

# Zoom Functions

## Etiquette

- Participants will stay muted until they have been called upon to speak after raising their hand.
- Participants may use the “chat” function to ask questions.

## Mute and Unmute

You may only unmute after being prompted to do so.

## Chat

Questions may also be asked in the chat.

## Stop and Start Video

## Raise Hand

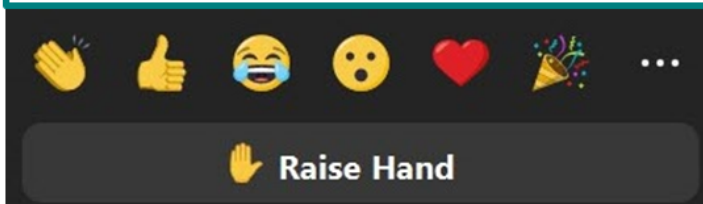
### By Phone:

If dialing in by phone, press \*9 to raise hand.



### Zoom:

To provide questions or feedback, use the ‘raise hand’ function to join the queue. Participants will be called on in order of hand raised.







NYC Criminal Justice

NYC DDC Department of Design and Construction

Borough-Based Jails

# Project Approach Construction Phase

March 26, 2024



**BK** Brooklyn Borough Based Jail



# MISSION STATEMENT HIGHLIGHTS

- Work with DDC to support building construction
- Work with community on site construction
- Maintain relationship with community
- Discuss high level schedule approach
- Discuss construction monitoring plan
- Create project awareness & required construction methods

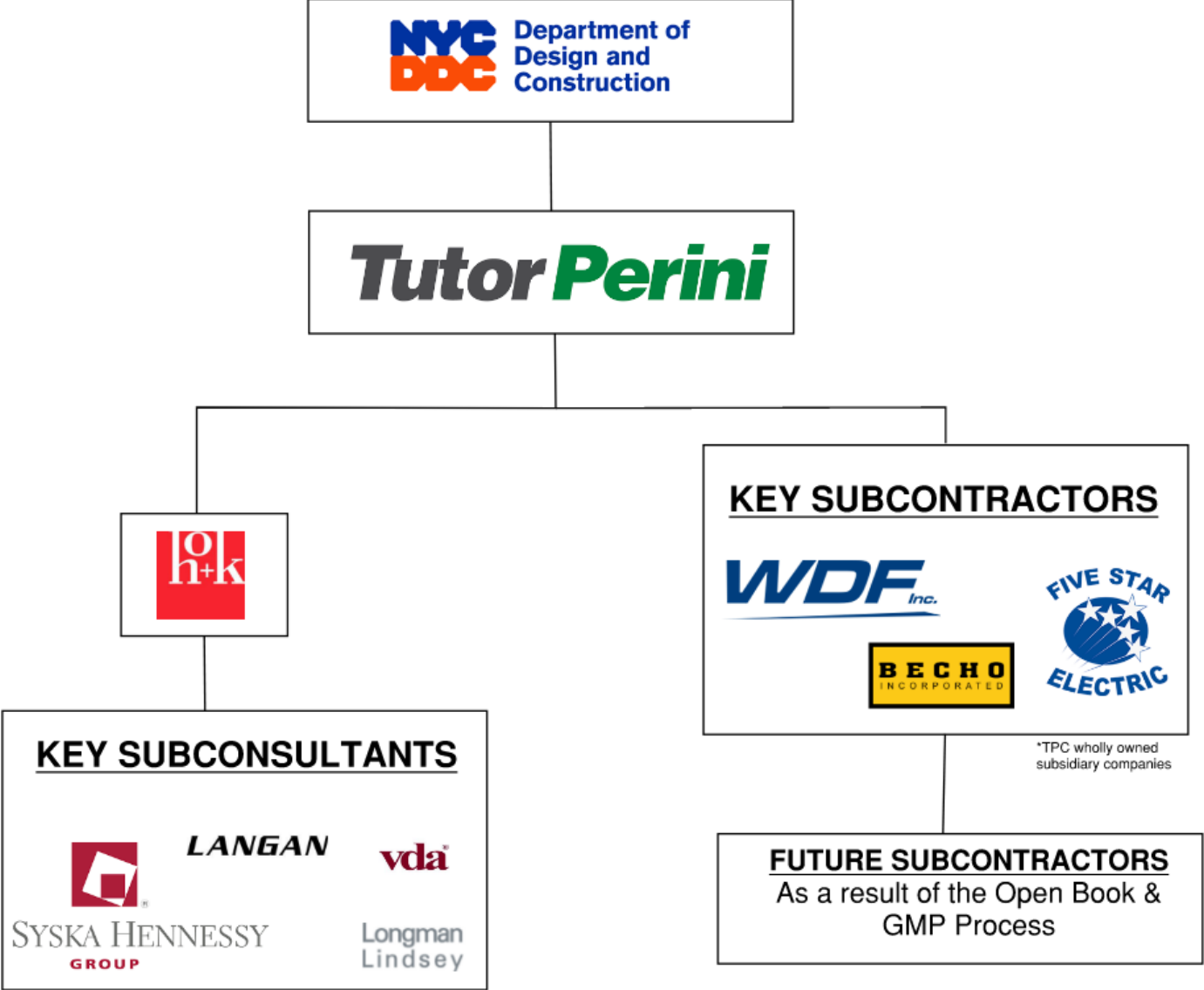
# Agenda

- 1 Design-Build Team Approach
- 2 Project Overview
- 3 Schedule & Work Hours
- 4 Site Logistics
- 5 Phase 1 Construction Activities
- 6 Construction Monitoring Plan
- 7 Environmental Controls
- 8 Future Engagement

Brooklyn

# Design-Build Team Approach

# DESIGN-BUILD TEAM APPROACH





# Tutor Perini Corporation – Urban Areas Experience

Tutor Perini has a successful track record of completing complex large-scale projects in urban areas.

