

Second Avenue Subway

Community Board 8 Second Avenue Subway Task Force Update

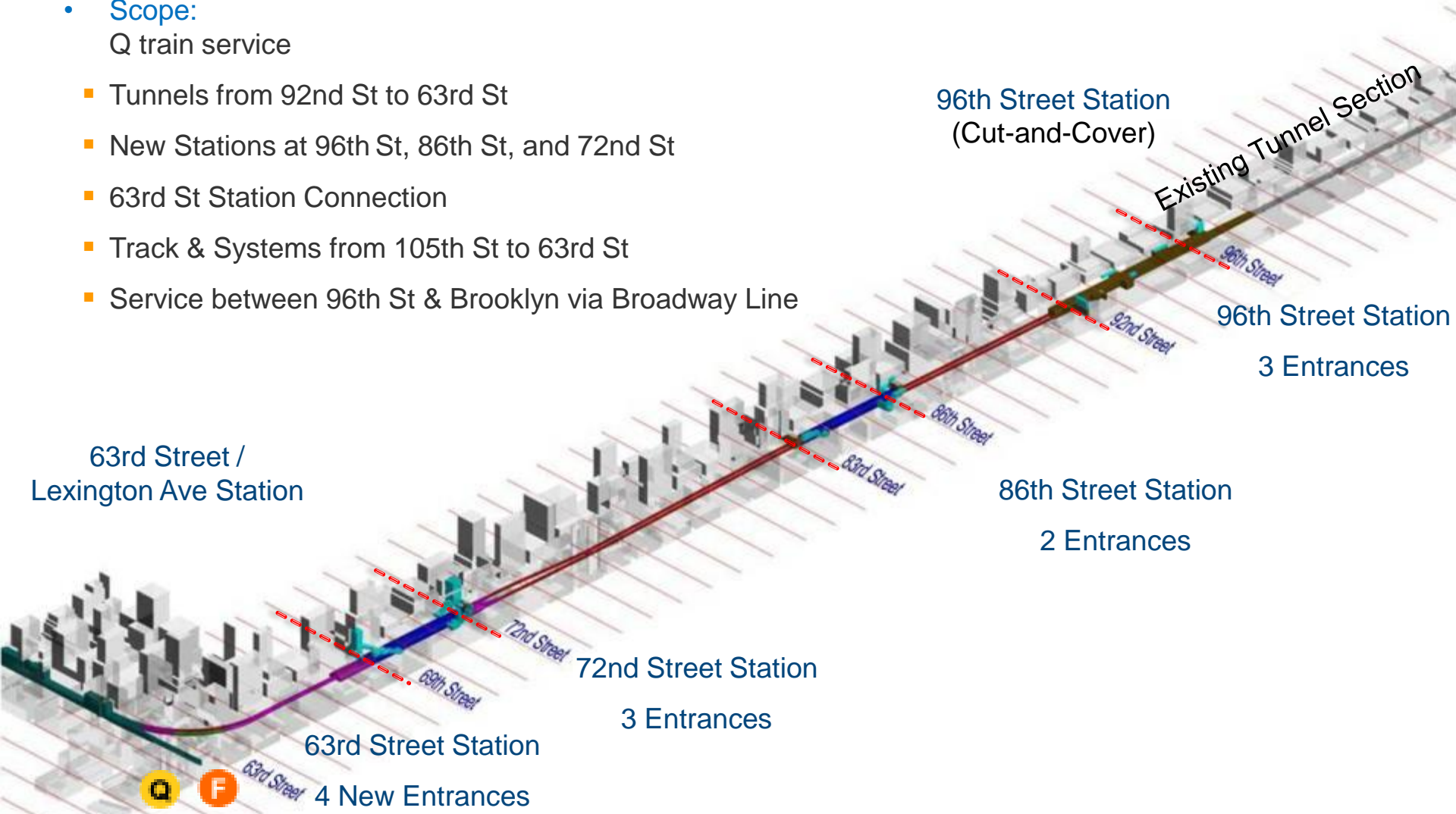
February 1, 2016

Tom Peyton, P.E.
Project Director, Construction
Second Avenue Subway Project



Phase 1 Overview

- Scope:
 - Q train service
 - Tunnels from 92nd St to 63rd St
 - New Stations at 96th St, 86th St, and 72nd St
 - 63rd St Station Connection
 - Track & Systems from 105th St to 63rd St
 - Service between 96th St & Brooklyn via Broadway Line



Phase 1: Target Cost-\$4.451B--- Ridership 200,000 --- Target Completion Date-December 2016

Current Project Status

- The Second Avenue Subway Project is on time and on budget for a December 2016 completion.
- Overall Construction Progress is 90.75% complete as of January 1st.
- All 10 SAS Contracts have been awarded for Phase 1
- 5 Construction Contracts Completed:
 - Tunnel Boring Machine Tunneling
 - 86th St Excavation, Utility Relocation, and Road Decking
 - 96th St Site Work and Heavy Civil
 - 72nd St Cavern Mining, Tunnels and Heavy Civil
 - 86th St Cavern Mining & Heavy Civil

