

PMOC MONTHLY REPORT

East Side Access (MTACC-ESA) Project

Metropolitan Transportation Authority

New York, New York

Report Period November 1 to November 30, 2012



PMOC Contract No. DTFT60-09-D-00007

Task Order No. 2, Project No. DC-27-5115, Work Order No. 03

Urban Engineers of New York, P.C., 2 Penn Plaza, Suite 1103, New York, New York 10121

PMOC Lead: V. Simuoli, 212-736-9100; vrsimuoli@urbanengineers.com

Length of time on project: Five years on project for Urban Engineers

TABLE OF CONTENTS

COVER	1
TABLE OF CONTENTS	2
THIRD PARTY DISCLAIMER.....	3
REPORT FORMAT AND FOCUS.....	3
MONITORING REPORT	3
1.0 PROJECT STATUS	3
a. Design	3
b. Procurement	4
c. Construction.....	5
d. Quality Assurance and Quality Control (QA/QC).....	9
2.0 SCHEDULE DATA	9
3.0 COST DATA	10
4.0 RISK MANAGEMENT.....	11
5.0 ELPEP COMPLIANCE SUMMARY.....	11
6.0 SAFETY AND SECURITY	12
7.0 ISSUES AND RECOMMENDATIONS	12

APPENDICES

APPENDIX A – ACRONYMS

APPENDIX B – TABLES

Table 1 – Project Budget/Cost Table

Table 2 – Summary of Critical Dates

Table 3 – Comparison of Standard Cost Categories: FFGA vs. CBB

Table 4 – Catenary Review Schedule

Table 5 – Core Accountability Items

THIRD PARTY DISCLAIMER

This report and all subsidiary reports are prepared solely for the Federal Transit Administration (FTA). This report should not be relied upon by any party, except FTA or the project sponsor, in accordance with the purposes as described below.

For projects funded through FTA Full Funding Grant Agreements (FFGAs) program, FTA and its Project Management Oversight Contractor (PMOC) use a risk-based assessment process to review and validate a project sponsor's budget and schedule. This risk-based assessment process is a tool for analyzing project development and management. Moreover, the assessment process is iterative in nature; any results of an FTA or PMOC risk-based assessment represent a "snapshot in time" for a particular project under the conditions known at that same point in time. The status of any assessment may be altered at any time by new information, changes in circumstances, or further developments in the project, including any specific measures a sponsor may take to mitigate the risks to project costs, budget, and schedule, or the strategy a sponsor may develop for project execution. Therefore, the information in the monthly reports will change from month to month, based on relevant factors for the month and/or previous months.

REPORT FORMAT AND FOCUS

This report is submitted in compliance with the terms of the Federal Transit Administration (FTA) Contract No. DTFT60-09-D-00007, Task Order No. 002. Its purpose is to provide information and data to assist the FTA as it continually monitors the grantee's technical capability and capacity to execute a project efficiently and effectively, and hence, whether the grantee continues to be ready to receive federal funds for further project development.

This report covers the project management activities on the East Side Access (ESA) Mega-Project managed by MTA Capital Construction (MTACC) with MTA as the grantee and financed by the FTA FFGA.

MONITORING REPORT

1.0 PROJECT STATUS

a. Design

As of October 31, 2012, MTACC reported that the Engineering/Design effort was 96.3% complete. The Stage 3 90% Catenary design package was approved by Amtrak on November 29, 2012. (target for completion of 90% design was October 5, 2012). The GEC is currently working on the 100% design submittal. The forecast date for submitting this to Amtrak was November 10, 2012 and the forecast date for getting approval from Amtrak is December 30, 2012. Given the delay in submitting the 100% design to Amtrak, the PMOC does not believe that approval will be obtained by the end of this year.

The GEC is working towards completing the 60% design submittal for CM015 (48th Street Entrance). Completion of the review was previously forecast for November 2012; however it has now been re-forecast until January 2013. Coordination with the property owners for review of design progress is ongoing.

The current advertise date of November 29, 2012 for the CH057 (Harold Structures Part 3a) package was not met. The PMT had previously forecast that the package would be advertised in late October 2012. The installation of the track slab for the Westbound Bypass tunnel will be

removed from the scope of CH057 and advanced separately to take advantage of a 30 day continuous track outage scheduled to begin in July 2013. The package is currently under review in MTA Legal.

The 90% submittal for CH058 (Harold Structures- Part 3b) had been previously forecast by ESA for mid-November 2012; however, this date was not met due to the focus on the CH061 design. The design of the eastbound re-route structure is being revised to permit construction with minimum impact to railroad operations. This revision is underway.