Tutor Perini has extensive experience self performing below grade work in intricate locations.



Pile Driving successfully adjacent to live train tracks at Hudson Yards



Hudson Yards: Multi Billion Dollar Project successfully completed on the West Side of Manhattan



SOE installation adjacent to live train tracks at Hudson Yards



# Tutor Perini Corporation – Design Build Experience

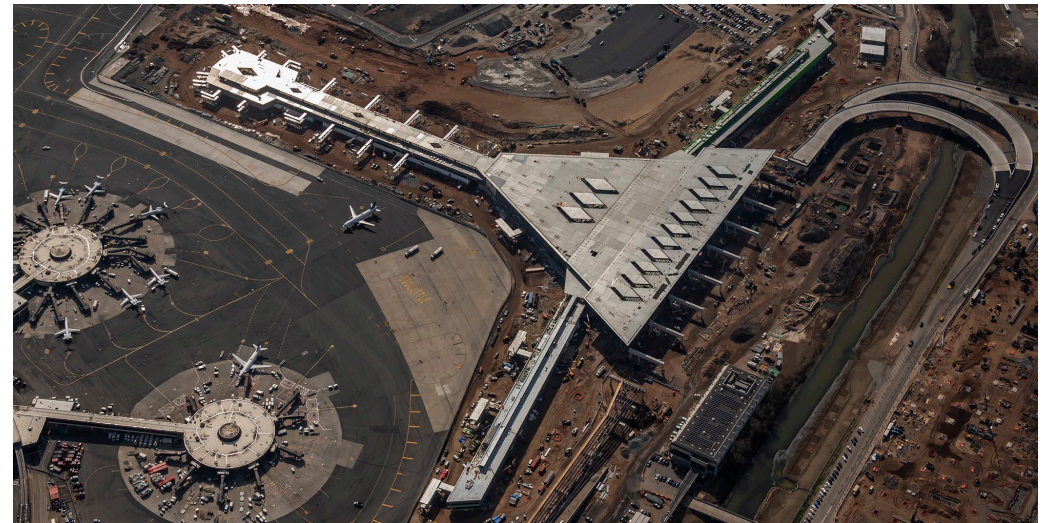
Tutor Perini is an industry leader in executing Correctional Design Build Projects.

The following are successful Design Build Experience performed by TPC, inclusive of correctional project:

- Newark Liberty International Airport – Terminal A – Newark, NJ
- Essex County Correctional Facility – Newark, NJ
- Baltimore Central Booking & Intake Center – Baltimore, MD
- District of Columbia Jail – Washington, DC



Baltimore Central Booking & Intake Center



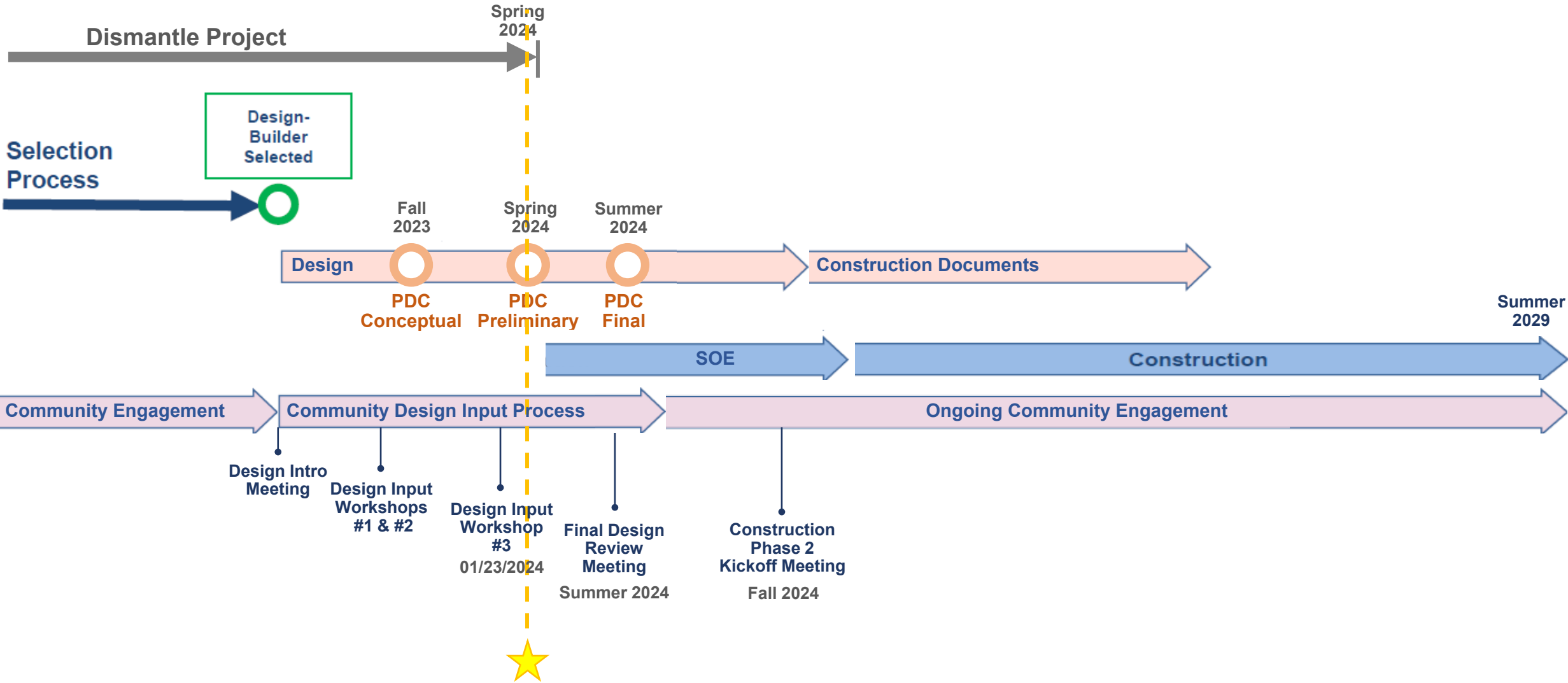
Newark Liberty International Airport – Terminal A