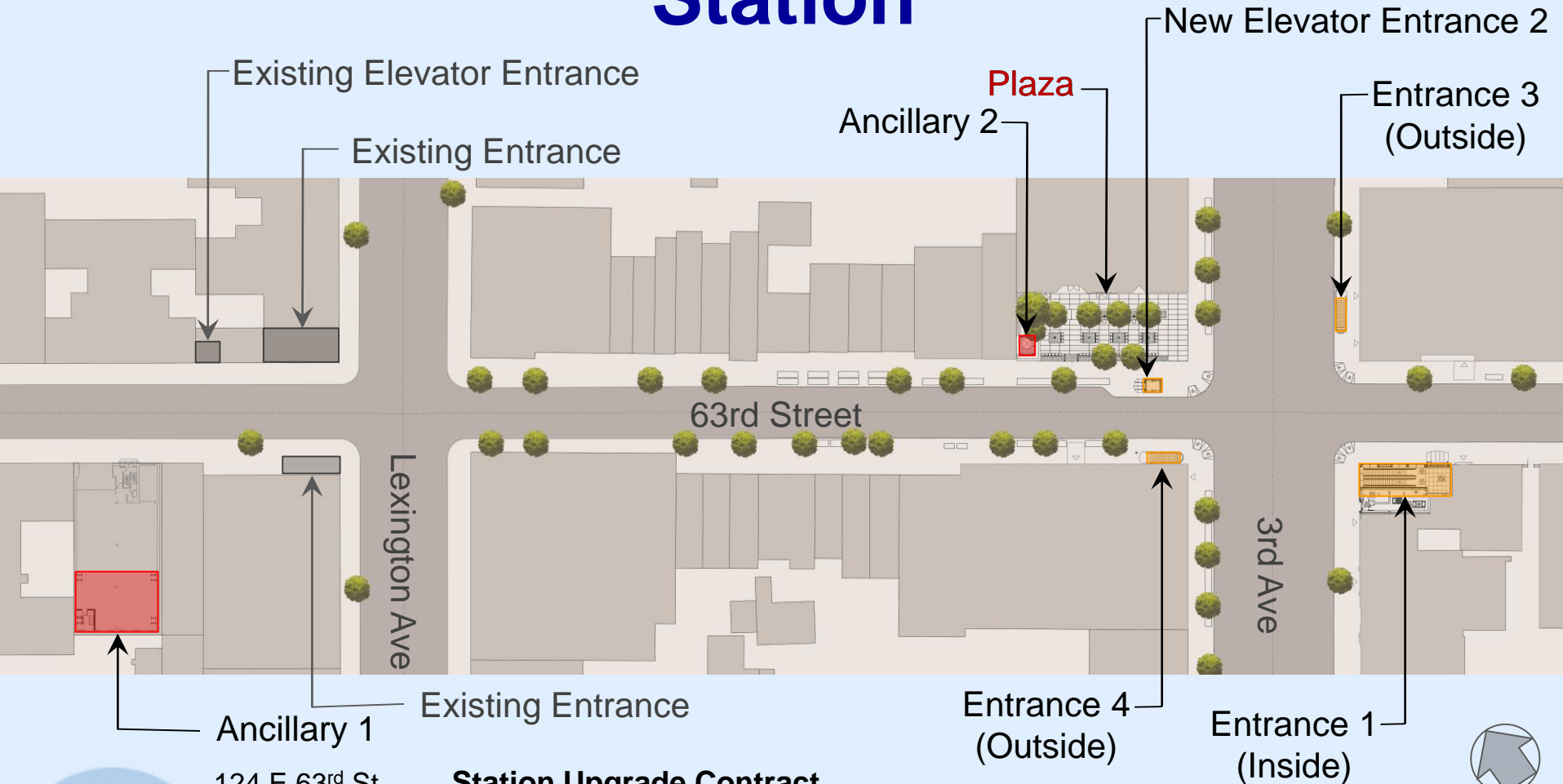


5 Active Contracts

96 th St.	Station Finishes, Systems, Ancillary Buildings and Entrances	90.8%
86 th St.	Station Finishes, Systems, Ancillary Buildings and Entrances	87.35%
72 nd St.	Station Finishes, Systems, Ancillary Buildings and Entrances	75.16%
63 rd St.	Station Upgrade	95 %
	Project track, Power, Signals & Communications Systems	73.9%



