



Department of
Design and Construction

WELCOME TO THE 2021 SAFETY SUMMIT

February 2, 2021

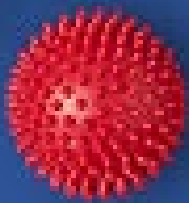
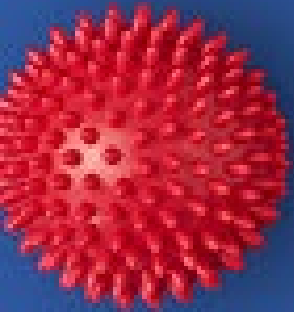
Lorraine Grillo
Commissioner

SAFETY SUMMIT AGENDA

- OPENING STATEMENT
- CONSTRUCTION AND COVID-19
- STATISTICS AND CHALLENGES
- ACHIEVEMENTS
- UPDATED REGULATIONS
- ENVIRONMENTAL SAFETY
- CLOSING REMARKS
- Q&A



COVID-19



DDC CONSTRUCTION PROJECTS SAFETY REQUIREMENTS

COVID-19 COMPLIANCE

COVID-19 Safety Plan

NYS DOH Affirmation

Designated Safety Monitor

Screening Questionnaire

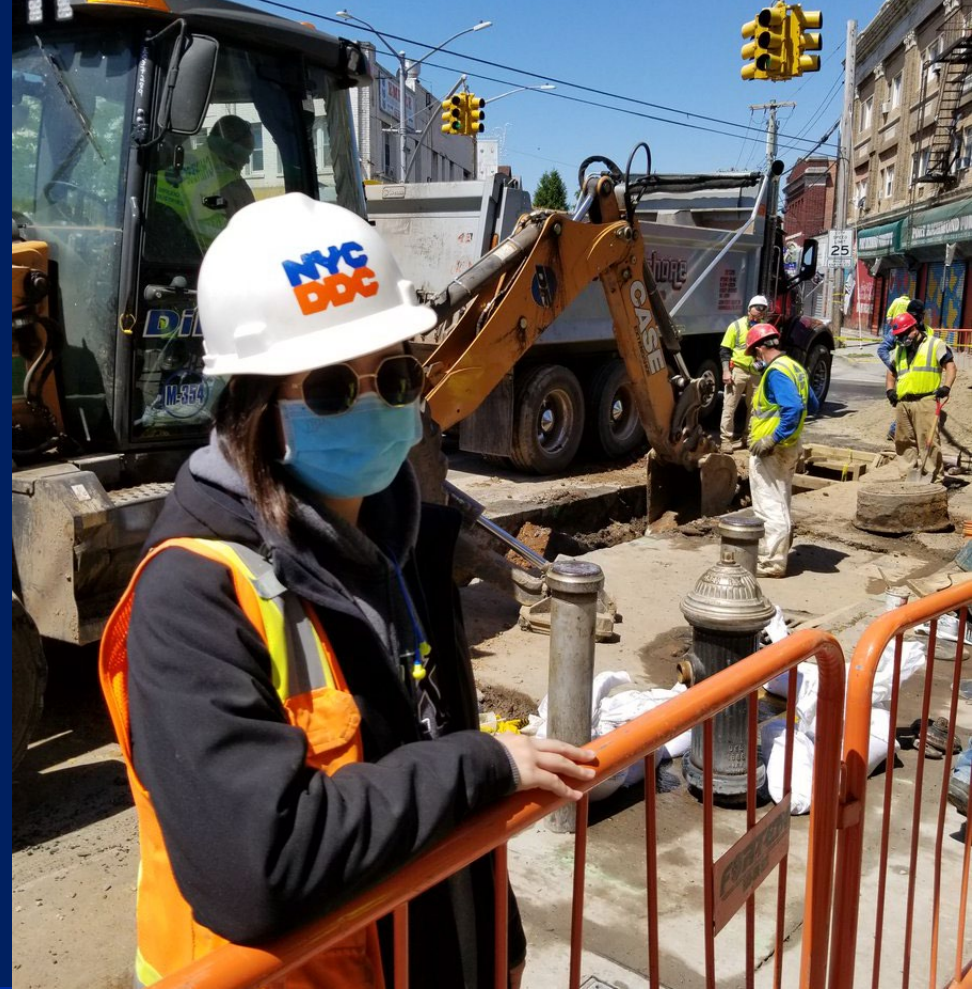
Communication Plan

Daily Log

Disinfection Log

Hand Hygiene Stations

DDC COVID-19 Checklist



**FACE COVERINGS
ARE REQUIRED ON
ALL DDC
CONSTRUCTION
PROJECTS**



**WEARING A
FACE MASK IS
MANDATORY ON
THESE PREMISES**



DDC COVID-19 HOTLINE

(718) 391-1100

The DDC hotline is monitored by the Office of Construction Safety for :

