

# Cape May Roosevelt Boulevard (CR 623) Bridge Deck Rehabilitation

July 18, 2016



**GPI** Greenman-Pedersen, Inc.

Engineering and Construction Services

# Roosevelt Boulevard (CR 623) Bridge



**Built in 1964**

**31 Spans, 30 concrete spans,  
1 steel span over the  
navigation channel.**

**Carries two 14-foot lanes,  
one each direction**

**Increasing deterioration on  
the deck.**

**After 50+ years without major  
repairs, due for major deck  
rehabilitation**

**Project will provide 20-25 year  
extension to deck life**



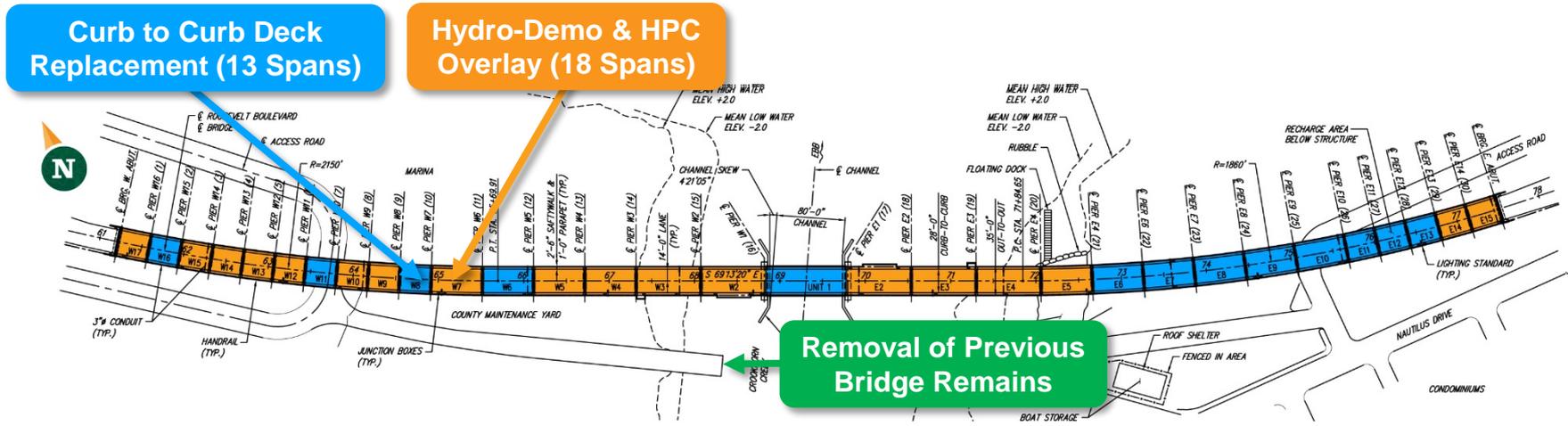
# South Elevation



# Ocean City Approach



# Project Scope (Major items)



- Full Depth Deck Replacement - 13 Spans
- Partial Depth Deck Replacement - 18 Spans
- Removal of Former Timber Bridge Remains
- Sidewalk, parapet, railing repairs



# Partial Depth Deck Replacement – Hydro-demolition



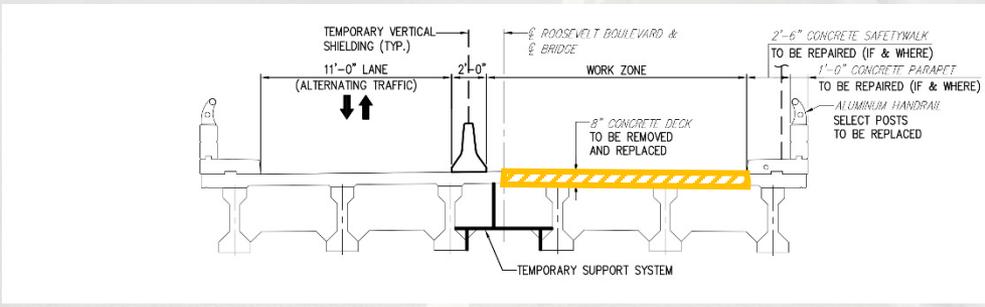
- Removal technique which uses high-pressure water jets to remove concrete.
- Remaining concrete left in better condition than conventional impact removal (jack hammers, etc.)
- Noise is comparable to impact removal (jack hammers). Full depth removal will use impact methods so no significant increase/decrease in noise.
- Vertical shielding to reduce dust/debris in work area.



