

MBTA South Station Tower 1/Cove Interlocking Improvements Request for G49CN01 Approval

MBTA Board of Directors

March 23, 2023

Dan Beaulieu, Sr. Project Manager, Commuter Rail

Contract Action

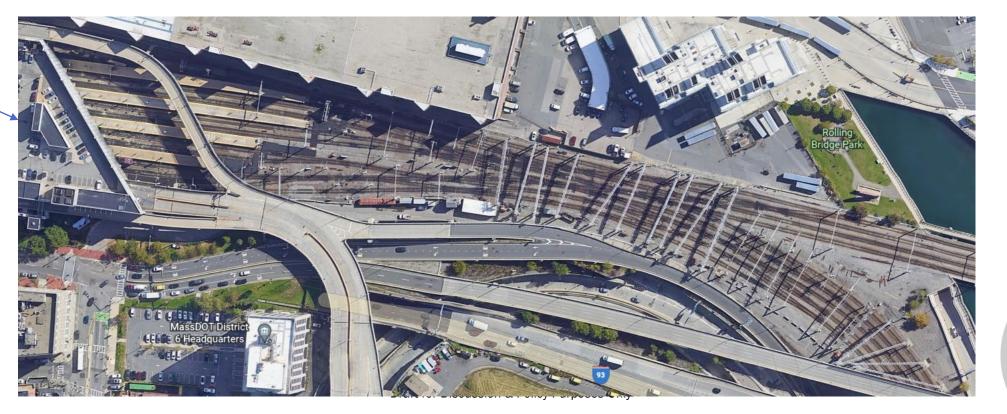
 Today's Board action will provide approval for the execution of construction contract G49CN01, South Station Tower 1/Cove Interlocking Project, with The Middlesex Co., for \$98,613,978.31.



Project Overview

 The Tower 1 & Cove Interlocking Project is located at South Station. It will upgrade the track and signal system in the interlocking to improve the reliability and resiliency of service at South Station. This work will also support future growth of the MBTA and Amtrak.

South Station



Project Scope

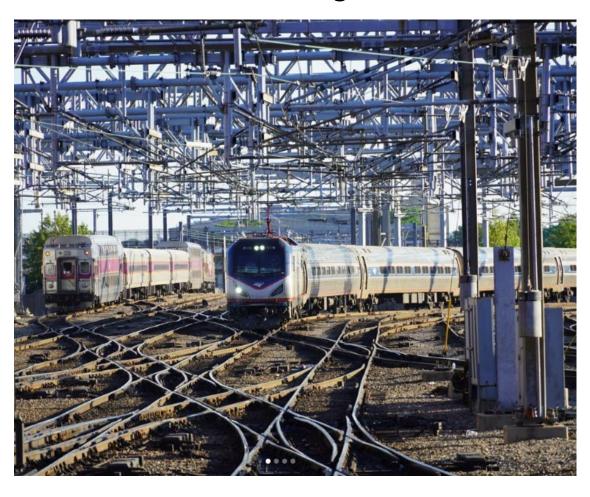
- Install in-kind special track work & interlocking infrastructure
- Install new master signal house, upgrade all existing signal systems with microprocessors, replace wayside signal bungalows and signals.
- Sequentially cut over all track & signal systems
- Provide new Backup generator, Inverter & Transformer system
- Install switch heaters and electrical & signal cable trough systems
- Upgrade communication system to Centralized Electrification and Traffic Control (CETC)
- Provide new LED lighting of the track areas and OCS structures
- Provide new security systems (CCTV, EAC, fencing)

Project Goals

- Address the immediate State-of-Good-Repair needs of Tower 1 & Cove Interlocking to maintain current services
- Improve operational security & safety (site & equipment access security, equipment grounding, upgrade of critical systems)
- Provide upgrades for immediate operational reliability of the Commuter Rail system, Amtrak's Northeast Corridor and Lake Shore Limited services
- Modernize the track & signal systems to support future ridership growth anticipated by both the MBTA and Amtrak
- Replace antiquated analog signal infrastructure with digital signal systems and new track & switch systems which will improve overall system safety and reliability, and prevent communication and signal system failures

Project Existing Conditions

Tower 1 interlocking area



Tower 1 Tracks (NEC)

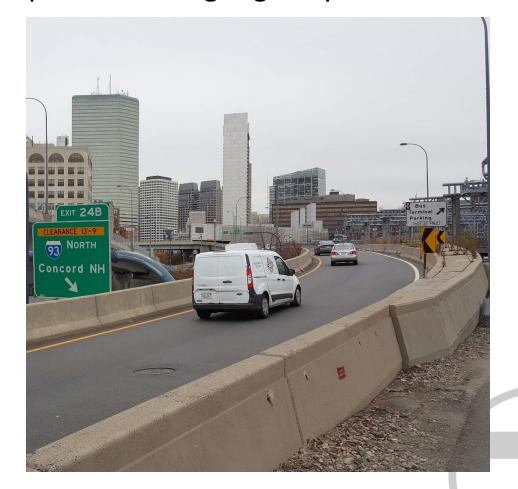


Project Existing Conditions

Existing CIH Location & Tracks



Prop. Fence Along Highway



Project Funding

MassDOT/MBTA was awarded an FRA State of Good Repair (SGR) Grant to fund the construction of this project

- •FRA grant funds of \$41.2M allocated to Discretionary Grant 21FRA1
- •MBTA & Amtrak funds of \$128.2M have been allocated under R19A01



Project Schedule

MBTA Tower 1 & Cove Interlocking Project		Current Submission PS&E CTD	
Activity ID	Milestone Name	Dates	Duration from NTP
100DC	100% Design Completed	Dec-21	
PSE	PS&E Design Completed	Mar-22	
PRC	Procure Construction Contract	Sep-22	
PPO	Public Price Opening	Nov-22	
MS.01	MS#1 NTP	Apr-23	
MS.02	MS#2 Substantial Completion	Sep-27	1592
MS.03	MS#3 Final Acceptance	Mar-28	1772

Board action

VOTED:

That the MBTA Board of Directors hereby authorizes the General Manager or his designee to execute a contract with The Middlesex Co., for South Station Tower 1/Cove Interlocking Improvements, in the amount of \$98,613,978.31, in a form approved by the General Counsel, and to execute any necessary or ancillary documents in the name of and on behalf of the Massachusetts Bay Transportation Authority to effectuate this Agreement.