

World Trade Center Quarterly Report

1st Quarter 2011

July 14, 2011

The Honorable Andrew M. Cuomo
Governor of the State of New York
State Capitol
Albany, New York 12224

Dear Governor Cuomo:

I am pleased to provide you with the tenth of The Port Authority of New York and New Jersey's World Trade Center Quarterly Reports – an ongoing initiative to give the public a tangible way to track the Port Authority's progress. These quarterly installments are published on our WTC website – www.wtcprogress.com – and contain a complete accounting of the interim milestones that the Port Authority established in October 2008 and others we have since added so the public has a full understanding of what we are doing to advance the rebuilding effort.

The 1st Quarter of 2011 continued the substantial progress at the site. We continue to drive closer to successfully delivering on our commitment to open the National September 11th Memorial (Memorial) by the 10th Anniversary of the attacks. This past quarter, the Port Authority successfully tested the South Fountain (the North Fountain was successfully tested last year). At the same time, One World Trade Center (1WTC) continues to rise in the City skyline, reaching the 74th floor as the Port Authority secured Condé Nast to anchor 1 million square feet of the building.

Overall, this past quarter, the Port Authority met 19 of 20 milestones. The one incomplete milestone was the completion of super column installation for the WTC Transportation Hub. These massive columns (225 tons or 450,000 pounds each) will provide the main support for the steel girders that span the MTA's #1 Subway Line in the underpass area. As of this report, two of the super columns have been erected on the western side of the #1 Subway Line box. The remaining two columns are on site, being welded and will be erected during the summer.

Our highest priority continues to be hitting the 9/11/11 deadline for opening the 9/11 Memorial. We remain on track to reach this commitment. The one milestone that was incomplete during the 4th Quarter 2010 – construction of the 25' walkway on the east side of the North Fountain – was completed during this past quarter and will not impact our commitment to completing this section in time for 9/11/11.

I look forward to updating you next quarter on our progress as well as our challenges, as we work every single day to build a new World Trade Center.

Sincerely,

Chris Ward
Executive Director
Port Authority of New York & New Jersey

Cc: Governor Chris Christie
David Samson, Chairman, Port Authority of NY & NJ
Stanley Grayson, Vice-Chairman, Port Authority of NY & NJ
Port Authority Board of Commissioners
Mayor Michael Bloomberg
Assembly Speaker Sheldon Silver
Senate Majority Leader Dean Skelos
Senate Minority Leader John Samson
Assembly Minority Leader Brian Kolb
State Senator Daniel Squadron
Council Speaker Christine Quinn
Council Member Margaret Chin
Manhattan Borough President Scott Stringer
Senator Charles Schumer
Senator Kirsten Gillibrand
Congressman Jerrold Nadler

MILESTONES



December 2010



March 2011

A full description of the 1st Quarter 2011 milestones is provided below, along with a look ahead at the key milestones for the 2nd Quarter of 2011.

1st Quarter 2011

National September 11 Memorial & Museum

- Museum Design Complete (by NS11MM) * - Complete

The National September 11 Memorial and Museum (NS11MM) issued the final design documents necessary to construct the interior portion of the Museum. This design includes all elements necessary to begin construction of the Museum exhibits, and represents the final design element of the Memorial program.

- Museum Construction Begins* - Complete

This work includes the initial framing of interior partitions and MEP systems necessary to construct all rooms and exhibit areas. Major artifacts such as the “Last Column,” “Vesey Street Staircase” (also known as the “Survivor’s Staircase”) and the “Tridents” have already been placed at their final location within the Museum walls. These artifacts were so large that they had to be placed early on in the construction process so the Museum could be built around them.

- Substantial Completion of South Fountain - Complete

Workers completed the installation of the final pieces of metal weir, and have begun testing the South Fountain in preparation for the tenth anniversary.

- Complete Installation of Two Sides of the Bronze Nameplates in the North Fountain - Complete

Installation of the Bronze Nameplates and their supporting structures began in early 2011. These plates, which will record the names of the victims of 9/11/01 and 2/26/93, will be etched and backlit from within the parapet housing. A system will be installed to keep temperature of the metal regulated at all times. The Port Authority has been coordinating with the 9/11 Memorial Foundation, who is closely overseeing this project.

