



03 August 2021

Report

Construction Progress Report

Purple Line LRT Purple Line Transit Partners

making the **difference**

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Preface

Turner and Townsend have been retained by Purple Line Transit Partners (the “Consortium”) to provide Lenders Technical Advisor (“LTA”) services on the Purple Line LRT Project (the “Project”). Turner & Townsend will be undertaking construction progress monitoring for the term of the construction period. The scope of the LTA monthly reporting includes:

- Site visit (as scheduled in the LTA Terms of Engagement) to meet with the DBJV Contractor’s site management team, review the progress of the works and discuss issues that may have an impact on cost and schedule.
- Monitoring of and reporting on construction costs during the construction phase, including variation analysis and approval.
- Monitoring of and reporting on construction sub-contractor’s performance against the schedule, compliance with milestone dates and any anticipated delays and methodology proposed to overcome them.
- Tracking of and reporting on discharge of permit conditions, approvals and any other such consent as may be required.
- Review and sign-off of construction invoice and other such Project Costs as may be included in the Consortium’s Construction Requisition Certificate. Report on the monthly drawdown application, including comparison of drawn funds against the anticipated cash flow or milestones as required and confirmation that the cost to complete is sufficient.
- Summarize each of the above in a monthly progress report.

Project background

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. 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/the 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:

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- 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 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 41,000 students (2020), 14,000 employees (2020), and visitors. The Project is expected to attract commuters wanting to use Metrorail and/or MARC services for some part of their trip, with the Project typically providing the access or egress connections.

Highlights of the Major Elements of the Project

Stations

There will be 21 stations provided, including:

- 15 At Grade / Surface Stations
- 3 Aerial Stations – Connecticut Avenue, Silver Spring Transit Centre and Riverdale Park
- 2 Below Grade – Bethesda and Manchester Place
- 1 Station (partially above grade and partially below grade) – Silver Spring Library (Fenton Street)

Tunnels, Aerial LRT Structures, Highway Bridges and Other Structures

There are 4 underground structures associated with the Project, as noted below:

- The Plymouth Tunnel: consists of a mined Section with cut-and-cover structures at each end. The mined tunnel Section has a length of 1,022 linear feet and the cut-and-cover Section to the east is 191 linear feet long. The cut-and-cover Section on the west end has a length of 288 feet and houses Manchester Place Station.
- The Bethesda South Entrance Shaft and Cavern: consists of a rectangular shaft, located below Elm Street, 88 feet deep, connecting to a 63 foot high cavern. The shaft passes through 31 feet of overburden and 57 feet of rock.
- The Connecting Stub Tunnel: is an existing stub tunnel that was excavated during the construction of the Bethesda Metro Station. Part of the existing stub tunnel is removed by the

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cavern excavation; the balance of the stub tunnel is enlarged to accommodate the permanent facilities for the new South entrance to the Bethesda Station.

- The existing “air-rights” tunnel: is 780 feet long, located on the former Georgetown Branch right-of-way, formed by the subsequent construction of buildings above the right-of-way.

Track

The scope of work provides an overall track length of 16.2 miles, including:

- Surface = 14.7 miles
- Tunnel = 0.5 miles
- Aerial = 1.0 mile

Maintenance and Storage Facilities (Yard and Shop)

In terms of the maintenance and storage facilities the following are scoped for the Project:

- Lyttonsville Shop and Yard –Shared Vehicle Storage & Back-up Operation Control Center, located at the Western end of the Alignment on Brookville Road in Montgomery County.
- Glenridge Yard and Shop – Primary Maintenance Facility & Primary Control Center, located at the Eastern end of the alignment on Veterans Parkway in Prince George’s County.

Traction Power and Traction Power Substations

A 1500 V DC traction power system, creating less current than a comparable 750 V DC system, is being utilized. This helps mitigate electromagnetic interference (EMI) and stray current corrosion and reduces power consumption.

Systems Integration

The proposed configuration of the Purple Line transit system is comprised of fixed facilities and operating systems. Each operating system is further comprised of sub-systems and components. The systems and components will work together as an individual sub-system and then together with other sub-systems and facilities as an integrated transit system.

Vehicles

The passenger capacity of the vehicle is 302 at AW 2.0. The total Service Level 1 fleet is 26 vehicles. The fleet size was determined by applying the Owner’s criteria for vehicle loading, peak hour capacities and required headways.

This report has been prepared on the instructions of the Consortium and is for the benefit and use of the Lenders and the Consortium. The contents are confidential and should not be disclosed to any third party without the permission of the Lenders, the Consortium and the Authors.

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1 Introduction

Turner & Townsend have been retained by Purple Line Transit Partners (the "Consortium") to provide Lenders Technical Advisor ("LTA") services on the Purple Line LRT Project (the "Project").