# Construction Staging



- Bridge will remain open to traffic at all times
- Both lanes open during summer months (approx Memorial Day - Columbus Day).
- During construction:
  - Single lane, alternating traffic
  - 11-foot lanes with concrete barrier
  - Half bridge staged at a time (4 stages)
  - During Stages 1A and 2A (East side) access ramp detour



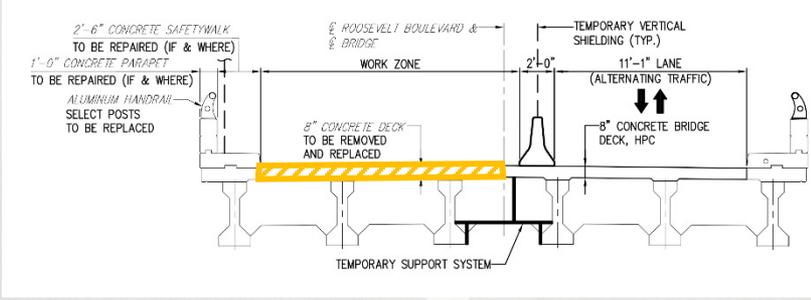
**Stage 1A**



# Construction Staging



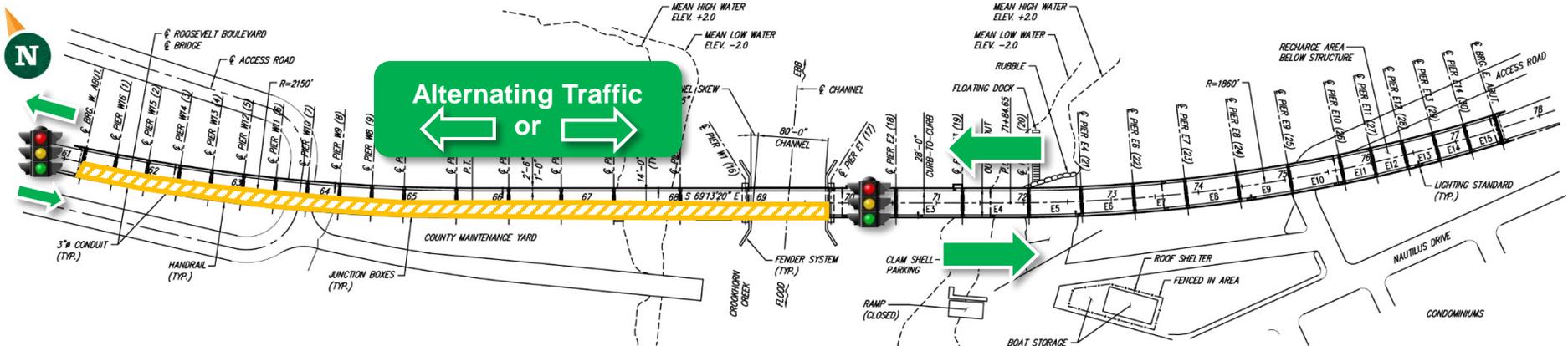
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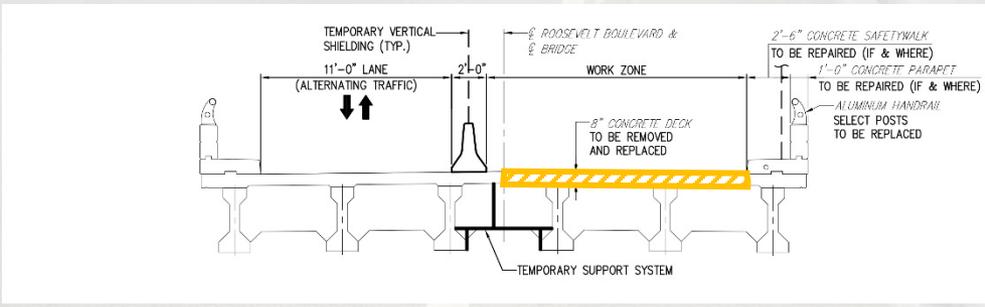
**Stage 2A**