Brooklyn

# Project Overview

# BBJ Design-Build & Engagement Process







# PROJECT OVERVIEW

- 1040 New Beds
- 295' Tall
- 60,000 SF Footprint
- 900,000 SF Building
- Structural Steel Framing
- Concrete Core
- Slabs on Deck
- 2 Subcellar Levels
- Curtain Wall System
- Percent for Art Program

Brooklyn

# Project Schedule & Work Hours



# Phase 1 Schedule and Work Hours

Activity	Expected Start Date	Expected Completion Date	MONDAY - FRIDAY			SATURDAY
			6AM-7AM (Mobilization Time)	7AM-6PM (Standard Working Hours)	6PM-9PM (As needed)	7AM-5PM (As needed)
Support of Excavation (SOE)	APRIL 2024	NOV 2024	<ul style="list-style-type: none"> <li>•Unlock Construction Gate</li> <li>•Arrival of Workers</li> <li>•Wearing Personal Protective Equipment (PPE)</li> <li>•Tools and Equipment Inspections</li> <li>•Stretch and Flex</li> <li>•Delivery Trucks arriving into site footprint</li> <li>•Coordination Meetings</li> <li>•Safety Checks</li> </ul>	<u>Site Mobilization</u> <ul style="list-style-type: none"> <li>•Install Vibration &amp; Noise Monitoring</li> <li>•Surveying</li> <li>•Perimeter Site Fence Modifications</li> <li>•Potholing and Utility Investigation</li> </ul> <u>Support of Excavation (SOE)</u> <ul style="list-style-type: none"> <li>•Drill and Install Soldier Piles</li> <li>•Drill and Install Mini Piles</li> <li>•Chop and Load out Concrete</li> <li>•Excavate and Lag</li> <li>•Install Tie Backs</li> <li>•Install Walers</li> <li>•Install Corner Bracing</li> </ul>	<ul style="list-style-type: none"> <li>•Extended Concrete Pours</li> <li>•Inclement Weather Impacts</li> <li>•Productivity Management</li> <li>•Schedule Constraints</li> <li>•Make Up Time</li> </ul>	<ul style="list-style-type: none"> <li>•Extended Concrete Pours</li> <li>•Inclement Weather Impacts</li> <li>•Productivity Management</li> <li>•Schedule Constraints</li> <li>•Make Up Time</li> </ul>
			No AHVs required	No AHVs required	No AHV scheduled or planned unless unforeseen condition is encountered. When needed, TPC will request permit in advance and concurrently notify the community of anticipated work and hours.	