Rehabilitation of Existing 63rd Street Station



124 E 63rd St
Top of
Hahn Garage

Station Upgrade Contract

Percent Complete: 95 %

Contract Value incl. AWOs: \$190.8 M

Award Date: January 13, 2011

Forecast Completion: Spring 2016



Construction Progress

- Street/sidewalk restoration is near completion
- Entrance 1 build-out of ground floor space of 200 East 63rd Street (framing and glass) is complete. Building façade work is in progress
- Plaza granite installation is underway. Elevator enclosure work is complete
- Architectural finishes are near completion and station systems testing is underway



Current Work Zones (SE corner of 63rd Street & Third Avenue)



Entrance 1



Current Work Zones (NW corner of 63rd Street & Third Avenue)



Plaza Restoration



Current Work Zones (NW corner of 63rd Street & Third Avenue)



Entrance 2 (Elevator Entrance)



Current Work Zones (NE corner of 63rd Street & Third Avenue)



Entrance 3



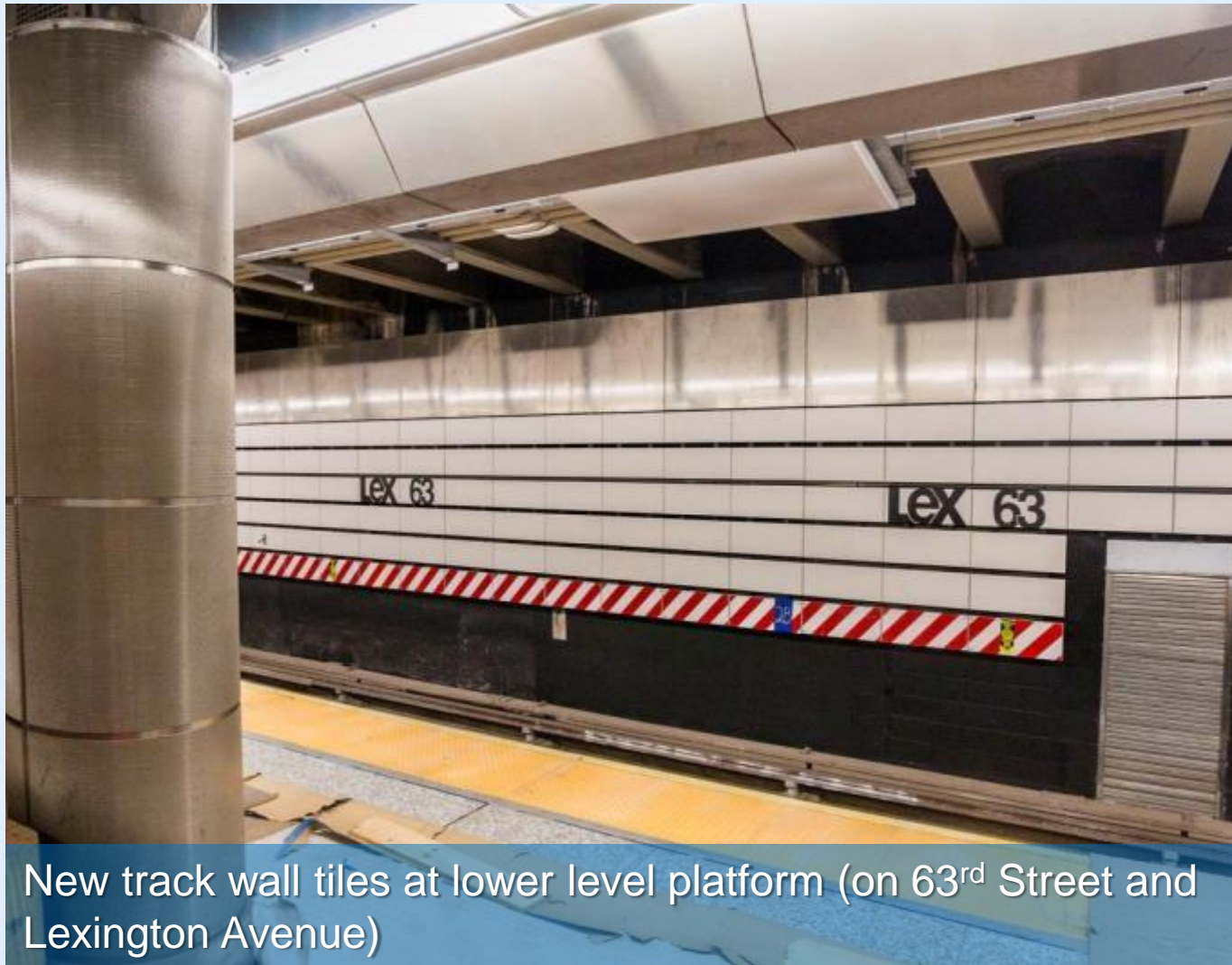
Current Progress



Preparation for ceiling panel installation at mezzanine level



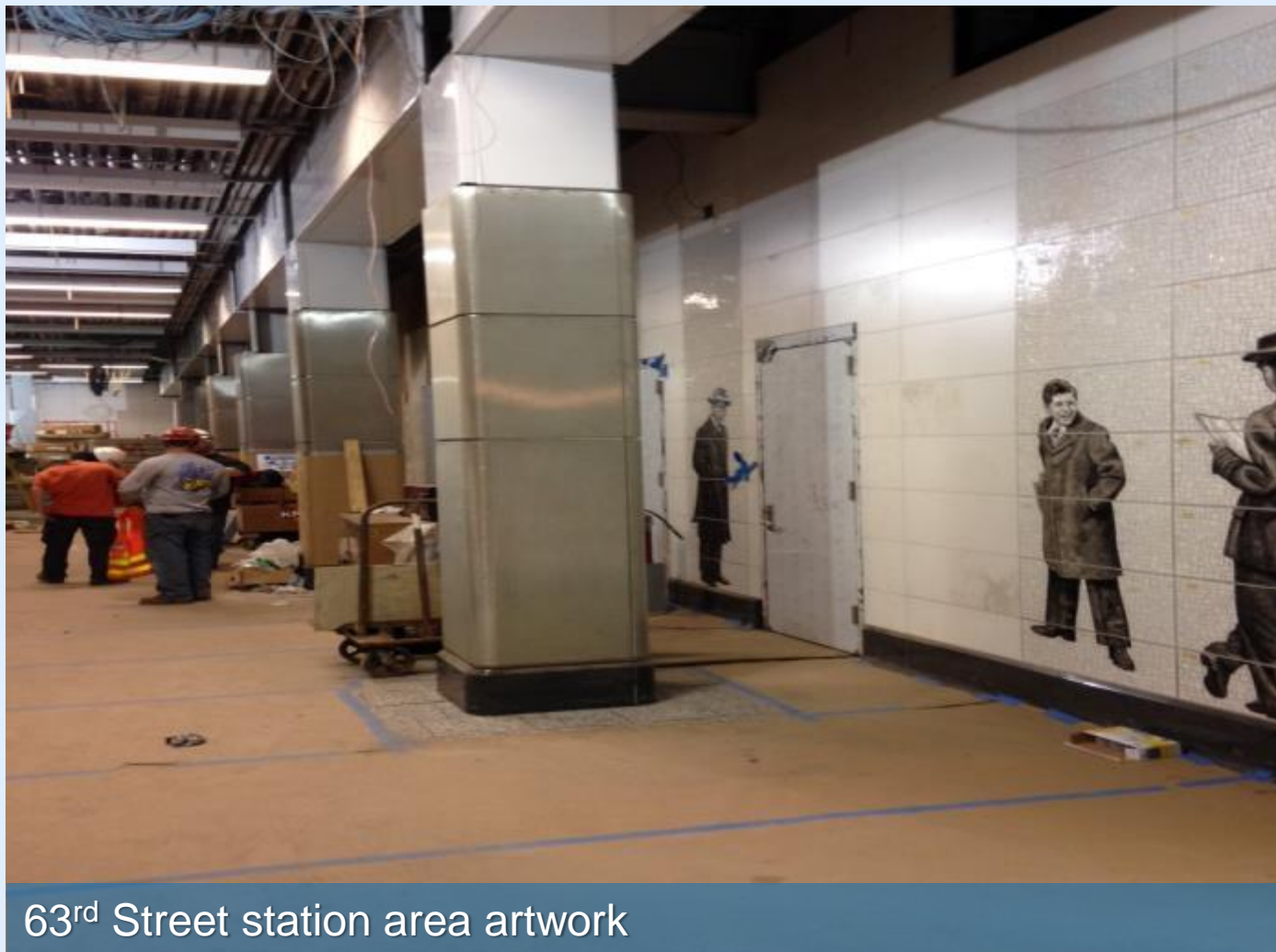
Current Progress



New track wall tiles at lower level platform (on 63rd Street and Lexington Avenue)



Current Progress



63rd Street station area artwork



Three-Month Look Ahead

STATION

- Completion of architectural ceilings, wall tiles, lighting and column enclosures
- Installation of elevators and escalators
- Testing of mechanical, electrical and plumbing systems in new station area



Three-Month Look Ahead

ENTRANCE 1

(200 East 63rd Street)

- Installation of finishes and tiles
- Installation of ceiling panels above escalator incline
- Artwork installation
- 200 E. 63rd Street exterior building work



Three-Month Look Ahead

ANCILLARY 2/ ENTRANCE 2

(Northwest corner of 63rd Street and Third Avenue)

- Installation of granite and furnishings in the plaza area
- Receive materials via sidewalk access hatch on the north side of 63rd Street, west of the existing work zone

OTHER SURFACE WORK

- Installation of interior finishes at Entrance 3 (northeast corner of 63rd Street and Third Avenue) and Entrance 4 (southwest corner of 63rd Street and Third Avenue)
- Remaining sidewalk restoration work