- Installation of the Large Major Museum Artifacts in the Museum Area - Complete

This milestone represents the installation of additional large artifacts recovered after 9/11/01, including a NYC taxicab. The taxi followed the “Last Column” and “Vesey Street Staircase” (also known as the “Survivor’s Staircase”) which have already been placed within the Museum’s walls. Given their size, these artifacts must be placed before the Memorial Plaza is permanently closed given that they are too large to fit in the Museum’s freight elevators. The Memorial Foundation has now decided to wait until the end of the year to place the remainder of these artifacts, such as the fire truck and ambulance. This timing was made available by construction of a temporary loading opening in the Memorial Plaza deck that can be closed and covered by the Memorial Plaza finishes in that area.

- Begin Installation of Pavilion Curtain Wall - Complete

The glass and metal cladding, representing the “skin” of the Pavilion structure (the Memorial’s Visitor’s Center), began during this period. Once complete, it will allow interior finish work to begin in the Pavilion. At the time of the October 2008 Assessment, the Port Authority did not commit to completing curtain wall construction by 9/11/11, but because of the significant progress made in the past three years, we believe the curtain wall for the Visitor’s Center will be substantially complete by the tenth anniversary.

- Substantially Complete Fit-Out of East Spot Network - Complete

The East Spot Network provides power to the South Fountain. This element represents the last major electrical piece that was necessary to begin final testing of the South Fountain in advance of 9/11/11.

WTC Transportation Hub

- Complete Metal Deck to D35 for PATH Hall Roof - Complete

Subsequent to the PATH Hall steel installation currently ongoing, the installation of the metal deck will be the precursor to placing concrete in that area. The concrete will serve a dual purpose, as it will be the roof of the PATH Hall and the floor of the Memorial Plaza.

- Complete Installation of Super Columns - Incomplete

- These massive columns (225 tons or 450,000 pounds each) will provide the main support for the steel girders that span the MTA’s #1 Subway Line in the underpass area. As of

this report, two of the super columns have been erected on the western side of the #1 Subway Line box. The remaining two columns are on site, being welded and will be erected during the summer.

- Pour Roof Slab for Route 9A Underpass - Complete

Located at the western portion of the site, the Route 9A underpass will provide continuous pedestrian access from the Winter Garden of the World Financial Center to the WTC Site by passing under Route 9A (aka the “Westside Highway” or “West Street”). Now that the roof installation is complete, the roof can be water proofed and backfilled to the grade of the newly established Fulton Street.

- Substantially Complete D15 Wall south of the PATH Hall - Complete

Spanning almost the entire length of the WTC Site, this critical wall running North-South provides structural support for the PATH Hall mezzanine and infrastructure for the construction of Greenwich Street. Completion of this wall has enabled placement of precast concrete sections to form the PATH mezzanine level over Platform A.

- Begin Platform A Construction - Complete

PATH’s Platform A will be the first permanent platform for the new WTC Transportation Hub. As work continues, the temporary PATH station will be phased out as new, permanent platforms are completed.

WTC Vehicular Security Center and Tour Bus Parking Facility

- Perimeter Wall Substantial Completion* - Complete

Due to the delay in the deconstruction of 130 Liberty Street, perimeter wall work was complete in the western half of the VSC site only. As discussed in past Quarterly reports, the past deconstruction delays have caused the VSC operational date to be pushed into 2013 (from 2012). The slurry wall and excavation to rock is complete from the temporary demising wall to the western edge of the site. Immediately upon turnover of the VSC site to the Port Authority at the end of February 2011, following completion of the deconstruction of the 130 Liberty building (which has been overseen by the Lower Manhattan Development Corporation), the Port Authority began work in the eastern portion of the VSC site.

- Start Ramp Structure Foundations* - Complete

Foundation work in the Western portion of the site began in the 1st Quarter. The work on these foundations was made possible by the installation of the demising wall which has been used to bifurcate the site and mitigate, to the extent possible, the delays from the 130 Liberty Street building deconstruction. These foundations will support the steel columns that comprise the VSC underground structure and ramp system.

- Begin Construction in the Eastern Portion of the Site - Complete

This represents the start of construction work on the site of the former 130 Liberty Street building. Work began immediately after turnover of the site and the completion of the deconstruction of 130 Liberty Street. As discussed in past reports, the year-and-a-half delay on this critical hand-off has pushed the VSC operational date into 2013.

One World Trade Center

- Steel Erection to the 60th Floor - Complete

This represents the structural steel framing which makes up the building's "Skeleton." The 60th floor rises approximately 720' above street level.

- Concrete Core to the 52nd Floor - Complete

This represents the interior concrete core which is critical to the structural stability of the building as it rises.