Brooklyn

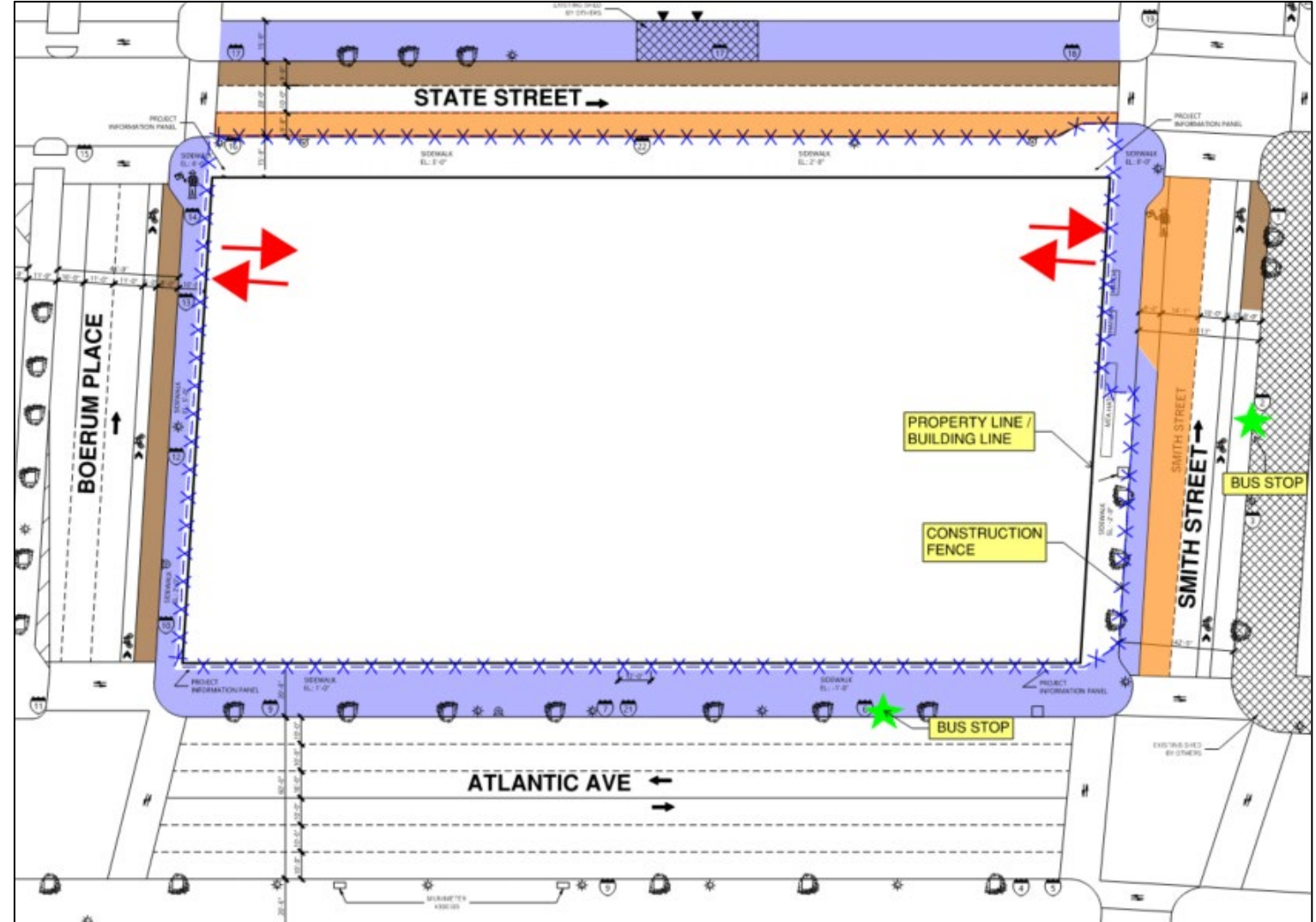
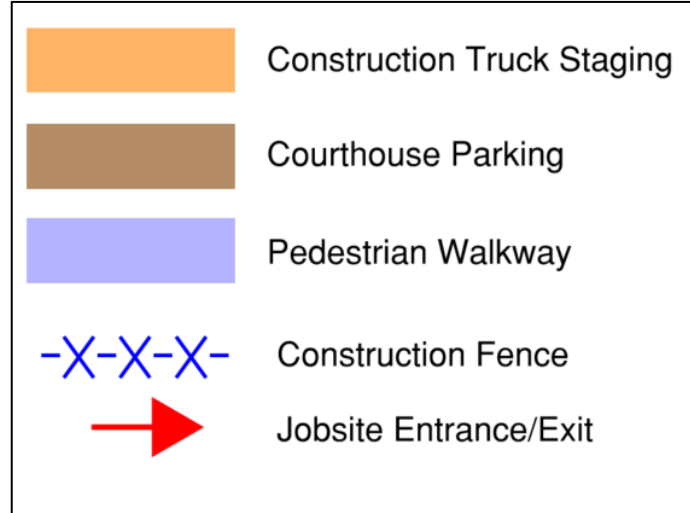
# Project Site Logistics



# Project Site Logistics

## Current Conditions

### Dismantling Project





# Project Site Logistics

## Phase 1

April 2024 –November 2024

### Key Takeaways:

Logistics Plan reviewed and approved by NYCDOT  
Atlantic Ave

- Design Build Team captures portion of sidewalk. Travel path reduced from 15 ft to 5 ft wide
- Bus Stop relocated

### Boerum Place

- Design Build Team captures parking lane
- Bike Lane relocated
- Courthouse Parking removed
- Pedestrian walkway moved into Street