- Questions regarding compliance
- Clarifications
- Request for forms or guidelines
- Anonymous complaints or concerns



REMINDER

HELP PREVENT THE SPREAD OF COVID-19

1



2



3



4



STATISTICS AND CHALLENGES



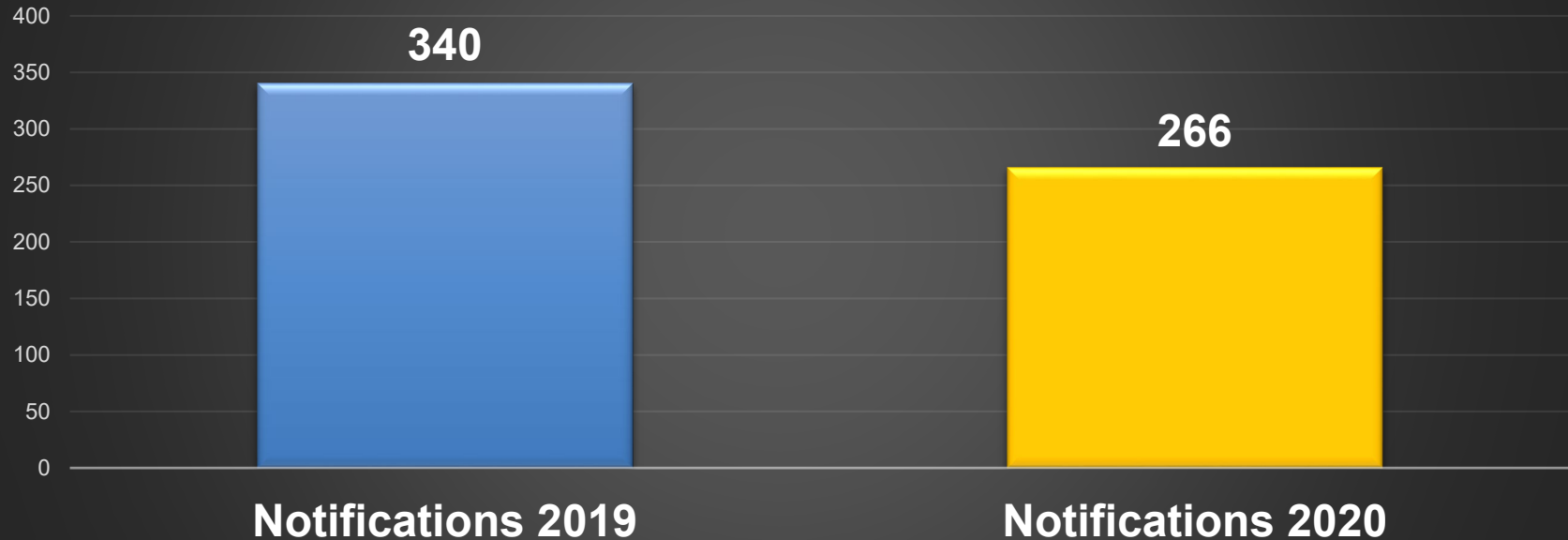
OSHA CONSTRUCTION STATISTICS 2019

- 5,333 fatal work injuries – largest since 2007
- 1,066 related to the construction industry (20%)
- An increase of 5% in construction related fatalities, largest since 2007
- Fatalities due to slips, trips and falls increased by 11%
- Incident rate (work related injury) for the construction industry increased by 110% (10K FTE)



Notifications of Accident, Incidents and Near Misses Office of Construction Safety

2019 and 2020 Calendar Years



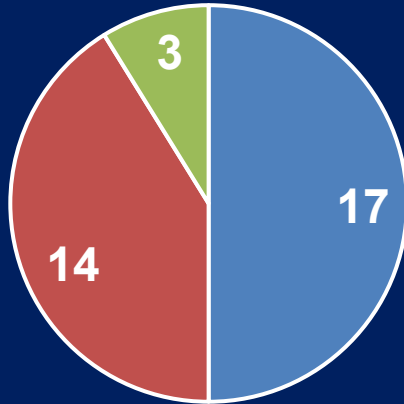


Definitions

- **Incident** – An unplanned work related event that results in personal injury requiring first aid or property damage.
- **Accident** – An unplanned work related event that results in personal injury that involves medical treatment beyond first aid.