The current advertise date for the CM014B (GCT Concourse and Facilities Fit-out) package, November 1, 2012, will not be met. Design modifications continue for the 45th Street Cross-Passageway; the transformer reconfiguration for the Biltmore Room; and revisions to the 44th street Vent Plant related to increased access for the CM012R package. In addition, there are twelve work scope items that ESA is planning to split from the package. Four of these items will be set-asides to be bid as part of the MTA Mentoring Program; the remaining items will be moved to CM014A; since the existing contractor is already doing similar work. A CCC meeting was held on November 14, 2012 to discuss these scope transfers, and the Committee agreed with the transfers.

The 90% design for the CH061 (Tunnel A) package was submitted by the GEC on November 26, 2012, and is currently under review by the ESA PMT.

b. Procurement

As of the end of October 2012, the total procurement activity on the project was reported to be 56.1% complete, with \$4.881 billion in contracts awarded out of the \$8.708 billion revised budget.

Bids for the CM012R (Manhattan Structures Part 2) solicitation were received on October 24, 2012. [REDACTED]

[REDACTED] MTACC has cancelled the solicitation, and is working on a preliminary strategy for moving forward. [REDACTED]

[REDACTED] This Contract package was on the project critical path and will also impact the CS179 (Systems Package 1) procurement; which depends upon completing certain milestones in the CM012R package for access.

The continuing slippage of awarding the CS179 (Systems Package 1) package remains a major concern. MTACC is still negotiating with three proposers; the NTP forecast date of December 1, 2012 will not be met. Finalization of this procurement will now be complicated by the fact that the work in this package is contingent upon completion of key milestones in the CM012R Contract; which will most likely require the proposers to re-evaluate their cost and schedule proposals. Contract CS179 is also on the project critical path.

The advertise date for the CM014B package is shown in the current IPS update as December 1, 2012, however as mentioned in the design section above, this date will not be met.

The advertise date for CH057 package is shown in the current IPS update as November 29, 2012, however, as mentioned in the design section above, this date was not met.

c. Construction

MTACC reported in its October 2012 Monthly Progress report that the total construction progress reached 47.3% complete on a cost invoiced basis, in accordance with its re-baselined budget of May 2012. Details for each of the contracts are provided below. The data date for financial and progress figures on all reported contracts is October 31, 2012.

The Harold interlocking work was severely hampered by Hurricane Sandy that struck NYC on October 29, 2012. Work was suspended after the storm due to the fact that both Amtrak and LIRR Force Account Resources have been pulled from the ESA project to help the railroads with storm recovery activities. Amtrak East River Tunnels were flooded and Amtrak focus is on recovery activities to get these tunnels operational. Both railroads suffered significant infrastructure damage which required Force Account personnel to concentrate their efforts on full service restoration rather than ESA support and construction throughout November 2012. As a result, construction for Harold Contracts CH053 and CH054A will be delayed. The PMOC estimates that the delay will be approximately 2 months, and that it will most likely be January 2013, at the earliest before Force Account support for the ESA project returns to its pre-storm levels.

Manhattan: CM009/019 Contracts – Manhattan Tunnels Excavation/Structures Part 1

The EAC for the CM009 Contract was re-baselined in January 2012 to \$413,415,000, and has remained unchanged since then. The Substantial Completion date established at the time of re-baseline was August 31, 2013, but, as of ESA's September 2012 Quarterly Report, the MTACC approved a revised Substantial Completion date of June 1, 2013. As of October 31, 2012, the actual construction progress for the month was 0.1% versus 0.4% planned and the cumulative project complete was 92.5% versus 95.9% planned.

The EAC for the CM019 Contract was re-baselined in January 2012 to \$793,879,000, and has remained unchanged since then. The Substantial Completion date established at the time of re-baseline was August 31, 2013, but, as of ESA's September 2012 Quarterly Report, the MTACC approved a revised Substantial Completion date of June 1, 2013 from August 31, 2013 reported in the previous quarter. As of October 31, 2012, actual construction progress for the month was 1.9% versus 1.7% planned and the cumulative project complete was 92.8% versus 88.9% planned.

The MTACC reported that the CM009/CM019 contractor has experienced a 22 day delay in completion of Milestone #2, South End West Cavern, and another 22 day delay for Milestone #3, shotcrete and sump pit excavation of West Cavern. As a result, the Substantial Completion dates for both milestones will be extended one month to December 19, 2012. At this time, the PMOC does not believe that these delays will have an impact on the overall project Substantial Completion date of June 1, 2013.

CM013 – 50th Street Vent Facility: EAC remained unchanged at \$127.8 million. Forecast Substantial Completion date is July 31, 2013. The actual percent complete is 71.4% vs. 70.1% planned.

Construction Progress:

- The MPT along 50th St. and 49th St. is ongoing and being maintained successfully.

