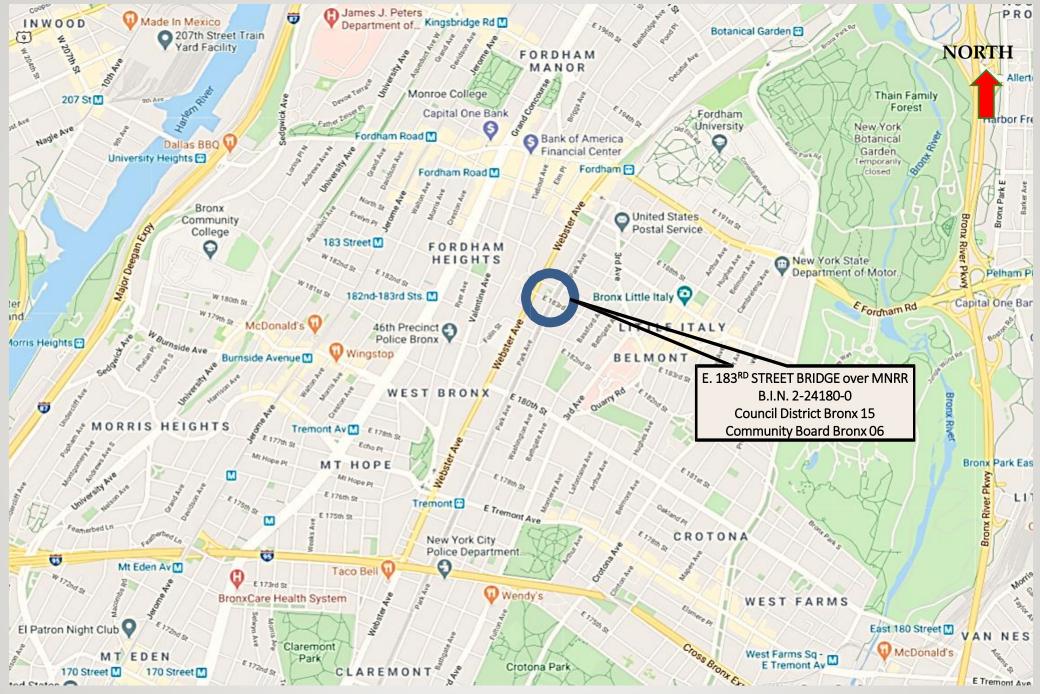


#### REHABILITATION OF EAST 183<sup>RD</sup> STREET BRIDGE OVER METRO NORTH RAILROAD HARLEM LINE BOROUGH OF THE BRONX, NY

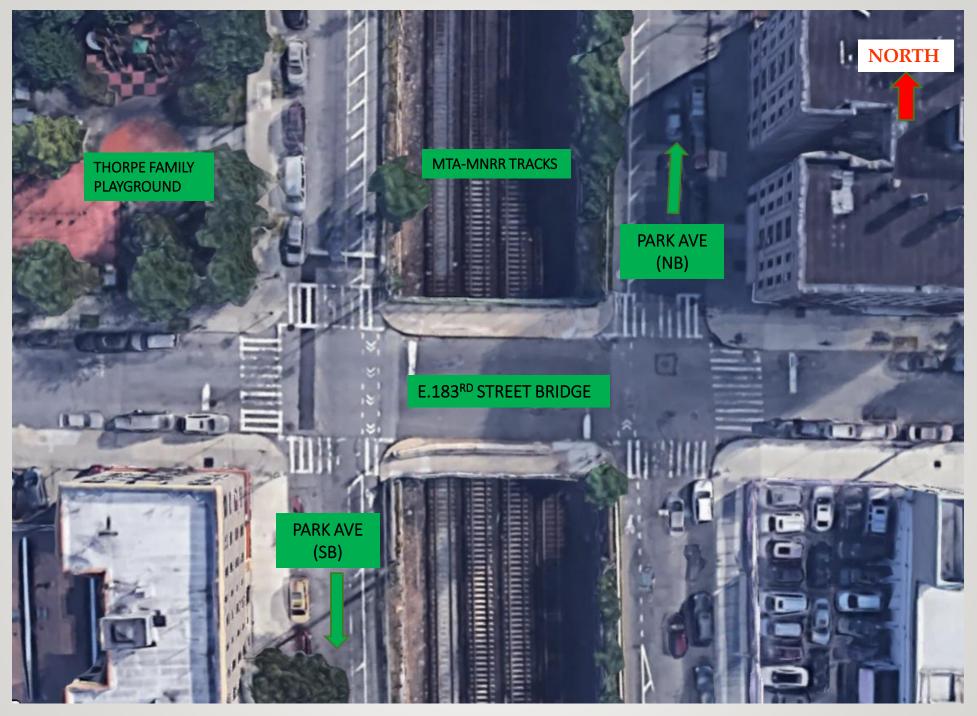
Community Board BX6 January 21<sup>st</sup>, 2021





