

# NJTPA 2016 Local Concept Development Study Essex & Hudson Counties Bridge Street Bridge over the Passaic River



## Community Stakeholders Meeting



September 19, 2016



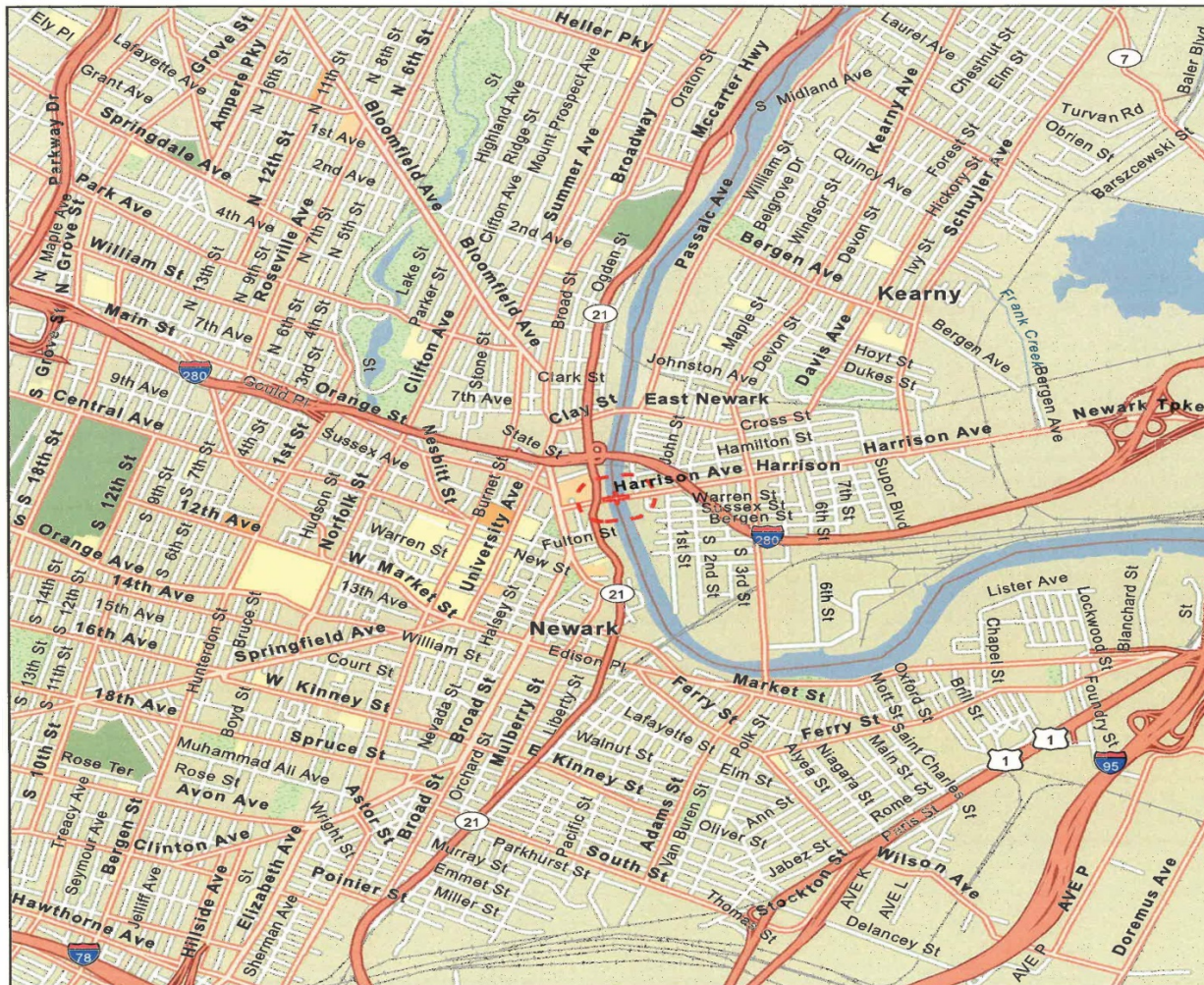




# Project Site Location Map

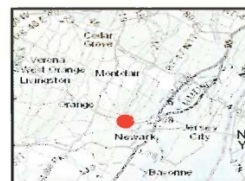


U.S. Department of Transportation  
**Federal Highway Administration**



## Legend

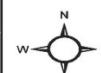
- Bridge Street Bridge Study Area
- Bridge Street Bridge Location