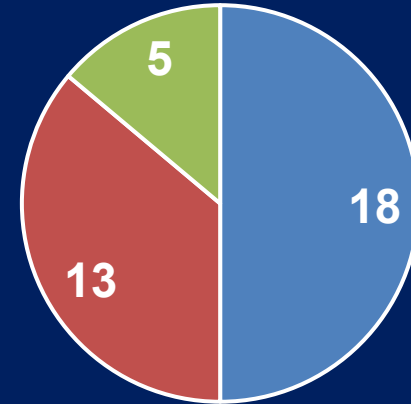
Accidents DDC Construction Projects

2019 Calendar Year



■ Accidents ■ Infrastructure
■ Public Bldgs

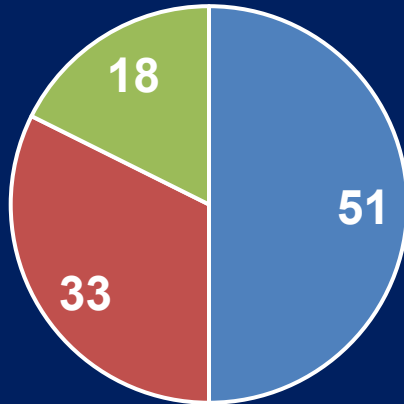
2020 Calendar Year



■ Accidents ■ Infrastructure
■ Public Bldgs

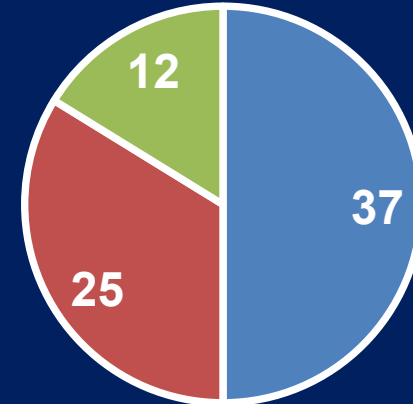
Incidents (Excluding Utility Damages) DDC Construction Projects

2019 Calendar Year



■ Incidents ■ Infrastructure ■ Public Bldgs

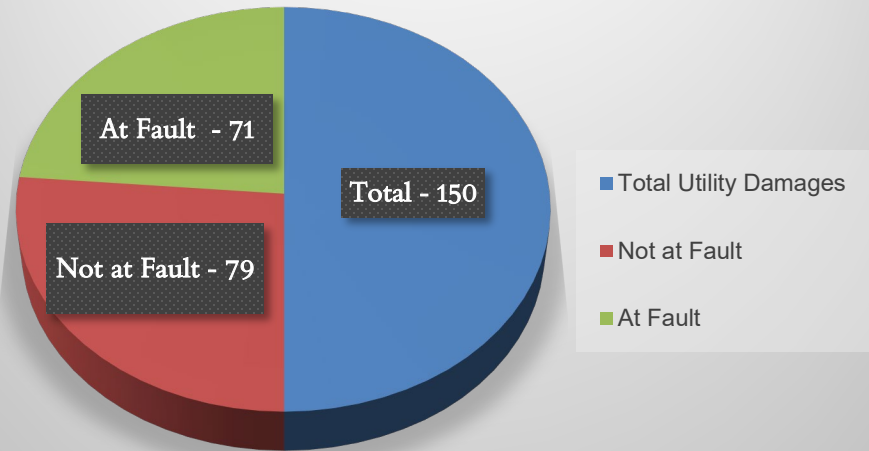
2020 Calendar Year



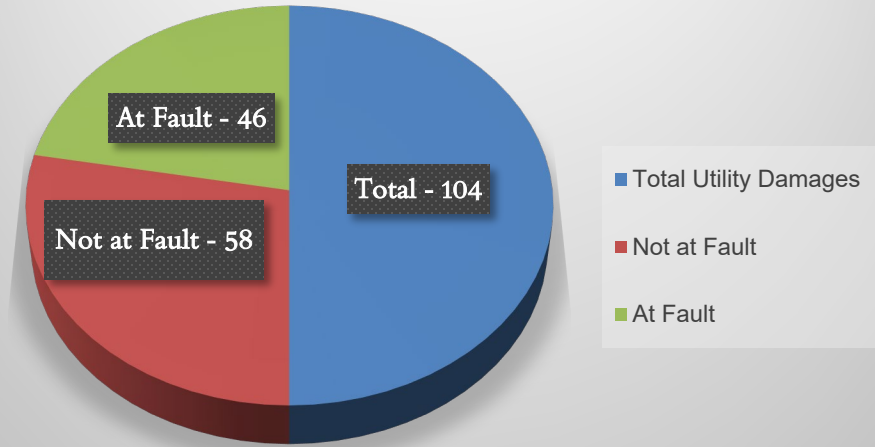
■ Incidents ■ Infrastructure ■ Public Bldgs