- At the Service Tunnel, the waterproofing on the roof of the 2nd basement was completed and preparations began for placement of the protection slab. Backfill will start up to the existing sewer line, and continue in lifts.
- At the Vent Plant, work continues with the erection of structural steel framing and installation of metal decking.
- At the Loading Dock, the 1st floor formwork and embedded light installation is ongoing.
- Placement for the 3rd level internal floor slab in the deep shaft began.

CM004 – 44th Street Demolition and Fan Plant Structure: EAC remained unchanged at \$55.7 million. Forecast Substantial Completion date is April 15, 2013. The actual percent complete is 86% versus 100% planned.

Construction Progress:

- Continued shaping remaining shaft and collecting and stacking muck in Access Tunnel #1
- Continued with rock bolting and began the shaft lining sequence.
- Continued the shop drawings approval and steel fabrication process.
- Resumed erection of basement structural steel.
- 44th St. north and south utility connections remain on hold awaiting permit approval from DEP. The preparation of these documents is the responsibility of the GEC.

CM014A – Concourse and Facilities Fit-Out: EAC remained unchanged at \$46.53 million. Forecast Substantial Completion (SC) date is now October 16, 2013. The actual percent complete is 26% versus 29.8% planned.

The PMOC has previously reported on the issues with the Systems Control and Data Acquisition (SCADA) system design. As of this report it was reported to the PMOC by the CM014A Project Office that the problems with the failed October 24, 2012 SCADA design demonstration by Siemens was determined to be with the SCADA relays. This issue was subsequently resolved but apparently an additional problem arose with the information transfer from the relays to the system PLC. Resolution of this problem is currently ongoing. As a result of this continuing issue, the contractor's recent Schedule Update #8 shows Substantial Completion at November 18, 2013. This is currently under review by MTACC.

Construction Progress: The garage owner wants further cleaning of the cobblestone pavers. The contractor noted that water cannot be used and is reviewing alternative methods to satisfy the owner's request.

Concourse

- The sequence of the work moves from south to north.
- Surveying and layout is ongoing.
- MNR repaired the sprinkler system.
- Trench excavation and backfilling is ongoing in Zones 3 & 4.

- Importing of new fill is ongoing in all zones.
- Installation of FRE/RGS conduit for ductbanks continued in Zones 3, 4 & 5.
- Continued concrete placement weekly for ductbanks and footings in Zones 2 & 3.
- Underground plumbing installation continued in Zones 4 & 5.
- Forming of ductbanks continued in Zones 2, 3, 4, & 5.
- Wire mesh installation for slab-on-grade continued in Zones 1, 2 & 3, and 2 sections of permanent slab were placed.

Queens: CQ031 – Queens Bored Tunnels and Structures: EAC remained decreased from \$766.0 million to \$757.2 million (due to removal of scope) The forecast Substantial Completion (SC) date slipped 6 weeks from 12/18/2012 to January 31, 2013. The actual cumulative percent complete is 89.0% versus 100% planned.

Construction Progress:

- Completed concrete work for WBBY structure and Substation C08 foundation slab.
- Continued construction of Yard Lead Tunnel cross-passage at the Yard Lead Emergency Exit (YLEE); steel erection for YLEE and B13 Substation; site restoration along 43rd Street; and installation of secant piles for E35 Signal Bridge.

CQ032 Contract – Plaza Substation and Queens Structures: EAC increased from \$165.1 million to \$187.7 million (due to scope additions and delays). The forecast Substantial Completion (SC) date slipped 2 weeks from April 16, 2012 to April 28, 2012. The actual percent complete is 13.0% versus 17.3% planned.

Construction Progress: Progress continues on rehabilitation /reconstruction/ modification of the five existing ventilation facilities along the 63rd Street Tunnel in Queens and on structural steel erection for the B10 Substation along Northern Boulevard. Contractor access to the west end of the Queens Open-Cut Excavation Area has been delayed due to slow progress of work on the Northern Boulevard Crossing tunnel by the CQ039 contractor. Similarly, contractor access to the east end of the Queens Open-Cut Excavation Area has been delayed several months by late de-mobilization by the CQ031 contractor. These delay impacts are reflected in the current forecast Substantial Completion date that is 8 months later than the original contract Substantial Completion date. The CQ032 contract milestones will be adjusted accordingly.

CQ039 Contract – Northern Boulevard Crossing: EAC remained unchanged at \$102.1 million. The forecast Substantial Completion (SC) date slipped 2 weeks from 04/29/13 to May 13, 2012. The actual percent complete is 74.8% versus 99.3% planned.

Construction Progress:

- Completed sequential excavation method (SEM) mining of the new tunnel beneath Northern Boulevard.
- Continued: fabrication and delivery of structural steel for permanent tunnel lining system; maintaining soil freeze operation.
- Commenced preparations for installation of the tunnel waterproofing system.

