

PMOC MONTHLY REPORT

East Side Access (MTACC-ESA) Project

Metropolitan Transportation Authority

New York, New York

Report Period October 1 to October 30, 2012



PMOC Contract No. DTFT60-09-D-00007

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

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

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THIRD PARTY DISCLAIMER

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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 September 30, 2012, MTACC reported that the Engineering/Design effort was 96.2% complete.

The PMT addressed the comments from the ESA consultant responsible for the quality assurance review of the Electric Traction (ET) designs made on the Stage 3 90% catenary design package (FHA03) and forwarded the package to Amtrak for approval on October 23, 2012. The package is still under review by Amtrak. The PMT anticipates delay in getting approval due to Amtrak's focus on the aftermath of the storm that severely impacted Amtrak operations on October 29, 2012. Continuing delay in finalizing and obtaining Amtrak approval of this design could impact the CH058 procurement (target for completion of 90% design was July 2012).

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

The current advertise date of October 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 mid-September 2012, and stated that an addendum would be issued if the construction procedure for tunnel jacking was not approved by Amtrak by then. The addition of the West Bound Bypass track slab has been issued to the GEC. 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 the end of July 2012; this date is now forecast for mid-November 2012, and the PMT has stated that this date might slip by several weeks 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. The re-route design will permit construction to proceed with the LIRR eastbound passenger track remaining in service, reducing impact to railroad operations and eliminating schedule conflicts with other portions of the Harold construction.

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 is planned for November 14, 2012 to discuss these scope transfers.

The 90% design for the CH061 (Tunnel A) package is currently forecast for completion by November 21, 2012.

b. Procurement

As of the end of September 2012, the total procurement activity on the project was reported to be 55.9% complete, with \$4.783 billion in contracts awarded out of the \$8.708 billion revised budget.

Bids for the CM012 (Manhattan Structures Part 2) solicitation were received on October 24, 2012. [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.

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 CM012 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.

c. Construction

MTACC reported in its September 2012 Quarterly report that the total construction progress reached 46.4 % 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 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. Project schedule impact cannot be determined until force account personnel from both railroads return to work on the ESA project, and the amount of time that takes. There was no major structural damage to either temporary or permanent construction on the ESA project resulting from the storm.

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

The Estimate at Completion for the CM009 contract was re-baselined in January 2012 at \$413,415,000, and has remained unchanged since then. The Substantial Completion (SC) date had been set at August 31, 2013, as part of the re-baseline, but the MTACC has revised that date twice to its present forecast of May 21, 2013.

The Estimate at Completion for the CM019 contract was also re-baselined in January 2012 at \$793,879,000, and has remained unchanged since then. The Substantial Completion date had been set at August 31, 2013, as part of the re-baseline, but the MTACC has revised that date twice to its present forecast of May 21, 2013.

The MTACC has noted that the CM009/CM019 contractor has experienced difficulty dewatering the T404 tunnel. As a result, final excavation in the Tail Tracks and GCT 1&2 is projected to be one month later than the Contract milestone dates (from November 2012 to December 2012). At this time the PMOC does not believe that this will have an impact on the overall Substantial Completion date.

CM013 – 50th Street Vent Facility: EAC remained unchanged at \$127.8 million. Forecast Substantial Completion date is July 31, 2013.

Construction Progress:

- The placement of concrete walls along the Vent Plant basement was substantially completed. Erection of structural steel began and is ongoing from the Concourse deck level at approximate Elevation 309.
- At the Service Tunnel, the contractor completed construction of the 2nd basement roof and the south wall that extends up to the underside of E. 50th as a part of the new street support system. The 2nd basement roof is the limit of Service Tunnel rooms. The space between the roof the 50th St. invert will be backfilled with engineered fill as the existing and new utilities are positioned under 50th St. The UA wall was closed with concrete at the east end of the Service Tunnel.
- During this period the concrete in the deep shaft was completed, including the invert slab at the base of the shaft and in the horizontal Access Tunnel. Invert slab is at approximate Elevation 222. Shoring and formwork has been erected for the first intermediate floor

slab in the deep shaft. The intermediate floors will shape the permanent shaft openings in the facility. Also, the contractor continued with construction of the high benches along the horizontal Access Tunnel.

CM004 – 44th Street Demolition and Fan Plant Structure: EAC remained unchanged at \$46.53 million. Forecast Substantial Completion date is October 17, 2013.