### State Street

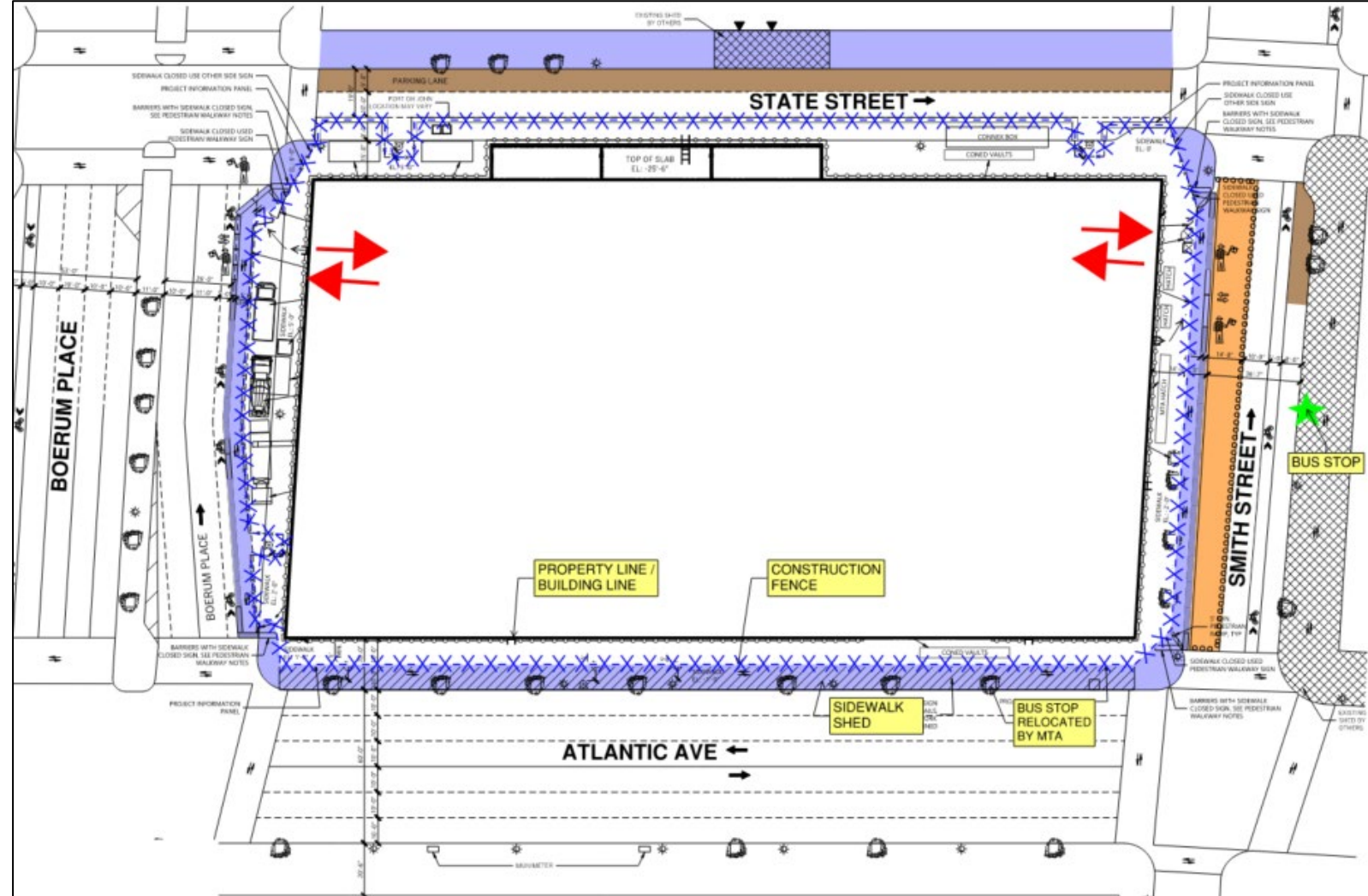
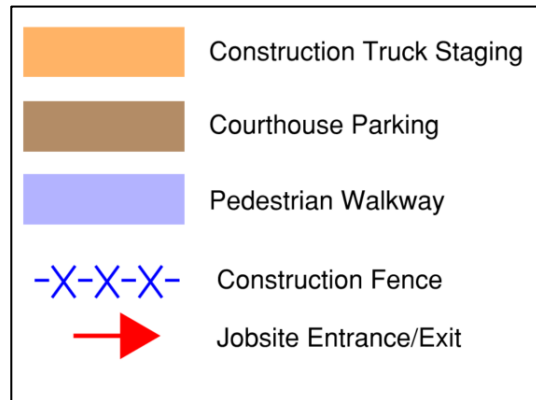
- Right Lane repurposed into construction fence area

### Smith Street

- Parking Lane captured by Contractor

### Traffic Path

- WB Atlantic Avenue → Boerum Place → Site
- SB Boerum Place → EB Atlantic Avenue → Smith Street → Site





Brooklyn

# Site Construction Activities

# PHASE 1 MAJOR ACTIVITIES

- **Site Mobilization**

- Installation of Perimeter Construction Fence
- Establish Construction Entrances and Gates
- Install Construction Office Trailers
- Install Overhead Protection as needed
- Pre-construction Surveying
- Establish Survey Control Points
- Installation of Monitoring Devices
- Site Utility and Geotechnical Investigation

## **Support of Excavation (SOE)**

- Drill and Install Soldier Piles
- Drill and Install Mini Piles
- Chop and Load out Concrete
- Excavate and Lag
- Install Tie Backs
- Install Walers
- Install Corner Bracing
- Drill Heel block Anchors

# PHASE 1: SITE MOBILIZATION

- Installation of Perimeter Construction Fence
- Establish Construction Entrances and Gates
- Install Construction Office Trailers
- Install Overhead Protection as needed
- Pre-construction Surveying
- Establish Survey Control Points
- Installation of Monitoring Devices
- Site Utility and Geotechnical Investigation



# PHASE 1: SUPPORT OF EXCAVATION (SOE)

**Temporary** systems and structures, used to **support and stabilize the soil** during construction activities that involve excavation.

The primary purpose of an SOE is to **support and maintain the integrity** of adjacent streets, structures, utilities, and the surrounding environment.