#### **GENERAL LOCATION**





#### LOCATION MAP



# **Bridge Information**

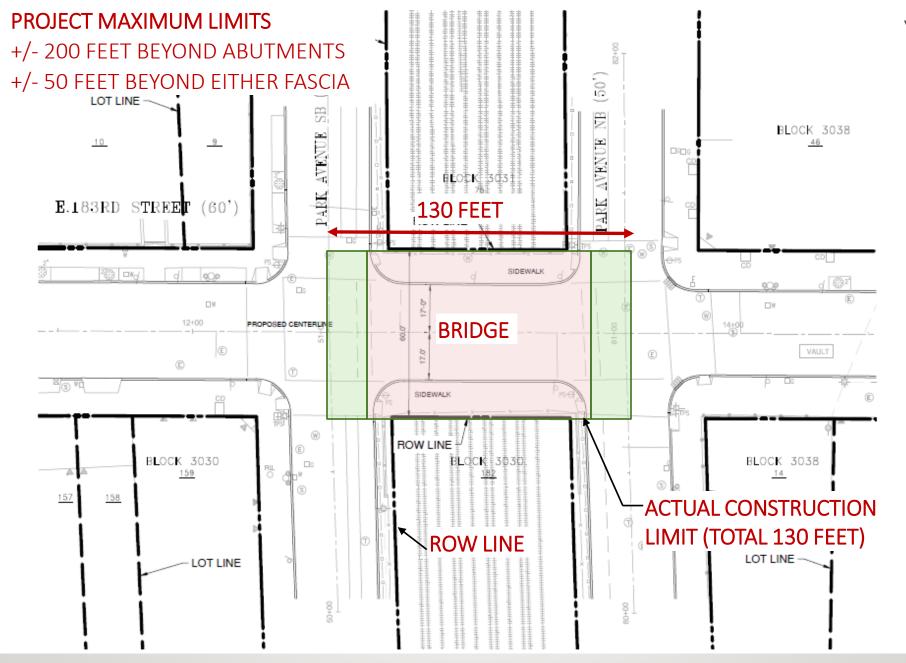
- Original bridge built in 1896. Bridge was again reconstructed in 1936.
- Bridge is 64 feet long and supported on original (1896) granite stone block retaining walls.
- Bridge spans over MNRR Harlem Line (4 active tracks 15.49 feet vertical clearance).
- Bridge has two vehicular traffic lanes and two sidewalks.







# Project Limits & Right of Way (ROW)



SITE PLAN



# Need for the Project

#### Structural Issues with the Existing Bridge

- Extensive deterioration of deck with cracking and spalls.
- Deteriorated bridge concrete frequently drop on MNRR traffic (safety issue).
- Corrosion in the visible bottom portion of steel girders.
- Presence of poor pavement surface, sidewalk spalls, and potholes.
- Missing railing at south sidewalk and non-standard pedestrian fence.
- Presence of lead paint on bridge and existing railings

#### Improved Conditions with Proposed Bridge

- New sidewalks with ADA ramps.
- Increased safety standards with standard pedestrian fence, railing, crosswalk signs.
- Increased truck carrying and seismic load capacity.
- Improved lighting and less maintenance.
- New bridge with 75 years service life.
- Improved safety for MNRR train traffic (no debris falling).



