

MONTHLY MONITORING REPORT

World Trade Center Port Authority Trans-Hudson Terminal
PORT AUTHORITY OF NEW YORK AND NEW JERSEY
New York, New York

June 2016



PMOC Contract Number: DTFT60-14-D-00010

Task Order Number: 006

O.P.s Reference: 01, 02, 25, 26, 40

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PMOC / Start of Assignment: David Evans and Associates, Inc. / October 2008

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Cover: An additional portion of the Transit Hall was opened by WTCC on June 21, 2016, providing ADA-accessible access from Vesey Street.

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 the FTA or the project sponsor, in accordance with the purposes as described below.

For projects funded through FTA's Lower Manhattan Recovery program, the 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 may change from month to month, based on relevant factors for the month and/or previous months.

REPORT FORMAT AND FOCUS

This monthly report is submitted in compliance with the terms of the Federal Transit Administration (FTA) Contract No. DTFT60-14-D-00010, Task Order No. 006. Its purpose is to provide information and data to assist the FTA in continually monitoring the grantee's technical capability and capacity to execute a project efficiently and effectively, and hence, whether or not the grantee continues to receive federal funds for project development.

This report covers the project management activities on the Permanent World Trade Center (WTC) Port Authority Trans-Hudson (PATH) Terminal (Hub) project, conducted by the Port Authority of New York and New Jersey (PANYNJ) as grantee and funded by the FTA's Lower Manhattan Recovery Office (LMRO).

EXECUTIVE SUMMARY

On June 21, 2016, World Trade Center Construction (WTCC) opened the third of four phases of the Transit Hall for public use. Phase III connects the Transit Hall lower level to the Tower 2 Transportation Lobby (T2TL) providing access to the street level at Vesey Street and Church Street. Elevator 23 was included as part of the Phase III opening and provides Americans with Disabilities Act (ADA) accessibility between the Transit Hall main floor level and the street level. Phase III also includes the permanent connection from the PATH Hall mezzanine to the West Concourse. With Transit Hall Phase III open, WTCC closed the North Temporary Access (NTA) on June 26, 2016. There are currently ADA-accessible routes between the PATH platforms and the New York City Transit (NYCT) Fulton Center Dey Street Concourse, to the street at Tower 4, the World Financial Center, and now to the street at the Tower 2 Transportation Lobby.

WTCC is currently planning a Phase IV opening of the Transit Hall for August 2016, which will make the balance of the Transit Hall available for public use, including the street-level entrances at the east and west ends of the Oculus, Elevators 14 and 18, Escalators 35, 36, 39 and 40, the two viewing platform areas (diving boards) at elevation 306', and the western half on the Transit Hall oval located at elevation 296'.

Project Description

The WTC PATH Hub serves the PATH electrified rail transit system in Lower Manhattan. The PATH Hub is an extensive underground complex of pedestrian corridors and train station facilities that will replace the original WTC PATH Terminal destroyed by terrorist attack on September 11, 2001.

Construction Agreement (CA)

The CA was signed on April 25, 2006. A Revised and Restated Construction Agreement (RRCA) was executed on September 18, 2012. (b) (4)

[REDACTED]

(b) (4)

Quarterly Progress Review Meeting (QPRM)

The QPRM for the first quarter of 2016 was held June 1, 2016. The FTA and WTCC reviewed project progress and discussed major project issues.

Design Activity

The designer continues to provide construction support services including reviewing contractor shop drawings, responding to Requests for Information (RFIs), and providing design certifications for completed elements of construction.

Procurement Activity

WTCC has completed all of the planned procurements for the PATH Hub project. However, change orders continue to be issued as necessary under the active construction contracts.

Construction Activity

WTCC dedicated sufficient project resources to prepare for the Phase III opening of the Transit Hall, which was successfully opened to the public on June 21, 2016. WTCC contractors continue to perform remaining work for Phases I, II, and III. WTCC continued its two-shift construction effort for the new Platforms C and D and the mezzanine above those platforms, along with the associated low-voltage systems, Vertical Circulation Elements (VCEs), and finishes.

