



**Massachusetts Bay  
Transportation Authority**



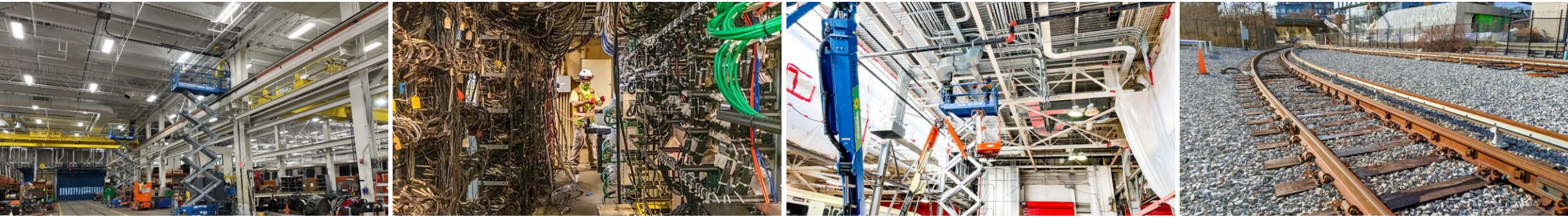
## **MBTA Contract No. R19PS04:**

**Contract for Program Management/Construction Management (PM/CM)  
Services for the Red Line and Orange Line Transformation Programs**

January 27, 2021

Angel Peña





Today's Board action will provide Red and Orange Line Transformation Programs continued Program Management and Construction Management (PM/CM) Services.

As of **November 1, 2021**, both Red Line and Orange Line transformation programs have been consolidated under the **Capital Transformation Program**.





***To see strategic capital investments improve the quality of service for the MBTA's riders and neighboring communities, with the realization that transformative methods drive transformative outcomes***



## Green Line Transformation



- ✓ **B Branch:** 2 new accessible stations, replaced 5,000 feet of track, and upgraded 2 intersections
- ✓ **D Branch:** replaced 25,000 feet of track and 6 miles of signal cable
- ✓ **E Branch:** upgraded 4,600 feet of track and upgraded a major intersection

## Orange Line Transformation



- ✓ **Completed rehab** of Orange Line test track
- ✓ Significant improvements at **Wellington Yard** (Loop, Storage Tracks, and 6 Crossovers)
- ✓ **New wheel truing machine** at maintenance facility, for smoother ride and improved reliability

## Red Line Transformation



- ✓ Completed the new **Red Line test track** and testing vehicle facility
- ✓ Received first new red line trains (January 12) for testing and **commissioning**
- ✓ Started "cutover" of **new signaling system** at Alewife (progressing south in 2022)

## Lookahead (2022 and beyond)

- ❑ **Conduct installation** of Green Line Train Protection System for **improved safety**
- ❑ Leverage any outages to perform additional work (e.g. trackwork)

- ❑ Put **Wellington Yard and Maintenance Facility** on a path for completion by mid-2023
- ❑ Begin cutovers to new signaling system (through 2023)

- ❑ Conduct and facilitate critical improvements (**Alewife Crossover** and **Floating Slabs**)
- ❑ Conduct signal cutovers to the new signaling system (through 2023)

## Background | *Scope of PM/CM*

- Total project budget is **\$66,830,697**
- Contract completion date is **2027 (5 Years)**
- **HDR** is the Program Manager / Construction Manager

### Program Management

- Program Management
- Quality and Safety Oversight
- Design Management

### Construction Management

- Construction Planning
- Interface Management
- Project Controls







### Mainline Signals Upgrade Management

- **Strategic Plans**
- **Design & Engineering Oversight**  
*Submittal Reviews, RFIs, Design Changes*
- **Installation & Construction Oversight**  
*Field Inspection, Testing & Commissioning, Safety & Quality Assurance, **System Assurance**, Certification*
- **Stakeholder Coordination**  
*Liaison with the MBTA E&M and Operations Team, Coordinate ROW Access and Diversion Planning*

# Capital Transformation | PM/CM Benefits

*Program/Construction Management services allow us to deliver an expanding portfolio of improvements*

 <b>Focus on the Big Picture</b>	<ul style="list-style-type: none"><li>✓ Enact a holistic view focused on improving quality of service on Red &amp; Orange lines</li><li>✓ Consolidate &amp; schedule work to fully leverage track outages</li><li>✓ Strategically plan for integration of new fleet (Red and Orange)</li></ul>
 <b>Integrate &amp; Align Data Systems</b>	<ul style="list-style-type: none"><li>✓ Provide comprehensive program controls system (establishes program baseline budget and schedule)</li><li>✓ Build and maintain reporting system on project &amp; program performance</li></ul>
 <b>Evaluate Plans</b>	<ul style="list-style-type: none"><li>✓ Design and constructability reviews</li><li>✓ Independent cost and schedule estimates</li></ul>
 <b>Augment Staff</b>	<ul style="list-style-type: none"><li>✓ Provide needed staff augmentation for engineering and inspection</li><li>✓ Signals: Strategic Plans, Design Oversight, Installation &amp; Construction Oversight, and stakeholder communication</li></ul>





To authorize the General Manager of the Massachusetts Bay Transportation Authority, or his designee, to award and execute a contract with HDR Engineering, Inc., for Program Management/Construction Management (PM/CM) Services for the Red Line and Orange Line Transformation Program and to take any and all actions necessary or advisable to effectuate the Agreement, in a form approved by the General Counsel, in an amount not to exceed \$66,830,697.00.





