

January 2015 Update

Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"

The Tunnel Boring Machine (TBM) that was idled on the eve of Superstorm Sandy in October 2012 resumed operation on April 14, 2014. The second scheduled maintenance of the tunneling equipment was completed in late November, and tunneling operations resumed on December 1st. Following minor repairs to the machine in December, it is anticipated that the TBM will break through at the Brooklyn Shaft by the end of January. (View the progress of the TBM at <http://client.hatchmott.com/siphon.>)

Background Information

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

Construction began in August 2011, with work on the starter trench in Staten Island. Construction of the Brooklyn shaft, located in Shore Road Park (just south of 83rd Street, opposite Fort Hamilton High School), began in February 2012. The TBM initially began tunneling operations on July 25, 2012. Tunneling operations were suspended on the evening of October 28, 2012 in advance of the storm. Following repair, reassembly and testing of the TBM, tunneling operations resumed on April 14, 2014. Although the TBM was originally expected to reach the Brooklyn Shaft in summer 2013, that date is currently projected to be January 2015.

Work During December

- Continuation of collection of instrumentation data (noise, vibrations, groundwater levels) in Staten Island and Brooklyn
- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping activities in Staten Island and Brooklyn, including:
 - preparation of final drawings for the chlorination building to reflect new flood elevation levels released by the Federal Emergency Management Agency in response

to Superstorm Sandy. The New York City Public Design Commission has approved the changes.

- continuation of development of procedures for removal and disposal of a section of asbestos-coated pipe on Van Duzer Street, between St. Julian Place and Hannah Street (Staten Island)
- revision of drawings for new water mains along 79th Street and Shore Road (Brooklyn)
- Continuation of tunneling operations. As of December 31st, 2,262 of the precast segment rings (to line the tunnel) had been installed (approximately 96% complete).
- Land piping work in Staten Island is currently on hold
NOTE: Work related to installation of a new 72" water main along Van Duzer Street (St. Julian Place to Hannah Street) and a new 60" water main in Front Street (Hannah Street to the vicinity of the Staten Island shaft site) was originally scheduled to begin in September but was postponed pending DEP approval of the shutdown needed to complete the work. It is currently anticipated that installation of the water mains will begin early next year.
- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10 and representatives of Bay Street Landing and other groups and individuals; distribution of informational materials (Project Update, etc.); updating of the project web site; and liaison with residents, businesses, and stakeholders in the project area

Work Projected for January

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping activities in Staten Island and Brooklyn
- Continuation of tunneling operations; the TBM is expected to reach the Brooklyn Shaft by the end of the month
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, construction notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

For additional information concerning these activities or other aspects of the Siphon construction project, please contact:

Anita Wright, Community Liaison
Helen Neuhaus & Associates Inc.
355 Front Street
Staten Island, NY 10304
(516) 712-5864 [cell phone]

Or visit the project website at: <http://www.nycedc.com/project/replacement-anchorage-channel-water-siphons>. See website for video that illustrates how the 110-ton, 300-foot long TBM will drill a distance of nearly two (2) miles, 100 feet beneath New York Harbor.

February 2015 Update

Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"

The Tunnel Boring Machine (TBM) that was idled on the eve of Superstorm Sandy in October 2012 resumed operation on April 14, 2014. The TBM broke through at the Brooklyn Shaft on Saturday, January 24th, and mining operations are now complete. Demobilization activities, including dewatering of the Brooklyn Shaft; dismantling of the equipment; and removal of sections of the TBM, which will be done through the Brooklyn Shaft, have begun and are expected to be completed in late February/early March. Installation of carrier pipe within the new Siphon tunnel can then begin.

Background Information

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

Construction began in August 2011, with work on the starter trench in Staten Island. Construction of the Brooklyn shaft, located in Shore Road Park (just south of 83rd Street, opposite Fort Hamilton High School), began in February 2012. The TBM initially began tunneling operations on July 25, 2012. Tunneling operations were suspended on the evening of October 28, 2012 in advance of the storm. Following repair, reassembly and testing of the TBM, tunneling operations resumed on April 14, 2014. The TBM reached the Brooklyn Shaft in January 2015.

Work During January

- Continuation of collection of instrumentation data (noise, vibrations, groundwater levels) in Staten Island and Brooklyn
- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping activities in Staten Island and Brooklyn, including:
 - preparation of final drawings for the chlorination building to reflect new flood elevation levels released by the Federal Emergency Management Agency in response to Superstorm Sandy. The New York City Public Design Commission has approved the changes. Construction of the building is anticipated to begin this summer.