Proposed Rendering of 63rd Street Plaza
SW corner of 63rd Street and Third Avenue

63RD ST STATION – PLAZA



Rendering of 63rd Street Station Art Installation, Mezzanine Level (Area 5)
Artist – Jean Shin, MTA Arts and Design commissioned work

72nd Street Station



Finishes, MEP Systems, Ancillary Buildings and Entrances Contract

Percent Complete : **75.16%**

Contract Value incl. AWOs: **\$286.1 M**

Award Date: **February 14, 2013**

Forecast Completion: **October 2016**



Construction Progress

- Water treatment plant between 73rd and 74th Streets has been removed
- Ancillary 2 façade work is underway
- Entrance 3 structural work is above ground
- Ancillary 1 structural work has reached the roof level
- Entrance 1 construction continues
- Continuing with mechanical and electrical equipment installation in station and ancillaries
- Systems contractor has commenced installation of communications and signaling equipment



Current Progress



Mezzanine Level Service Carrier Steel Framing Installation



Current Progress



Main station (mezzanine level) – floor tile installation



Current Progress

Ancillary#2 NW corner 72nd Street



Current Progress

Ancillary #1 NW corner 69th Street



Current Progress



Entrance 3 (southeast corner of 72nd Street and Second Avenue) at street level



Current Progress



Three-Month Look Ahead

Main Station Cavern:

- Service carrier, mechanical, electrical and plumbing systems installation, including: wall tiles, floor tiles, ceiling panels, conduits and duct work at mezzanine level
- Installation of service carrier and ceiling panels at the platform level
- Installation of escalators and elevators from mezzanine to platform level
- Cable pulling through finished conduits continuing
- Continued track work in station area



Three-Month Look Ahead

Entrance 1:

- Installation of concrete lining for the underground portion of the entrance escalator incline
- Conduit work to start after concrete lining
- Continue work for entrance structure at street level and installation of street level escalator

Ancillary 1, Ancillary 2, Entrance 3

- Construction of Ancillary 1 and Entrance 3 structures
- Concrete pumping at Ancillary 1 and Entrance 3
- Equipment delivery and installation at Ancillary 1, Ancillary 2 and Entrance 3
- Electrical and mechanical equipment installation at Ancillaries 1 and 2
- Façade installation at Ancillaries 1 and 2



Three-Month Look Ahead

Miscellaneous

- Concrete truck staging as needed between 74th and 75th Streets
- Use of access hatches at Ancillary 1 and Ancillary 2 to deliver materials to the station
- Sidewalk restoration work to commence





72ND ST STATION – ANCILLARY 1





Subway

72 Street Subway Station

Subway

CAFE GRECO

NYC
Pal House
cigarettes
as of 1/1/10

72ND ST STATION – ENTRANCE 3



72ND ST STATION – ENTRANCE 2 / ANCILLARY 2

86th Street Station



Finishes, Entrances, Ancillaries, and MEP Systems Contract

Percent Complete : **87.35%**

Contract Value: **\$223,000,000**

Award Date: **June 12, 2013**

Forecast Completion: **October 2016**



86th Street Station Milestones

- The structural frame for the elevator at East 86th Street has been installed
- A total of ten of the thirteen escalators have been installed in the station





Installation of wall panels and flooring tiles



Installation of escalators at entrance 2 (north side of 86th Street) and architectural ceiling



Three Month Look Ahead

86th Street Station Area

East 78th to East 79th Streets – (Center of Second Avenue)

The center work zone on Second Avenue between 78th and 79 Street will be maintained to pour concrete for tracks in the underground tunnels

East 82nd to East 85th Streets

- Water main replacement work will continue on the west side of Second Avenue between 83rd and 84th Streets
- Sidewalk restoration on the west side of Second Avenue between 82nd and 84th Streets is ongoing.
- Construction of the Ancillary 1 building (northwest corner of 83rd Street) has reached full height. Above ground work will continue, including installation of building finishes

East 86th Street to East 87th Streets

- Construction of the Ancillary 2 building on the northwest corner of 86th Street will reach street level in the spring
- The contractor continues to receive deliveries of equipment at the Ancillary 2 location (northwest corner of 86th Street) and the 87th Street access shaft



Three Months Construction Look Ahead

East 86th Street to East 87th Streets (continued)

- Work zones currently on the east side of Second Avenue between East 85th and East 87th will move to the west side in early summer

East 86th Street between 1st and 2nd Avenues

- The structural frame for the elevator at East 86th Street has been installed
- Traffic lanes have been reduced to two eastbound lanes and one westbound bound lane



Three Month Look Ahead

86th Street Station Area

Underground Construction

- Installation of concrete masonry walls at the platform, mezzanine, and upper mezzanine levels
- Installation of architectural finishes: wall panels, floor tile, acoustic panels, and service carriers on the platform and mezzanine levels continues
- Installation of HVAC ductwork, insulation, chillers, transformers, and control panels at all levels
- Installation of electrical conduit at all levels of the station and entrances.





