

# Greenville Yard Redevelopment Project

## 2015 Facilities Engineering Seminar & Expo

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# Agenda

- > **Background**
- > **Sustainable Design**
- > **Project Overview**



# Greenville Yard Redevelopment Project

## Background

- > The Greenville Yard is located on the Upper New York Harbor, in Jersey City, New Jersey
- > Greenville Yard was developed on a manmade peninsula in the early 1900s by the Pennsylvania Railroad
- > Greenville Yard supported a float dock operation for cross harbor container and rail car traffic to/from Jersey City and Brooklyn
- > Greenville Yard has direct, double stacked, CSX/NS shared assets rail connectivity , leading to float bridges that allow rail cars to be drilled onto barges

# Greenville Yard Redevelopment Project Background

## Greenville Yard & Port Jersey Peninsula



# Greenville Yard Redevelopment Project

## Background

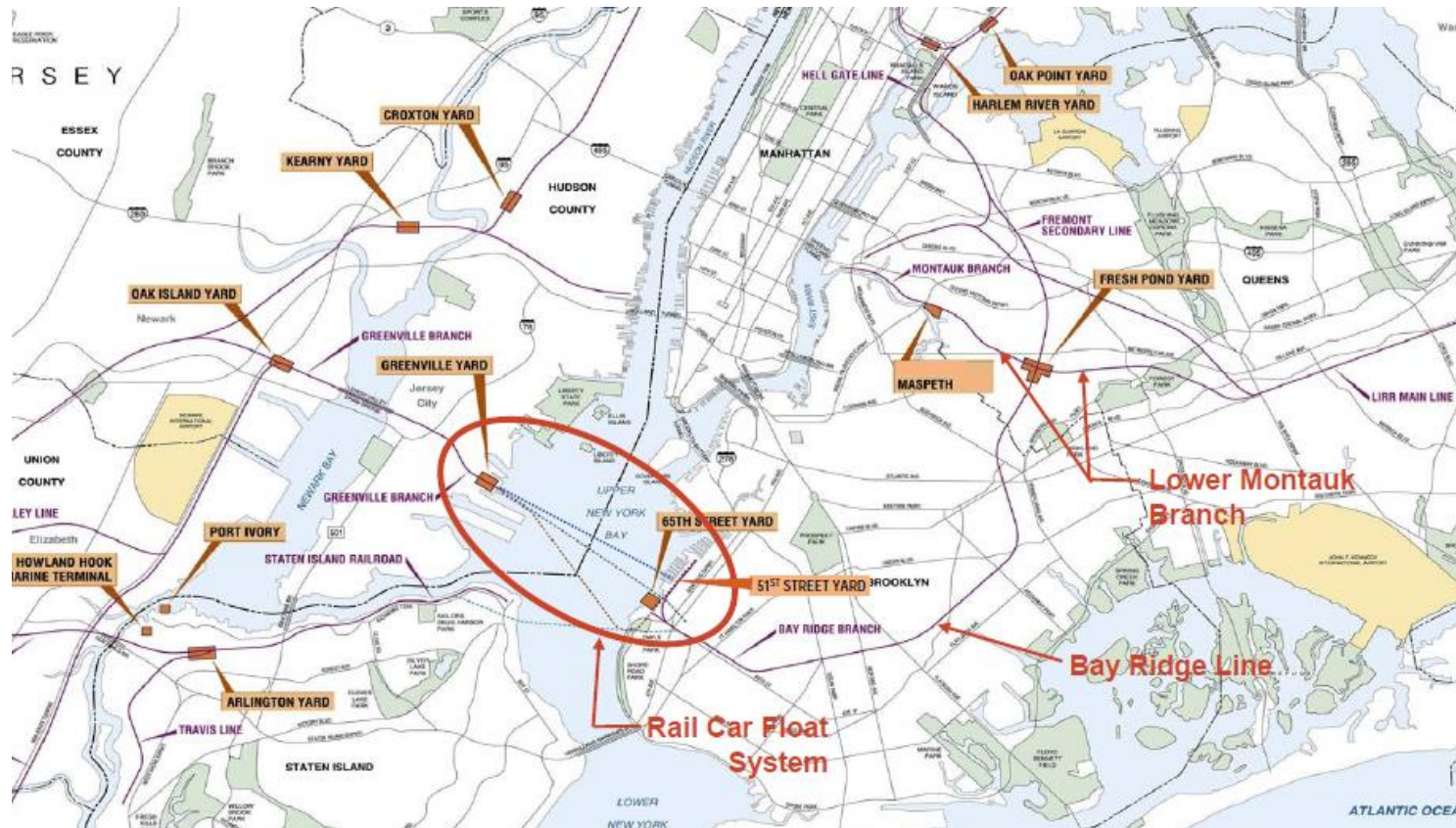
### Location

- > Greenville Yard is located on the northern boundary of a peninsula, adjacent to, and north of the Port Jersey peninsula
- > The Port Jersey peninsula is located in the Upper New York Harbor, in Jersey City, New Jersey
- > The Port Jersey peninsula will be the first area in the Port of New York to have a 50ft. access channel, with no air draft limitations
- > The Port Jersey peninsula had no on or near dock rail connectivity; all intermodal rail movement must be trucked to Express Rail, NYCT, Oak Island, Kearny or Croxton. Currently near dock rail is being constructed at Port Jersey at the ICTF
- > The Greenville Yard is also an integral part of the Cross Harbor Rail Freight Network and the construction of the ICTF



# Greenville Yard Redevelopment Project Background

## Cross Harbor Freight Rail Network



# Greenville Yard Redevelopment Project

## Background

### Key Acquisitions

The Port Authority of NY/NJ has made significant key acquisitions and lease arrangements in the Port Jersey peninsula are including:

1. The purchase of the Cross Harbor Railroad
2. The purchase of the Northeast Auto Marine Terminal Lease
3. Purchase of Global Terminal & Container Services, LLC property
4. Lease back of Global Terminal & Container Services, LLC property
5. Lease of Northeast Auto Marine Terminal to Global Terminal & Container Services, LLC