# Photographs of Existing Bridge



DETERIORATED CONCRETE BELOW DECK (DEBRIS FALL ON MNRR TRAINS)



#### CORROSION AT GIRDER (VISIBLE BOTTOM FLANGE)



TOTAL DESIGN AND CONSTRUCTION SUPPORT SERVICES FOR The Rehabilitation of East 183<sup>rd</sup> Street Bridge over MNRR (Harlem Line)

For Discussion Only

# Photographs of Existing Bridge



NO TRAFFIC RAILING AT SOUTH SIDEWALK



DETERIORATED PAVEMENT SPALLED SIDEWALKS



TOTAL DESIGN AND CONSTRUCTION SUPPORT SERVICES FOR The Rehabilitation of East 183<sup>rd</sup> Street Bridge over MNRR (Harlem Line)

For Discussion Only

# Photographs of Existing Bridge



DETERIORATED BEARINGS



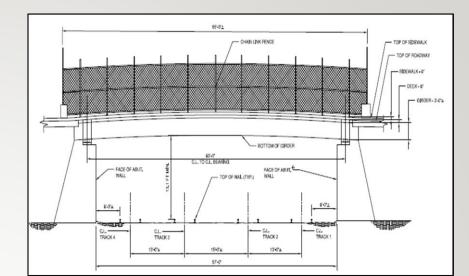
#### ABUTMENT STONE JOINTS IN POOR CONDITION



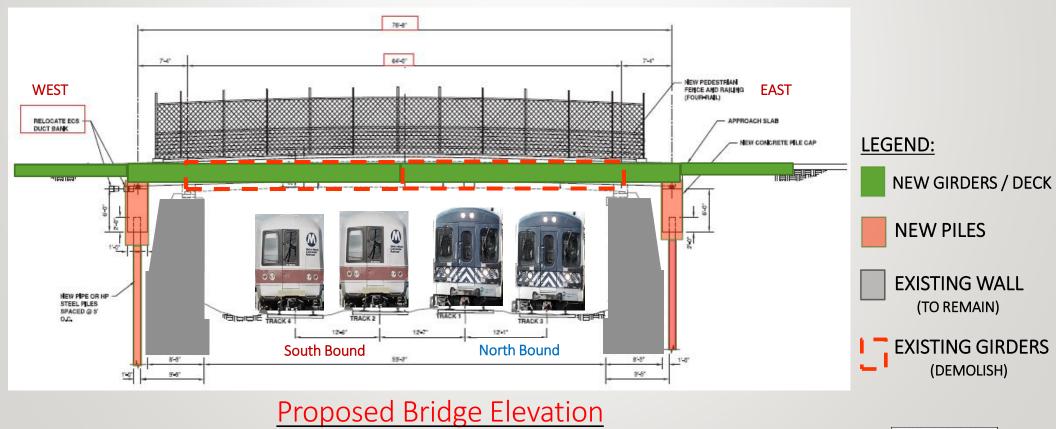
# **Project Details**

**Reconstructed Bridge Features:** 

- New steel railing, fence, and sidewalk
- New concrete deck and steel girders
- New bridge placed on new micro piles