Elevator entrance at East 86th Street



86th Street Entrance 1 Rendering

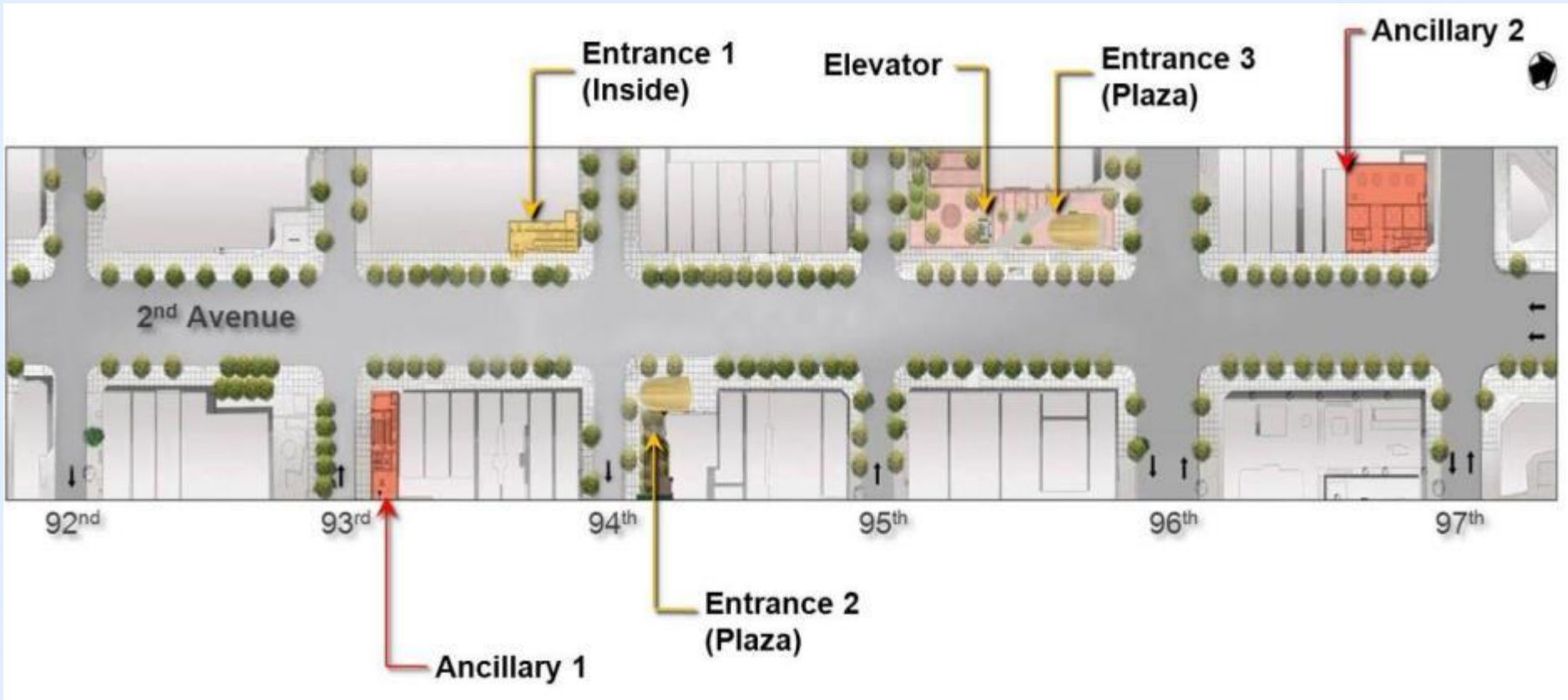
83rd Street and Second Avenue



Rendering of 86th Street Station Art Installation

Artist – Chuck Close, MTA Arts and Design commissioned work
Portraits in mosaic and tile representing NYC cultural figures & family