Further to the Forbearance Agreement and Settlement Documentation executed on 17th December 2020, the Consortium are currently procuring a Replacement Design-Build Contractor. This process is due to be concluded by mid-September, in accordance with the provisions of the Forbearance Agreement. During this process, MTA have continued to progress design work, permits, utilities and right of way acquisition, having assumed a number of the sub-contracts that were originally part of the Purple Line Transit Constructors (PLTC) contract.

Turner & Townsend last issued a monthly progress report on 28th October 2020, covering works performed to 30th September 2020. Following this time PLTC undertook no further works on the contract. Turner & Townsend last visited site on 29th October 2020 to review the status and making safe of work.

It has been agreed with the Consortium that the LTA would provide quarterly reports from the beginning of 2021, until the Replacement DB Contractor had been engaged and works had fully commenced on site. This report is the second quarterly report of 2021 and is intended to provide a high level summary of the status of the procurement of the Replacement Design-Build Contractor, as well as other activities ongoing.

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2 Forbearance Agreement and Settlement Documentation

On December 17, 2020, PLTP entered into a consent, process, waiver and forbearance agreement (the "Forbearance Agreement") with PLTP's Sponsors referred to therein and U.S. Bank National Association, in its capacity as Trustee, Intercreditor Agent and Collateral Agent (collectively, the "Agents").

Pursuant to the Forbearance Agreement, among other things, the Agents agreed to permit PLTP to execute, deliver and perform its obligations under the Settlement Documentation with the Contracting Authority and the Design-Build Contractor to resolve certain claims and disputes. The Settlement Documentation was executed and delivered by such parties as of December 17, 2020, in the forms attached to the Forbearance Agreement, a copy of which is available on EMMA.

As part of the Settlement Documentation, the Public Private Partnership Agreement (as amended) remains in place. PLTP is responsible for the solicitation of a Replacement Design-Build Contractor to complete the design-build work.

3 Design, Procurement and Construction progress

3.1 Replacement DB Contractor Procurement

The solicitation process for a Replacement Design-Build Contractor commenced in January 2021 with a Request for Qualifications (RFQ) issued to firms on January 8th. The RFQ process included Question and Answers and one-on-one meetings with potential proposers. PLTP received Statement of Qualification (SOQ) submittals from five teams by the deadline of February 18th, 2021. PLTP evaluated the SOQs and recommended a shortlist of three teams to MTA on February 25th, 2021.

MTA accepted PLTP's recommendation and on March 2nd, 2021 the three shortlisted teams were notified. The three teams are (in alphabetical order):

- Halmar International.
- Maryland Transit Solutions (comprised of Dragados USA Inc. and OHL USA Inc.).
- Tutor-Perini / Lunda, a Joint Venture.

PLTP are continuing with the procurement process, with the deadline for the submission of proposals in Q3 2021.

3.2 Progress of Design and Construction Works

Under the Settlement Agreement, the Owner continues to advance select Design and Construction work, to maintain schedule to the extent possible and help to de-risk the Project for the replacement DB Contractor. This includes advancing design, permitting, LRV production, and utility relocation, among other items.

The Maryland Department of Transportation and Maryland Transit Administration Purple Line website includes the following ongoing construction updates:

- Utilities works are continuing at Glenridge/New Carrollton, Long Branch, Riverdale Park, Silver Spring and University Boulevard.
- Water line relocations commenced at Riverdale Park in June 2021.

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- Beginning mid-June, crews have been tree clearing on the north side of the CSX tracks between 16th Street and Fenwick Lane in Greater Lyttonsville/Woodside in preparation for utility relocations.
- Works are continuing to the Plymouth Tunnel and at Arliss Street, as well as at Silver Spring, with temporary lane closures occurring.

Work forecast for August predominantly includes:

- Utility and water line relocations in Areas 1, 2 and 3
- Tree removal in Area 1
- Bridge jacking in Area 1
- Works to the Tunnel Portal in Area 2
- Works to Manchester Station in Area 2
- College Park Bus Loop Walls in Area 3
- Foundation works at the Mall access in Area 3

3.3 Right of Way

The Owner is responsible for right of way acquisition and is currently finalizing access to required right of way prior to the award of the new Design-Build Contract. There may be a small subset of parcels to be acquired after award, but these will remain the Owner's responsibility.

3.4 Light Rail Vehicles

The LRV Supply Contract was assigned to MTA on September 28, 2020. MTA continues to advance LRV production during the DB Contractor Selection Period.

CAF has completed the manufacturing of all 26 LRV car sets and they are expected to be delivered to Elmira, NY over the next few months. LRVs 1-6 are assembled and are in the testing phase. LRVs 1-18 have been delivered to Elmira and are in various phases of assembly. LRV's 19-26 are being painted and are preparing to ship to Elmira. MTA is planning that completed LRVs will be stored at the CAF facility in Elmira until they are ready to be received at the Project site.

MTA notified CAF in June of its intent to exercise an option to purchase an additional 2 LRVs.

4 Schedule Management

The revised Revenue Service Availability Date will form part of the Replacement Design-Build Contractor's contract.