Construction Progress:

- Continued shaping remaining shaft and collecting and stacking muck in the horizontal shaft. Continued the shop drawings approval and steel fabrication process.
- The Contractor has substantially completed its work at 245 Park Ave. Punch lists have been generated and issued and the Contractor is working to complete them in coordination with MNR completion of their portion of the work.
- MNR has in-house work to complete, and the “official” opening of the entrance is up to MNR.

CM014A – Concourse and Facilities Fit-Out: EAC remained unchanged at \$55.7 million. Forecast Substantial Completion (SC) date is July 1, 2013.

The PMOC has previously reported on the issues with the SCADA system design. As of this report it was reported to the PMOC by the CM014A Project Office that this issue remains outstanding. The SCADA subcontractor undertook a demonstration and test procedure for their revised design on October 24, 2012. According to the Project Office report this test was unsuccessful and a subsequent test scheduled for October 24 was cancelled. Follow-up meetings and discussions are ongoing with the respective parties to resolve this ongoing issue.

This issue is impacting completion of shop drawing submittal/approval, manufacture and delivery of all equipment by the required December 2012 for May 2013 “power up”. No Time Impact Analysis or revised schedule can be determined at this time.

Queens: CQ031 – Queens Bored Tunnels and Structures: EAC remained unchanged at \$766.0 million. Forecast Substantial Completion (SC) date recovered 1 month from January 14, 2013 to December 18, 2012.

All TBM mining and lining of the four new Queens tunnels has been completed. This is a significant milestone. Some CQ031 work scope that could not be completed due to delays in completion of predecessor work under the CH053 contract is being transferred to other active contracts or future contracts based on project schedule requirements.

The PMOC notes that the contractor has been able to recover significant schedule time primarily based on advancing the WBBY work ahead of schedule. . ESA forecasts that Contract CQ031 will achieve Substantial Completion by the end of 2012. Based on the contractor’s performance to date, the PMOC believes that this contract will be completed in 1Q2013. Work-around plans have been developed to deal with the few remaining access and work zone conflicts between the CH053 and CQ031 contractors due to late completion of the CH053 work. The CQ032 contractor is awaiting access to the TBM launch area where the CQ031 contractor is working to complete the remaining contract work in that area. ESA is working to achieve partial turnover of this area in November 2012.

CQ032 Contract – Plaza Substation and Queens Structures: EAC remained unchanged at \$165.1 million. Forecast Substantial Completion (SC) date slipped three months from 01/05/15 to 04/16/2012.

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.

CQ039 Contract – Northern Boulevard Crossing: EAC remained unchanged at \$102.1 million. Forecast Substantial Completion (SC) date recovered 1 week from May 6, 2013 to April 29, 2013.

Construction Progress:

- Completed sequential excavation method (SEM) mining of Drifts 1 through Drift 5 beneath Northern Boulevard.
- Continued: SEM mining of Drifts 6 and 7 beneath Northern Boulevard; fabrication of structural steel for permanent tunnel lining system; maintaining soil freeze operation.

Harold Interlocking: CH053 Contract – Harold Structures Part 1 and G02 Substation: EAC remained unchanged at \$267.8 million. Forecast Substantial Completion (SC) date slipped two months 02/05/14 to 03/31/14.

Construction Progress:

- Completed erection of all LIRR signal towers; erection of QB 3/4 utility bridge; and construction of bridge deck on ML4 Bridge over 43rd Street.
- Continued fabrication of steel catenary structures; erection of catenary poles; construction of 12kV duct bank and manholes; construction of foundations for catenary poles at various locations in Harold Interlocking; construction of jacking and receiving pits for micro-tunneling; installation of T-Wall sections of Retaining Wall 48-S1; and internal wiring and equipment testing for G.O.2 Substation. .

The PMOC notes that the rate of construction needs to improve to meet the forecast SC date of March 31, 2014. At the September 2012 job progress meeting, however, the contractor stated that his forecasted SC date is October 31, 2014, 7 months later than the current MTACC-ESA forecast date.

CH054A Contract – Harold Structures Part 2A: EAC remained unchanged at \$46.2 million. Forecast Substantial Completion (SC) date slipped three months from 06/24/13 to 10/02/13.

Construction Progress:

- Completed: construction of foundation for Signal Bridge #11; E-34 Signal Bridge north and south abutments.
- Continued: construction of 12kV duct bank and manholes.