- Completion of tunneling operations. On January 24th, the TBM broke through at the Brooklyn Shaft and the final precast segment ring (to line the tunnel) was installed.
- Initiation of demobilization activities, including dewatering of the Brooklyn Shaft Site, which will be used to access the tunnel for work associated with dismantling and removal of sections of the TBM and pipe installation.
- Land piping work in Staten Island is currently on hold

NOTE: Work related to installation of a new 72" water main along Van Duzer Street (St. Julian Place to Hannah Street) and a new 60" water main in Front Street (Hannah Street to the vicinity of the Staten Island shaft site) was originally scheduled to begin in September but was postponed pending DEP approval of the shutdown needed to complete the work. Installation of the water main on Front Street is scheduled to begin in mid-February; work on Van Duzer Street is expected to begin later this year.
- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10 and representatives of Bay Street Landing and other groups and individuals; distribution of informational materials (Project Update, etc.); updating of the project web site; and liaison with residents, businesses, and stakeholders in the project area

Work Projected for February

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping activities in Staten Island and Brooklyn
- Continuation of demobilization activities
- Initiation of pipe installation in the new siphon
- Land piping work in Staten Island, including:
 - Installation of a new 60" water main in Front Street (Hannah Street to the vicinity of the Staten Island Shaft Site)
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, construction notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

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March 2015 Update

Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"

The Tunnel Boring Machine (TBM) that initially began tunneling operations in July 2012, was idled on the eve of Superstorm Sandy (October 2012) and resumed operation on April 14, 2014. The TBM broke through at the Brooklyn Shaft on January 24, 2015, thus completing mining operations. Demobilization activities, including dewatering of the Brooklyn Shaft; dismantling of the equipment; and removal of sections of the TBM, which will be done through the Brooklyn Shaft, began in late January and are scheduled for completion in late March. Installation of the 72" carrier pipe within the new Siphon tunnel will follow.

Background Information

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

Construction began in August 2011, with work on the starter trench in Staten Island. Construction of the Brooklyn shaft, located in Shore Road Park (just south of 83rd Street, opposite Fort Hamilton High School), began in February 2012. The TBM initially began tunneling operations on July 25, 2012 and had progressed approximately 1,600 feet from its starting point before suspending operations in advance of Superstorm Sandy. Following repair, reassembly and testing of the TBM, tunneling operations resumed on April 14, 2014 and were completed in January 2015.

Work During February

- Continuation of collection of instrumentation data (noise, vibrations, groundwater levels) in Staten Island and Brooklyn
- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping activities in Staten Island and Brooklyn, including:
 - preparation of final drawings for the chlorination building to reflect new flood elevation levels released by the Federal Emergency Management Agency in response to Superstorm Sandy. The New York City Public Design Commission has approved the changes. Construction of the building is anticipated to begin this spring. [See page 3 for rendering.]
- Continuation of demobilization activities, including dewatering of the Brooklyn Shaft Site, dismantling and removal of sections of the TBM, preparation for sealing the portion of the

TBM that will remain in the tunnel, cleaning, and demolition of the grout plant at the Staten Island shaft site

- Resumption of land piping work in Staten Island, including:
 - Installation of a new 60" water main in Front Street (Hannah Street to the vicinity of the Staten Island Shaft Site), including excavation, installation of the pipe and backfilling. During work hours, northbound Front Street traffic is being diverted at Wave Street.
- NOTE:** Work related to installation of a new 72" water main along Van Duzer Street (St. Julian Place to Hannah Street) that was originally scheduled to begin last fall, is now expected to begin in late April/early May, pending DEP approval of the shutdown needed to complete the work.
- Preparatory work in support of construction of the new chlorination station, including cleaning the muck pit at the Staten Island shaft site. The pit that was used during tunneling operations is designed to be the basement of the new building.
 - Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10 and representatives of Bay Street Landing and other groups and individuals; distribution of informational materials (Project Update, etc.); updating of the project web site; and liaison with residents, businesses, and stakeholders in the project area

Work Projected for March

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping activities in Staten Island and Brooklyn
- Completion of demobilization activities
- Initiation of pipe installation activities in the new siphon, including surveying, mobilization of equipment and personnel and delivery of pipe
- Continuation of preparatory work in support of construction of the new chlorination station, including waterproofing and installation of rebar for the base slab
- Continuation of land piping work in Staten Island, including:
 - Installation of a new 60" water main in Front Street (Hannah Street to the vicinity of the Staten Island Shaft Site)
 - Preliminary activities related to the initiation of work on Van Duzer Street, including coordination with DEP regarding the required shutdown
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, construction notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

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Or visit the project website at: <http://www.nycedc.com/project/replacement-anchorage-channel-water-siphons>. See website for video that illustrates how the 110-ton, 300-foot long TBM will drill a distance of nearly two (2) miles, 100 feet beneath New York Harbor.



Installation of 60" water main along Front Street, just south of Hannah Street
(photo looking north towards Hannah Street)



Rendering of new chlorination station to be built along Front Street in Staten Island

April 2015 Update

Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"

Another project milestone was reached when the Tunnel Boring Machine's (TBM) cutter head (the rotating head of the TBM used for excavation) was removed from the Brooklyn Shaft on Thursday, March 26, 2015. (See photos on page 3.) The next phase of work, installation of the 72" carrier pipe within the new Siphon tunnel, is scheduled to begin in late April following mobilization and delivery of pipe.