# Construction Staging



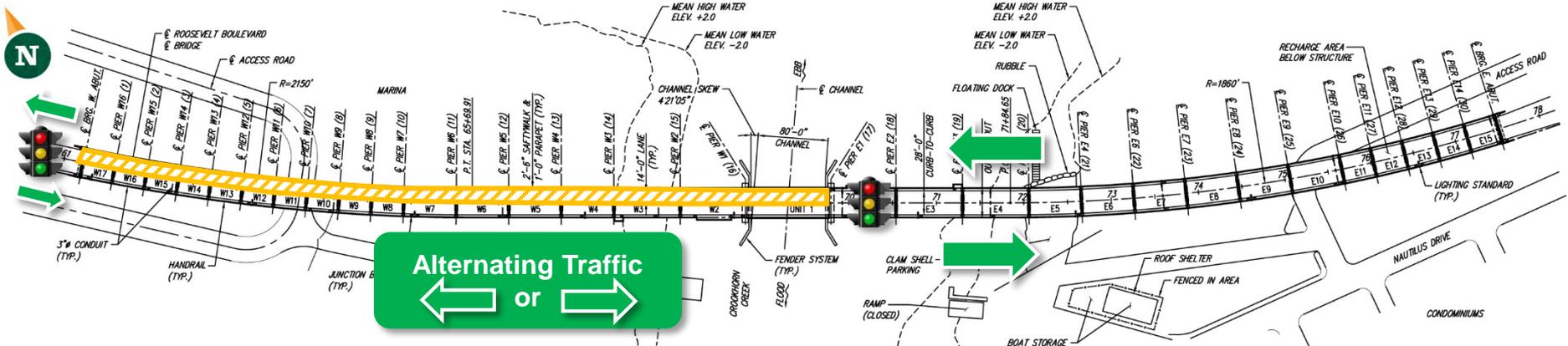
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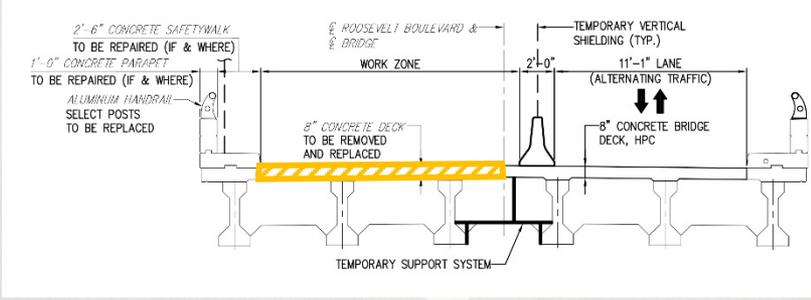
**Stage 1B**



# Construction Staging



- Bridge will remain open to traffic at all times
- Both lanes open during summer months (approx Memorial Day - Columbus Day).
- During construction:
  - Single lane, alternating traffic
  - 11-foot lanes with concrete barrier
  - Half bridge staged at a time (4 stages)
  - During Stages 1A and 2A (East side) access ramp detour