Harold Interlocking: CH053 Contract – Harold Structures Part 1 and G.0.2 Substation: EAC remained unchanged at \$267.8 million. The forecast Substantial Completion (SC) date remains the same at 03/31/14. The actual cumulative percent complete is 70% versus 100% planned.

Construction Progress:

- Completed construction of Retaining Wall 39-S5.
- Continued fabrication of steel catenary structures; erection of catenary poles; construction of 12kV ductbank and manholes; construction of foundations for catenary poles at various locations in Harold Interlocking; construction of jacking and receiving pits for micro-tunneling.
- Commenced pulling of 12kV cable through completed portions of the new ductbank system.

CH054A Contract – Harold Structures Part 2A: EAC remained unchanged at \$46.2 million. Forecast Substantial Completion (SC) date slipped 3 weeks from October 2, 2013 to October 25, 2012. The actual cumulative percent complete is 69.6% versus 92.7%.

Construction Progress:

- Completed installation of Signal Bridge #11.
- Continued construction of 12kV ductbank and manholes; excavation and installation of support-of-excavation for next section of storm sewer; and construction of retaining wall THOM S1.

Railroad Force Account: The Estimate at Completion for FHA01 is \$16.8 million. The Substantial Completion date is forecast to be April 2014. Actual work completed for October 2012 was 1.5% versus 1.3% planned. Cumulative work complete was 83.6% versus 81.6% planned.

Construction Progress, FHA01: The remaining FHA01 construction is largely Electric Traction (ET) relocation of existing catenary wires to be done once the CH053/CH054A contractor has installed new catenary structures. Amtrak ET forces also support the contractor during the erection of the catenary structures. In late October 2012, Hurricane/Super Storm Sandy caused significant damage to Amtrak's infrastructure. As a result, during November 2012, Force Account personnel were diverted from their ESA duties to restore full service to the railroad and no progress was made on ESA projects. Therefore, the number of catenary poles installed to date remains at 124. In addition, the MTACC recently added 12 new catenary poles to the CH053/CH054A contractor's scope for future Westbound By-Pass construction. This brought the total number of catenary poles the contractor will install to 170. Based on the construction delay due to the storm and the additional scope, the PMOC now believes that catenary pole installation will not be complete until late March 2013 at the earliest.

The Estimate at Completion for FHA02 is presently \$40.54 million. The Substantial Completion date is forecast to be August 2014. Actual work completed for October 2012 was 1.3% versus 4.0% planned. Cumulative work complete was 47.7% versus 52.6% planned.

Construction Progress, FHA02: At present, the scope of FHA02 construction consists of Amtrak installation of two main line crossovers by the Track Department and installation and cutovers of the Central Instrument Houses (CIHs) for “F” Interlocking by the Communications and Signal (C&S) Department. Amtrak completed installation of the crossovers in June 2012 and the C&S Department continues to make progress to cutover the CIHs, although little progress was made during November 2012 while Force Account personnel were engaged in non-ESA storm damage repairs. Nonetheless, the overall progress on the cutover construction is such that they remain on schedule for an “F2” cutover in late 1Q2013 and an “F1” cutover in late 2Q2013.

The Estimate at Completion for FHL01 is presently \$21.97 million. The Substantial Completion date is forecast to be June 2014. Cumulative work complete was 73.9% versus 76.8% planned.

The major elements of the remaining LIRR FHL01 construction include installation of power cables and subsequent energizing and commissioning of G.O.2 Substation by the Traction Power Department, construction and re-alignments of ML2 and ML4 Tracks by the Track Department, and installation and relocation of signal and communications cables by the C&S Department.

Construction Progress FHL01: The G.O.2 Substation work has not been turned over to LIRR from the CH053 contractor yet, so LIRR work will be “on hold” until it is. There are existing signal power towers that must be removed by the CH053 contractor prior to LIRR ML2 and ML4 work, so that work is also “on hold”. The LIRR continues daily C&S construction with dedicated Force Account personnel, but November 2012 work was largely superseded by Hurricane/Super Storm Sandy. In general, however, this work continues to go well. Recent LIRR construction includes installation prior to cutover of the “H4” Central Instrument Location (CIL) and signal cable installation between new signal tower #s 32 and 49 in preparation for a signal power cutover. The signal power cutover was originally scheduled for December 2012, but the storm has delayed that until early 2013.

The Estimate at Completion for FHL02 is presently \$62.69 million. The Substantial Completion date is forecast to be November 2015. Cumulative work complete was 20.2% versus 21.0% planned.

Construction Progress FHL02: Due to Hurricane/Super Storm Sandy occurring at the end of October 2012, little appreciable Force Account construction progress was made during November 2012, although the Track Department did begin Westward LIRR Passenger Track reconstruction (a major work task) on November 30, 2012. This work is expected to be complete by December 17, 2012.

d. Quality Assurance and Quality Control (QA/QC)

The current version of the ESA Project Quality Manual (PQM) is Revision 6, issued in February 2009. The ESA Quality Manager has committed to revise it by the end of February 2013 which will incorporate changes to the ESA Quality System that have occurred since then.