Schedule

On June 21, 2016, WTCC opened Transit Hall Phase III for public use. WTCC currently forecasts that the balance of the Transit Hall, referred to as Phase IV, will open for public use on August 16, 2016. WTCC forecasts that the substantial completion of Platforms C and D will occur by September 30, 2016. (b) (4)

Cost Data

WTCC submitted its monthly cost model revision for May 2016 on June 28, 2016. (b) (4)

Risk Management

As of *June* 2016, the PMOC saw no changes to the top risks to the PATH Hub project construction, which are:

- Site-wide systems integration, testing, and commissioning.
- Completion of PATH Hub support rooms/facilities/elements.
- Remaining work to be performed by the low-voltage contractors.
- Performance of PATH Hub project work by other WTC stakeholders.

Technical Capacity and Capability Review

The FTA uses the Project Execution Plan (PEP) to measure WTCC's technical capacity and capability. The PEP also includes a mechanism for the release of Risk Retainage. *The June 2016 opening of PATH Transit Hall Phase III for public use triggered a PEP milestone review and, as a result of that evaluation, (b) (4)*

Project Management Plan (PMP)

The PMP and all of the PMP sub-plans are up to date, and no resubmissions are necessary at this time.

Project Quality Assurance

During *June* 2016, WTCC Quality Assurance (QA) completed *four* oversight audits that included reviewing the Construction Manager (CM) QA's field audits and performing its own field construction audits of Oculus glazing activities. The *June* 2016 audit total reflects the *four* WTCC QA audit reports that were issued and received at the time this monthly report was drafted. During its *June* audits, WTCC QA did not identify any quality issues for corrective action.

Site Safety

The WTC PATH Hub project has established its own project safety performance goals for Total Case Incident Rate (TCIR) and Lost-Time Incident Rate (LTIR) of less than 5.0 and less than 2.0, respectively. In *May* 2016, the project had no recordable incidents and no lost-time incidents, resulting in a monthly TCIR of 0 and an LTIR of 0, based on 117,998.0 hours worked. WTCC Safety initiatives that took place in *June* are discussed in the project monitoring report section of this report. The *June* 2016 safety data for the project was not fully available when this report was drafted but is expected to be available after mid-*July* 2016.

Issues/Problems/Suggestions

During June, WTCC reported that it will close Platform B once Platforms C and D are opened for public use. This closure will allow for the performance of the work needed to complete the northern 120' of the platform, along with the work on the mezzanine level above the northern end. Among the work activities to be performed are the construction of the new permanent train dispatcher's office for the WTC PATH Station, removal of structural elements that remain from the temporary PATH Station, installation of various architectural finishes, and the remaining fit-out of the support spaces located behind the northern end of the platform. Platform B opened for public use and has been receiving 8-car revenue service trains since May of 2015. The

remaining work will expand its capacity to 10-car consists, but will likely necessitate a multi-month closure period to perform.

Although WTCC's emphasis on completing public spaces for operational use provides earlier benefit to the public, it appears that the balance of work that will remain after the Transit Hall and the PATH Hall are operational will be considerable. The FTA has tasked the PMOC with identifying the scope of remaining work and creating a tool that can be used to: (1) verify the grantee's compliance with RRCA Attachments 1 and 3; and (2) assess the ability of the grantee to achieve the December 31, 2016 RCD and thereby determine the likelihood that a new recovery plan will be necessary. *During June, the PMOC continued identifying the remaining work in the Transit Hall, the North-South Concourse, and the three associated Transportation Lobbies. A spot report on this subject is also being prepared.*

MONITORING REPORT

A. Project Description

The PATH Hub facility is an intermodal terminal serving the PATH electrified heavy rail transit system, which has a total of 13 stations in New York and New Jersey. When completed, the WTC PATH Hub will connect to 11 NYCT subway lines in Lower Manhattan. The PATH Hub includes a platform level, associated mezzanine and concourse levels called the PATH Hall, and a terminal building called the Transit Hall, or Oculus, with north-south and east-west pedestrian connections to the NYCT subways, the World Financial Center, and WTC above-grade site development. It will be a permanent replacement of the original WTC PATH Terminal complex destroyed by the terrorist attack on September 11, 2001.