Utility Damages at DDC Projects

Utility Damages 2019 Calendar Year



Utility Damages 2020 Calendar Year

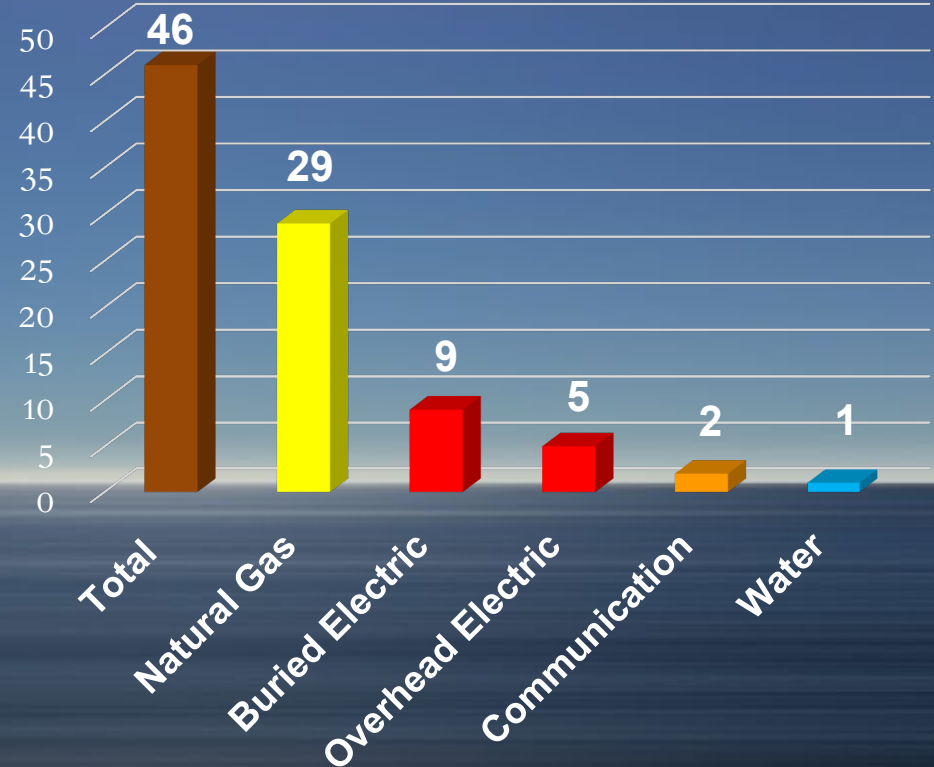




Reducing at Fault Utility Damages

- Notify 811 – NYC One Call
- Wait the required time
- Positive response from affected utilities
- Respect and maintain the marks – NO powered or mechanized equipment within the Tolerance Zone
- Conduct a walkthrough prior to excavation activities
- Provide a spotter where overhead utilities are located
- Support and protect exposed utilities within the excavation
- NY 811 Excavator Training & Education Program
- Request assistance from utility representative

At Fault Utility Damages 2020 Calendar Year



ISSUANCE OF A



Stop Work Order (SWO)

During the course of a safety audit a SWO may be issued when:

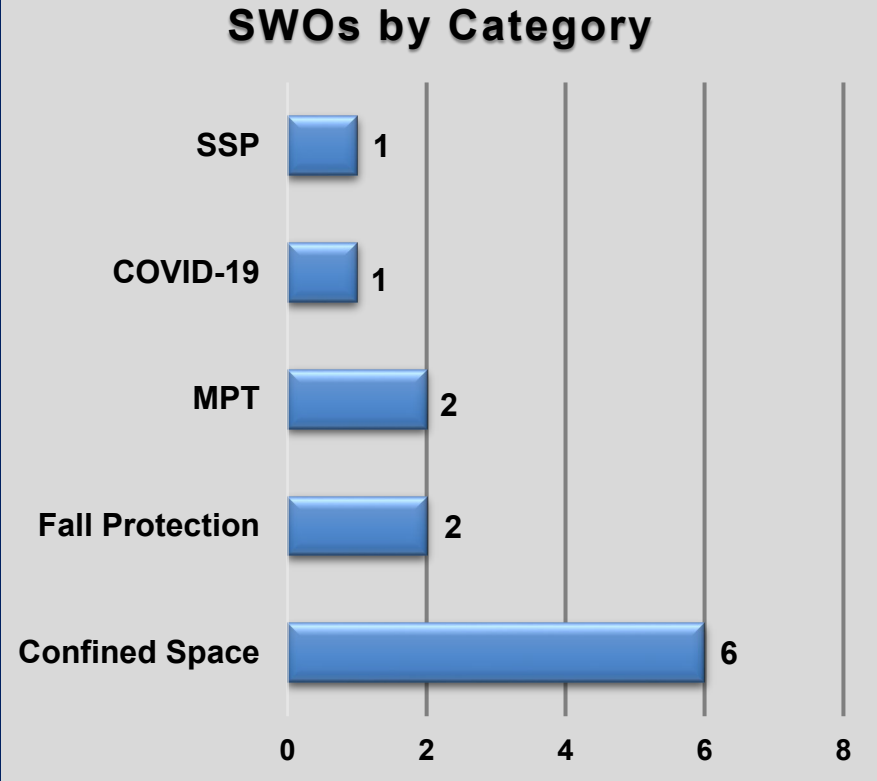
- An operation or task is performed in an unsafe manner presenting immanent danger
- Contractor performing a task without an acceptable Site Safety Plan or with Conditionally Acceptable Plan (task section not submitted for review)
- Non-compliance with COVID-19 Safety Requirements
- Lifted when documented corrective action is provided