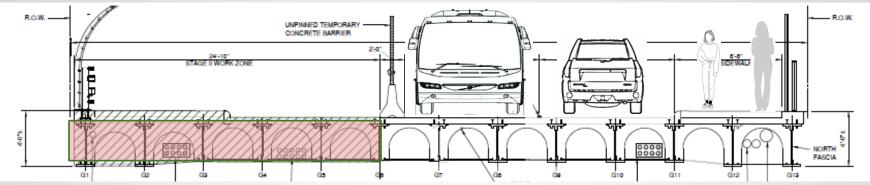


**Existing Bridge Elevation** 

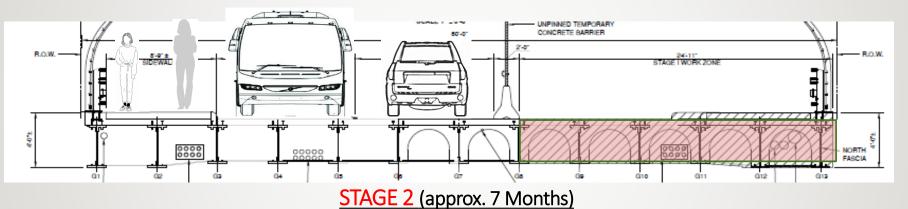


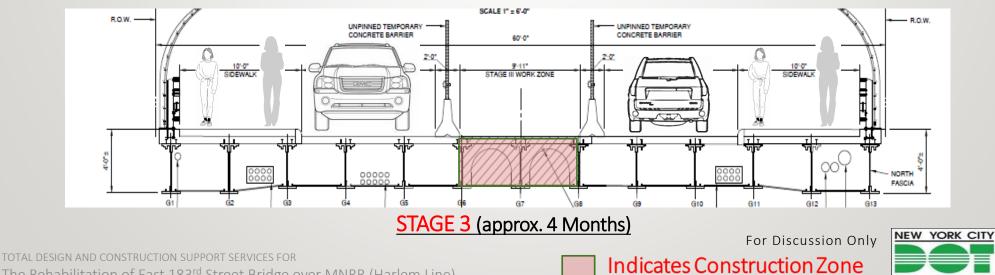


#### **Project Construction Staging** Key Stages



STAGE 1 (approx. 7 Months)

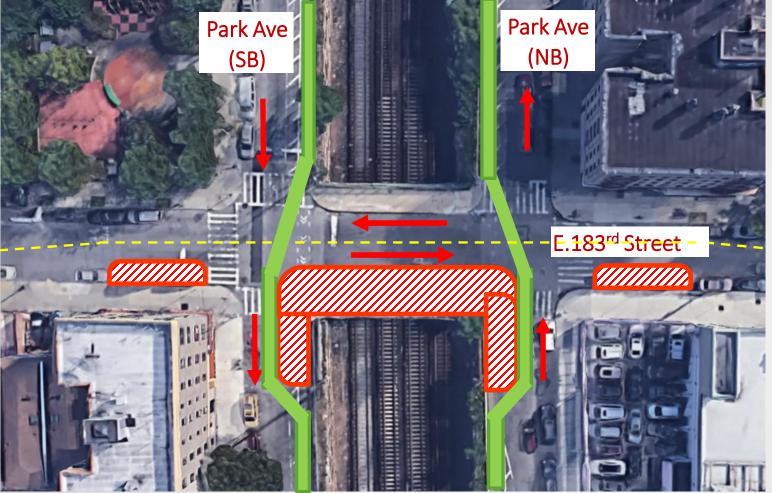




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The Rehabilitation of East 183<sup>rd</sup> Street Bridge over MNRR (Harlem Line)

# Project Construction Staging



- Maintain 2 traffic lanes (EB & WB) of 11' width on 183<sup>rd</sup> Street.
- Maintain one way traffic lane on Park Avenue (NB & SB).
- Maintain one sidewalk.
- Maintain bike lane on Park Avenue (NB & SB).



## Project Construction Staging STAGE 2



- Maintain one way traffic lane on Park Avenue (NB & SB).
- Maintain one sidewalk.
- Maintain bike lane on Park Avenue (NB & SB).