2.0 SCHEDULE DATA

ESA submitted the IPS #41, data date November 1, 2012, and its variance reports on November 28, 2012.

Project Critical Path:

The PMT is also negotiating with CS179 proposers on the Best and Final Offer (BAFO). Because of uncertainty on the status of CM012R Contract, the PMT has delayed the systems contracts by 2 months.

The IPS critical path continues to go through Manhattan CM009/019 contract followed by Manhattan Structures 2 & Facilities Fit out (CM012R) and will be continued through the system contracts (CS179) to construct the last facility rooms in GCT4 and GCT5. Integrated System Testing will start in January 2017 and will be followed with the last LIRR readiness activities completed by Revenue Service Start Date (RSD) of August 2018. The RSD is still August 31, 2019, which includes the PMT's 10 months remaining contingency.

Schedule Contingency: The PMT has used two months of project contingency in its latest IPS update due to not being able to award contract CM012R on December 1, 2012. This leaves 10 months of remaining project contingency. The PMOC anticipates substantial use of schedule contingency as ESA-PMT finalizes a plan forward to execute the CM012R work scope.

3.0 COST DATA

Funding: The MTACC announced at the May 2012 CPOC meeting that an additional \$720 million will need to be identified in the MTA 2015 – 2019 Capital Plan to cover the new project baseline budget, but no progress was reported.

Budget/Cost: ESA has reported that as of October 31, 2012 the actual total project progress was 51.4% vs. 51.6% planned progress resulting from the May 2012 re-baseline and the actual construction progress was 47.3% vs. 47.5% planned based on invoiced amount.

During October 2012, the ESA PMT transferred \$10.5M to contract CQ032 (\$2.5M from CQ031 and \$8M from Construction Contingency); \$6.3M to CQ032 from CQ031; and \$5.7M to CQ032 from CH058 and CS078. The above transfers were to move the scope for Trench Invert, open cut excavation, and flat Invert/Ductbank all to CQ032. Additionally, the PMT transferred \$10.4M from CH058 to Construction Contingency to reflect the change for the tunnel approach from Cut & Cover excavation to an extension of the TBM drive & place precast method.

The current Budget and Cost data is shown in Table 1 in Appendix B of this report. Table 3 in Appendix B of this report shows a comparison of the MTA's Current Baseline Budget (CBB) vs. the FFGA Baseline Budget in Standard Cost Categories (SCC).

Contingency: As of the end of October 2012, the project contingency was reported as \$536,607,601, of which \$150 million is a management reserve. Total contingency drawdown for this reporting period was \$3,753,850.

Change Orders/Budget Adjustments: The PMT reported that during October 2012 there were 3 Change Orders executed over \$100K, with a total value of \$3.3M.

4.0 RISK MANAGEMENT

Background Summary: During 2Q2012, MTACC completed a comprehensive risk assessment of the ESA project. In May 2012, the MTACC's independent risk assessment consultant completed its initial analysis and issued the draft report on May 15, 2012. [REDACTED]

[REDACTED] Based on the cost and schedule re-baselining and the project-wide risk assessment, MTACC presented the new budget and RSD to the MTA Capital Program Oversight Committee on May 21, 2012: \$8.24 billion budget (w/o vehicles and financing); August 2019 RSD. [REDACTED]

Current Risk Mitigation Efforts: Through November 2012, ESA-PMT continued its efforts to identify and mitigate specific risks that may adversely affect the program's cost and schedule performance. Ongoing and significant new risk mitigation initiatives include the following:

- The PMT is proposing to advance construction of selected work from Contract CM014B (GCT Concourse and Facilities Fit-Out). The goal is to achieve early completion of work that would interfere with the work train operations under Contract CM014B and to complete repairs to the existing structural steel in Metro-North Railroad' Madison Yard area. This will reduce coordination and work access issues during construction under the CM014B contract. The PMOC believes that this approach will result in improved worksite logistics, provided that this does not delay the NTP for the CM014B Contract.
- ESA-PMT continued, through November 2012, to coordinate contractor activities in shared works area: between CM009/019 (conveyor), CQ039 and CQ032 (Plaza Substation B10) at the location of the Early Access Chamber; and between CH053 and CQ031 regarding the remaining work area and access conflicts.