**Figure 1**  
**Site Location Map**

Bridge Street Bridge over Passaic River  
Town of Harrison, Hudson County  
and City of Newark  
Essex County, New Jersey

ASGECI Project # 3994



AMY S. GREENE  
ENVIRONMENTAL

# Project Overview and Background

- Bridge Spans the Passaic River connecting the City of Newark & the Town of Harrison
- Bridge Street Bridge was built in 1913.
- Bridge is in need of major rehabilitation or replacement.
- Routine maintenance can no longer address deficiencies.
- NJTPA/Essex & Hudson County Local Concept Development (LCD) Study initiated June 2016 utilizing federal funding
- Local Capital Project Delivery Process provides opportunity to advance this project with public input and agency collaboration.





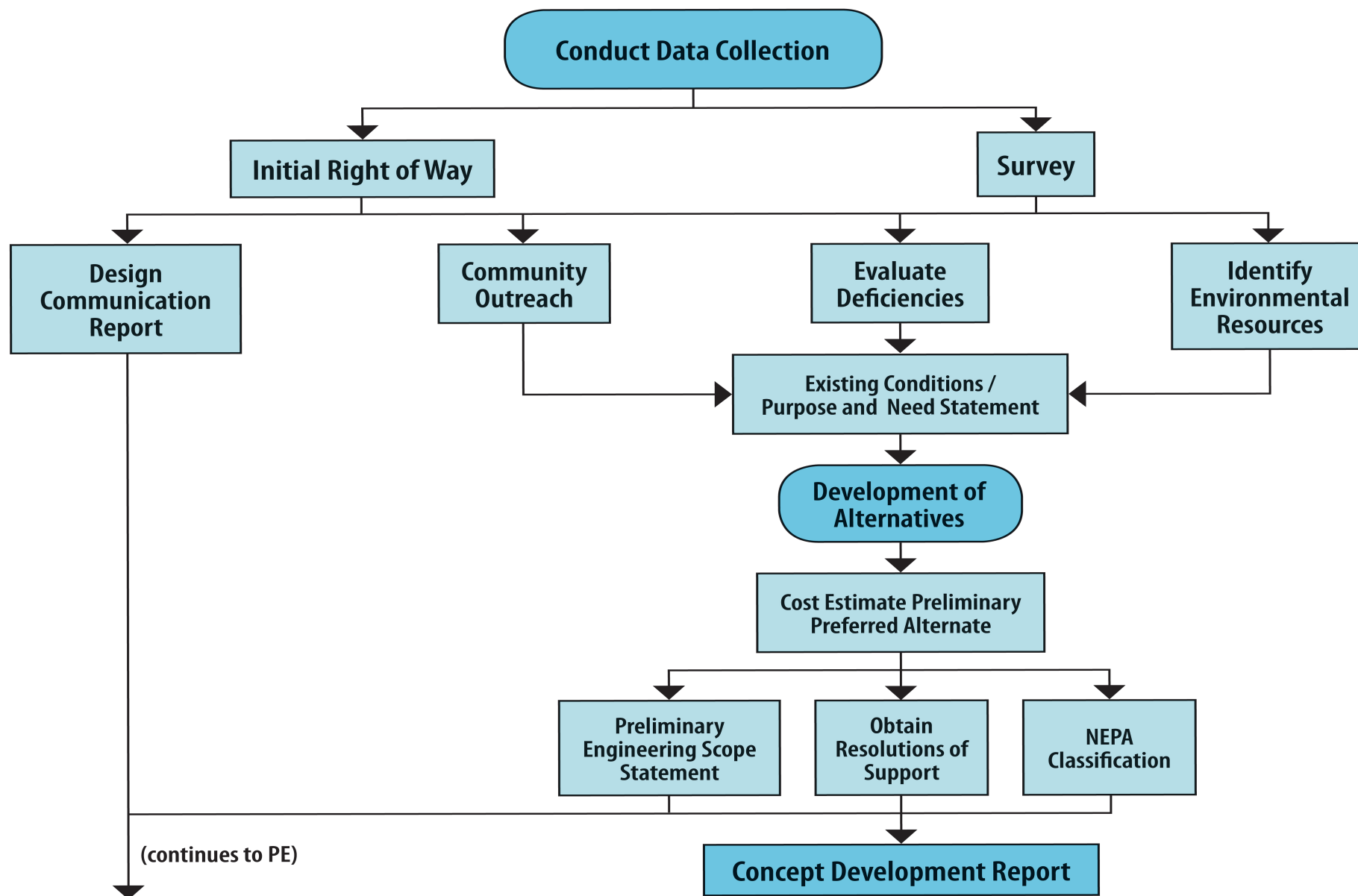
# Local Capital Project Delivery Process

