturyLink Communications;
- Century Like QGS;
- Level 3 Communications, Incorporated; and
- Any other Utility Owner identified by Owner.

## 9.7 Other Utility Owner Memorandum of Agreements Provisions

The Owner intends that Utility Owner Agreements will be entered into with certain Utility Owners as defined in this Part 1, Section 9.6 of the Technical Provisions. Such Utility Owner Agreements will generally follow the Baseline Utility Agreement provided to Concessionaire as a Reference Document. The specific provisions identified below are incorporated herein by reference in the Contract Documents. Any work item identified, in these incorporated provisions, as the obligation of "MTA" or "Concessionaire" shall be implemented by the Concessionaire.

- ARTICLE I DEFINITIONS. Defined terms in ARTICLE I are incorporated into the Contract Documents only for the purpose of and to the extent such terms are used in provisions shown, and incorporated by reference, in this Part 1, ARTICLE 9.7 of the Agreement;
- ARTICLE II PROJECT DESCRIPTION AND SCOPE OF WORK, Sections 2 and 3;
- ARTICLE III PROJECT EXECUTION PLAN, in its entirety;
- ARTICLE IV DESIGN AND REVIEW OF RELOCATION WORK TO BE PERFORMED BY CONCESSIONAIRE, in its entirety;
- ARTICLE V PERFORMANCE OF RELOCATION WORK, in its entirety;
- ARTICLE VI PERFORMANCE OF UTILITY OWNER WORK, Sections 1, 3, 7;

- ARTICLE IX CONSTRUCTION MATERIAL, in its entirety; and
- ARTICLE XI GENERAL PROVISIONS, Sections 4, 7, 10, 11 and 12.