5.0 ELPEP COMPLIANCE SUMMARY

The current status of each of the main ELPEP components is summarized as follows:

- **Technical Capacity and Capability (TCC):** The PMOC has completed its review of the Candidate Revisions for the ESA-PMP and discussed them with the FTA Region II Office. MTACC issued ESA PMP Revision 8.1 on September 27, 2012 and is planning to issue Revision 9.0 by June 30, 2013. MTACC has stated that it has implemented the PMP training process. The PMOC will conduct an audit of this process through the ESA Quality Manager.
- **Schedule Management Plan (SMP):** The SMP was fully approved by the FTA on November 3, 2011.
- **Cost Management Plan (CMP):** FTA conditional approval of the Cost Management Plan, including five (5) Candidate Revisions was received on September 1, 2011. MTACC submitted its final revisions to the CMP on November 11, 2011, which incorporate its responses to those Candidate Revisions.

- **Risk Mitigation Capacity Plan (RMCP):** FTA-RII provided its conditional acceptance of the RMCP in its May 24, 2012 letter to MTACC. Final acceptance is based on incorporation of the RMCP into the RMP, currently under review by the PMOC.
- **Conformance and Compliance:** MTA's final conformance and compliance document, the ELPEP Whitepaper, was completed and submitted to FTA-RII. In its May 30, 2012 letter to MTACC, the FTA acknowledged that ESA was in conformance with the ELPEP requirements. The PMOC will begin reporting the project's continued ELPEP compliance based on the PMOC's review of the 4Q2012 performance.
- **Risk Management Plan (RMP):** MTACC submitted Rev. 2 of the RMP, which addressed previous FTA/PMOC comments in August 2012. The PMOC is nearing completion of its review of the RMP.

The ELPEP Quarterly Review Meeting with MTACC, FTA-RII and the PMOC was held on September 12, 2012. The current ELPEP compliance checklist completed by MTACC was reviewed, and some possible modifications were discussed. MTACC planned to update the checklist and issue for FTA and PMOC review and comment. MTACC will also provide a status update of the outstanding MTACC procedures. The next ELPEP Quarterly Review Meeting is scheduled for December 12, 2012.

6.0 SAFETY AND SECURITY

Project safety statistics for lost time accidents continue to trend above the Bureau of Labor Statistics (BLS) national average at 2.50 vs. 2.20 lost time accidents per 200,000 hours. Although there has been some improvement in the safety statistics for the CM009 Contract, the lost time accidents continue to trend above the ESA Program average (2.82 vs. 2.50 lost time accidents per 200,000 hours). For the CM004 Contract, the lost time accidents are trending above the ESA Program average (3.89 vs. 2.50 lost time accidents per 200,000 hours). On the CQ039 Contract, the lost time accident statistics continue to trend well above the ESA Program average (5.61 vs. 2.50 lost time accidents per 200,000 hours).

ESA did not report any significant security issues during November 2012.

7.0 ISSUES AND RECOMMENDATIONS

Harold Electrical/Catenary Design: The PMOC is concerned that delays in finalizing the ET Stage 3 Catenary design has pushed the CH058 procurement advertise date out two months (from April 2013 to June 2013 as per latest IPS update. Key milestone dates and status for catenary designs are shown in Table 4 in Appendix B.

Contracts CM009/019: The PMOC believes that the current ESA SC date of June 1, 2013 will be met and does not have any concerns at this time.

Contract CM013: The PMOC notes that, after ongoing delays during the concrete placement phase of the project, the overall work is experiencing significant progress with the erection of structural steel, completion of the Service Tunnel roof and containment wall to the underside of 50th St. and advancement of the Deep Shaft. To date, the delay in achieving Milestone #5 (shaft access) has no impact on current or future contracts.

Contract CM004: The PMOC notes that the Substantial Completion date for the 44th St. Vent Plant has been extended to April 1, 2013 from the previous January 13, 2013 due to the change

in the structural steel fabricator (new subcontractor). The Contract has also experienced some delay as a result of hurricane Sandy. The PMOC remains concerned with the continued extension of the Substantial Completion date for this project and will continue to monitor the fabrication and delivery process of the building structural steel, as well as impact of delays in completing this Contract on the overall project schedule.

Contract CM014A: SCADA is currently driving the critical path in the Contractor's schedule update. The PMT is working with LIRR to resolve interface/compatibility issues with existing LIRR SCADA systems. The PMOC continues to be concerned with the schedule for SCADA, transformer and switchgear fabrication and delivery, and progress on resolving the problems with the design of the SCADA system. These issues have resulted in a slip in Substantial Completion from July 24, 2013, to October 16, 2013. Impact on the overall project schedule will have to be determined.

Contract CQ031: The CQ031 contractor turned the majority of the Open-Cut area over to the CQ032 contractor in November 2012 as scheduled; as such, the PMOC has no significant concerns at this time.

Contract CQ032: The contractor continues to make progress but is now 4.3% behind the planned completion goal as compared with only 2.7% behind the previous month. Future planned progress is at a higher rate but will be constrained by late access to three work areas: east end of the Queens Open-Cut Excavation (turnover from CQ031); west end of the Queens Open-Cut Excavation (turnover from CQ039); B10 Substation (partial access exists; full access requires removal of the CM009/019 muck conveyor system). Forecast delay due to these late turnovers is now 8 months and ESA is working to expedite earlier turnovers.