- Commenced: excavation and installation of support-of-excavation for next section of storm sewer; construction of retaining wall THOM S1

The PMOC notes that the reported construction progress has shown improvement the last several months compared to the historical progress rate of about 1.8%. However, the 3Q2012 reported actual progress was less than the planned progress and the construction progress continues to fall, from 20% to 22% currently, further below the revised progress schedule. The construction progress rate needs to improve significantly to meet the forecast SC date of October 02, 2013.

Railroad Force Account: As of September 30, 2012, project percent complete for FHA01 is 82.1% vs. 80.3% planned. The forecast EAC remains \$16.80M. Forecast Substantial Completion is April 14, 2014.

The remaining FHA01 construction is largely Electric Traction (ET) relocation of existing catenary wires to new catenary poles that the CH053/CH054A contractor has installed. Amtrak ET forces also support the contractor during the erection of the catenary poles. This continued to go well during October 2012 with a total of 21 new catenary poles installed, bringing the total number of poles installed up to 124 of 158 (78.5%). The impacts of the storm will have to be evaluated in terms of finishing the installation of the catenary poles.

As of September 30, 2012, project percent complete for FHA02 is 46.8% vs. 48.5% planned. The forecast EAC remains \$40.54M. Forecast Substantial Completion is August 13, 2014.

The scope of FHA02 construction consists of Amtrak installation of two main line crossovers in “F” Interlocking (by the Amtrak Track Department) and cutovers of the Central Instrument Houses (CIHs) for “F” Interlocking by the Amtrak Communications and Signal (C&S) Department. Amtrak completed installation of the crossovers in June 2012 and the C&S Department continued to make daily progress to cutover the CIHs until the storm hit on October 29, 2012. The cutovers have been re-scheduled from November 2012 until 2Q2013 due to late completion of predecessor activities; however, this date will have to be re-evaluated in light of the storm.

As of September 30, 2012, project percent complete for FHL01 is 73.9% vs. 76.6% planned. The forecast EAC remains \$21.97M. Forecast Substantial Completion is December 3, 2013.

LIRR personnel continued to support Amtrak’s ET catenary wire transfers between 39th and 43rd streets and preparation for signal tower relocation between existing tower #s 34 and 49; and began signal wire installation across the main lines in Harold Interlocking between new Signal Tower #s 47 and 49.

Construction Progress:

- Completed: Installation of signal power cables between new towers 47-49, 34-36, and 37-40.
- Continued: Installation of signal power cables between other towers from Tower 32 to Tower 47, and signal construction for the cutover of the new “H4” CIL in Harold Interlocking.

As of September 30, 2012, project percent complete for FHL02 is 20.0% vs. 20.5% planned. The forecast EAC remains \$62.69M. Forecast substantial completion is November 2, 2015.

Construction Progress:

- Continued: Installation of cross-track conduits and troughs for “H2”, “H3”, and “H4” signal locations in Harold Interlocking, communications construction between Point CIL and the Harold communications hut, and constructed track panels for the Westward Passenger Track reconstruction.

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

During the Quarterly Quality Oversight (QO) audits conducted in the second quarter of 2012, the PMOC observed an inconsistency in the way the audits were conducted. During some audits, the status of action items from the previous oversight is included in the agenda while on others, this is not addressed. The PMOC recommended that QOs for each contract be performed by a Quality Engineer from another contract in order to provide an independent evaluation. The ESA Quality Manager has implemented this recommendation. QO's for the third quarter were conducted by a Quality Engineer not assigned to the Contract being audited. Action items from the previous QO were reviewed and exit meetings were conducted.

2.0 SCHEDULE DATA

ESA submitted the IPS #40 data date October 1, 2012, and its variance report, on September 26, 2012.

Project Critical Path: ESA PMT has announced the following major changes in this month's IPS (which are mostly schedule mechanics):

- ESA will calculate the float of the activities based on the finish date of August 2018 instead of August 2019.
- The PMT segregated the Harold schedule from the rest of the program to establish clear critical and near critical paths in Harold Contracts. Harold critical path goes through:
- Contracts FHL02, FHL03, FHL04, start-up/testing and commissioning are on the critical path. This segregation should allow the PMT to better manage the critical and near critical path in Harold.
- After the latest CCC Meeting, the PMT has modified the schedule to account for the Scope transfer of catenary poles from the future CH057 contract into the active CH053 contract, which allows the Structural Slab work that supports the jacked tunnel construction to begin in CH057 in 2013 instead of 2014

Schedule Contingency: The current project baseline schedule for ESA has 365 days of contingency added at the end of the project, extending the RSD from August 2018 to August 2019. As mentioned elsewhere in the report, the PMOC believes that ESA will have to draw down significantly from this schedule contingency since at this point, it is highly unlikely that the CM012 and CS179 Contracts will be able to issue NTP in 2012 (both of these packages are on the project critical path).