Local Concept Development	Local Preliminary Engineering	Final Design/ Right of Way Acquisition	Construction
Data Collection	Approved Design Exception Report	Construction Contract Documents and PS&E package	Complete Construction
Purpose and Need Statement			
Concept Development & Alternatives Analyses	Cost Estimates (Final Design, ROW and Construction)	Environmental Reevaluations	Continue Public Outreach
Selection of Preliminary Preferred Alternative	Approved Environmental Document	Secure Environmental Permits	As-Builts
Environmental Screening Report & NEPA Classification	Preliminary Design	Acquisition of ROW	Update and Finalize Design Communications Report
Concept Development Report	Preliminary Engineering Report	Final Utility Relocation Schemes	Close-out Documentation
Initiate Public Outreach & Involvement	Continue Public Outreach & Involvement	Continue Public Outreach & Involvement	





# Local Concept Development Process



# Environmental Process

- Federally funded projects require NEPA (National Environmental Policy Act) documentation
- Identify environmental resources and concerns
- Avoid, minimize and or mitigate environmental impacts
- Coordination with permitting agencies
- Process includes public input and community development



## Bridge Street Bridge Data

- Year Built: 1913 (Major rehab. 1981, Next rehab. 2016)
- Bridge type: 3 spans- riveted Warren truss rim-bearing swing center span (244 ft), west and east approach riveted deck girder spans (65 ft)
- Overall Length: 374 feet
- Bridge Roadway Width: 39' – 0"
- No Shoulders on bridge
- 7 foot wide cantilevered sidewalk on both sides
- Bridge Navigational Vertical Clearance in closed position: 7 feet (at MHW); Horizontal Clearance = 80 feet

# Existing Bridge Condition

- Bridge in poor overall condition and is Structurally Deficient – (2014 Bridge Re-evaluation Report)
- Sufficiency Rating = 48.5 (out of 100)
- Superstructure in poor condition: Rating = 4 out of 10 (localized advanced material losses to steel truss members and to girders & floor beams in swing span)
- Bridge may soon need to be load posted due to advancing deterioration of steel support members



## Existing Bridge Condition (continued)

- Substructure in satisfactory condition – Rating = 6 out 10
- Bridge railings are substandard
- Bridge operating machinery in overall fair condition but has only one set of brakes and the span lock machinery has failed ( both conditions non-compliant with AASHTO)
- Bridge electrical system in overall poor condition with much equipment nearing the end of its service life
- Bridge can only be operated at creep speed which does not meet AASHTO standards (1 minute to both open & close)
- Needs approx. **\$ 7.5 M** in remedial repairs

