

## FACT SHEET

### GENERAL INFORMATION

The project extends the existing No.7 Line subway service via a 1.5 mile extension from Times Square to the new 34 Street – Hudson Yards station located at West 34th Street and 11th Avenue, with additional train storage tracks south to West 25<sup>th</sup> Street. This is the only station south of 59 Street to provide service west of 9th Avenue.

The station is designed to handle 25,000 people in a peak hour and is anticipated to become the busiest single line station in the New York City Transit Subway system once Hudson Yards is fully developed.

Budget: \$2.42 billion

- \$2.1 billion allocated for subway related work
- \$266 million allocated for other infrastructure
- \$53 million contributed by MTA local funds for environmental studies and preliminary engineering design

Funding was provided by the City of New York via the Hudson Yards Infrastructure Corporation and Hudson Yards Development Corporation.

Owner: MTA New York City Transit

Design and Construction Manager: MTA Capital Construction

### THE STATION

The new 34 St- Hudson Yards station will be New York City Transit's 469<sup>th</sup> subway station.

- Primary station entrance: West 34<sup>th</sup> Street and Hudson Blvd East.
- Secondary station entrance: West 35<sup>th</sup> Street and Hudson Blvd East—this entrance is currently under construction.

The underground station extends approximately 1,200 ft. along 11<sup>th</sup> Avenue from West 32<sup>nd</sup> Street to West 37<sup>th</sup> Street.

The station features high-end finishes such as stainless steel tile wall panels, painted steel ceiling panels, granite floor tile and energy efficient lighting. It is air-tempered, maintaining a year-round temperature on the lower mezzanine and platform levels between 72 and 78 degrees Fahrenheit.

There are three public floors in the station: the upper mezzanine (27.6 ft. below street level), the lower mezzanine (109 ft. below street level) and the platform level (125 ft. below street level).

## No. 7 Line Extension

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Access from the street level to the upper mezzanine at the main entrance is provided by four low-rise escalators and two staircases. An ADA elevator located in the new park outside of the main entrance provides access to the fare array area in the upper mezzanine.

### Upper Mezzanine Highlights:

- An oval shaped, stainless steel and glass Station Service Center (formerly referred to as a token booth)
- A Retail Concession area located behind the Station Service Center.
- 4 Metrocard vending machines
- 2 Customer Information Centers with subway and bus maps

Passengers can access the lower mezzanine by 5 high-rise escalators or 2 inclined elevators.

### Lower Mezzanine Highlights:

- Length: 1,025 feet
- Public area: 585 feet long, 50 feet wide
- 24 Digital Screens for Advertising and Service Information

8 sets of stairs and 1 ADA accessible elevator provide access to the platform level.

### Platform Level Highlights:

- Column-free platform configuration.
- The station's platform is among the widest (36 ft.) and longest (585 ft.) in the transit system.

Total On-the-Go Kiosks: 8 (to be installed: 2 at street level/station entrance, 2 in upper mezzanine, 4 on platform)

Total Customer Information Panels: 6 (3 on lower mezzanine and 3 on platform)

Total MTA Help Points: 10 (4 on upper mezzanine, 3 on lower mezzanine, 3 on platform)

The station has the largest tunnel ventilation fans in the subway system.

## ELEVATORS AND ESCALATORS

The station has the highest and longest escalators of any subway station in New York City Transit.

Total Escalators: 9 (16 when Secondary entrance is complete)

Total Elevators: 4 (2 vertical, 2 inclined)

### Inclined Elevators:

- 2 inclined elevators located on the upper mezzanine are the first of their kind for the MTA.
- Location: Upper Mezzanine to Lower Mezzanine
- Vertical distance traveled: 82 feet

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- Length of cab travel: 172 feet
- Elevator weight capacity: 5000 lbs. per cab
- Occupancy: Approximately 15 standing or 3-5 wheelchair passengers
- Speed: 100 feet per minute (approximately 2 minutes from door close to door open)
- Manufacturer: Maspero Elevatori, Italy
- Installer: Kone Inc., Coal Valley Illinois
- Cost: \$2.7M (includes fabrication and installation)

## STATION ART

Station features 2 mosaic artwork installations, one over the low-rise escalators and one ceiling dome at the center of the upper mezzanine area.

The artwork, "Funktional Vibrations" (2014) by Xenobia Bailey, was commissioned by MTA Arts & Design following an international competition.

## CONSTRUCTION HIGHLIGHTS

Two Tunnel Boring Machines (TBMs) manufactured in Germany by Herrenknecht were used to mine the tunnels.

- Length of each assembled TBM: 150 feet.
- Commenced mining: May 2009
- Completed mining: June 2010
- Disassembled and removed from site: August 2010

For the first time in the world a tunnel boring machine drilled through a "ground freeze" area while simultaneously placing precast tunnel liners. This was under 11th Avenue between West 26th and West 28th Streets.