Examples of SWOs issued:

- Employees in an excavation ≥ 5 feet without a protective system
- Workers in a Confined Space without an approved program and procedures in place
- Workers exposed to unprotected side or edge, 6-feet above a lower level, with no Fall Protection System in place



SWOs Issued 2020 Calendar Year



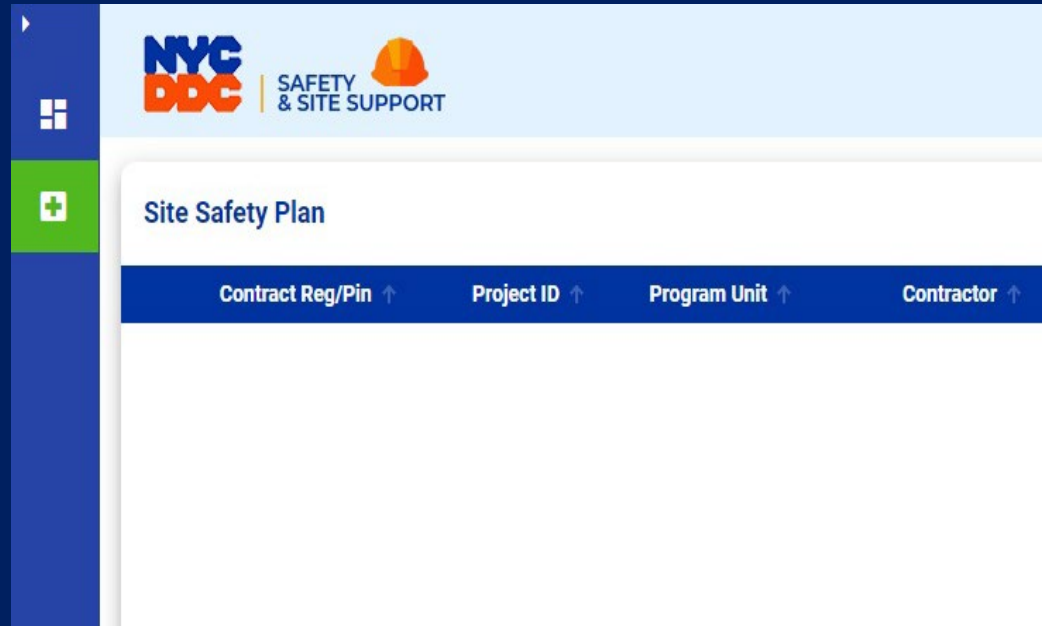


NOTABLE ACHIEVEMENTS



Site Safety Plan (SSP) Application

- Direct and improved communication with contractors and assigned Project Staff
- Improved submittal process of SSP (templates)
- Project Staff involvement in review of contractor SSP prior to submittal to the Office of Construction Safety – Code Compliance Unit
- Overall reduction in submittal, review and acceptance timeframe
- Overall target review timeframe reduced by approximately 50%



SAFETY DEVIATIONS

During the course of a safety audit, auditors with the Office of Construction Safety will document instances of noncompliance and issue a deviation.

- Contractors and DDC Project Staff work to immediately remediate high risk deviations
- Remaining deviations are also quickly addressed
- The daily backlog of deviations to single digits – and at times is at zero

The key to continued success is to identify and immediately address noncompliance upon recognition to prevent a potential incident or accident

This is a collective effort by all involved parties



REGULATORY UPDATE



NYC DOB – Local Law 196

A construction project where a Construction Superintendent, Site Safety Coordinator, or Site Safety Manager is required to be present, then:

Construction and demolition workers must have a total of 40 hours site safety training (SST Card) by March 1, 2021 (recently extended).

Option 1:

30-Hour OSHA, 8-Hrs Fall Prevention, 2-Hrs Drug and Alcohol Awareness = Total Hours: 40

Option 2:

10-Hour OSHA, 8-Hrs Fall Prevention, 8-Hrs Site Safety Manager Refresher/Chapter 33, 4-Hrs Supported Scaffold, 2-Hrs Drug and Alcohol Awareness, 4-Hrs General Electives, 4-Hrs Special Electives = Total Hours: 40