# Existing Bridge Condition



Bridge East Approach Roadway Looking West – Note no shoulders



Bridge Opening Looking West at McCarter Highway & City of Newark



# Existing Bridge Condition



West approach to bridge looking east towards Town of Harrison



Bridge Opening Looking East at Town of Harrison



# Existing Bridge Condition



East Approach Roadway looking towards Passaic Avenue

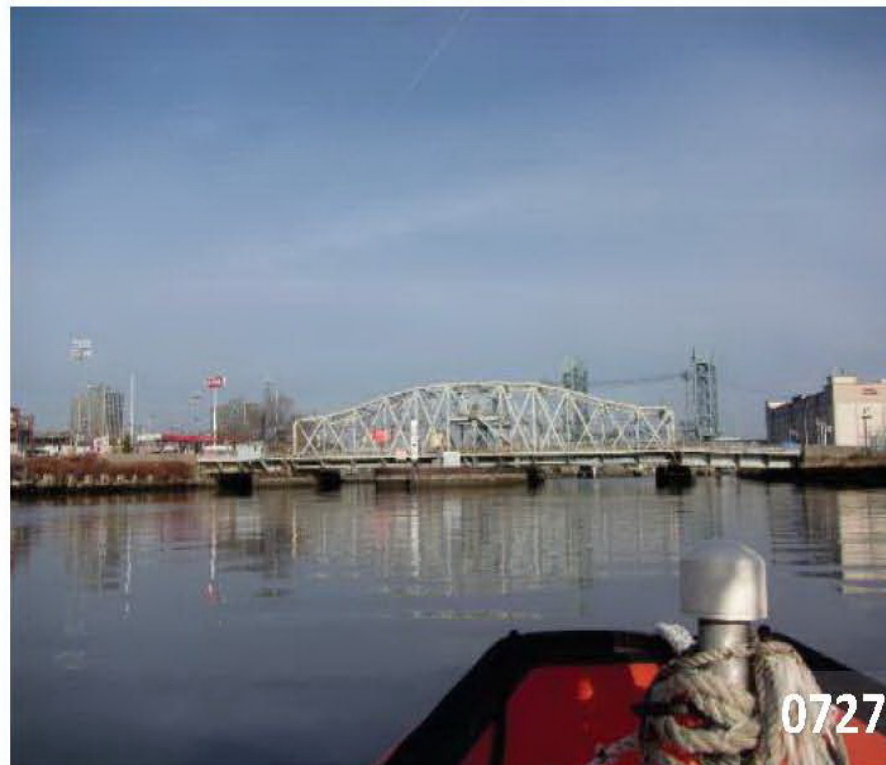


West Approach to Bridge looking towards McCarter Highway

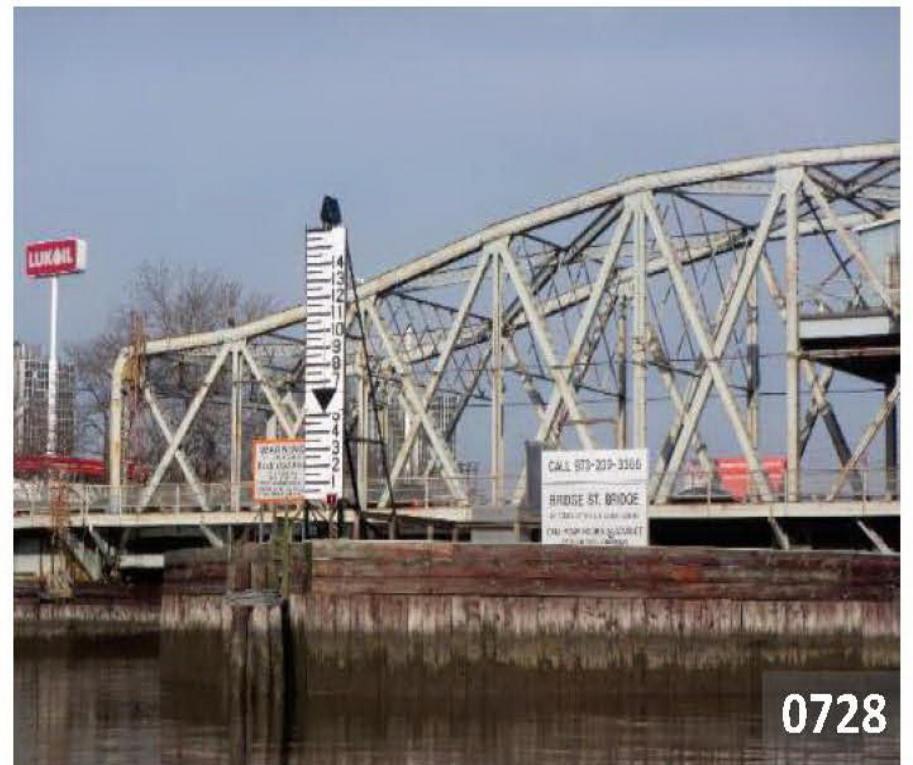


# Bridge Navigation Data

Name of Bridge	River Mile	Bridge Clearance		