Background Information

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

Construction began in August 2011, with work on the starter trench in Staten Island. Construction of the Brooklyn shaft, located in Shore Road Park (just south of 83rd Street, opposite Fort Hamilton High School), began in February 2012. The TBM initially began tunneling operations on July 25, 2012 and had progressed approximately 1,600 feet from its starting point before suspending operations in advance of Superstorm Sandy. Following repair, reassembly and testing of the TBM, tunneling operations resumed on April 14, 2014 and were completed in January 2015.

Work During March 2015

- Continuation of collection of instrumentation data (noise, vibrations, groundwater levels) in Staten Island and Brooklyn
- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping activities in Staten Island and Brooklyn, including:
 - preparation of final drawings for the chlorination building to reflect new flood elevation levels released by the Federal Emergency Management Agency in response to Superstorm Sandy. The New York City Public Design Commission has approved the changes. Construction of the building is anticipated to begin this spring.
- Continuation of demobilization activities, including dewatering of the Brooklyn Shaft Site, dismantling and removal of sections of the TBM, including the cutter head; preparation for sealing the portion of the TBM that will remain in the tunnel; and cleaning

- Continuation of land piping work in Staten Island, including:
 - Installation of a new 60" water main in Front Street (Hannah Street to the vicinity of the Staten Island Shaft Site), as well as work within the site, including excavation, installation of the pipe, backfilling and installation of a new valve chamber, located adjacent to Front Street
 - Preliminary activities related to the initiation of work on Van Duzer Street, including coordination with DEP regarding the required shutdown
NOTE: Work related to installation of a new 72" water main along Van Duzer Street (St. Julian Place to Hannah Street) that was originally scheduled to begin last fall, is now expected to begin in mid-April, pending DEP approval of the shutdown needed to complete the work.
- Preparatory work in support of construction of the new chlorination station, including cleaning the muck pit at the Staten Island Shaft Site. The pit that was used during tunneling operations will become the basement of the new building.
- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10 and representatives of Bay Street Landing and other groups and individuals; distribution of informational materials (Project Update, etc.); updating of the project web site; and liaison with residents, businesses, and stakeholders in the project area

Work Projected for April 2015

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping activities in Staten Island and Brooklyn
- Completion of TBM demobilization activities
- Initiation of pipe installation activities in the new siphon, including surveying, mobilization of equipment and personnel and delivery of pipe
- Continuation of preparatory work in support of construction of the new chlorination station, including waterproofing and installation of rebar for the base slab
- Continuation of land piping work in Staten Island, including:
 - Completion of installation of a new 60" water main in Front Street (Hannah Street to the vicinity of the Staten Island Shaft Site), including temporary restoration of Front Street
 - Continuation of water main work within the Shaft Site
 - Initiation of work on Van Duzer Street related to installation of 72" water main, including coordination with DEP regarding the shutdown, asbestos abatement and excavation
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, construction notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

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Removal of the TBM cutter head from the Brooklyn Shaft
(top and bottom photos)



May 2015 Update

Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"

Following removal of the Tunnel Boring Machine's (TBM) cutter head (the rotating head of the TBM used for excavation) from the Brooklyn Shaft in March 2015, preparations continue for installation of the 72" carrier pipe within the new Siphon tunnel. This work includes surveying, cleaning of the tunnel and mobilization. Delivery and installation of the pipe is scheduled to begin in mid-May.

Background Information

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

Construction began in August 2011, with work on the starter trench in Staten Island. Construction of the Brooklyn shaft, located in Shore Road Park (just south of 83rd Street, opposite Fort Hamilton High School), began in February 2012. The TBM initially began tunneling operations on July 25, 2012 and had progressed approximately 1,600 feet from its starting point before suspending operations in advance of Superstorm Sandy. Following repair, reassembly and testing of the TBM, tunneling operations resumed on April 14, 2014 and were completed in January 2015.

Work During April 2015

- Continuation of collection of instrumentation data (noise, vibrations, groundwater levels) in Staten Island and Brooklyn
- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping activities in Staten Island and Brooklyn
- Continuation of demobilization activities, including dewatering of the Brooklyn Shaft Site; dismantling and removal of sections of the TBM; preparation for sealing the portion of the TBM that will remain in the tunnel; and cleaning
- Continuation of land piping work in Staten Island, including:
 - Completion of installation of a new 60" water main in Front Street (Hannah Street to the vicinity of the Staten Island Shaft Site), including temporary restoration of Front Street
 - Continuation of water main work within the Shaft Site
 - Chlorination of the newly installed water main on Front Street

- Preparatory work on Van Duzer Street related to installation of a 72" water main, including coordination with DEP regarding the required shutdown and preliminary excavation for the bulkhead on Van Duzer Street, near the northern entrance to Margo Loop

NOTE: Work related to installation of a new 72" water main along Van Duzer Street (St. Julian Place to Hannah Street) that was originally scheduled to begin last fall is now expected to begin in May.