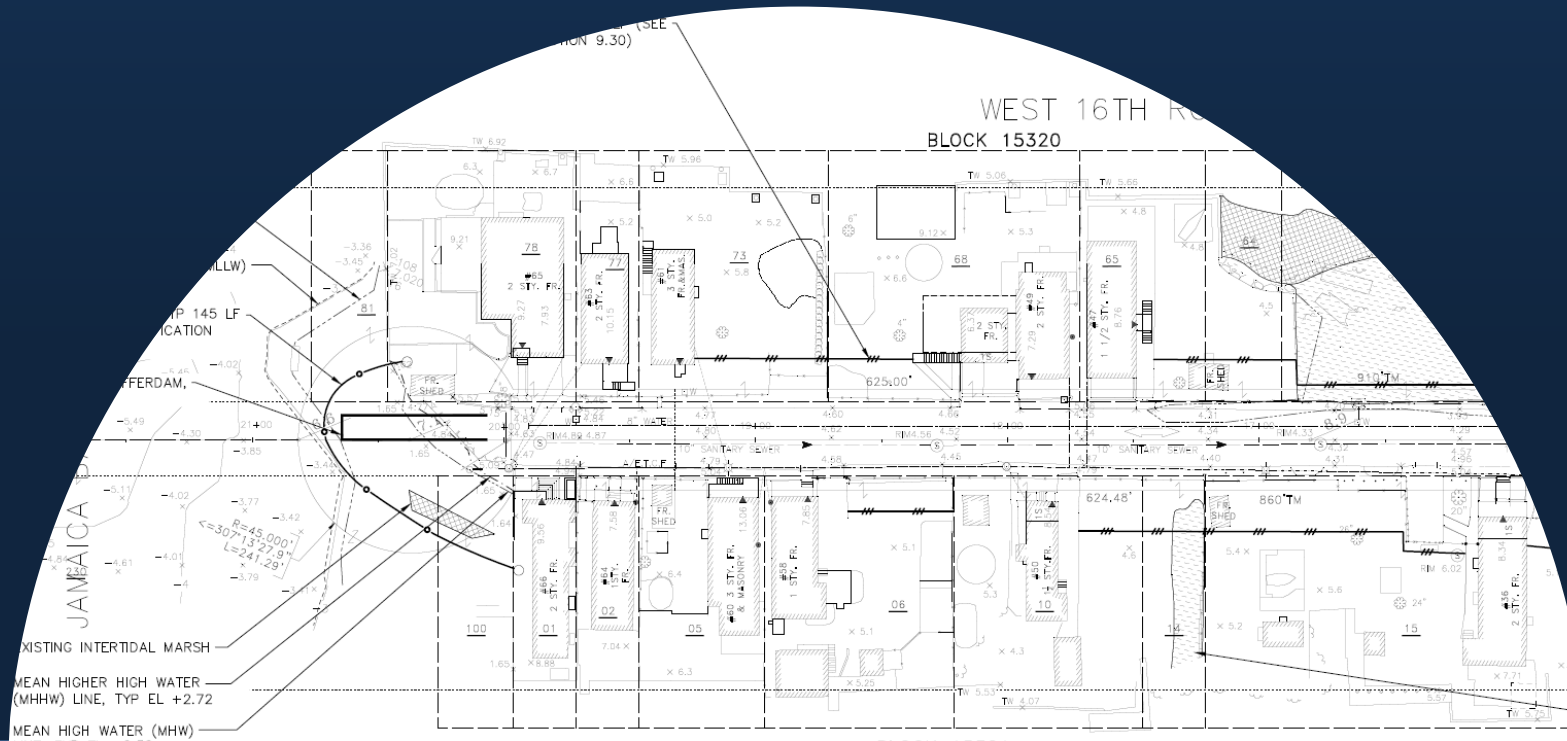
ENVIRONMENTAL SAFETY

A diagram consisting of three overlapping circles. The leftmost circle is orange and contains the text 'DESIGN PHASE'. The top circle is dark blue and contains the text 'ENVIRONMENTAL SAFETY'. The bottom-right circle is dark blue and contains the text 'CONSTRUCTION PHASE'. The circles are connected by thin white lines. The background is a photograph of a city waterfront with a river, a bridge, and a city skyline under a blue sky with clouds.

**ENVIRONMENTAL
SAFETY**

DESIGN PHASE

**CONSTRUCTION
PHASE**



ENVIRONMENTAL SAFETY IN DESIGN PHASE

- Phase I Corridor Assessment
- Phase II Subsurface Corridor Investigation
- Wetlands Permitting
- State Pollution Discharge Elimination System (SPDES) Program
- Municipal Separate Storm Sewer System (MS4) Construction Permitting Program

ENVIRONMENTAL SAFETY IN DESIGN PHASE

These soil investigations and permits are necessary to ensure the safety of:

- Construction workers
- Communities living in close proximity to construction sites
- Surrounding natural resources

Phase I & Phase II Investigations

Ascertain soil contamination by:

- Analyzing current and historical activities within or adjacent to the project boundaries during Phase I assessment
- Soil sampling to determine presence of analytes of concern (lead, mercury, etc.) during Phase II investigation

These investigations allow DDC to determine:

- If contaminated and/or hazardous soils are present within the area of construction
- How contaminated and hazardous soils should be handled, transported and disposed during construction