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.

Budget/Cost: MTACC reported that, as of September 30, 2012, the overall project completion was 50.6%, vs. 50.8% planned. 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 vs. the FFGA Baseline Budget in Standard Cost Categories (SCC). The PMT did not provide documentation the changes shown in SCC between July 1, 2012 and September 1, 2012. The PMOC will follow up in the next reporting period.

Contingency: As of the end of September 2012, the project contingency was reported as \$540,361,451, of which \$150 million is a management reserve. Total contingency drawdown for Q3 2012 is \$12,005,537.

Change Orders/Budget Adjustments: The PMT reported that during the 3Q12 there were 20 Change Orders executed over \$100K with a value of \$23.37M.

4.0 RISK MANAGEMENT

Background Summary: During Q2-2012, 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 August 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 ESA Change Control Committee (CCC) approved transfer of scope from CM014B to CM013 for 4 cooling towers and associated pumps and controls to provide early climate control necessary to support installed systems equipment and to remove a constraint on the ESA work train tracks. The PMOC believes this approach provides benefits, provided that this will not extend the contract time for CM013.
- ESA-PMT is transferring the CQ031 rock excavation at the west end of the Queens Open-Cut Excavation Area to CQ039 to delete this contract interface. The PMOC agrees with this approach since CQ039 can perform this work, provided that this will not extend the contract time for CQ039 which is already late and is delaying the CQ032 contractor access to the site.
- ESA-PMT is considering transfer of the sump pit excavation from CQ031 to CQ032 thus permitting CQ031 to complete demobilization of the TBM launch area and timely transfer of the work area to CQ032. The PMOC disagrees with this proposed action

because the work involves drill and blast operations in close proximity to Amtrak facilities. The CQ031 has successfully performed drill and blast work without any issues with Amtrak while this type of work would be new to the CQ032 contractor.

5.0 ELPEP

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.
- **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 incorporated 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 compliance with the ELPEP requirements.
- **Risk Management Plan (RMP):** MTACC submitted Rev. 2 of the RMP, which addressed previous FTA/PMOC comments in August 2012. The Plan is currently under review by the PMOC.

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 plans to update the checklist and issue for FTA and PMOC review and comment. MTACC will provide a status update of the outstanding MTACC procedures. The next ELPEP Quarterly Review Meeting is scheduled for December 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 2.55 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 hours continue to trend above the ESA Program average (2.87 vs. 2.55 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 (5.89 vs. 2.58 lost time accidents per 200,000 hours). MTACC made a presentation to FTA on April 26, 2012, MTACC made a presentation to FTA on April 26, 2012, discussing its Safety Program Plan and measures being taken (root cause analyses, lessons learned, etc.) to improve safety performance. The PMOC

recommends that MTACC makes a follow-up presentation, specifically addressing findings and actions being taken to improve safety performance on contracts that are lagging behind overall Program performance.

No significant security issues were reported by ESA during October 2012.

7.0 ISSUES AND RECOMMENDATIONS

Harold Electrical/Catenary Design: Amtrak's priority is now on recovery efforts from hurricane Sandy, so approval of ET designs may lag. The PMOC is concerned that delays in finalizing the ET Stage 3 Catenary design could impact the CH058 procurement if it is not finalized by November 1, 2012 (as per latest IPS update). Key milestone dates and status are shown in Table 4 in Appendix B.

Contracts CM009/019: The PMT has noted that the CM009/019 contractor has experienced difficulty de-watering the T404 tunnel. As a result, final excavation in the Tail Tracks and GCT 1&2 is projected to be one month later than the contract milestone dates (from November 2012 to December 2012). The PMOC does not believe that the difficulty the contractor is experiencing de-watering the Tail Tracks and GCT1&2, as mentioned in the Executive Summary above, will have any impact on the Substantial Completion date. The PMOC does believe, however, that the MTACC present forecast Substantial Completion date of May 21, 2013 for CM019 is overly optimistic and that a more realistic date would be July 31, 2013.