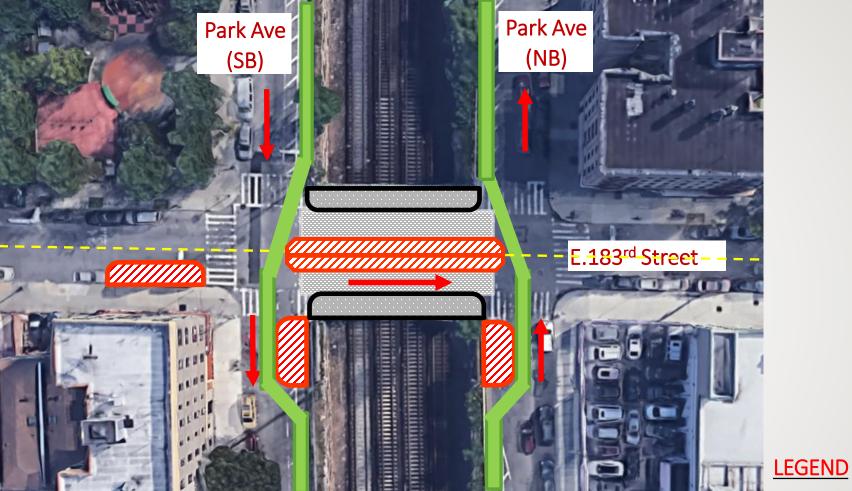
TOTAL DESIGN AND CONSTRUCTION SUPPORT SERVICES FOR The Rehabilitation of East 183<sup>rd</sup> Street Bridge over MNRR (Harlem Line)



**RECONSTRUCTED BRIDGE** 

TRAFFIC DIRECTION

## Project Construction Staging STAGE 3



- Maintain 2 traffic lanes (EB & WB) of 11' width on 183<sup>rd</sup> Street.
- Maintain one way traffic lane on Park Avenue (NB & SB).
- Maintain two sidewalk.
- Maintain bike lane on Park Avenue (NB & SB).



**BIKE LANE** 





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## Project Construction Staging Safety and Traffic Control Measures

- Provide fence and screen around construction staging perimeter to control dust, sound, and increase safety.
- Request to provide traffic agents during the rush hour to guide traffic movements.
- Provide signal optimization at adjacent intersections to relieve congestion.
- Provide adequate signs and temporary pavement markings specific to each stage.
- Suspend parking temporarily on Park Avenue (NB & SB) adjacent to bridge staging. Total ten (approx.) parking spots temporarily affected.





# **Budget and Schedule**

## Budget

Estimated Construction Cost - \$20 M

## Schedule

Total Construction Duration - 18 Months (Tentatively, Spring, 2022 to Summer, 2023)

- Stage 1 (Approx. 7 Months)
- Stage 2 (Approx. 7 Months)
- Stage 3 (Approx. 3 Months)
- Stage 4 (Approx. 1 Month)



# **Community Outreach**

#### Planned Outreach and Coordination

### Stakeholders

- Bronx Community Board 6
- Elected Officials
- Civic + Community Groups
- Local Businesses in the area
- Metro North Rail Road (MNRR)
- NYC Department of Parks & Recreation (NYCDPR)

#### **Outreach Strategy**

- Community Outreach Notification Letter
- Stakeholder Meetings
- Social Media Notifications
- On-Site Information

#### **Coordinating Agencies**

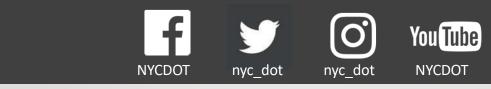
- Metro North Rail Road (MNRR)
- NYCDEP
- NYC Department of Sanitation (DSNY)
- NYPD, FDNY, FDNY Emergency Medical Services
- Utilities: Verizon (Telephone), Con Edison (Gas/Electric)











TOTAL DESIGN AND CONSTRUCTION SUPPORT SERVICES FOR The Rehabilitation of East 183<sup>rd</sup> Street Bridge over MNRR (Harlem Line)

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