96th Street Station



**Finishes, MEP Systems, Ancillary Buildings
and Entrances Contract**

Percent Complete: 90.8%

Contract Value: \$324,600,000

Award Date: June 22, 2012

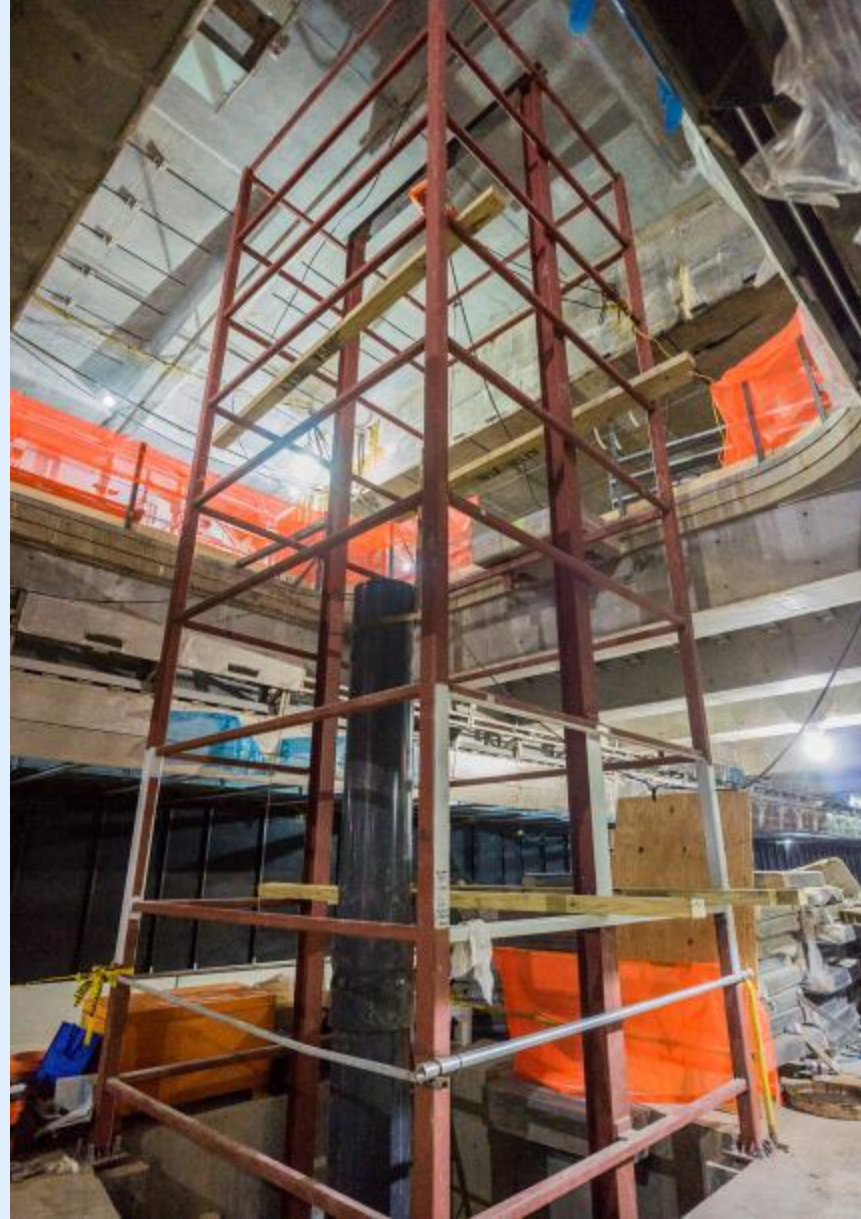
Forecast Completion: October 2016



96th Street Station Progress

Contract C2B is 90.8% complete

- Utility work continues on the west side of Second Avenue.
- Road base pouring has started on blocks where utility work is complete
- Installation of wall tiles, ceiling panels at platform and mezzanine level
- Facility power equipment turned over to Con Edison. Permanent power expected in February
- Customer service booth on mezzanine and dispatcher booth on platform levels nearing completion



Elevator installation between platform and mezzanine





Ruppert Park completed sidewalk

West side of Second Avenue 90th – 91st Street





Curb pour and preparation for sidewalk and road base
Southwest corner 92nd Street & Second Avenue





Ancillary 1 sample cladding

Northeast corner 93rd Street & Second Avenue





North customer service booth (token booth)