- Concrete Floor Slab to the 55th Floor - Complete

This represents the placement of the concrete slab on the 55th floor that is approximately 650' feet above street level. After the placement of the concrete, other critical trades like Fireproofing and Curtain wall can begin.

- Curtain Wall to the 32nd Floor - Complete

This represents the glass curtain wall installation from the 20th floor podium level to the 32nd floor level. The curtain wall will provide weather tight protection to allow for interior finish work to begin on the office floors.

Greenwich Street

- Complete Footing and Wall Construction at Elevation 242 - Complete

This represents the lowest level of the Greenwich Street "Top-Down" Construction. The footings and walls will complete the massive permanent structure that goes over 70' below street level and provides the permanent support for the MTA's #1 Subway Line in the areas North and South of the underpass.

2nd Quarter 2011

National September 11 Memorial & Museum

- Start Pavilion Curtain Wall*

This original October 2008 assessment milestone is for beginning the installation of the curtain wall of the Pavilion structure. Acceleration of the Memorial Plaza area and early construction of the pavilion steel enabled this work to start in the 1st Quarter of 2011.

- Complete Pavilion Core and Shell

Because of careful planning and execution, the core and shell of the Pavilion will be complete in the second quarter of 2011. This work will include the concrete, steel, exterior paneling and curtain wall installation. Reaching this milestone is significant in that it surpasses the Port Authority's original commitment for 9/11/11 to provide completed steel only. Once this work is complete, interior fit out construction of the Pavilion will begin. This acceleration was made possible by the Port Authority's "build the roof" deckover approach to the WTC Transportation Hub, which was developed as part of the agency's 2008 Assessment. The approach re-sequenced the construction of the Transportation Hub's below-grade mezzanine, building the roof of the train station first, which doubles as the floor of the Memorial Plaza and foundation for the Memorial's Pavilion (Visitor's Center).

- Begin Phase 4 of Plaza Construction

This final phase of plaza construction will be the last major area required to be complete for the Port Authority's 9/11/11 commitments. Totalling approximately 27,000 SF, this phase had to be delayed to enable the accelerated completion of the Museum Pavilion's steel erection and curtain wall installation. When finished, the portion of the Memorial Plaza committed to be open on 9/11/11 will be complete – an area totaling over 144,000 SF.

- Complete Bronze Nameplate Installation in North Fountain

By the end of the second quarter, installation on all four sides of the North Fountain will be complete. These plates, which will record the names of the victims of 9/11/01 and 2/26/93, will be etched and backlit from within the parapet housing. A glycol system will also be installed to keep temperature of the metal regulated at all times. The Port Authority has been coordinating with the 9/11 Memorial Foundation, who is closely overseeing this project.

- Test South Fountain

Following the successful testing of the North Fountain in the 4th Quarter of 2010, testing of the South Fountain will occur in the 2nd Quarter of 2011. Because of the successful efforts of the team on the North Fountain, work on the South Fountain is expected to progress more quickly. Successfully testing the South Fountain will ensure the Port Authority's commitment of having both fountains operational by 9/11/11. (This milestone has already been completed.)

- Complete West Vent Structure Cladding

The West Vent Structures provide ventilation to the below- grade Museum space. In the 2nd Quarter, the cladding system will be installed on both buildings. The system consists of anchors and metal beams that will support installation of a stainless steel wire mesh façade screening system that will wrap the exterior the structures.

WTC Transportation Hub

- Platform A Construction Complete*

The PATH stations' Platform A will be the first permanent platform for the new WTC Transportation Hub. Work for this original October 2008 assessment milestone has been resequenced in order to also incorporate work on Platform B as well. The original plan had construction of Platform B beginning after Platform A was complete. The WTC Transportation Hub team has developed and implemented a revised logistics plan that calls for work on both platforms to occur simultaneously, but the original completion dates were also pushed back. In the meantime, the PATH system at the WTC site remains fully operational and will remain so throughout construction.

- Substantially Complete Core and Shell Construction of Zones 1&2 of the Route 9A Underpass

This represents the first two of five zones that are being constructed under Route 9A and will connect the Hub's East-West Connector with the World Financial Center. The core and shell of the remaining three zones, being managed by Brookfield Properties, will be completed by 4th Quarter 2011. The Route 9A underpass will be the pedestrian thoroughfare that connects commuters from the World Financial Center to the World Trade Center Transportation Hub's East-West Connector, which will ultimately provide pedestrian access all the way east to the Fulton Street Transit Center. The Port Authority's completion of the core and shell work within the World Trade Center site will correlate with Brookfield Property's completion of the work in their portion of the site.