5 Financial Management

At the date the Forbearance Agreement was signed in December 2020, the total costs paid for construction and design works as well as LRV design and production was \$1,122,323,572. Given the original DB Contract sum of \$2,045,747,356, there was \$923,423,784 remaining to complete the DB Works. The cost to complete the Project will be finalized once the Replacement DB Contractor has been selected.

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6 LTA Certificate

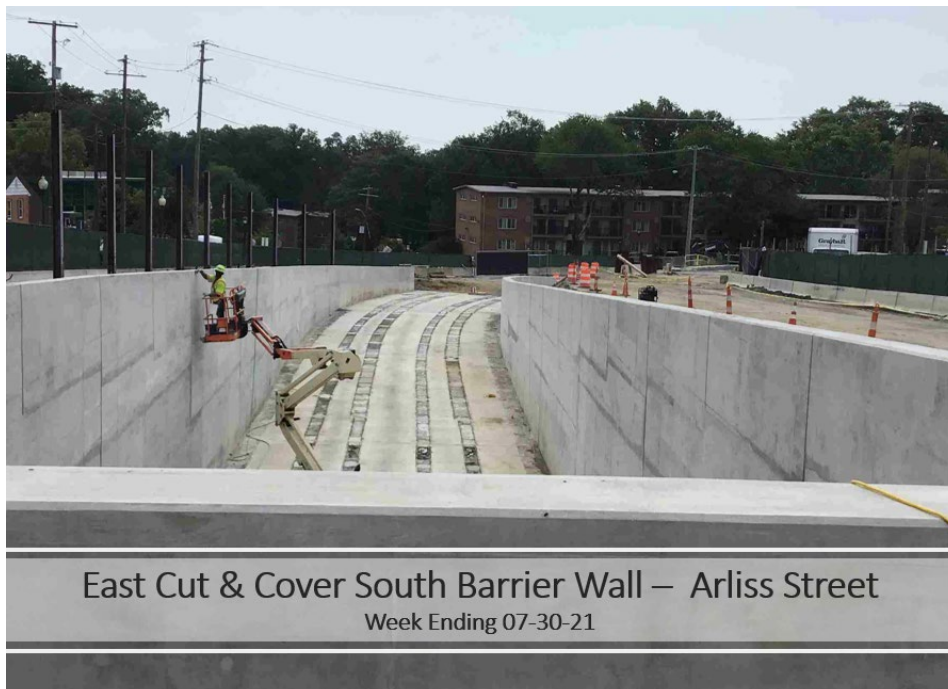
There have been no LTA Certificates issued since that issued on 20th November 2020 in relation to Construction Requisition Certificate 75.

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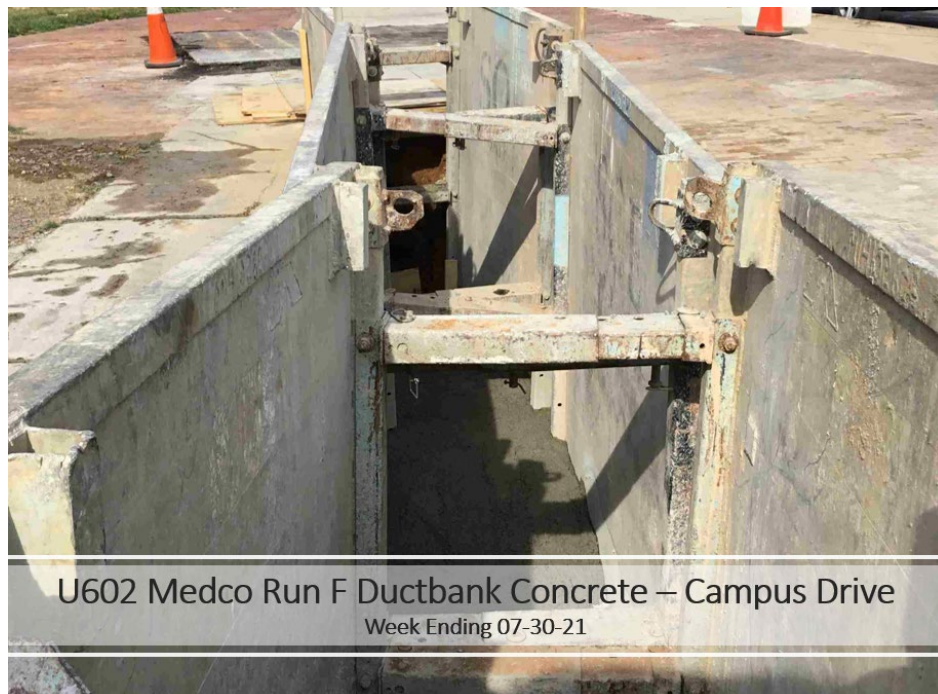
Appendix A Progress Photographs

The following photographs are from weekly updates provided by MTA dated July 30, 2021.



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