**Stage 2B**



# Traffic Control & Staging



Westbound Ramp Access Detour Map



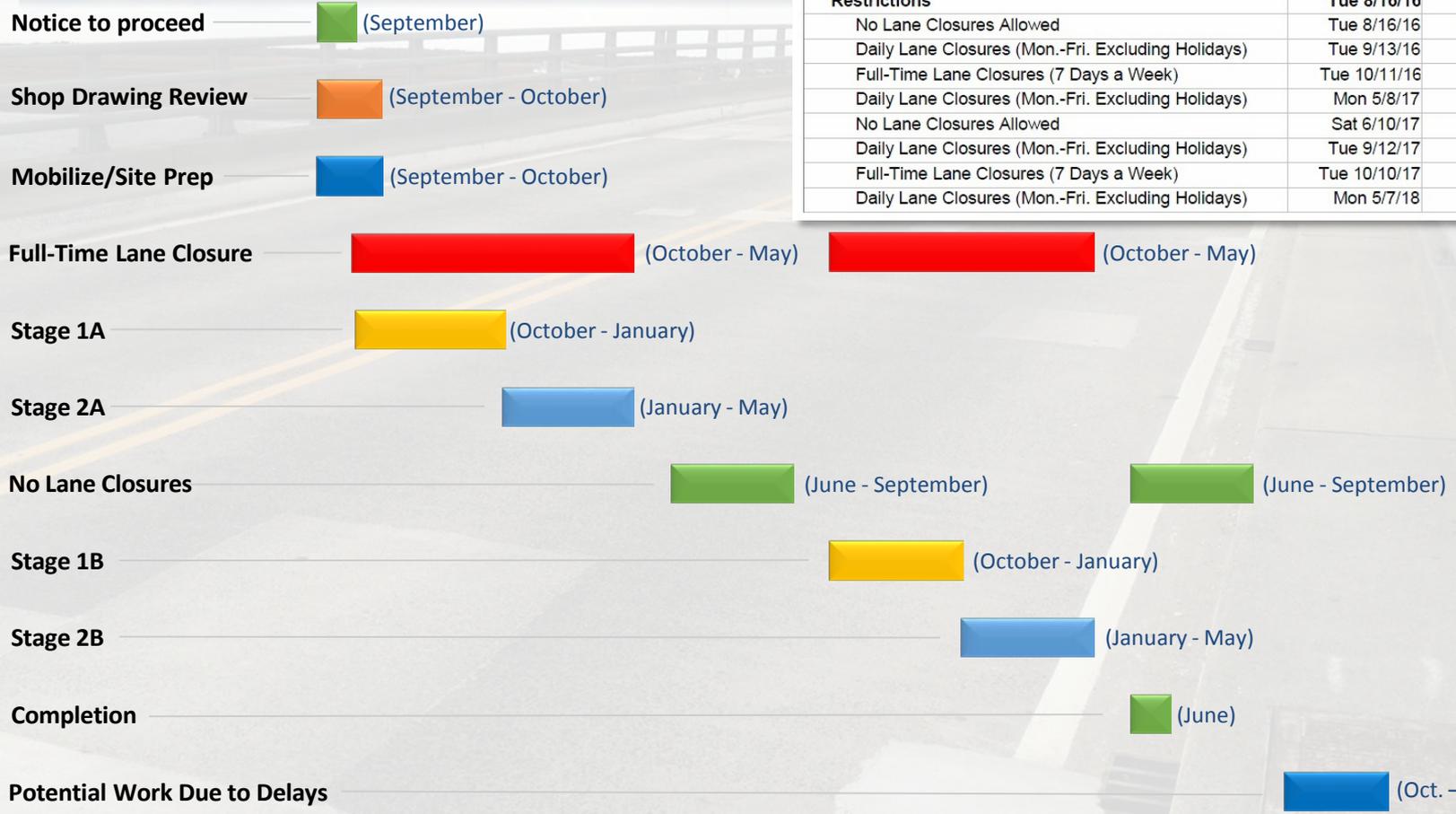
# Project Schedule

2016

2017

2018

J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D



Restrictions	Tue 8/16/16	Fri 6/8/18
No Lane Closures Allowed	Tue 8/16/16	Mon 9/12/16
Daily Lane Closures (Mon.-Fri. Excluding Holidays)	Tue 9/13/16	Fri 10/7/16
Full-Time Lane Closures (7 Days a Week)	Tue 10/11/16	Fri 5/5/17
Daily Lane Closures (Mon.-Fri. Excluding Holidays)	Mon 5/8/17	Fri 6/9/17
No Lane Closures Allowed	Sat 6/10/17	Mon 9/11/17
Daily Lane Closures (Mon.-Fri. Excluding Holidays)	Tue 9/12/17	Fri 10/6/17
Full-Time Lane Closures (7 Days a Week)	Tue 10/10/17	Fri 5/4/18
Daily Lane Closures (Mon.-Fri. Excluding Holidays)	Mon 5/7/18	Fri 6/8/18



# Thank you!

## Questions?



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