- Substantially Complete Structure for VSC / Hub Interface Area

The VSC / Hub Interface area is a key location that connects the Vehicular Security Center with the Hub's Greenwich Street Corridor below grade. In addition, the structure will provide the support for the Memorial Plaza and Greenwich and Liberty Street work at grade.

WTC Vehicular Security Center and Tour Bus Parking Facility

- Start Ramp Structure Steel Erection*

The Vehicular Security Center's Ramp will be the main structural element which supports vehicles as they undergo the screening process. Per the October 2008 Assessment, work for this milestone was to occur in the 2nd Quarter of 2011. However,

this milestone depended on LMDC completing deconstruction of the 130 Liberty Street building by August 2009, per LMDC's Assessment commitment. As a result of the delays to the deconstruction of the 130 Liberty Street building, and the turnover of the site at the end of February 2011, we had to develop revised means and methods and the work has been resequenced and will occur in the first half of 2012. Erection of VSC superstructure steel in the western portion of the site is scheduled to begin in the 3rd quarter of 2011.

- Start Secant Wall Installation in Eastern Portion of Site

The secant wall installation signifies the first major construction in the eastern portion of the Vehicular Security Center. The wall will form the perimeter structural support or "bathtub" to allow excavation to begin in the area.

- Relocate Existing Utilities in Eastern Portion of Site

Several existing utility lines must be relocated within the eastern portion of the site. This work must be done in order to allow excavation to take place in the area.

One World Trade Center

- Complete Installation of Podium Glass*

The podium of One World Trade Center is located between street level and the 20th floor of the building. In this area, there is glass that forms the curtain wall, a different type of glass than the one currently being installed from the 20th floor and up. Completion of this work in the 2nd Quarter of 2011 has been rescheduled to start installation in 2012 in order to improve logistics for other trades operating in the building, to deal with podium glass fabrication issues, and to avoid any damage to the glass once it has been installed. Installation of the curtain wall above the 20th floor will continue and is currently rising at a floor per week. This revised schedule should not impact the overall completion of the building's core and shell.

- Steel Erection to the 75th Floor

This represents the structural steel framing which makes up the building's "Skeleton." The 75th floor rises approximately 920' above street level. Attainment of this level in the 2nd Quarter will not be met. Harsh winter snows and winds caused delays in the erection. The spring time weather and extended daylight hours has allowed the building to return to an approximate floor per week rate of construction and we do not believe this interim delay will impact the overall completion schedule of the building. We continue to utilize selective overtime time to mitigate bad weather delays.

- Concrete Core to the 65th Floor

This represents the interior concrete core which is critical to the structural stability of the building. Similar to the steel erection, due to the harsh weather, we do not believe we will hit this milestone. We do not believe this interim delay will impact the overall completion schedule of the building.

- Concrete Floor Slab to the 70th Floor

This represents the placement of the concrete slab on the 70th floor that is approximately 850' feet above street level. After the placement of the concrete, other critical trades like spray fireproofing and curtain wall can begin. Similar to the steel erection, due to the harsh weather, we do not believe we will hit this milestone. We do not believe this interim delay will impact the overall completion schedule of the building.

- Curtain Wall to the 42nd Floor

This represents the glass curtain wall installation from the 20th floor to the 42nd floor level. The curtain wall will provide weather tight protection to allow interior finish work to begin on the typical office floors.

Greenwich Street

- Begin Cortlandt Street Station*

Located on the MTA's #1 Subway Line that bisects the WTC site from North to South, this represents the installation of concrete and steel for the MTA's Cortlandt Street Station and its connection to the WTC Transportation Hub in accordance with the overall construction schedule of associated projects on the site.

- Substantially Complete Invert Slab Construction in Areas 1 through 10

The invert slab is the last major structural element of the Greenwich Street or "top-down" construction. After completion of the slab, which sits only several inches below the existing MTA's #1 Subway Line, the weight of the subway enclosure can be transferred from the temporary support to the permanent support. Once the subway load in areas 1 through 10 is transferred to the permanent structure, construction of the street, infrastructure and utilities of Greenwich Street can begin.

* These milestones marked with an asterisk represent those original interim milestones that were published as part of the Port Authority's Original 2008 report that concluded it's assessment process of the WTC redevelopment.