



Department of Public Utilities
Rail Transit Safety Division

DIVERSION REPORT

GL Central Tunnel – November 2023



FTA-DPU-23-004, Action Item 3

Table of Contents

Background	2
Overview of Scope of Work	2
Summary of Observations	3
Immediate Actions.....	4
Corrective Action Plans.....	4
Conclusion	4
Appendix A – Surge Management Plan	6
Appendix B – Inspection and Verification Plan.....	7
Appendix C – Information Request Form(s).....	8

Background

STATE SAFETY OVERSIGHT

As part of the Department of Public Utilities (“DPU”) enhanced oversight activities, the DPU monitors and tracks the work scheduled to be completed for any diversion through field observations and monitoring of meetings associated with the diversion. Ultimately, the DPU provides oversight of the safe execution of work, safety rules and procedures, as well as the safe return to service.

DPU’s FTA Special Directive 22-8, FTA-DPU-23-004 (Finding 4), Corrective Action Plan (“CAP”) states the DPU will develop and submit a report of field observations associated with diversions. The purpose of this report is to not only fulfill the requirements for the CAP, but to demonstrate DPU’s improved abilities and enhanced oversight activities of MBTA’s rules compliance procedures for track maintenance safety rules and procedures.

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY (“MBTA”)

In November 2023, the MBTA announced the launch of its Track Improvement Program, a major initiative to eliminate all existing speed restrictions and bring tracks closer to a State of Good Repair by the end of next year. Additionally, the MBTA plans to schedule Track Improvement Program work during nights, weekends, and shutdown periods to minimize service, time, and cost impacts.

The purpose of this surge was to provide the required time and access for crews to replace rail, ties, and ballast, to address speed restrictions and bring these areas closer to a State of Good Repair.

Overview of Scope of Work

DPU SCOPE OF WORK SUMMARY

The DPU develops an inspection and verification plan to oversee each diversion comprised of the following steps:

1. Information request for all related project documents;
2. Various document reviews;
3. Establish internal schedules for work zone observations and safety briefings observations;
4. Field observations of MBTA safety briefings;
5. Field observations at high priority locations and work zones;
6. Tracking of MBTA’s progress of work to be completed;

7. Attend all relative meetings (i.e., Capital Transformation construction and senior management meetings); and
8. Issue directives as needed.

MBTA SCOPE OF WORK SUMMARY

MBTA launched a full-access closure between November 27, 2023, through December 5, 2023 along the B and E Line Branch Central Tunnel to remove ten safety-related speed restrictions through the following work:

No.	Location (Contractor)	Description
1.	Arlington to Boylston EB (Barletta)	Rail replacement
2.	Kenmore to Boylston (Middlesex)	Full depth track replacement and rail installation
3.	E Branch (Skanska)	Selective hand tamping and aligning, tie plate replacement, huck bolt replacement, running rail and restraining rail replacement, and tie replacement

Table 1. Scope of Work for GL Central Tunnel

Summary of Observations

The table summarizes the total number of observations the DPU conducted during the surge period:

Task	Grand Total	Notable Observations
On-Call Duty	1	11/29/23 Employee Injury in diversion area at Boylston Street Station: <ul style="list-style-type: none"> Track Laborer was punching a spike when tool broke off and went into his leg. Transported with piece of metal impaled into left leg. Safety Stand down at 11:50 AM.
Field Observations (Work zone and Safety briefings)	27	All positive observations.
Coordination Meetings	25	All positive observations.
Requests for Information	2	All positive observations
Grand Total		55

Table 2. DPU Summary of Observations

WORK ZONE OBSERVATIONS

Every week during regular internal meetings with DPU staff, DPU updated schedules for its staff for the current and following week to ensure oversight of all areas of the surge. The DPU planned to observe the track work being conducted at least once a week. DPU achieved this goal.

Observations included, but were not limited to:

- Coordination of moving work vehicles between work zones
- Use of required PPE
- ROW License on person
- Construction areas are clear, no tripping hazards or tools left behind

- Third rail energized within work zone and status properly communicated to employees and contractors
- Document relevant checklists or special orders used by MBTA or contractors

SAFETY BRIEFING OBSERVATIONS

Safety Briefings were held daily at 6AM and 6PM at Northeastern for Skanska and Barletta track work, and at the Blandford Siding at 10AM and 10PM for Middlesex track work. Construction Logistics were stationed at Copley westbound for around the clock briefings (24 hours), mostly for off-track jobs.

DPU aimed to attend at least four safety briefings a week throughout the surge to ensure they were being offered, conducted, and completed thoroughly. DPU achieved this goal.

COORDINATION MEETINGS

Coordination meetings were held at 8AM daily beginning November 27, 2023. DPU aimed to attend a minimum of four per week. DPU achieved this goal.

DOCUMENT REVIEWS

Documents reviews included any related work plans, the Surge Management Plan (“SMP”) and any relevant special orders.

Immediate Actions

- DPU and FTA were notified within 2 hours of the accident.
- Due to the employee injury accident that occurred on November 29, 2023, in the diversion area at Boylston Street Station, the MBTA Safety conducted a safety stand down of all work in that section. MBTA Safety banned the use of the style tool that failed as a safer mechanical tool (punch strikes) was available to do the same job for the remainder of the diversion.

Corrective Action Plans

The Green Line Surge was completed as scheduled and there were no CAPs or longer-term actions required by DPU.

Conclusion

The MBTA successfully completed the critical track work on the Green Line to remove the 12 safety-related speed restrictions, two more than was originally planned. Other opportunity projects, mostly station enhancements, were completed during the surge (e.g., new floors, significant painting work and lighting).

On November 29, 2023, at approximately 11 AM in the diversion area at Boylston Street Station, a Track Laborer was punching a spike when the tool broke off and a piece of metal impaled his left leg. This employee was transferred for his injury. MBTA Safety conducted a safety stand down and banned the tool that failed during the job. MBTA Safety was able to utilize a safer mechanical tool for the remainder of the diversion. The DPU and FTA were notified within the required two-hour timeframe and Safety conducted a stand down which was noted as an immediate action and a positive note. There were no other safety events or accidents that occurred along the diversion area, and no CAPs or longer-term actions required by DPU.

As part of DPU's role during the surge, several safety oversight tasks were conducted including attending coordination meetings and monitoring the progression of work, conducting field observations of safety briefings and track work, and requested and reviewed any relevant surge documents, including the SMP and Safety Operating Procedures. At the conclusion of the 8-day surge, the DPU conducted 55 total oversight activities.