Typical Representation of SOE  
(Not Brooklyn Project)

# PHASE 1: SOE Installation Process

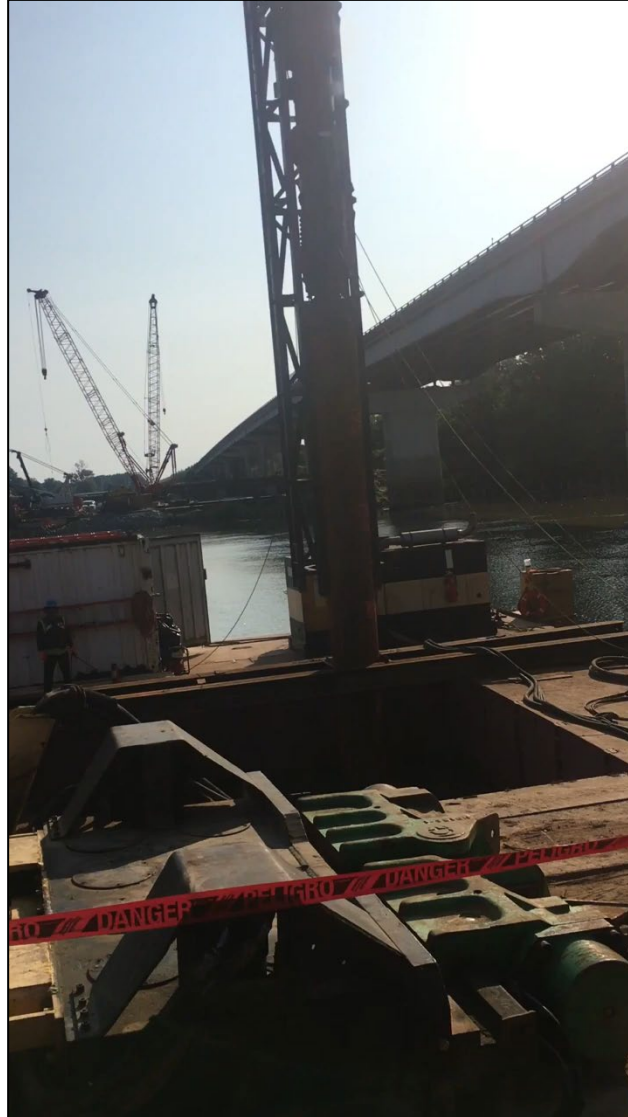
This project will implement an SOE Installation process with the following advantages:

- Reduced Noise and Vibration
- Minimal Environmental Impact
- More precise
- Safer
- More efficient



Typical Representation of SOE Installation  
(Not Brooklyn Project)

# Conventional SOE Installation Process – Other Projects





# Engineered SOE Installation Process for this Project



Brooklyn

# Project Monitoring Plan

# PROJECT MONITORING PLAN REVIEW AND APPROVAL PROCESS

The Project Monitoring plan was submitted, reviewed and approved by:

- Engineer of Record
- Department of Buildings (DOB)
- NYC Landmarks Preservation Commission (LPC)
- Transit Authority (MTA)





# PROJECT MONITORING PLAN

In accordance with NYC Building Code 3309.16, TPC has developed a Project specific **Monitoring Plan** consisting of the following:

1. Construction Monitoring:
  - a) Movements
  - b) Vibrations
  - c) Cracks
2. Noise Monitoring
3. Air Monitoring

In accordance with NYC Building Code 3309.4.3, the Site Monitoring Plan will also include:

- Pre-Construction Documentation (Survey)
- Post-Construction Documentation (Survey)

# PRE-CONSTRUCTION DOCUMENTATION

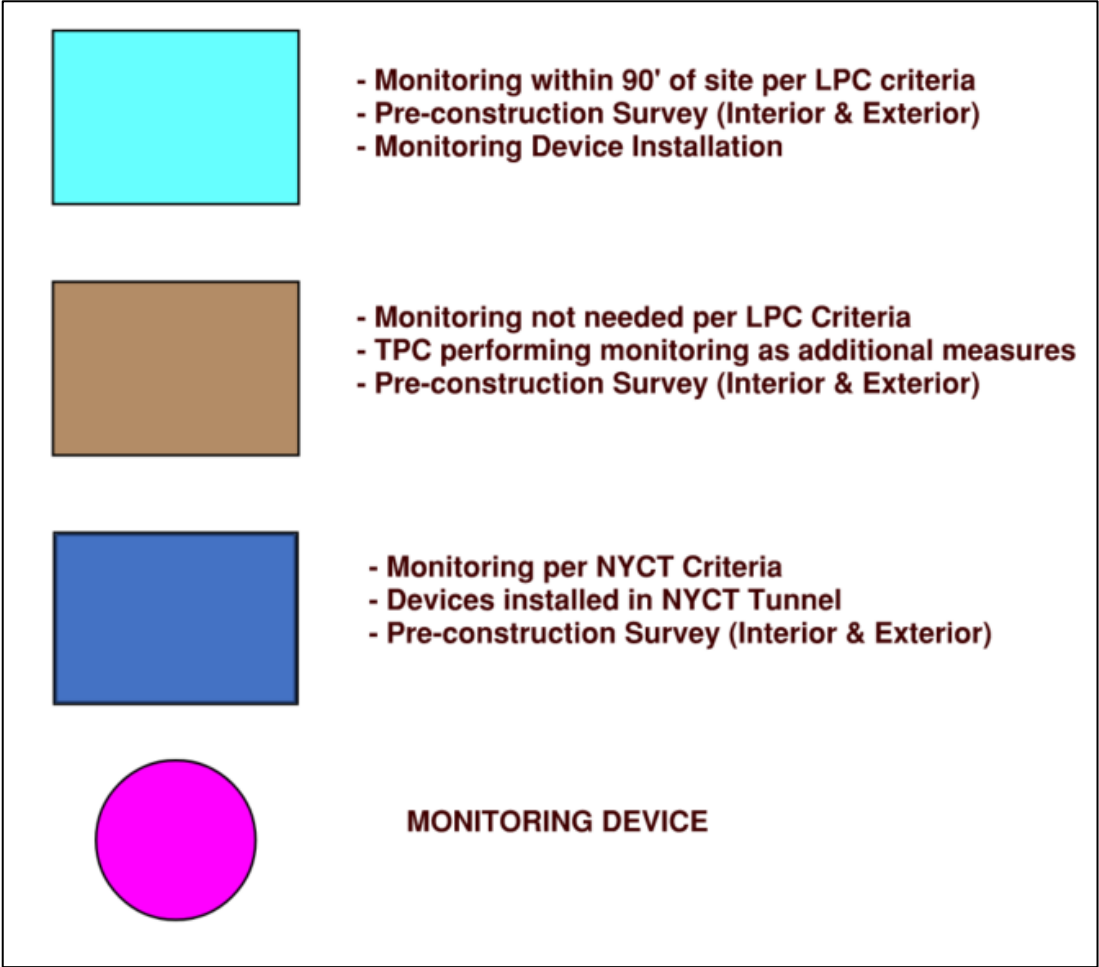
- Requires properties to be accessible and permissions to be granted by building owners.
- Includes all available areas for observations at time of visit.
- Document, by digital photography, the current cosmetic and structural conditions of accessible interior and exterior areas of the surrounding buildings and structures.
- Highlight evidence of **existing** structural distress or deficiencies, cracks, settlement or damage or previous repairs.