		Horizontal (ft)	Vertical MHW <sup>1</sup> (ft)	Vertical MLW <sup>2</sup> (ft)
Bridge Street Bridge	5.6	80	7	12.5



South Elevation Looking North (Upstream)



4 Hour Advance Call Notice for Bridge Opening

# Passaic River Navigation



Looking Upstream (North) from Bridge Street Bridge



Looking downstream (South) from Bridge Street Bridge



# Existing Bridge Condition



Section loss of gusset plate in south truss at east swing



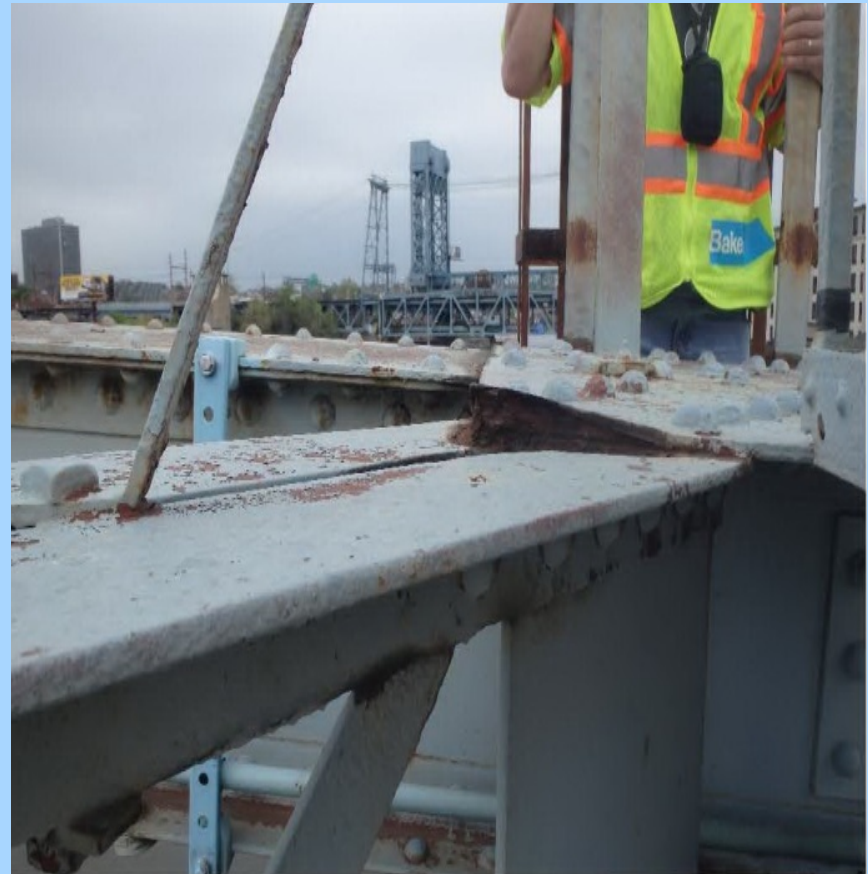
Severely corroded and deteriorated floor beam web and bottom flange in the south truss west swing span