- Length of each tunnel: 4,700 feet
- Outside diameter: 22.5 feet
- Finished interior diameter: 19.5 feet

Controlled "drill-and-blast" methods were used to excavate the underground facilities.

Total excavation resulted in over 409,000 cubic yards of rock, hauled away for various uses via 26,900 truck trips.

Part of the extension was constructed under the Port Authority Bus Terminal, the world's busiest bus terminal. A cavern was blasted out under the structure to receive the TBMs as they completed drilling operations. More than 6,500 cubic yards of rock was removed. This was done safely, without disruption to the 250,000 daily bus passengers and without impeding Port Authority Bus operations.

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The existing A, C and E subway routes, running north–south under 8<sup>th</sup> Avenue, also needed to be protected during construction of the No. 7 Line Extension. These lines, above the work area, required extensive underpinning. There were no disruptions in service to those subway lines throughout the entire construction operation.

### Infrastructure Highlights

- Route miles: 1.5 miles
- Track miles: 3 miles
- Electrical Conduits: 100 miles
- Other Conduits: (Communications, Signals, Traction Power) 281 miles
- Ductwork: 43,000 linear feet
- Cable: 700 miles
- Piping: 52,600 linear feet
- Interlockings: 2 (located immediately north and south of station platform)
- Ventilation Buildings: 4
- Substations: 2 traction power, 2 facility power

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### CONTRACTS/PARTICIPATING FIRMS

#### ***Designer of Record, Environmental Impact Statement, Preliminary Engineering and Final Design***

Firm: WSP | Parsons Brinckerhoff  
 Budget: \$174 million  
 Award Date: September 2002 (contract still active)

Dattner Architects, DPC performed the architectural work for the project as a subcontractor to WSP | Parsons Brinckerhoff.

#### ***Consultant Construction Management***

Firm: HLH7  
 (Joint venture of Hill International, Inc., LiRo Engineers, Inc., Lemley International and Henningson Durham & Richardson Architecture and Engineering, P.C.)  
 Budget: \$61.95 million  
 Award Date: April 2007 (contract still active)

#### ***Construction of Running Tunnels and Station Structures***

Firm: S3 II Tunnel Constructors  
 (Joint venture of Shea Construction Inc., Skanska Construction, Inc. & Schiavone Construction, Inc.)  
 Budget: \$1.144 billion  
 Award Date: November 2007  
 Completion Date: April 2012

#### ***Mining and Lining of Shaft/Adit and Construction of a Two-Story Ventilation Building Structure at Site L***

Firm: CCA/Halmar International, LLC.  
 (Joint venture of China Construction of America & Halmar International, Inc.)  
 Budget: \$58.778 million  
 Award Date: July 2010  
 Completion Date: October 2012

#### ***Excavation/Mining/Lining of Vertical Shaft, E1 and E2, Inclined Tunnels and T1 Connector Tunnel; and Construction of a Ventilation Building and Station Entrance Structure at Site J (34<sup>th</sup> Street)***

Firm: Yonkers Contracting Company Inc.  
 Budget: \$121 million  
 Award Date: October 2010  
 Completion Date: February 2014

#### ***Core and Shell and 11<sup>th</sup> Avenue Viaduct Reconstruction at Site K***

Firm: Scalamandre/Oliveira, JV  
 (Joint venture of Scalamandre Construction, Inc. & Oliveira Contracting, Inc.)  
 Budget: \$58 million  
 Award Date: February 2011  
 Completion: November 2012

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### ***Finishes and Systems***

Firm: Skanska/Railworks, JV  
(Joint venture of Skanska Construction, Inc. & Railworks Transit, Inc.)  
Budget: \$554 million  
Award Date: August 2011  
Completion Date: Active contract

This contract consisted of furnishing and installing civil improvements, utility connections, architectural finishes, structural work, elevators, escalators, HVAC, tunnel ventilation, fire protection, plumbing, electrical power and lighting, instrumentation and controls, signal, communication, and traction power systems and track work required for the utilization and occupancy of these facilities for a fully operational subway.

### ***Site P Secondary Station Entrance Core & Shell and Building Systems/Finishes***

Firm: John P. Picone Inc.  
Budget: \$85 million  
Award Date: September 2012  
Completion Date: Active contract

This was the last contract awarded for the No. 7 Line Extension project. Work includes installation of structural components and building systems/finishes for the secondary entrance to the 34<sup>th</sup> Street Station located at West 34<sup>th</sup> and 35<sup>th</sup> Street and 10<sup>th</sup> and 11<sup>th</sup> Avenues.