# POST-CONSTRUCTION DOCUMENTATION

- Takes place after construction is complete.
- Compares the adjacent property's condition before construction began to the condition after the project is finished.
- Identifies changes to the property, if any, that occurred during the construction period.



# Surrounding Building Monitoring Plan



# OPTICAL MONITORING

- Optical monitors will be installed on the façade of the designated buildings and NYCT tunnel.
- Automated Robotic Total Station (ATMS) will read the monitoring points.
- Movement data are continuously collected by the ATMS
- TPC is notified if the readings are above the alert and limiting thresholds.

ATMS



Movement Monitor



Movement Monitoring Thresholds (Adjacent Buildings)	
Alert Limit	Limiting Criteria
0.25 in	0.5 in

# VIBRATION MONITORING

- Vibration monitors will be installed at locations shown on Monitoring Plan.
- Vibration data is continuously collected by the vibration monitor.
- TPC is notified if the vibration monitor reads vibration above the warning limit threshold.

Vibration Monitoring Thresholds (Adjacent Buildings)	
Alert Limit	Limiting Criteria
0.25 in/sec	0.5in/sec

Above ambient background vibrations

Vibration Monitor



Ground mounted sensor installed by drilling 3/8" of anchor bolts on mortar

# Noise Monitoring

- Noise Meters will be installed at all perimeters of the Project.
- TPC is notified if the noise monitor reads noise levels above the warning limit threshold.



● Noise Monitoring Device

Time of Day	Noise Monitoring Threshold
7AM to 6PM WEEKDAYS	80 dBA or + 10dBA above ambient
6PM to 7AM WEEKDAYS, NIGHTS, WEEKENDS	70 dBA or + 7dBA above ambient

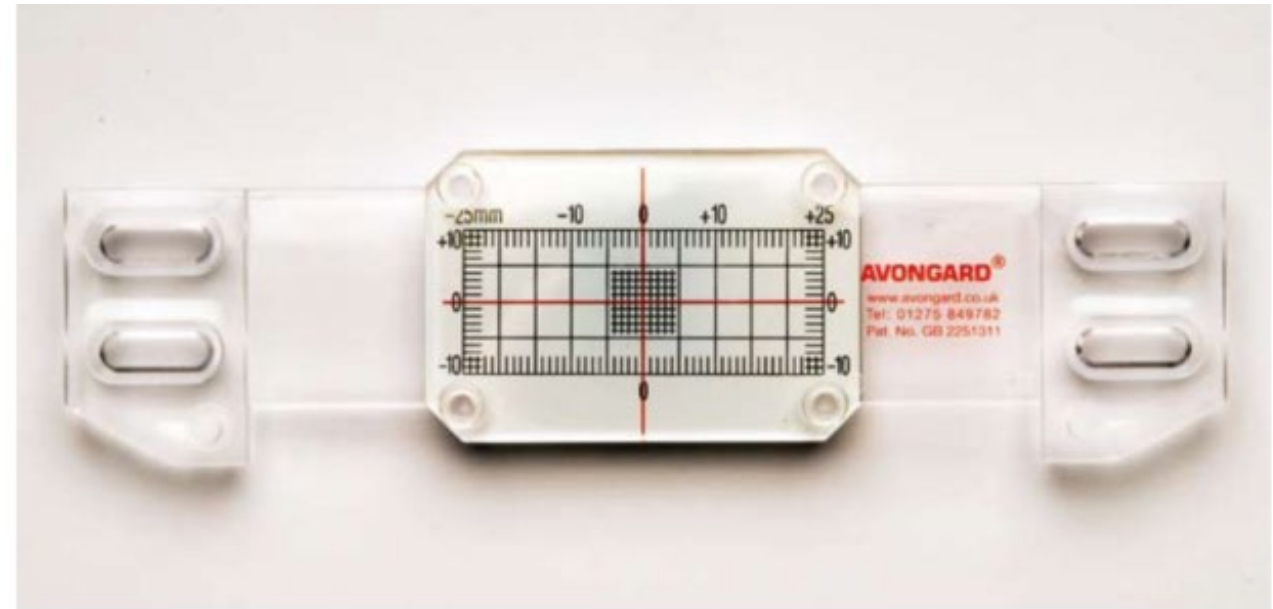




# CRACK MONITORING

- Crack Gauges will be installed on visible and accessible locations where cracks are observed.
- Crack Gauges will be monitored weekly or as required
- Crack Data Reports will contain the following:
  - Gauge ID, Location, and date of installation
  - Photograph of crack
  - Reading of crack growth and propagation
  - Comparative photo from previous readings side-by-side with new photo