Contract CM013: The PMOC notes that the Contractor has been able to achieve better production rates now that the concrete wall work is substantially complete in the Vent Plant basement, the Deep Shaft and the Service Tunnel. The completion date for Milestone #5 remains December 31, 2012 and the project is proceeding towards this objective. To date Milestone #5 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 changes in the structural steel fabricator. 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.

Contract CM014A: SCADA is currently driving the critical path in the Contractor's schedule update. The PMT is currently working with LIRR to resolve interface/compatibility issues with existing LIRR SCADA systems.

Contract CQ031: Phasing the turnover of open-cut for construction of the Plaza substation is critical to the Queens Program. The CQ031 Contractor is working towards a partial turnover to the CQ032 Contractor in November 2012.

Contract CQ032: The contractor continues to make good progress and is only 2.7% behind the planned completion goal. 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 has been much slower than planned. Completion of the excavation is now forecast for November 2012. 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.

Contracts CH053/54A: Given that challenging coordination issues remain and additional problems, such as the significant impacts on railroad force account support due to the hurricane experienced on October 29-30, 2012 continue to arise, the PMOC does not believe that any sustainable increase in productivity is possible on the CH053 Contract. The PMOC is concerned about the potential adverse impacts to the follow-on Harold Interlocking contracts CH057 and CH058. The PMOC is also concerned that costs may continue to increase dramatically in response to continuing delays to the Substantial Completion date. 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 nine 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 adverse impacts to the CH053 and CH054A construction schedules and budgets have been significant. 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 the storm and as of this report, there are no estimates as to when these resources will be once again available to the ESA project. 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 CM012 (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 is currently evaluating the bids and developing a strategy for going forward.

Project Funding/Budget: 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.

As discussed above in the Procurement section of this report; the bid overrun on the CM012 Contract Package will have a significant impact on the overall project budget and remaining project contingency.

Project Schedule: Although the current IPS has 365 days of total project contingency, the recent results of the CM012 procurement will impact the project contingency. Since this Contract is on the critical path, contingency drawdown will take place if the Contract cannot be awarded before the end of 2012 (which is highly unlikely at this point). The situation is similar for CS179; which is on the critical path and will utilize project contingency if not awarded by the end of 2012. In addition, the work at Harold is complex and currently many of the Harold contract schedules are close to the critical path. Consequently, any delays may require use of project contingency early on. Given the delays to the Harold work due to hurricane Sandy; there is a strong likelihood that project contingency will be utilized for this work also.

APPENDIX A – ACRONYMS

ARRA	American Recovery and Reinvestment Act
BA	Budget Adjustment
BAFO	Best and Final Offer
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	Sequential 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 (September 30, 2012)		Expenditures as of September 30, 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	\$3,995.7	40.7
Financing Cost	\$1,036	14.0		\$1,116	11.4		
Total Project Cost	\$6,350	86.0	\$4,107	\$8,708*	88.6	\$3,995.7	45.8
Federal Share	\$2,683	36.3	\$1,148	\$2,699	27.5	\$1,815.6	20.8
5309 New Starts share	\$2,632	35.6	\$1,098	\$2,436.6	27.6	\$1,564.0	17.2
Non New Starts grants	\$51	0.7	\$50	\$67	0.8	\$50.4	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	\$2,180.1	25.0

* Current Baseline Budget represents current MTA Board approved \$8,245 budget that includes \$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. Re-baselined Budget

Standard Cost Category (SCC) No.	FFGA SCC baseline (YOE \$) M	Re-baseline of July 01, 2012 SCC (YOE \$M)	September 2012 SSC (YOE \$) M	% Change of September Vs. FFGA	Changes between September 2012 vs. July 2012(\$M)
10	1,989	2,943	2,908	46.22%	-35
20	1,169	1,514	1,578	35.02%	64
30	356	388	385	7.95%	-3
40	205	488	491	139.56%	3
50	619	698	698	12.75%	0
60	165	204	204	23.21%	0
70	494	674	674	36.52%	0
80	1,184	1,649	1,649	39.24%	0
90	169	150	150	-10.99%	0
Subtotal	6,350	8,708	8,708	37.14%	0
100	1,036	1,116	1,116	7.76%	0
Total Project Cost (10 – 100)	7,386	9,824*	9,824	33.01%	0

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	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	5/26/12 9/4/12

A = Actual

Note: yellow highlights denote missed target dates.

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