WETLANDS PERMITTING



USACE and NYSDEC Permits

- The purpose of US Army Corps of Engineers (ACE) & NYS Department of Environmental Conservation (DEC) permits is to preserve and protect natural resources in order to safeguard the functions and values of those resources for the public benefit
- Outfall work & construction adjacent to wetland areas trigger the need for these permits

NYSDEC Permit No. 2-6102-00672/00001

Facility: NYCDDC 9TH ST INFRASTRUCTURE - CAP PROJ SEK20068
50' N 9TH ST BRIDGE & UNDER 9TH ST BRIDGE
BROOKLYN, NY 11231

ECL Article 25 - Tidal Wetlands

ECL Article 15 – Protection of Waters

6 NYCRR Part 608 – Water Quality Certification

NOTICE OF PERMIT ISSUANCE



USACE and NYSDEC Permits

FINAL 2017 NATIONWIDE PERMIT REGIONAL CONDITIONS AND DESIGNATED CRITICAL RESOURCE WATERS IN THE BUFFALO (LRB) AND NEW YORK (NAN) DISTRICTS FOR NEW YORK STATE

(Effective March 19, 2017 - Expiring March 18, 2022)

New York District Only Permit-specific Regional Conditions:

d. For those waterways not already disqualified by Condition 12.b.1. above, and located within Essential Fish Habitat as discussed in Section G-E.8. below, if any work is proposed within areas supporting anadromous fish migration and spawning, sediment removal and pile and sheet pile/cofferdam installation and removal shall be avoided from **March 1 to June 30** of any year. **Work within cofferdams can proceed any time during the year provided that the cofferdams are installed or removed outside of the seasonal work restriction.** A PCN is required if a variance of this seasonal work window is requested.



Joint Permit Application (JPA)



- Submit to following federal, state & city agencies for review and approval as applicable:
 - US Army Corps of Engineers (USACE)
 - NYS Department of Environmental Conservation (DEC)
 - NYS Department of State (DOS)
 - NYC Department of City Planning (DCP)
- Determination of which agencies the JPA is submitted to is dependent on project scope (a project can be within NYSDEC jurisdiction without being in USACE jurisdiction)
- JPA includes but is not limited to:
 - Project description
 - Design drawings
 - City Environmental Quality Review (CEQR) Determination

City Environmental Quality Review (CEQR)



New York City's process for implementing the State Environmental Quality Review Act (SEQRA), by which agencies of the City of New York review proposed discretionary actions to identify and disclose the potential effects those actions may have on the environment

- Lead Agency determines which CEQR action apply to a City project during initial evaluation of a project

CEQR Actions:

- Type I: likely to have a significant adverse impact on the environment. Environmental Impact Statement (EIS) is necessary if significant adverse impacts are anticipated
- **Type II:** would not have a significant impact on the environment. Type II letter of determination is issued by the lead agency
- **Unlisted:** an Environmental Assessment Statement (EAS) must be prepared. Negative Declaration is issued by the lead agency once it is determined that the project does not pose any significant adverse impacts

NYSDEC State Pollutant Discharge Elimination System (SPDES) Program

NYSDEC State Pollutant Discharge Elimination System (SPDES) Program

- New York Pursuant to Section 402 of the Clean Water Act (CWA), stormwater discharges from certain construction activities are unlawful unless they are authorized by a National Pollutant Discharge Elimination System (NPDES) permit **or by a state permit program**
- New York administers the approved **State Pollutant Discharge Elimination System (SPDES) program** with permits issued in accordance with the New York State Environmental Conservation Law (ECL) Article 17, Titles 7, 8 and Article 70

NYSDEC State Pollutant Discharge Elimination System (SPDES) Program

- The SPDES program is designed to eliminate the pollution of New York waters and to maintain the highest quality of water for:
 - public health
 - public enjoyment of the resource
 - protection and propagation of fish and wildlife
 - industrial development in the state
- New York's SPDES program has been approved by the United States Environmental Protection Agency