- Continuation of preparatory work in support of construction of the new chlorination station, including installation of a duct for a new communication line and cleaning of the muck pit at the Staten Island Shaft Site, which will become the basement of the new building
- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10 and representatives of Bay Street Landing and other groups and individuals; distribution of informational materials (Project Update, Construction Notices, etc.); updating of the project web site; and liaison with residents, businesses, and stakeholders in the project area

Work Projected for May 2015

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping activities in Staten Island and Brooklyn
- Completion of TBM demobilization activities
- Initiation of pipe installation activities in the new siphon, including surveying, mobilization of equipment and personnel and delivery of pipe
- Continuation of preparatory work in support of construction of the new chlorination station, including waterproofing and installation of rebar for the base slab
- Continuation of land piping work in Staten Island, including:
 - Continuation of water main work within the Shaft Site
 - Initiation of work on Van Duzer Street related to installation of the 72" water main, including coordination with DEP regarding the shutdown, asbestos abatement and excavation
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, construction notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

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June 2015 Update

Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"

Following removal of the Tunnel Boring Machine's (TBM) cutter head (the rotating head of the TBM used for excavation) from the Brooklyn Shaft in March 2015, preparations continue for installation of the 72" carrier pipe within the new Siphon tunnel. This work includes surveying, cleaning of the tunnel and mobilization. Delivery and installation of the pipe is scheduled to begin in late June.

Background Information

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

Construction began in August 2011, with work on the starter trench in Staten Island. Construction of the Brooklyn shaft, located in Shore Road Park (just south of 83rd Street, opposite Fort Hamilton High School), began in February 2012. The TBM initially began tunneling operations on July 25, 2012 and had progressed approximately 1,600 feet from its starting point before suspending operations in advance of Superstorm Sandy. Following repair, reassembly and testing of the TBM, tunneling operations resumed on April 14, 2014 and were completed in January 2015.

Work During May 2015

- Continuation of collection of instrumentation data (noise, vibrations, groundwater levels) in Staten Island and Brooklyn
- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of demobilization activities, including dewatering of the Brooklyn Shaft Site; tunnel survey work; sealing the portion of the TBM that will remain in the tunnel; and ongoing tunnel cleaning
- Continuation of land piping work in Staten Island, including:

- Initiation of work on Van Duzer Street related to installation of a new 72" water main, including coordination with DEP regarding the shutdown, asbestos abatement and excavation for the temporary bulkhead on Van Duzer Street, near the northern entrance to Margo Loop
- Continuation of preparatory work in support of construction of the new chlorination station, including cleaning and waterproofing of the current muck pit at the Staten Island Shaft Site, which will become the foundation and basement of the new building
- Community outreach activities, including meeting with Brooklyn Community Board #10's Environmental Committee to provide a project update; coordination with Staten Island Community Board #1, Brooklyn Community Board #10 and representatives of Bay Street Landing and other groups and individuals; distribution of informational materials (Project Update, Construction Notices, etc.); updating of the project web site; and liaison with residents, businesses, and stakeholders in the project area

Work Projected for June 2015

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Completion of TBM demobilization and tunnel cleaning activities
- Initiation of activities related to installation of pipe in the new siphon, including surveying, mobilization of equipment and personnel and delivery of pipe
- Continuation of preparatory work in support of construction of the new chlorination station, including waterproofing the foundation and installing rebar for the base slab
- Continuation of land piping work in Staten Island, including:
 - Installation of the 72" water main along Van Duzer Street, including excavation and installation of the valve chamber (vicinity of Swan Street) and pipe
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, construction notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

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Interior of newly completed tunnel, prior to installation of pipe.

July 2015 Update

Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"

Following removal of the Tunnel Boring Machine's (TBM) cutter head (the rotating head of the TBM used for excavation) from the Brooklyn Shaft in March 2015, preparations continue for installation of the 72" carrier pipe within the new Siphon tunnel. This work includes surveying, cleaning of the tunnel and mobilization. Delivery and installation of the pipe is anticipated to begin in late July.

Background Information

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

Construction began in August 2011, with work on the starter trench in Staten Island. Construction of the Brooklyn shaft, located in Shore Road Park (just south of 83rd Street, opposite Fort Hamilton High School), began in February 2012. The TBM initially began tunneling operations on July 25, 2012 and had progressed approximately 1,600 feet from its starting point before suspending operations in advance of Superstorm Sandy. Following repair, reassembly and testing of the TBM, tunneling operations resumed on April 14, 2014 and were completed in January 2015.

Work During June 2015

- Continuation of collection of instrumentation data (noise, vibrations, groundwater levels) in Staten Island and Brooklyn
- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of TBM demobilization activities, including dewatering of the Brooklyn Shaft Site; tunnel survey work; sealing the portion of the TBM that will remain in the tunnel; and ongoing tunnel cleaning
- Installation and setup of Grout Plant at Brooklyn Shaft Site
- Continuation of land piping work in Staten Island, including:

- Installation of a new 72" water main on Van Duzer Street, including completion of asbestos abatement, excavation, and installation of the valve chamber (vicinity of Swan Street) and pipe
- Continuation of preparatory work in support of construction of the new chlorination station, including cleaning and waterproofing of the current muck pit at the Staten Island Shaft Site, which will become the foundation and basement of the new building
- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10 and representatives of Bay Street Landing and other groups and individuals; distribution of informational materials (Project Update, Construction Notices, etc.); updating of the project web site; and liaison with residents, businesses, and stakeholders in the project area