B. Project Status

Construction Agreement

The CA was signed on April 25, 2006. An RRCA was executed on September 18, 2012. (b)

(4)

[REDACTED]

[REDACTED]

[REDACTED]

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[REDACTED]

Quarterly Progress Review Meeting

The QPRM for the first quarter of 2016 was held June 1, 2016. The FTA and WTCC reviewed project progress and discussed major project issues.

WTC Site Master Plan

WTCC’s latest site master plan is Master Plan Version 11, dated October 10, 2013.

Environmental Compliance

(Reported on separately by FTA’s LMRO.)

Design Support During Construction

The designer continued providing post-award design support services for the PATH Hub construction during *June*, including responding to contractor RFIs, reviewing contractor submittals, and providing design certifications for completed elements of construction. *In June 2016, the designer issued design certification letters for the PATH Hub project to support the documentation of completed work for the Transit Hall Phase III opening at the end of the month.*

Construction Status

As part of its plan to deliver the remaining project elements in stages, WTCC is opening the Transit Hall in four phases by the middle of third quarter of 2016, and will open PATH Hall Platforms C and D, along with additional PATH mezzanine space above Platforms C and D, at the end of the quarter. WTCC will continue to complete remaining PATH Hall and Transit Hall work after they are opened for operational use. Essential portions of the project systems and support spaces, along with testing, commissioning, and integration, will be advanced, but not necessarily completed, in conjunction with the opening of public spaces.

Transit Hall Operational

On June 21, 2016, World Trade Center Construction (WTCC) opened the third of four phases of the Transit Hall for public use. Phase III connects the Transit Hall lower level to the Tower 2 Transportation Lobby (T2TL) providing access to the street level at Vesey Street and Church Street. Elevator 23 was included as part of the Phase III opening and provides Americans with Disabilities Act (ADA) accessibility between the Transit Hall main floor level and the street level. Phase III also includes the permanent connection from the PATH Hall mezzanine to the West Concourse. With Transit Hall Phase III open, WTCC closed the North Temporary Access (NTA) on June 26, 2016. There are currently ADA-accessible routes between the PATH platforms and the New York City Transit (NYCT) Fulton Center Dey Street Concourse, to the street at Tower 4, the World Financial Center, and now to the street at Tower 2. During June, contractors advanced Phase III construction for operational use in the north transept, North Concourse, and Tower 2 Transportation Lobby areas with the installation of floor and wall stone, lighting, above-ceiling Mechanical, Electrical, and Plumbing (MEP) elements, security cameras, glass railings, stairs, and escalators.

WTCC is currently planning a Phase IV opening of the Transit Hall for August 2016, which will make the balance of the Transit Hall available for public use, including the street-level entrances at the east and west ends of the Oculus, Elevators 14 and 18, Escalators 35, 36, 39 and 40, the two viewing platform areas (diving boards) at elevation 306', and the western half on the Transit Hall oval located at elevation 296'.

WTCC continues to perform remaining work for Phases I, II, and III of the Transit Hall.

In addition to advancing the interior fit-out and finishes in the Transit Hall, WTCC is completing remaining work for the Oculus:

- *Oculus Painting: Improved progress during June 2016 brought exterior painting of the Oculus closer to completion. As sections of the Oculus painting are completed and the boom lifts used by the painters are moved, areas can be cleared for the installation of plaza stone paving.*
- *Oculus Skylight: During June, the contractor continued to advance the installation of the permanent fall-arrest system at the catwalk portion of the WT-3 metal panels that surround the exterior of the Oculus skylight. Only minor caulking and sealing of the catwalk panel joints remain to be completed.*

Platforms C and D Operational

During June, WTCC continued to execute the work at Platforms C and D on a two-shift basis. The installation of stone flooring at the north end of the mezzanine level above Platforms C and D was completed, and the area was turned over for operational use, thus allowing pedestrians to directly access the West Concourse rather than use the temporary connection through the NTA. In addition to stone installation, installation of other architectural wall and ceiling finishes continued. As noted in the discussion of vertical circulation below, elevator and escalator installation continued during June. WTCC continued to monitor contractor progress for the installation of low-voltage systems in order to mitigate delays that might impact the planned completion of Platforms C and D for operational use (b) (4)