NYSDEC State Pollutant Discharge Elimination System (SPDES) Program

SPDES Program consists of General and Individual Permits

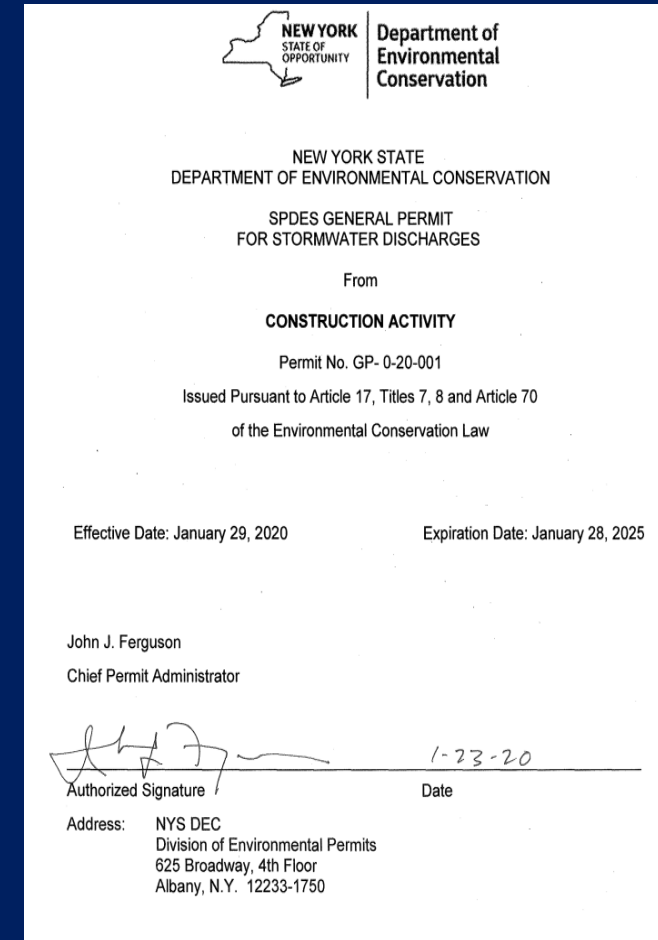
SPDES General Permit:

➤ NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit

- Permit coverage must be obtained by project owner or operator prior to the commencement of construction if project is eligible
 - ☑ *DDC projects with construction impact of over 1 acre are eligible*
- For exceptions refer to NYSDEC Permit No. GP-0-20-001

➤ Municipal Separate Storm Sewer System Construction Permitting (MS4CP) Program

- Meets the requirements of the NYSDEC SPDES General Permit for the City's MS4
- Regulated by NYCDEP



NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES

From

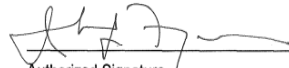
CONSTRUCTION ACTIVITY

Permit No. GP-0-20-001

Issued Pursuant to Article 17, Titles 7, 8 and Article 70
of the Environmental Conservation Law

Effective Date: January 29, 2020 Expiration Date: January 28, 2025

John J. Ferguson
Chief Permit Administrator

 1-23-20
Authorized Signature Date

Address: NYS DEC
Division of Environmental Permits
625 Broadway, 4th Floor
Albany, N.Y. 12233-1750



Municipal Separate Storm Sewer System Construction Permitting (MS4CP) Program

The program requires the City to implement measures to reduce pollution in stormwater runoff to local waterways during and after construction activities.

Overview of MS4CP Program

- The NYC MS4CP requirements apply to any development projects that meets the following criteria:
 - ☑ Contributes runoff to the NYC MS4 area; and
 - ☑ Construction impact of over 1 acre
- Right-of-Way (ROW) projects would be required to include post-construction Stormwater Management Practices (SMPs) which would last beyond construction and need to be incorporated into design drawings prior to bid (*SPDES General Permit requirement being enforced by NYCDEP*):
 - ☑ Curb-to-curb full depth reconstruction and/or addition of new impervious area (*in addition to having over 1 acre of impact*)

Post- construction SMP Example: Porous Pavement



Post- construction SMP Example: Bioretention





Environmental Safety in Construction Phase



Environmental Safety in Construction Phase

- Stormwater Pollution Prevention Plan (SWPPP)
- Environmental Construction Plans:
 - Field Sampling Plan (FSP)
 - Material Handling Plan (MHP)
 - Environmental Health & Safety Plan (EHASP)
 - Community Air Monitoring Plan (CAMP)



Stormwater Pollution Prevention Plan (SWPPP)

- The plan should include measures to reduce pollution in stormwater runoff to protect NYC waterways in accordance with NYSDEC SPDES General Permit & MS4CP conditions during and beyond construction for:
 - DDC projects with construction impact of over 1 acre; and
 - Outside of areas serviced by combined sewers
- SWPPP must include:
 - Erosion & Sediment Control (E&SC) measures for all projects
 - Post-construction SMPs for applicable projects
- Regulators: NYCDEP & NYSDEC

SWPPP Steps & Required Approvals

Contractor submits SWPPP to DDC for review & owner certification

SWPPP is then submitted to NYCDEP for approval via Stormwater Permitting and Tracking System (SWPTS) portal

NYCDEP SWPPP Acceptance Form and Notice of Intent (NOI) submitted to NYSDEC

NYSDEC issues acknowledgement of NOI for coverage under SPDES General Permit

NYCDEP Stormwater Construction Permit



Environmental Safety in Construction Phase

Construction Plans:

- Field Sampling Plan (FSP)
 - Material Handling Plan (MHP)
 - Environmental Health & Safety Plan (EHASP)
 - Community Air Monitoring Plan (CAMP)
-
- Specify how contaminated and hazardous soils must be handled during construction
 - Enable DDC to implement safety measures to protect construction workers and communities
 - Must be approved by DDC Environmental Unit prior to construction initiation