Entrance 3 mezzanine level, 96th Street & Second Avenue





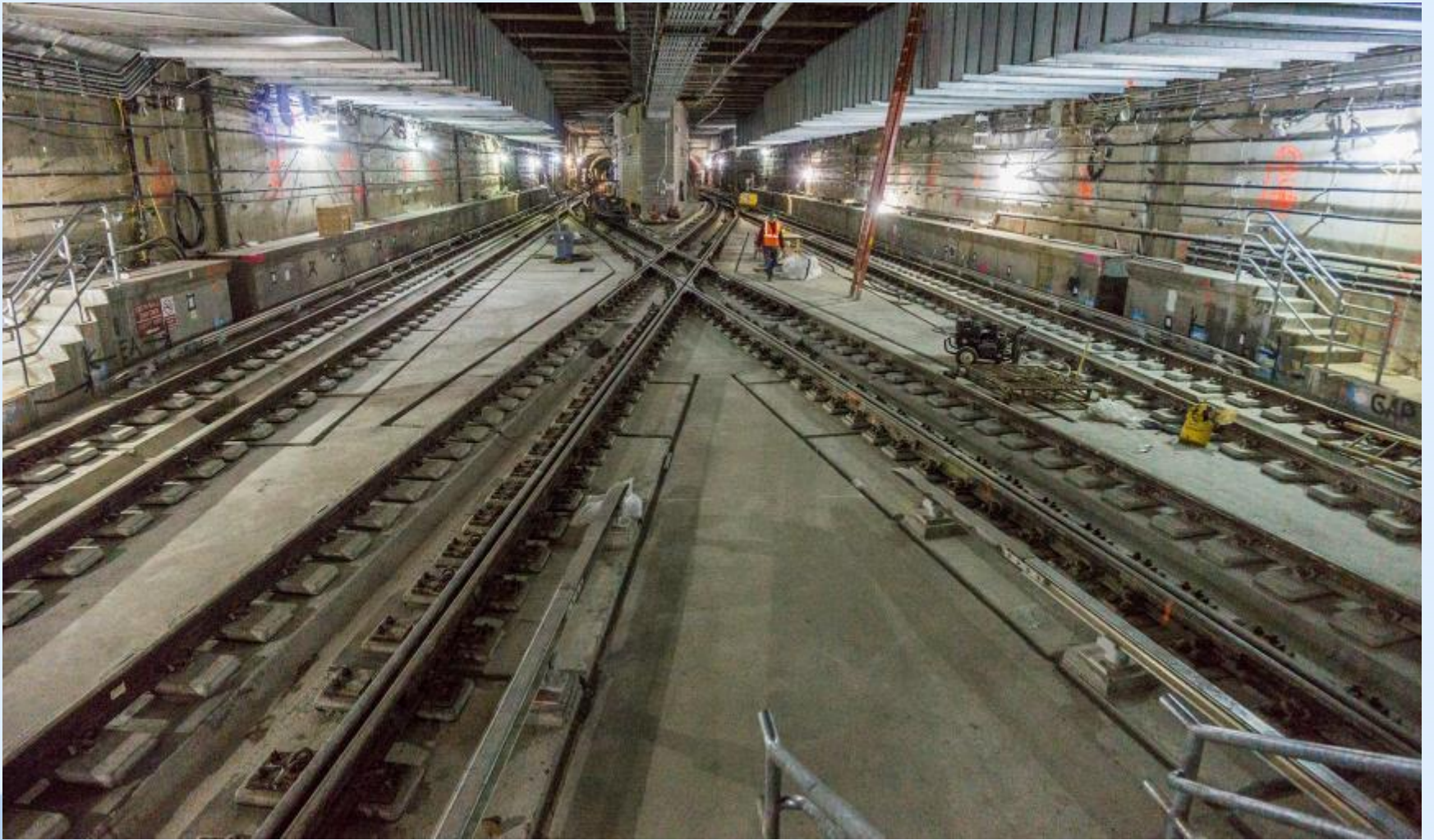
Mezzanine wall tile mockup





Track wall mockup





Crossover tracks

92nd Street & Second Avenue





Entrance 3 escalators

96th Street & Second Avenue



Three-Month Look Ahead

- Completion of surface utility work on west side of Second Avenue between 91st Street and 99th Street
- Continue pouring road base and begin asphalt pouring on west side of Second Avenue
- Completion of west side sidewalk restorations between 90th and 104th Streets
- Shift to the east side of Second Avenue. Commencement of sidewalk restoration from 91st to 102nd Streets
- Installation of wall tiles, ceiling panels at platform and mezzanine level.





96th Street Entrance 3 rendering
SW corner 96th St and Second Avenue



Rendering of 96th Street Station proposed art installation

Artist – Sarah Sze, MTA Arts and Design

Systems Installation

- **Low Vibration Track (LVT) System Being Installed**

- Track to be installed: 22,000 ft.
- Track installed to date: 15,155 ft. (concreted to date)
- Aluminum 3rd rail installed: 13,500 ft.
- 96th St. Station Interlocking and 72nd St. Station South Interlocking are complete. 72nd St. North interlocking scheduled to be completed 1/26/16.

Note: Track as reported here consists of 2 rails and includes Special Work Portions

- Traction Power work ongoing for three substations and four circuit breaker houses

- Traction Power Substation installation at 72nd St. Station nearing completion
- Pulling of Traction Power Feeder cables is ongoing



Installation of Special Work Portion complete at 96th St.



Systems Installation

- Signal equipment being installed in relay rooms and central instrumentation room. Wayside equipment installation 95% complete.
- Contractor 95% complete pulling fiber optic and copper cables at 63rd and 72nd Street Stations. Work ongoing at 86th and 96th Street Stations.
- Installation of all communication room equipment and wiring ongoing at 72nd, 86th and 96th Street Stations.
- Installation of inter-station communication cables completed between 86th Street and 105th Street.

96th St. Traction Power Substation Equipment Installation ongoing.



Track, Power, Signals and Communications Systems Contract

Percent Complete: **73.9%**

Contract Value incl. AWOs: **\$282.8 M**

Award Date: **January 18, 2012**

Forecast Completion: **October 2016**