Work Projected for July 2015

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Initiation of activities related to installation of pipe in the new siphon, including surveying, mobilization of equipment and personnel and delivery of pipe
- Continuation of preparatory work in support of construction of the new chlorination station, including waterproofing the foundation and installing rebar for the base slab
- Continuation of land piping work in Staten Island, including:
 - Installation of the 72" water main along Van Duzer Street, including excavation and installation of the valve chamber (vicinity of Swan Street) and pipe
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, construction notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

For additional information concerning these activities or other aspects of the Siphon construction project, please contact:

Anita Wright, Community Liaison
 Helen Neuhaus & Associates Inc.
 355 Front Street
 Staten Island, NY 10304
 (516) 712-5864 [cell phone]

Or visit the project website at: <http://www.nycedc.com/project/replacement-anchorage-channel-water-siphons>. See website for video that illustrates how the 110-ton, 300-foot long TBM will drill a distance of nearly two (2) miles, 100 feet beneath New York Harbor.



Installation of 72" water main along Van Duzer Street

August 2015 Update

Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"

Following removal of the Tunnel Boring Machine's (TBM) cutter head (the rotating head of the TBM used for excavation) from the Brooklyn Shaft in March 2015, preparations were completed for installation of the 72" carrier pipe within the new Siphon Tunnel. This work included surveying, cleaning of the tunnel and mobilization. Delivery and installation of the carrier pipe began during the week of July 20th.

Background Information

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

Construction began in August 2011, with work on the starter trench in Staten Island. Construction of the Brooklyn shaft, located in Shore Road Park (just south of 83rd Street, opposite Fort Hamilton High School), began in February 2012. The TBM initially began tunneling operations on July 25, 2012 and had progressed approximately 1,600 feet from its starting point before suspending operations in advance of Superstorm Sandy. Following repair, reassembly and testing of the TBM, tunneling operations resumed on April 14, 2014 and were completed in January 2015. Installation of the 72" carrier pipe within the tunnel began on July 23, 2015 and is expected to be completed this fall.

Work During July 2015

- Continuation of collection of instrumentation data (noise, vibrations, groundwater levels) in Staten Island and Brooklyn
- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Completion of TBM demobilization activities, including dewatering of the Brooklyn Shaft Site; tunnel survey work; monitoring of the previously sealed portion of the TBM that will remain in the tunnel; and ongoing tunnel cleaning
- Continuation of activities related to installation of pipe in the new siphon, including surveying, mobilization of equipment and personnel and delivery of pipe
- Initiation of installation of the 72" carrier pipe within the tunnel (the first 13 of 237 sections of pipe have been installed)

- Continuation of land piping work in Staten Island, including:
 - Installation of a new 72" water main along Van Duzer Street, including excavation and installation of the valve chamber (vicinity of Swan Street) and pipe
- Continuation of preparatory work in support of construction of the new chlorination station, including waterproofing the foundation and basement of the new building
- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10 and representatives of Bay Street Landing and other groups and individuals; distribution of informational materials (Project Update, Construction Notices, etc.); updating of the project web site; and liaison with residents, businesses, and stakeholders in the project area

Work Projected for August 2015

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including surveying; mobilization of equipment and personnel; pipe delivery and installation; and ongoing monitoring
- Continuation of preparatory work in support of construction of the new chlorination station, including waterproofing the foundation and installing rebar for the base slab
- Continuation of land piping work in Staten Island, including:
 - Installation of the 72" water main along Van Duzer Street, including excavation and installation of the valve chamber (vicinity of Swan Street) and pipe
 - Installation of an 8" water main along Van Duzer Street (Grant to Swan Streets)
NOTE: Work at Van Duzer Street will be suspended from mid-August until mid-September in accordance with DEP's summer moratorium. During this time, Van Duzer Street will remain closed and the work area secured.
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, construction notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

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Or visit the project website at: <http://www.nycedc.com/project/replacement-anchorage-channel-water-siphons>. See website for video that illustrates how the 110-ton, 300-foot long TBM will drill a distance of nearly two (2) miles, 100 feet beneath New York Harbor.



Delivery of 72" carrier pipe for installation in tunnel



Installation of pipe in tunnel

September 2015 Update

Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"

Following removal of the Tunnel Boring Machine's (TBM) cutter head (the rotating head of the TBM used for excavation) from the Brooklyn Shaft in March 2015, preparations were completed for installation of the 72" carrier pipe within the new Siphon Tunnel. This work included surveying, cleaning of the tunnel and mobilization. Delivery and installation of the carrier pipe began during the week of July 20th and is now more than halfway complete.

Background Information

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

Construction began in August 2011, with work on the starter trench in Staten Island. Construction of the Brooklyn shaft, located in Shore Road Park (just south of 83rd Street, opposite Fort Hamilton High School), began in February 2012. The TBM initially began tunneling operations on July 25, 2012 and had progressed approximately 1,600 feet from its starting point before suspending operations in advance of Superstorm Sandy. Following repair, reassembly and testing of the TBM, tunneling operations resumed on April 14, 2014 and were completed in January 2015. Installation of the 72" carrier pipe within the tunnel began on July 23, 2015 and is expected to be completed in late September.