Crack Monitoring Thresholds	
Alert Limit	Limiting Criteria
3mm	6mm



# PROJECT REPORTING

## Monthly Reporting:

- DDC will publish the Monitoring Report on the BBJ website documenting all the monitoring for the month.
- Reporting will include:
  1. Construction Monitoring
    - Movements
    - Vibrations
    - Cracks
  2. Noise Monitoring
  3. Air Monitoring

# PROTOCOL FOR EXCEEDANCE LIMITS

**If any monitoring reading exceeds limiting criteria, the following actions shall be taken:**

- The contractor will immediately be notified by the monitoring devices
- DDC will be notified by the contractor
- Work in the vicinity of the exceedance will be stopped
- The contractor will assess the reasoning for the exceedance
- Corrective actions will be taken depending on severity of exceedance
- The method to perform the work close to the exceedance will be revised
- Work will resume using the agreed-upon revised methods
- The contractor will continue monitoring for exceedances of allowable limits

# Air Monitoring Plan

- Air Monitoring Devices installed at site perimeter to monitor for volatile organic compounds (VOCs) and particulates (e.g. dust).
- Real Time monitoring via the air monitoring equipment and the air monitoring system
- Equipment will be calibrated daily
- Upwind and downwind concentrations will be measured at the start of each workday
- Equipment fitted with audible alarm to indicate exceedance of the action level
- 15-minute running average concentrations
- Action Levels for VOCs and particulates are defined in the New York State Department of Health Generic Community Air Monitoring Plan (CAMP)
- All recorded monitoring data will be logged daily and follow the same reporting protocol as the Construction Monitoring Plan



# AIR MONITORING PLAN



**Air Monitoring Station**



**Air Monitoring Equipment**



● Air Monitoring Device Locations

Air Monitoring locations will be subject to change based on prevailing wind direction.

# DUST MITIGATION PLAN

- Water Suppression
- Dust Control Additives
- Enclosures and Barriers
- Dust Suppression Equipment
- Vehicle and Equipment Management
- Site Layout
- Training and Awareness



Example of Dust Mitigation Efforts  
(not Brooklyn Project)

Dust generating activities will be limited to early construction activities in Q3 2024 i.e. soil excavation/disposal. During this time, TPC will implement strict dust mitigation strategies.

Brooklyn

# Future Engagement

# **COORDINATION WITH DDC OFFICE OF COMMUNITY OUTREACH AND NOTIFICATION**

In conjunction with DDC & Office of Community Outreach & Notification the following items will be periodically issued to the Community:

- Construction Schedule Updates
- Monthly Monitoring Reports
  - Air Monitoring
  - Noise Monitoring
  - Vibration Monitoring
- Maintaining relationship of constant communication



# FALL 2024 COMMUNITY MEETING

In Fall 2024 in conjunction with DDC & Office of Community Outreach & Notification there will be a Community Meeting to review the Phase 2 Activities



# COMMUNITY RESOURCES DURING CONSTRUCTION



BBJ Website

<https://rikers.cityofnewyork.us/>



Designated Phone Number



Weekly Look Ahead



Advisories for Impactful  
Construction Activities



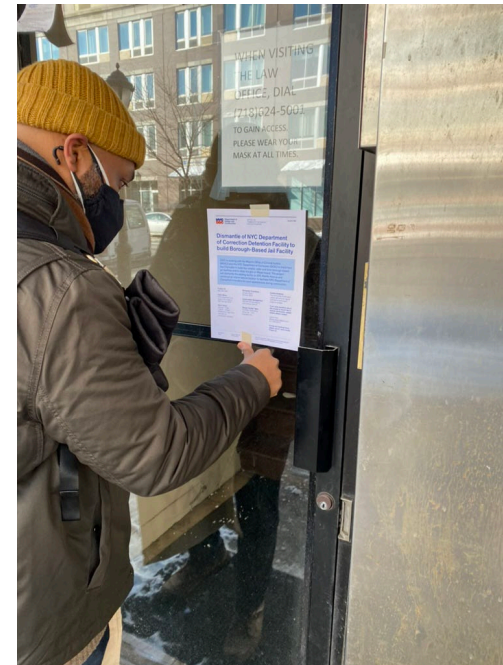
Community Construction  
Liaison & Field Office

**Lucien Allen Brooklyn BBJ CCL**

(917) 270-2370 / [BrooklynCCL@bbjnyc.com](mailto:BrooklynCCL@bbjnyc.com)

360 Atlantic Avenue

Monday – Friday 7:00am - 3:30pm



Brooklyn

# Questions or Comments?





NYC Criminal Justice

NYC DDC Department of Design and Construction

Borough-Based Jails | NAC

# Thank You



**BK**

## Brooklyn Borough Based Jail