# Existing Bridge Condition



Typical localized material loss and heavy pitting in north truss members



Pack rust between gusset plate and sway bracing at top side of north truss



# Existing Bridge Condition



Rusting of gusset plate in truss leg



Localized section loss and heavy pitting of floor beams and stringers in swing span



# Existing Bridge Condition



Section loss and heavily corroded floor beams in swing span



Localized section loss of floor beams and stringers in swing span



# Existing Bridge Condition



Steel deck grating in swing span



Substandard bridge railing (typical)

# Existing Bridge Condition



Drum girder and tapered rollers



Heavy corrosion and section loss of tapered roller support



# Additional Significant LCD Phase Elements

- Navigation Impact Report for Clay Street Bridge
- Entire Completion of Cultural Resources (Section 106) Process
- Value Engineering
- Risk Analysis Assessment



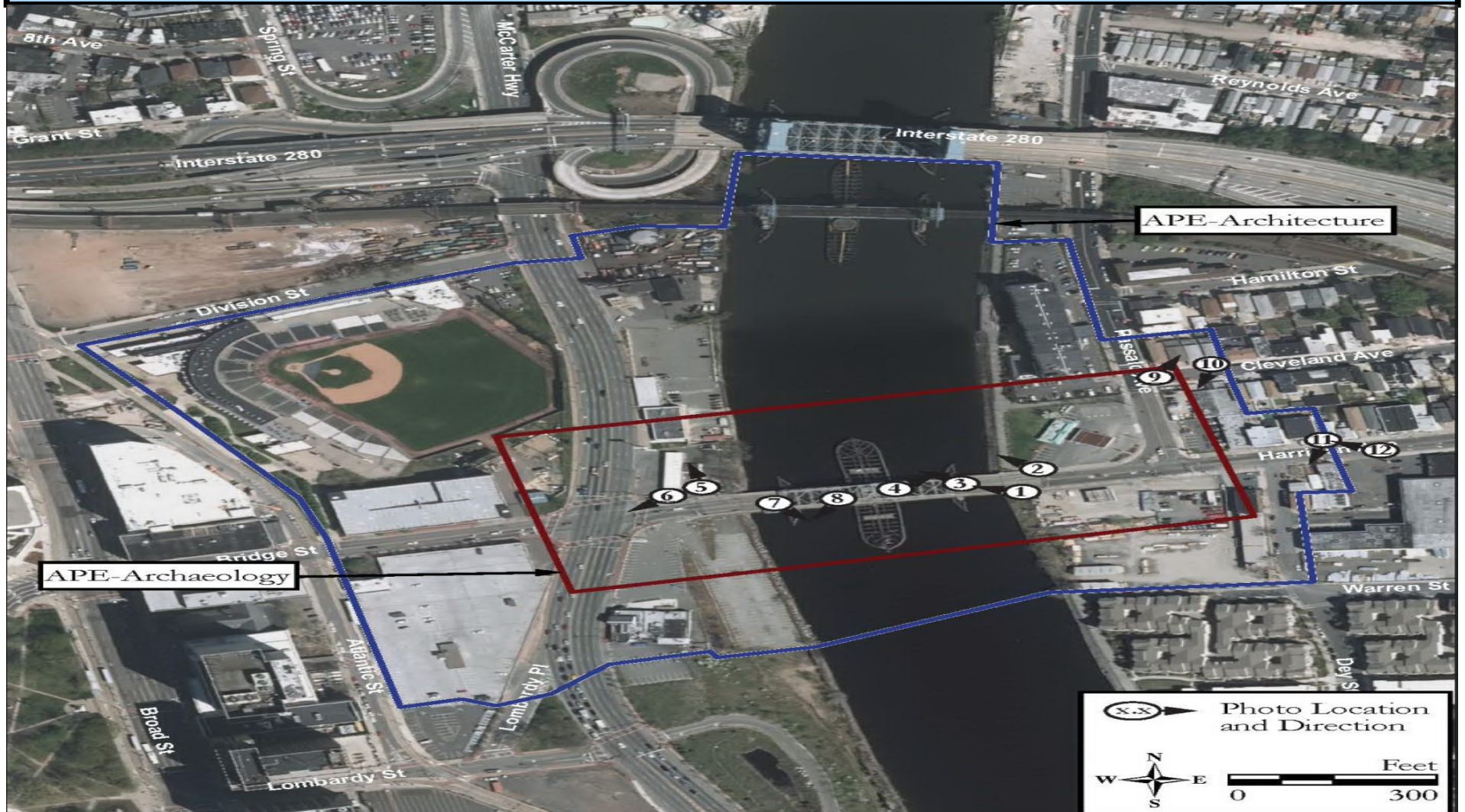


# Environmental Constraints





# Cultural Resources





# Project Status

- Work began June 2015
- Data Collection On-Going
  1. Project Mapping & Field Survey
  2. Environmental Screening
  3. Cultural Resources Study
  4. Verification of Utilities
  5. Obtain Bridge Inspection Reports, Traffic Data, Crash Data
  6. Conduct Traffic Counts
  7. Identify Existing Substandard Design Elements