West Concourse: There was limited progress during June on the work on the remaining 200-foot-long section of the upper level of the West Concourse above the north end of the mezzanine level of the PATH Hall. (b) (4)

East Bath tub MEP and Fire Protection Work: During June, contractors focused on bringing the necessary public and support spaces to the level of completion needed for the opening of Phase III of the Transit Hall. Project elements addressed included ventilation, power supply including emergency backup power, and hot water and chilled water distribution, along with associated testing and commissioning of these elements. In addition to the Phase III activities, work at the fresh air supply fans and fresh air shaft in the Tower 3 podium advanced during June. The activation of the fresh air shaft and supply fans is expected to occur early in the third quarter of 2016. Only the containment piping remains to be completed for the replacement of the south fuel riser piping. The Emergency Generator Plant has been advanced to the point that the temporary emergency generator plant is needed only for the NTA. Although the NTA has been closed, it still houses the temporary Fire Command Station and will continue to do so until swing-over to the permanent Fire Command Station is made.

Vertical Circulation: During June, the vertical circulation contractor continued to focus resources on the installation of elevators and escalators at Platforms C and D, and to support the Phase III opening of the Transit Hall. The contractor continued to make progress on the street-entrance level elevators (Elevators 14 and 18) located at the west and east ends of the Transit Hall, including the installation of glass enclosures. As part of the Phase III opening of the Transit Hall, a total of four escalators were placed in service, with two escalators serving the levels between the Transit Hall main floor (elevation 274) and upper floor (elevation 296). In addition, two escalators were placed in service that serve elevation 306 and the street level at the T2TL. An additional elevator was placed in service that serves the levels between the Transit Hall and the street level. The status of elevators and escalators through the end of June is summarized in the following table:

Item	In Service Last Month	In Service This Month	Onsite/Under Construction Last Month	Onsite/Under Construction This Month	Not Yet Onsite	Total
Escalators	28	32	19	15	0	47
Elevators	12	13	11	10	2*	25

*Tower 3 Transportation Lobby

Fire Alarm System: During June, the fire alarm contractor continued to install fire alarm controls at various supply air dampers located within the fresh air plenum that connects to the Central Fan Plant. The fire alarm contractor and WTCC have made progress toward resolving the interface issues with the fire alarm system and the radio system. Radio Switch No. 11 in the new Fire Command Station is operable. The Fire Command Station and the Fire Command Satellite Panel are both functional, and when the Fire Department of the City of New York (FDNY) disconnects the temporary emergency fire alarm communication system located in the NTA, then the swing-over from the temporary panels to the permanent panels will be made.

Radio System: During June, the radio system contractor continued to install head-end equipment at the first of the two permanent head-end locations (Room TH-015). The contractor also had to replace some of the radio equipment in Room TH-083 that was damaged by water infiltration from the floor above. Progress was also made in developing the radio system test plan during June. The Engineer of Record (EOR), the contractor, and the CM are continuing to develop a radio system test plan. WTCC and the EOR for the radio system are reviewing with the contractor the means by which VHF frequencies for a mutual aid channel and seven frequencies for the existing PAPD channels will be installed with the permanent radio system. Options are being developed, and the EOR, the contractor, and WTCC will address these options in response to the contractor RFI. Progress on the radio system fit-out in the Platforms C and D north and south projection equipment rooms has been slowed by the condition of the equipment rooms and the lack of permanent power. WTCC indicated that temporary power can be provided for any early radio system testing.

Telecommunications and Security Systems: During June, the contractor continued to perform testing and commissioning of telecommunications and security systems equipment throughout the site. Also during June, the security contractor worked on the ADA doors at the Vesey Street entrance in preparation for the Transit Hall Phase III opening. At Platforms C and D, the contractor continued to install security cameras and customer information equipment. With some telecommunications and security systems equipment in place and operational, the contractor has started to provide training to WTC Operations staff, including Every Day User Training, Supervisor Training, and Administrator Training.