The above are significant because they allowed for the development of the Port Jersey peninsula into a deep water port, with intermodal and cross harbor rail connectivity

# Greenville Yard Redevelopment Project

## Sustainable Design

### PANYNJ Objective

“To reduce adverse environmental impacts of the design, construction, operation and maintenance and occupancy or leasing of new or substantially renovated buildings and facilities, reconstruction projects, and programs.”\*

*\*Reference: PANYNJ Sustainable Design Guidelines.*



# Greenville Yard Redevelopment Project

## Sustainable Design

### > 4 Step Process

- Step 1: Determine Project Type
- Step 2: Generating a Project Credit Checklist
- Step 3: Project Achievement
- Step 4: Credit Documentation

### > Sustainability Infrastructure Guidelines

- Details PANYNJ's goals
- Details credit requirements
- Download from PA website:

<http://www.panynj.gov/about/building-transportation-greening.html>

# Greenville Yard Redevelopment Project

## Sustainable Design

### Sustainability and PANYNJ

#### Sustainable Design Credit Categories

- > Site
- > Water
- > Energy
- > Material
- > Construction
- > Maintenance and Operation
- > Innovation in Design

# Greenville Yard Redevelopment Project

## Sustainable Design

### Sustainability and PANYNJ

#### Certification Levels

- > Each Project-type has a pre-determined number of credits as identified in the credit checklist
- > Three Levels of Achievement
  - Certified
    - *45% of total point allocation*
  - Gold
    - *60% of total point allocation*
  - Platinum
    - *75% of total point allocation*
- > All Project types are required to achieve a Certified or greater level

# Greenville Yard Redevelopment Project

## Sustainable Design

### How to Incorporate Entire Project Team

- > Detailed sustainability write up in each design development report (DDR)
- > Workshops on checklists and summary guidance document for each contract
- > Register tracking progress
- > Review by Sustainability Consultant at various stages of project development

# Greenville Yard Redevelopment Project

## Project Overview

### The scope of work for the Greenville Yard Project includes

1. Replacement of the float bridges
2. Dredging
3. Carfloat Barge (design/bid/build)
4. Rail yard trackage, switching and connectivity layout and design, within Greenville Yard
5. Rail design for connectivity to other areas of the Port Jersey peninsula