  8. Local Officials, Stakeholders and Public Outreach & Input
  9. Project Fact Sheet
  10. Develop Project Purpose and Need



# Project Schedule

- 18 to 21 month completion schedule
- Major Milestones
  1. Project Purpose and Need – Fall 2016
  2. Development of Conceptual Alternatives – Winter 2017
  3. Determine Preliminary Preferred Alternative – Fall 2017
  4. Submit Draft Concept Development Report – Fall 2017
  5. Completion of Concept Development Phase – Winter 2018



# Community Involvement

- Community Involvement Schedule
  1. Local Officials Briefings: Project Purpose & Need - July 26, 2016 (Town of Harrison); September 12, 2016, City of Newark
  2. Stakeholders Meeting No. 1: Purpose & Need – Sept. 19, 2016
  3. Public Information Center Meetings (No. 1): Project Purpose & Need – October, 2016 (Town of Harrison & City of Newark)
  4. Stakeholders Meeting No. 2: Input on Alternatives – Winter/Spring 2017
  5. Local Officials Briefings (No. 2): Input on Alternatives & Determine Preliminary Preferred Alternative – Spring/Summer 2017



## Community Involvement (continued)

6. Public Information Center Meetings (No. 2): Input on Alternatives & Determine Preliminary Preferred Alternative – Spring/Summer 2017 (Town of Harrison & City of Newark)
7. Local Officials Briefings (No. 3): Obtain Resolution of Support for Preliminary Preferred Alternative (Town of Harrison & City of Newark)