Work During August 2015

- Continuation of collection of instrumentation data (noise, vibrations, groundwater levels) in Staten Island and Brooklyn
- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including surveying, pipe delivery, and ongoing monitoring
- Continuation of installation of the 72" carrier pipe within the tunnel [As of August 31st, 195 of 237 sections of pipe have been installed.]

- Continuation of land piping work in Staten Island, including:
 - Installation of a new 72" water main along Van Duzer Street, including excavation and installation of the valve chamber (vicinity of Swan Street) and pipe
 - Installation of an 8" water main along Van Duzer Street (Grant to Swan Streets)
NOTE: Work at Van Duzer Street was suspended until mid-September in accordance with DEP's summer moratorium. During this time, Van Duzer Street remained closed and the work area secured.
- Continuation of preparatory work in support of construction of the new chlorination station, including waterproofing the foundation and basement of the new building
- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10 and representatives of Bay Street Landing and other groups and individuals; distribution of informational materials (Project Update, Construction Notices, etc.); updating of the project web site; and liaison with residents, businesses, and stakeholders in the project area

Work Projected for September 2015

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including surveying; pipe delivery and installation; mobilization of equipment and personnel for grouting the space between the newly installed pipe and tunnel walls; and ongoing monitoring
- Continuation of preparatory work in support of construction of the new chlorination station, including waterproofing the foundation, installing rebar for the base slab and pouring concrete for the base slab and walls
- Continuation of land piping work in Staten Island, including:
 - Installation of the 72" water main along Van Duzer Street, including excavation and installation of the valve chamber (vicinity of Swan Street) and pipe
 - Installation of 12" and 20" water mains along Van Duzer Street (Grant to Swan Streets)
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, construction notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

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October 2015 Update

Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"

Following removal of the Tunnel Boring Machine's (TBM) cutter head (the rotating head of the TBM used for excavation) from the Brooklyn Shaft in March 2015, preparations were completed for installation of the 72" carrier pipe within the new Siphon Tunnel. This work included surveying, cleaning of the tunnel and mobilization. Delivery and installation of the carrier pipe began during the week of July 20th. Installation and welding of the pipe was completed and grouting of the space between the newly installed pipe and tunnel walls began on September 15th. The grouting operation is expected to be completed by mid-November.

Background Information

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

Construction began in August 2011, with work on the starter trench in Staten Island. Construction of the Brooklyn shaft, located in Shore Road Park (just south of 83rd Street, opposite Fort Hamilton High School), began in February 2012. The TBM initially began tunneling operations on July 25, 2012 and had progressed approximately 1,600 feet from its starting point before suspending operations in advance of Superstorm Sandy. Following repair, reassembly and testing of the TBM, tunneling operations resumed on April 14, 2014 and were completed in January 2015. Installation of the 72" carrier pipe within the tunnel began on July 23, 2015 and was completed in late September.

Work During September 2015

- Continuation of collection of instrumentation data (noise, vibrations, groundwater levels) in Staten Island and Brooklyn
- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including surveying; pipe delivery and installation; mobilization of equipment and personnel for grouting the space between the newly installed pipe and tunnel walls; grouting, which began on September 15th in Brooklyn; and ongoing monitoring
- Completion of installation of the 72" carrier pipe within the tunnel

- Continuation of land piping work in Staten Island, including:
 - Resumption of work related to installation of a new 72" water main along Van Duzer Street, including installation of the valve chamber (vicinity of Swan Street) and the final section of pipe
 - Installation of 12" and 20" water mains along Van Duzer and Swan Streets
 - Emergency repair of section of 8" water main along Van Duzer Street (vicinity of Margo Loop)
- Continuation of preparatory work in support of construction of the new chlorination station, including waterproofing the foundation and basement of the new building and installation of rebar for the base slab
- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10 and representatives of Bay Street Landing and other groups and individuals; distribution of informational materials (Project Update, Construction Notices, etc.); updating of the project web site; and liaison with residents, businesses, and stakeholders in the project area

Work Projected for October 2015

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including surveying; grouting; installation of the riser pipe (vertical pipe that connects to the siphon) in Brooklyn; and ongoing monitoring
- Continuation of preparatory work in support of construction of the new chlorination station, including installation of rebar for the base slab and walls and pouring concrete for the base slab and walls
- Continuation of land piping work in Staten Island, including:
 - Installation of the 72" water main along Van Duzer Street, including construction of the valve chamber (vicinity of Swan Street), backfilling and removal of sheeting from work zone
 - Work related to installation of monitoring equipment along Van Duzer Street Extension, including removal of two (2) trees
 - Installation of 60" and 72" water main in the Staten Island Shaft Site
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, construction notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

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Or visit the project website at: <http://www.nycedc.com/project/replacement-anchorage-channel-water-siphons>. See website for video that illustrates how the 110-ton, 300-foot long TBM will drill a distance of nearly two (2) miles, 100 feet beneath New York Harbor.