Contract CQ039: The Contractor's progress on the Segmental Excavation Method (SEM) tunneling was much slower than originally planned. Completion of the excavation was achieved in November 2012. The PMOC does not believe that the contractor will be able to sustain a higher rate of construction progress based on the particular characteristics of the contract work including: very limited site access; labor intensive construction work; NYCT oversight of the construction work and impacts to the subway facilities; and there remains a chance of encountering unanticipated situations during construction of the permanent tunnel liner system that may result in a change in the construction means and methods. There is also concern that the delays experienced to date have already impacted the start of major construction work under the follow-on Contract CQ032 (Plaza Substation and Queens Structures) in the work zone area currently occupied by the CQ039 contractor at the west end of the Queens Open-Cut Excavation Area.

Contracts CH053/54A: The PMOC remains concerned that costs may continue to increase significantly in response to continuing delays to the Substantial Completion date. The adverse impacts to the CH053 and CH054A construction schedules and budgets have already been significant. The PMOC is also concerned about the potential adverse impacts to the follow-on Harold Interlocking contract CH057 caused by late completion of the CH053 contract work. The PMOC has similar concerns about Contract CH054A (Harold Structures Part 2A). The planned Notice to Proceed (NTP) for Contract CH057, currently scheduled for April 1, 2013, is now 12 months prior to the current forecast CH053 Substantial Completion date of March 31, 2014 and has the potential to create significant construction access and work area conflicts between the two contracts as well as an increased demand for scarce LIRR and Amtrak force

account resources. The PMOC continues to recommend that ESA prioritize the GEC construction support to this contract, expedite resolution of utility interferences, and prioritize the contractor's requests for track outages and force account support.

Railroad Force Account: The PMOC is concerned about the disruption to the availability of both Amtrak and LIRR force account personnel that were diverted from the ESA project to assist with storm recovery efforts. Both railroads were significantly impacted by the storm and it appears that force account resources will not be back to normal levels until the beginning of 2013. Impact to the overall project schedule will be based upon the length of time it takes for the LIRR and Amtrak resources to fully return to supporting the work on the ESA project.

Procurement: Bids for the CM012R (Manhattan Structures Part 2) solicitation were received on October 24, 2012. [REDACTED]

[REDACTED] This Contract package is on the project critical path and will also impact the CS179 (Systems Package 1) procurement; which is dependent upon completion of certain milestones in this package for access, and is also on the project critical path. MTACC has cancelled the solicitation and is developing a strategy for going forward.

[REDACTED]

[REDACTED]

APPENDIX A – ACRONYMS

ARRA	American Recovery and Reinvestment Act
BA	Budget Adjustment
BAFO	Best and Final Offer
C&S	Communications and Signals
CBB	Current Baseline Budget
CCC	Change Control Committee
CCM	Consultant Construction Manager
CD	Calendar Days
CM	ESA Construction Manager (assigned to each contract)
CMP	Cost Management Plan
CIL	Central Instrument Location
CPOC	Capital Program Oversight Committee
CPRB	Capital Program Review Board
CPP	Contract Packaging Plan
CWP	Construction Work Plan
EAC	Estimate at Completion
ELPEP	Enterprise Level Project Execution Plan
ERT	East River Tunnel
ESA	East Side Access
ET	Electric Traction
FA	Force Account
FFGA	Full Funding Grant Agreement
FTA	Federal Transit Administration
GCT	Grand Central Terminal
GEC	General Engineering Consultant
IPS	Integrated Project Schedule
LIRR	Long Island Rail Road
MNR	Metro-North Railroad
MTA	Metropolitan Transportation Authority
MTACC	Metropolitan Transportation Authority – Capital Construction
NATM	New Austrian Tunneling Method

NTP	Notice to Proceed
NYCT	New York City Transit
NYSPTSB	New York State Public Transportation Safety Board
OSHA	Occupational Safety and Health Administration
PE	Preliminary Engineering
PMOC	Project Management Oversight Contractor (Urban Engineers)
PMP	Project Management Plan
PMT	ESA's Project Management Team
QA	Quality Assurance
RAMP	Real Estate Acquisition Management Plan
RFP	Request for Proposal
RMP	Risk Management Plan
RMCP	Risk Mitigation Capacity Plan
ROD	Revenue Operations Date
RSD	Revenue Service Date
SC	Substantial Completion
SCADA	Systems Control and Data Acquisition
SCC	Standard Cost Category
SEM	Segmental Excavation Method
SMP	Schedule Management Plan
SSMP	Safety and Security Management Plan
SSPP	System Safety Program Plan
SWP	Safety Work Plan
TBM	Tunnel Boring Machine
TCC	Technical Capacity and Capability
VE	Value Engineering
WBBY	Westbound Bypass
WBS	Work Breakdown Structure