TIC: \$100 – 150 million

# Greenville Yard Redevelopment Project

## Project Overview

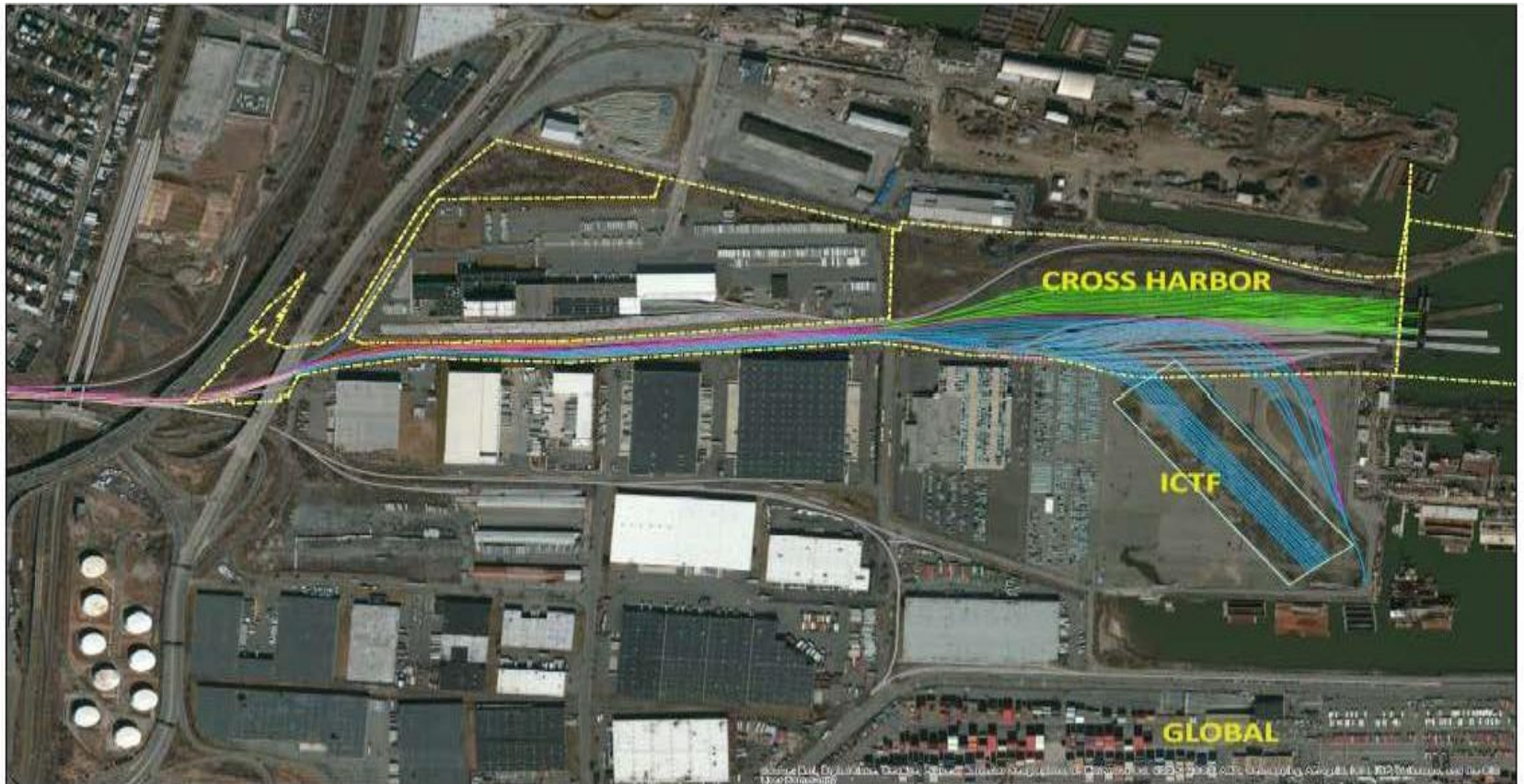
### Management and Technical Disciplines required:

1. Project Management
2. Permitting/ Mitigation – (Environmental & Construction)
3. Marine Structural Engineering
4. Naval Architecture
5. Rail Engineering
6. Geotechnical Engineering
7. Dredging Engineering
8. Site Civil Engineering
9. Electrical Engineering
10. Terminal operational planning