Installation of rebar for base slab of new chlorination station
on Front Street, Staten Island

November 2015 Update

Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"

Following removal of the Tunnel Boring Machine's (TBM) cutter head (the rotating head of the TBM used for excavation) from the Brooklyn Shaft in March 2015, preparations were completed for installation of the 72" carrier pipe within the new Siphon Tunnel. This work included surveying, cleaning of the tunnel and mobilization. Delivery and installation of the carrier pipe began during the week of July 20th. Installation and welding of the pipe was completed and grouting of the space between the newly installed pipe and tunnel walls began on September 15th. By the end of October, the grouting operation was approximately 95% complete and is expected to be finished in early November.

Background Information

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

Construction began in August 2011, with work on the starter trench in Staten Island. Construction of the Brooklyn shaft, located in Shore Road Park (just south of 83rd Street, opposite Fort Hamilton High School), began in February 2012. The TBM initially began tunneling operations on July 25, 2012 and had progressed approximately 1,600 feet from its starting point before suspending operations in advance of Superstorm Sandy. Following repair, reassembly and testing of the TBM, tunneling operations resumed on April 14, 2014 and were completed in January 2015. Installation of the 72" carrier pipe within the tunnel began on July 23, 2015 and was completed in late September.

Work During October 2015

- Continuation of collection of instrumentation data (noise, vibrations, groundwater levels) in Staten Island and Brooklyn
- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including surveying; grouting the space between the newly installed pipe and tunnel walls; preparatory work in support of installation of the riser pipes (the vertical pipes that connect to the siphon) in Brooklyn

and Staten Island; and ongoing monitoring. In late October, grouting equipment was moved from the Brooklyn Shaft Site to the Staten Island site to complete grouting of the tunnel walls.

- Continuation of land piping work in Staten Island, including:
 - Work related to installation of a new 72" water main along Van Duzer Street, including installation of the valve chamber (vicinity of Swan Street), backfilling and removal of sheeting from the work zone
 - Preparatory work in support of installation of 60" and 72" water mains at the Staten Island Shaft Site
- Continuation of preparatory work in support of construction of the new chlorination station, including installing rebar for the base slab and walls and pouring concrete for the base slab
- Community outreach activities, including meetings with Brooklyn Community Board #10's Traffic and Transportation Committee and the full Board to discuss a request for extension of permit work hours; coordination with Staten Island Community Board #1, Brooklyn Community Board #10 and representatives of Bay Street Landing and other groups and individuals; distribution of informational materials (Project Update, etc.); updating of the project web site; and liaison with residents, businesses, and stakeholders in the project area

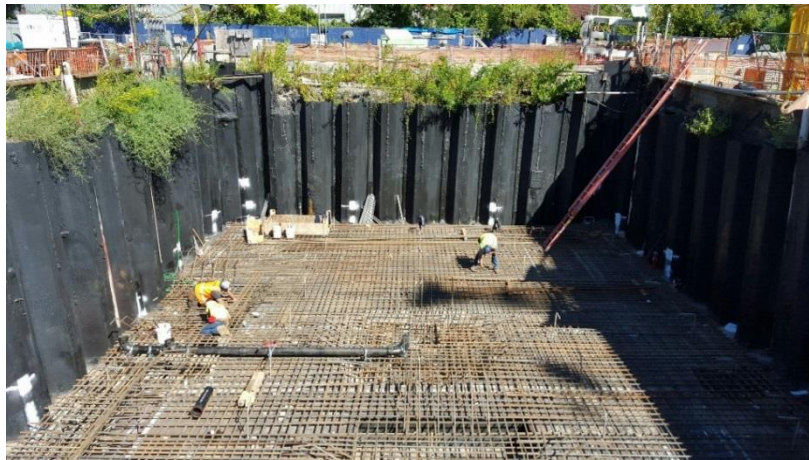
Work Projected for November 2015

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including surveying; grouting; installation of the riser pipes in Brooklyn and Staten Island; and ongoing monitoring
- Continuation of preparatory work in support of construction of the new chlorination station, including installing rebar and pouring concrete for the below-grade walls
- Continuation of land piping work in Staten Island, including:
 - Completion of work related to installation of the 72" water main along Van Duzer Street
 - Work related to installation of monitoring equipment along Van Duzer Street Extension, including removal of two (2) trees
 - Permanent restoration of Van Duzer Street (from approximately St. Julian Place to Swan Street), Swan Street (from approximately Bay Street to Van Duzer Street), and Van Duzer Street Extension (from approximately Bay Street to Van Duzer Street). This will include installation of new curbs and sidewalks, demolition of the existing street pavement and installation of a new roadway surface. Van Duzer Street, Swan Street and Van Duzer Street Extension will be closed to traffic while this work is in progress.
 - Installation of 60" and 72" water mains at the Staten Island Shaft Site
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, and other groups and individuals, as needed; preparation and distribution of informational materials (Project Update, construction notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

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Or visit the project website at: <http://www.nycedc.com/project/replacement-anchorage-channel-water-siphons>. See website for video that illustrates how the 110-ton, 300-foot long TBM will drill a distance of nearly two (2) miles, 100 feet beneath New York Harbor.