APPENDIX B – TABLES

Table 1: Project Budget/Cost Table 

	FFGA (as of December 18, 2006)			MTA's Current Baseline Budget (October 31, 2012)		Expenditures as of October 31, 2012	
	(\$ Millions)	(% of Grand Total Cost)	Obligated (Millions)	(\$ Millions)	(% of Grand Total Cost)	(\$ Millions)	(% of CWB)
Grand Total Cost	\$7,386	100		\$9,824	100	\$4,070.1	41.4
Financing Cost	\$1,036	14.0		\$1,116	11.4		
Total Project Cost	\$6,350	86.0	\$4,107	\$8,708*	88.6	\$4,488.0	51.5
Federal Share	\$2,683	36.3	\$1,148	\$2,699	27.5	\$1,819.2	20.9
5309 New Starts share	\$2,632	35.6	\$1,098	\$2,436.6	27.6	\$1,567.6	18.0
Non New Starts grants	\$51	0.7	\$50	\$67	0.8	\$56.2	0.6
ARRA	0	0	0	\$195.4	2.2	195.4	2.2
Local Share	\$3,667	49.6	\$2,959	\$6,009	61.2	\$2,668.8	30.6

* CBB represents current MTA Board approved \$8,245 million budget plus \$463 million for Rolling Stock Reserve.

Table 2 – Summary of Critical Dates

	FFGA	Forecast (F) Completion, Actual (A) Start	
		Grantee*	FTA**
Begin Construction	September 2001	September 2001(A)	September 2001(A)
Construction Complete	December 2013	August 2019	September 2019
Revenue Service	December 2013	August 2019	September 2019

* Source – Grantee forecast Revenue Operations Date per information presented to MTA CPOC on May 21, 2012

**Source –Based on PMOC 2012 risk assessment results.

Table 3: Comparison of Standard Cost Categories: FFGA vs. CBB

Standard Cost Category (SCC) No.	Description	FFGA SCC baseline (YOE) \$M	Re-baseline of July 1, 2012 SCC (YOE) \$M	October 2012 SSC (YOE) \$M	% Change of October vs. FFGA	Changes between 7/12 vs. 10/12 \$M	Awarded value \$M
10	Guideway & Track	1,989	2,943	2,903	45.95%	-40	1,958
20	Stations	1,169	1,514	1,575	34.73%	61	814
30	Support Facilities	356	388	389	9.27%	1	190
40	Sitework & Utility	205	488	495	141.46%	7	309
50	Systems	619	698	669	8.08%	-29	235
60	Right-of-Way	165	204	204	23.64%	0	140
70	Vehicles	957	674	674	-29.57%	0	9
80	Professional Services	1,184	1,649	1,645	38.94%	-4	1,216
90	Unallocated Contingency	169	150	150	-11.24%	0	0
Subtotal		6,813	8,708	8,708	27.81%	0	4,871
100	Finance Charges	1,036	1,116	1,116	7.72%	0	418
Total Project Cost (10 – 100)	Total Project Cost (10 – 100)	7,849	9,824	9,824	25.16%	0	5,289

Table 4 –Catenary Review Schedule

Catenary Package	30% Submittal HNTB/Amtrak Review		60% Submittal HNTB/Amtrak Review		90% Submittal HNTB/Amtrak Review		100% Submittal HNTB/Amtrak Review	
	Submit	Return	Submit	Return	Submit	Return	Submit	Return
STAGE 1							8/8/11	8/26/11 10/06/11 (A)
STAGE 2			9/7/11 11/16/11 (A)	9/21/11 2/29/12 (A)	10/28/11 3/9/12 (A)	12/1/11 4/18/12 4/27/12 (A)	1/6/12 4/27/12 5/10/12 (A)	2/6/12 6/01/12 5/30/12 (A)
STAGE 3	10/14/11 12/14/11 (A)	11/18/11 2/29/12 (A)	12/23/11 4/18/12 4/27/12 (A)	1/30/12 5/24/12 8/13/12 (A)	3/9/12 6/20/12 8/17/12 (A)	4/15/12 7/30/12 11/29/12 (A)	5/18/12 8/17/12	6/18/12 9/18/12
FQA65	9/29/11 12/14/11 (A)	10/21/11 2/29/12 (A)	11/25/11 4/3/12 4/13/12 (A)	1/06/12 5/10/12 7/13/12 (A)	2/10/12 6/11/12 8/01/12 (A)	3/20/12 7/18/12 10/12/12 (A)	4/20/12 8/3/12 11/20/12 (A)	5/26/12 9/4/12

A = Actual

Note: yellow highlights denote missed target dates.

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]