# Greenville Yard Redevelopment Project

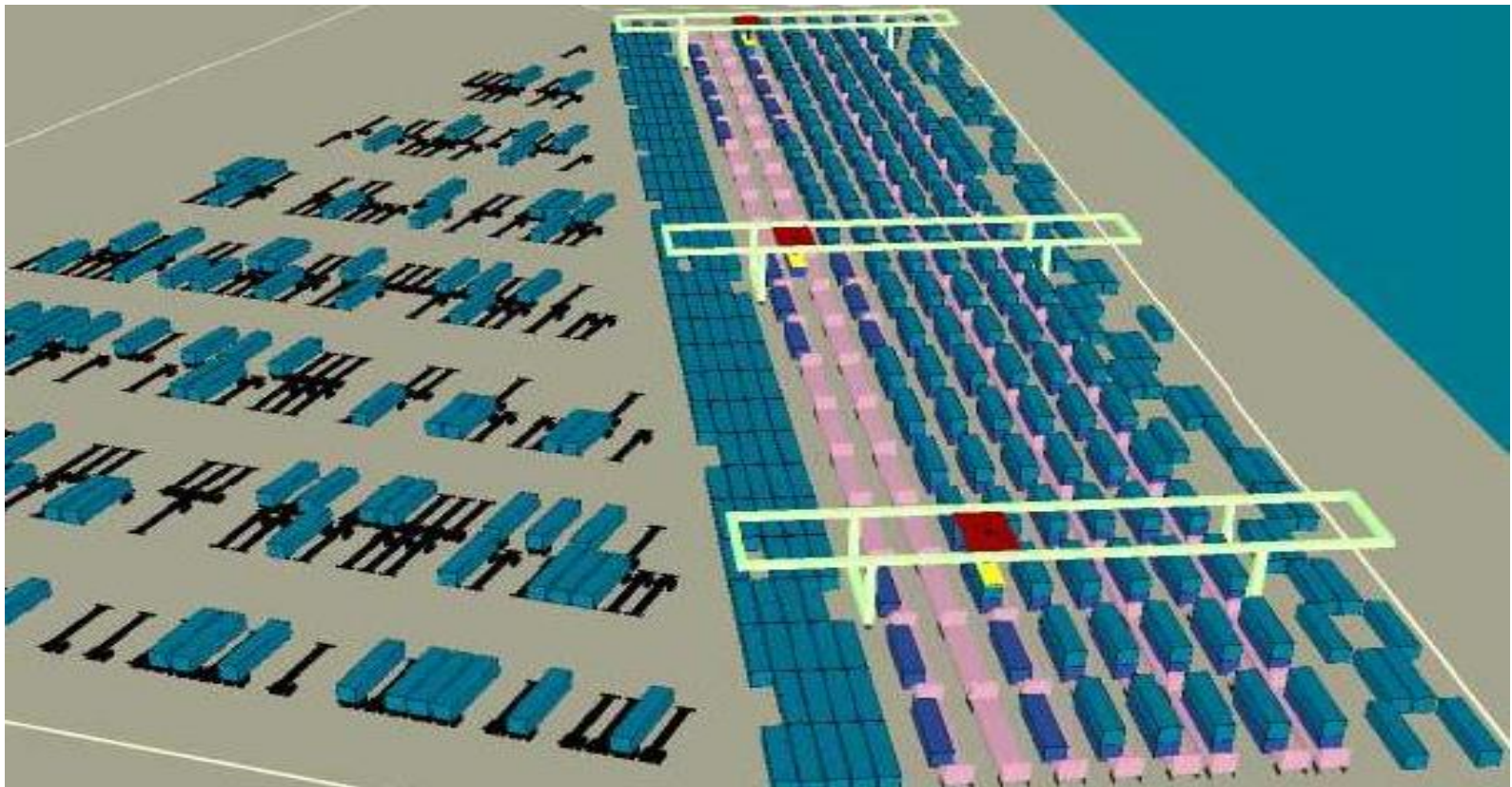
## Project Overview



# Greenville Yard Redevelopment Project

## Project Overview

### Intermodal Container Transfer Facility





# Greenville Yard Redevelopment Project

## Project Overview

### Cross-Harbor Car float System



# Greenville Yard Redevelopment Project

## Project Overview

### Barge Mooring Structures



# Greenville Yard Redevelopment Project

## Project Overview

### Project Area





# Greenville Yard Redevelopment Project

## Project Overview

### Project Cost/Schedule

Project Cost	\$10.2 Million
Construction	\$6.7M
Planning/engineering/support	
Staff Costs	\$0.7M
Consultant costs	\$0.6M
Contingency	\$1.2M
Agency Allocation	\$1.0M
(Insurance, Administration, Financial Expenses)	
Construction Duration: Q1 2016 – Q4 2017	



# Greenville Yard Redevelopment Project

## Project Overview

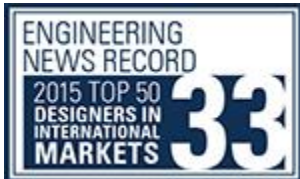
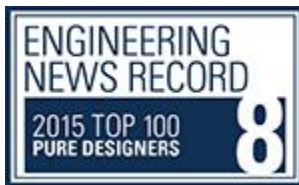
### Economic Impact

- > 50 job-years
- > \$3.7 million in wages
- > \$15 million in economic activity



# About Cardno

- > Industry-recognized firm with domestic and international operations



## GLOBAL

STAFF

8,200

OFFICES

300<sup>+</sup>

## AMERICAS

STAFF

4,700

OFFICES

200<sup>+</sup>

COUNTRIES CARDNO HAS COMPLETED PROJECTS

100<sup>+</sup>

# Thank you

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