Installation of rebar for base slab of new chlorination station
on Front Street, Staten Island



Removal of TBM equipment from the
Staten Island Shaft Site.

December 2015 Update

Replacement of the Existing Water Siphons between Brooklyn and Staten Island "Siphon Project"

Following removal of the Tunnel Boring Machine's (TBM) cutter head (the rotating head of the TBM used for excavation) from the Brooklyn Shaft in March 2015, preparations were completed for installation of the 72" carrier pipe within the new Siphon Tunnel. Delivery and installation of the carrier pipe began during the week of July 20th. Installation and welding of the pipe was completed and grouting of the space between the newly installed pipe and tunnel walls, which began on September 15th, was completed in November. Testing of the new siphon is expected to begin early next year.

Background Information

The New York City Economic Development Corporation (EDC) is administering the Siphon Project, which is being funded by the New York City Department of Environmental Protection (DEP) and the Port Authority of New York & New Jersey (PANYNJ).

Major components of the project include the following:

- use of a TBM to install a new 72" water siphon
- installation of land piping (new water mains and sewers) in Staten Island and Brooklyn using open cut and microtunneling techniques
- construction of a new "green building" chlorination station in Staten Island
- implementation of an extensive community outreach program, including development of informational materials and ongoing liaison with residents, businesses and other stakeholders

Construction began in August 2011, with work on the starter trench in Staten Island. Construction of the Brooklyn shaft, located in Shore Road Park (just south of 83rd Street, opposite Fort Hamilton High School), began in February 2012. The TBM initially began tunneling operations on July 25, 2012 and had progressed approximately 1,600 feet from its starting point before suspending operations in advance of Superstorm Sandy. Following repair, reassembly and testing of the TBM, tunneling operations resumed on April 14, 2014 and were completed in January 2015. Installation of the 72" carrier pipe within the tunnel began on July 23, 2015 and was completed in late September.

Work During November 2015

- Continuation of collection of instrumentation data (noise, vibrations, groundwater levels) in Staten Island and Brooklyn
- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including surveying; grouting the space between the newly installed pipe and tunnel walls; welding; removal of TBM equipment from the Brooklyn and Staten Island sites; delivery of the riser pipes (the vertical pipes

that connect to the siphon) in Brooklyn and Staten Island; installation of the riser pipes at the Staten Island Shaft Site; preparatory work in support of installation of the riser pipes at the Brooklyn Shaft Site; and ongoing monitoring.

- Continuation of land piping work in Staten Island, including:
 - Completion of work related to installation of a new 72" water main along Van Duzer Street
 - Work related to installation of monitoring equipment along Van Duzer Street Extension, including removal of two (2) trees
 - Initiation of permanent restoration of Van Duzer Street (from approximately St. Julian Place to Swan Street), Swan Street (from approximately Bay Street to Van Duzer Street), and Van Duzer Street Extension (from approximately Bay Street to Van Duzer Street). This will include installation of new curbs and sidewalks, demolition of the existing street pavement and installation of a new roadway surface. Van Duzer Street, Swan Street and Van Duzer Street Extension will be closed to traffic while this work is in progress.
 - Preparatory work in support of installation of 60" and 72" water mains at the Staten Island Shaft Site
- Continuation of work in support of construction of the new chlorination station, including installation of rebar and forms for the below-grade walls
- Community outreach activities, including coordination with Staten Island Community Board #1, Brooklyn Community Board #10 and representatives of Bay Street Landing and other groups and individuals; distribution of informational materials (Project Update, Construction Notices, etc.); updating of the project web site; and liaison with residents, businesses, and stakeholders in the project area

Work Projected for December 2015

- Continuation of preparatory work (drawings, permit applications and other submittals) in support of land piping and chlorination building activities in Staten Island and Brooklyn
- Continuation of activities related to installation of pipe in the new siphon, including surveying; installation of the riser pipes in Brooklyn and Staten Island; welding; backfilling the shaft sites; and ongoing monitoring
- Continuation of work in support of construction of the new chlorination station, including installing rebar and pouring concrete for the below-grade walls
- Continuation of land piping work in Staten Island, including:
 - Work related to installation of monitoring equipment along Van Duzer Street Extension
 - Permanent restoration of Van Duzer Street, Swan Street and Van Duzer Street Extension, including installation of new curbs and sidewalks, demolition of the existing street pavement and installation of a new roadway surface. Van Duzer Street, Swan Street and Van Duzer Street Extension will be closed to traffic while this work is in progress.
 - Installation of 60" and 72" water mains at the Staten Island Shaft Site
- Continuation of community outreach program, including coordination and meetings with Staten Island Community Board #1, Brooklyn Community Board #10, and other groups and

individuals, as needed; preparation and distribution of informational materials (Project Update, construction notices, etc.); updating of project web site; and ongoing liaison with residents, businesses and other interested stakeholders and constituencies

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Preparation for installation of new curb along Van Duzer Street, south of Swan Street