*Building Automation and Temperature Control (BATC) System: In June, the contractor continued to address on a priority basis: tie-in of the leak-detection monitors at the emergency diesel fuel oil storage tank room to the Engineer's office located at the Central Chiller Plant; installation of air flow monitors in the fresh air shaft located in the Tower 3 podium; and advancement of control wiring for fresh air supply fans SF-1, SF-2, and SF-3, and on detection devices in the escalator and elevator pits that were included as part of the *Phase III* opening.*

*Central Fan Plant: The air handlers that are currently being run in the Central Fan Plant will continue to depend on fresh air supply from the spill air shaft in the Tower 2 basement until the permanent fresh air shaft and supply fans in the Tower 3 podium are completed and placed in service during the *third* quarter of 2016, as *re-forecasted* by WTCC. The controls contractor continues to install control wiring and devices for the fans and dampers in the Central Fan Plant.*

Construction Logistics

The WTCC Office of Program Logistics (OPL) continues to facilitate construction progress and the sharing of access, egress, and work zones among all contractors onsite. *Notable during June was OPL's coordination for the opening of the T2TL street-level entrance at Vesey Street and Church Street and the subsequent closure of the NTA.*

Interagency Coordination

During June, work continued on the restoration of the pre-September 11 connection between the WTC PATH Station and the NYCT WTC E Line Station at the northeast corner of the WTC site. *During June, WTCC and Metropolitan Transportation Authority (MTA) Capital Construction (MTACC) concluded discussions for their agreement to construct the free transfer connector between the NYCT WTC E Line Station and the NYCT R Line Cortlandt Street Station (R to E Connector).*

Community Relations

OPL continued to distribute construction alerts, updates, and monthly construction progress newsletters to the community and stakeholders. Updates on the project are listed at the website wtccprogress.com and publicized on commonly used social media outlets, and specific presentations are periodically made to Manhattan's Community Board #1. *WTCC announced the planned date of June 21, 2016, for the Phase III opening of the Transit Hall. The opening of Phase III at the end of June provided street-level access to the Transit Hall at Vesey Street and Church Street.*

C. Schedule

At the end of June 2016, WTCC opened Phase III of the Transit Hall for operational use. Currently, (b) (4)

[REDACTED]

The following table summarizes the 90-day look-ahead for completion of significant activities:

Significant Activity	Action by
<i>Platforms C and D Operational</i>	WTCC
<i>West Bathtub Vertical Circulation Elements Operational</i>	WTCC
<i>Start of NTA Demolition</i>	WTCC
<i>Opening of Transit Hall to Operational Use (Phase IV)</i>	WTCC

(b) (4)

(b) (4) [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]

D. Cost Data

(b) (4) [Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

The following table summarizes the latest available EAC (WTCC’s forecast) and expenditures as of *May 2016*:

Description	EAC (WTCC’s Forecast) (in millions)	Expenditures (in millions)
Construction	\$2,811	\$2,588
Program Management and Design	724	720
Contingency	(b) (4)	(b) (4)
Total	(b) (4)	(b) (4)

WTCC submitted its monthly cost model revision for *May 2016* on *June 28, 2016*. The report shows that WTCC’s EAC for the federally funded PATH Hub project (b) (4)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

E. Risk Management

As of *June 2016*, the PMOC saw no changes to the top risks to the PATH Hub project construction, which are:

- Site-wide systems integration, testing, and commissioning.
- Completion of PATH Hub support rooms/facilities/elements.
- Remaining work to be performed by the low-voltage contractors.
- Performance of PATH Hub project work by other WTC stakeholders.

F. Technical Capacity and Capability Review

The FTA uses the PEP to measure WTCC’s technical capacity and capability. *At the end of June 2016, WTCC opened a third portion of the Transit Hall for public use, and thus achieved the PEP milestone of “Transit Hall Operational—Phase III Opening” during the month. With WTCC’s achievement of this milestone, the PMOC evaluated residual risks based on revised PEP Exhibits 2 and 3, and as a result of that evaluation, the PMOC recommended that the FTA*

(b) (4)

[REDACTED]

[REDACTED]

Project Management Plan

The PMP and all of the PMP sub-plans are up to date and no resubmissions are necessary at this time.