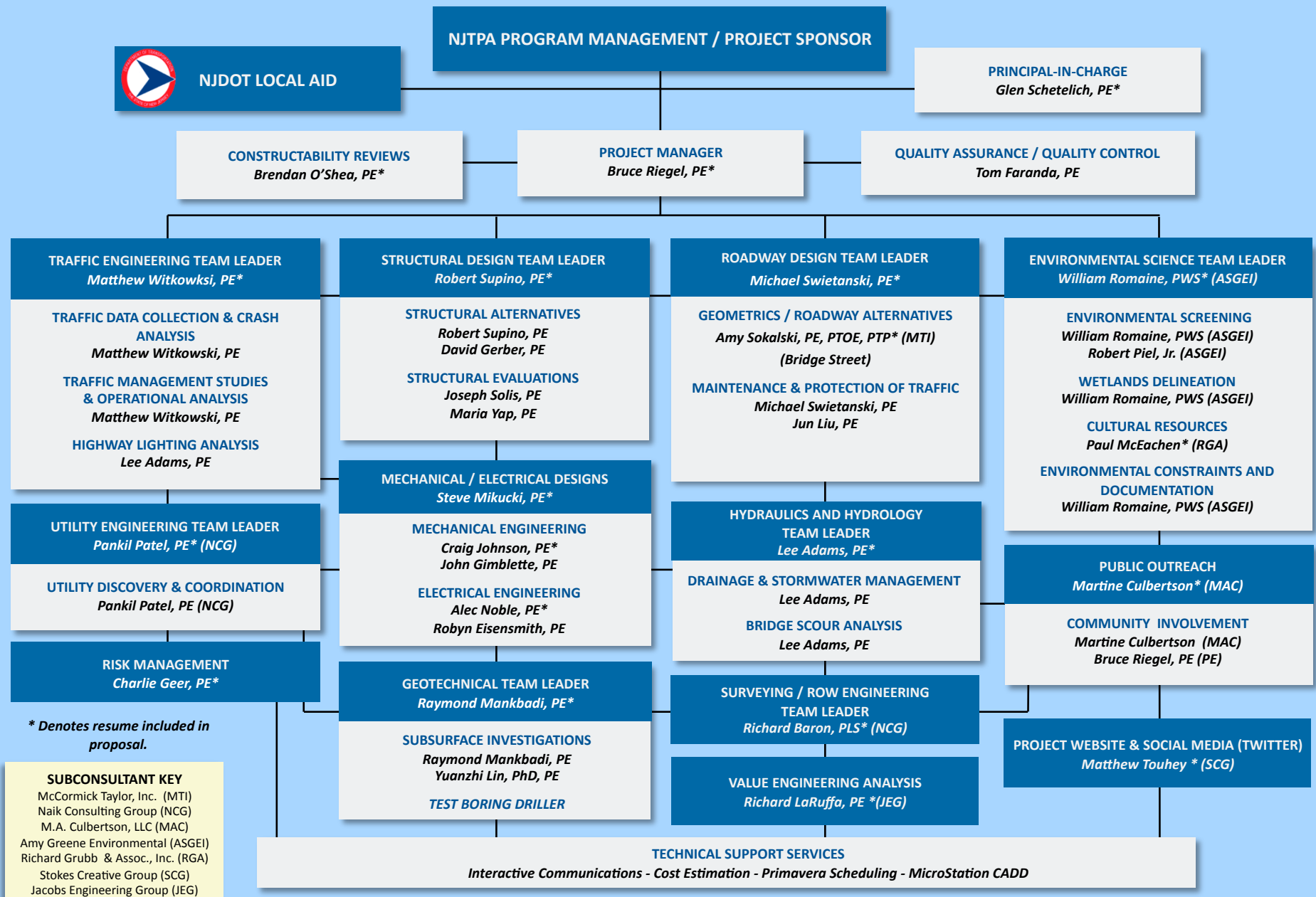
# Local Officials Briefing (1/29/14)

## Comments from Local Officials Briefings No. 1 (Town of Harrison & City of Newark)

- Bridge Street & Clay Street Bridges cannot be closed at the same time – severe traffic impacts
- Need to maintain and improve pedestrian and bicycle access and connectivity
- Need wider bridge to for the addition of outside shoulders



**FY 2016 BERGEN COUNTY AND ESSEX COUNTY  
LOCAL CONCEPT DEVELOPMENT STUDIES  
ORGANIZATION CHART**





# Project Contact Information

- Luis Rodriguez, Essex County Project Manager,  
[lrodriguez@essexcounty.nj.org](mailto:lrodriguez@essexcounty.nj.org), (973) 226-8500
- Joe Glembocki, Hudson County Project Manager,  
[jglembocki@hcnj.us](mailto:jglembocki@hcnj.us), (201) 369-4340
- Clay Street Bridge Project Web Site address:  
- **[www.bridgestreetbridge.com](http://www.bridgestreetbridge.com)**

The Power Point Presentation will be posted on the Project Web Site

- Social Media (Twitter)
- Written comments towards Project Purpose & Need will be received until Friday, October 21, 2016



# Questions