Project Quality Assurance

During *June* 2016, WTCC QA completed *four* oversight audits that included reviewing the CM QA's field audits and performing its own field construction audits of Oculus glazing activities. The *June* audit total reflects the *four* WTCC QA audit reports that were issued and received at the time this monthly report was drafted. During its *June* audits, WTCC QA did not identify any quality issues for corrective action.

Lessons Learned

On a quarterly basis, the PMOC identifies potential Lessons Learned topics for further consideration. For the second quarter of 2016, phased opening of project elements for operational use was identified and is outlined in Appendix B.

G. Site Safety

The WTC PATH Hub project has established safety performance goals for its TCIR and LTIR of less than 5.0 and less than 2.0, respectively. In *May* 2016, the project had no recordable incidents and no lost-time incidents, resulting in a TCIR of 0 and an LTIR of 0 for the month, based on 117,998.0 hours worked. The *June* safety data for the project was not fully available at the time this report was drafted but is expected to be available after mid-*July* 2016.

During *June*, WTCC Safety issued safety information for use by its site safety managers that included a WTCC *Incident Weather Advisory for June 28, 2016*. This *Incident Weather Advisory* provided information on predicted high wind gusts of up to 60 miles per hour at the WTC construction site, and asked all contractors to take precautions to protect the site and its surrounding area. The *Incident Weather Advisory* also included a copy of the New York City Department of Buildings *Advisory on high winds* that outlined the precautions for crane operations, hoisting activities, and the use of scaffolds, as well as other preventive measures to observe during severe weather conditions. The WTC site contractors were advised to implement the cited precautions.

Issues/Problems/Suggestions

During June, WTCC reported that it will close Platform B once Platforms C and D are opened for public use. This closure will allow for the performance of the work needed to complete the northern 120' of the platform, along with the work on the mezzanine level above the northern end. Among the work activities to be performed are the construction of the new permanent train dispatcher's office for the WTC PATH Station, removal of structural elements that remain from the temporary PATH Station, installation of various architectural finishes, and the remaining fit-out of the support spaces located behind the northern end of the platform. Platform B opened for public use and has been receiving 8-car revenue service trains since May of 2015. The remaining work described above will expand its capacity to 10-car consists, but will likely necessitate a multi-month closure period to perform.

Although WTCC's emphasis on completing public spaces for operational use provides earlier benefit to the public, it appears that the balance of work that will remain after the Transit Hall and the PATH Hall are operational will be considerable. The FTA has tasked the PMOC with identifying the scope of remaining work and creating a tool that can be used to: (1) verify the grantee's compliance with RRCA Attachments 1 and 3; and (2) assess the ability of the grantee to achieve the December 31, 2016 RCD and thereby determine the likelihood that a new recovery plan will be necessary. During June, the PMOC continued identifying the remaining work in the Transit Hall, the North-South Concourse, and the three associated Transportation Lobbies. A spot report on this subject is also being prepared.

End of report. Appendices follow.

APPENDIX A – LIST OF ACRONYMS

ADA	Americans with Disabilities Act
BATC	Building Automation and Temperature Control
CA	Construction Agreement
CM	Construction Manager
EAC	Estimate at Completion
EOR	Engineer of Record
FDNY	Fire Department of the City of New York
FTA	Federal Transit Administration
LMRO	Lower Manhattan Recovery Office
LTIR	Lost-Time Incident Rate
MEP	Mechanical, Electrical, and Plumbing
MTA	Metropolitan Transportation Authority
MTACC	MTA Capital Construction
NTA	North Temporary Access
NYCT	New York City Transit
OPL	Office of Program Logistics
PANYNJ	Port Authority of New York and New Jersey
PAPD	Port Authority Police Department
PATH	Port Authority Trans-Hudson
PEP	Project Execution Plan
PMOC	Project Management Oversight Contractor
PMP	Project Management Plan
QA	Quality Assurance
QPRM	Quarterly Progress Review Meeting
SCD	Substantial Completion Date
RCD	Required Completion Date
RFI	Request for Information
RRCA	Revised and Restated Construction Agreement
T2TL	Tower 2 Transportation Lobby
TCIR	Total Case Incident Rate
VCE	Vertical Circulation Element
WTC	World Trade Center
WTCC	World Trade Center Construction