

Cape May Roosevelt Boulevard (CR 623) Bridge Deck Rehabilitation

March 23, 2016



GPI Greenman-Pedersen, Inc.
Engineering and Construction Services

Project Information

- Constructed in 1964
- 31 spans. Total length of 1,628 feet
 - Single steel through-girder main span
 - Flanked by prestressed concrete girder spans
- 14-foot wide lanes in each direction
- Basically unchanged from original construction
- Regular deck repairs with increasing frequency
 - Recent rehab completed in 2005-2006 and 2009
 - Significant deck spall repairs and sealing



Scope of Rehabilitation

- Deck Rehabilitation Program Study (Dec. 2012)
- Curb to curb deck replacement in 13 spans
- Hydro-demo and HPC overlay in remaining spans
 - Remove top 3" +/- and replace with new concrete
- Misc. repairs
 - Steel main span strengthening
 - Sidewalk/parapet repairs
 - Railing system repairs
 - Removal of previous bridge remains



Roosevelt Boulevard (CR 623) Bridge



Aerial



Roosevelt Boulevard (CR 623) Bridge



South Elevation



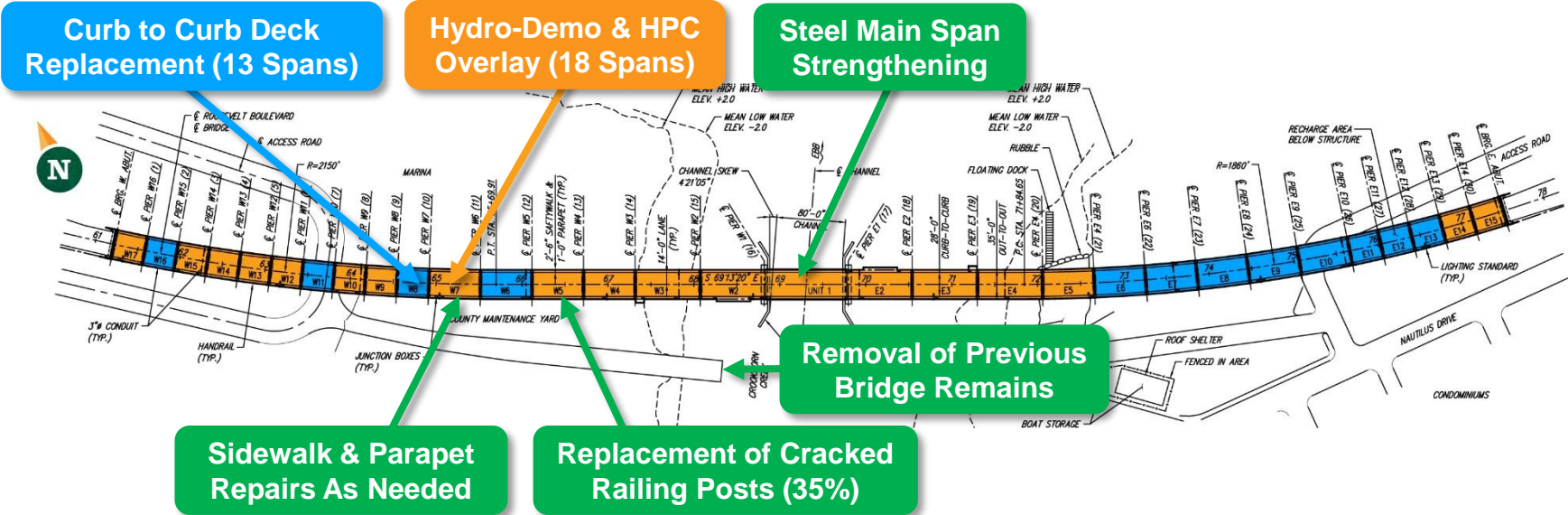
Roosevelt Boulevard (CR 623) Bridge



Ocean City Approach



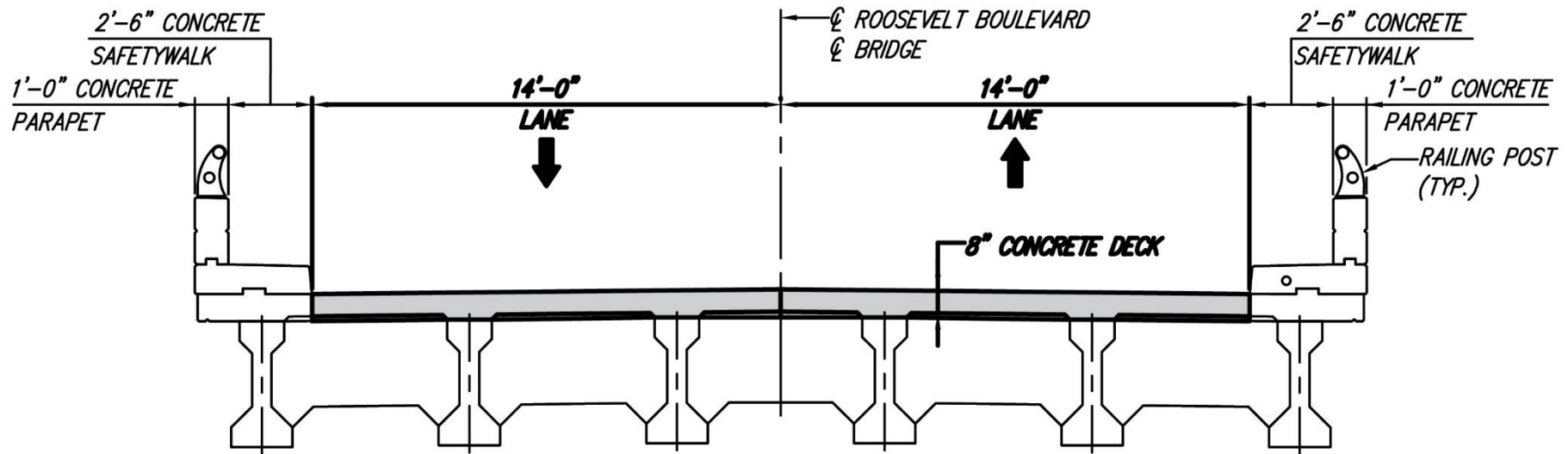
Repair Plan



Hydrodemo



Staging – Deck Replacement



PROPOSED TYPICAL SECTION

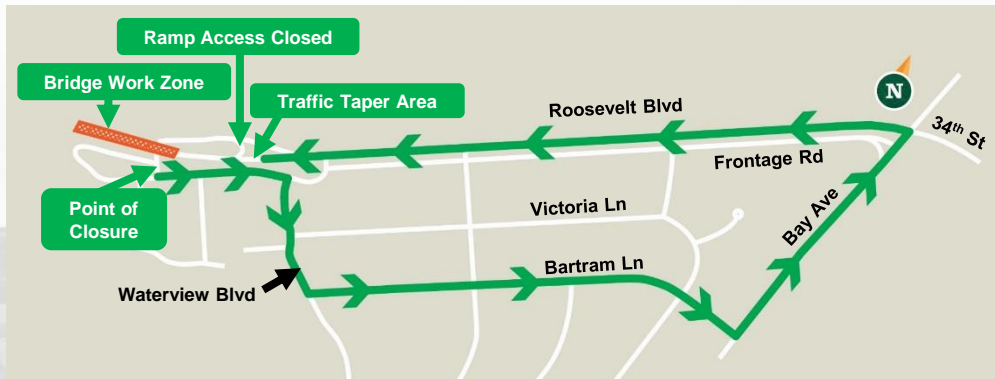


Staging

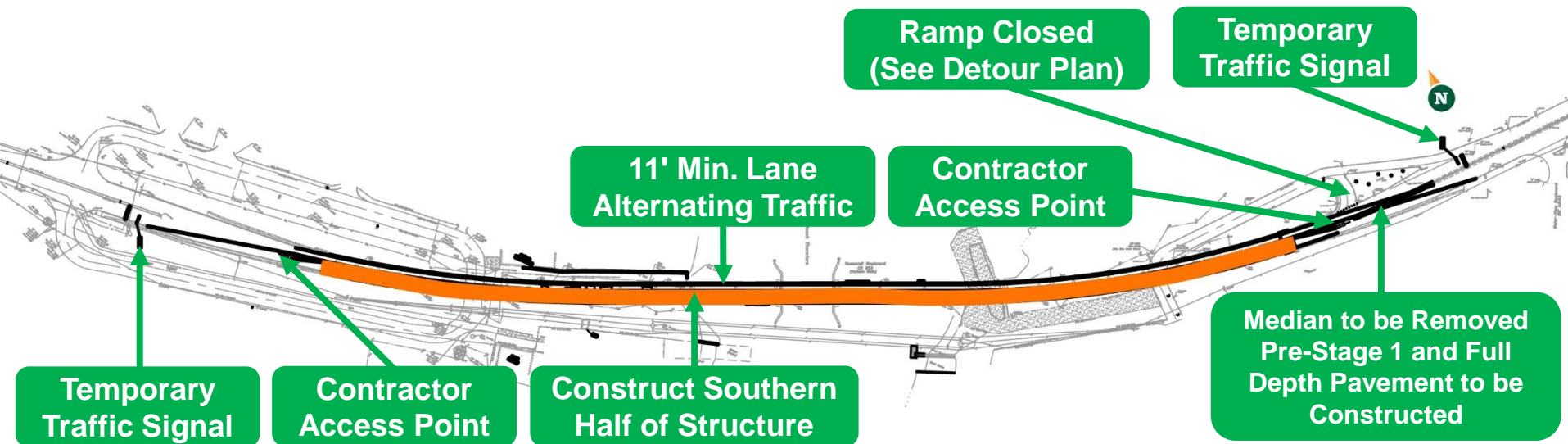
- Bridge open to traffic at all times
 - Single lane open during construction
 - No peak season lane closings
- Long term single lane closing using temporary traffic signals
 - Alternating traffic
 - 11-foot lanes minimum
 - Concrete construction barrier required
- Alternatives
 - Half the length of the bridge at a time (2 stages)
 - Full length of the bridge, EB followed by WB (2 stages)



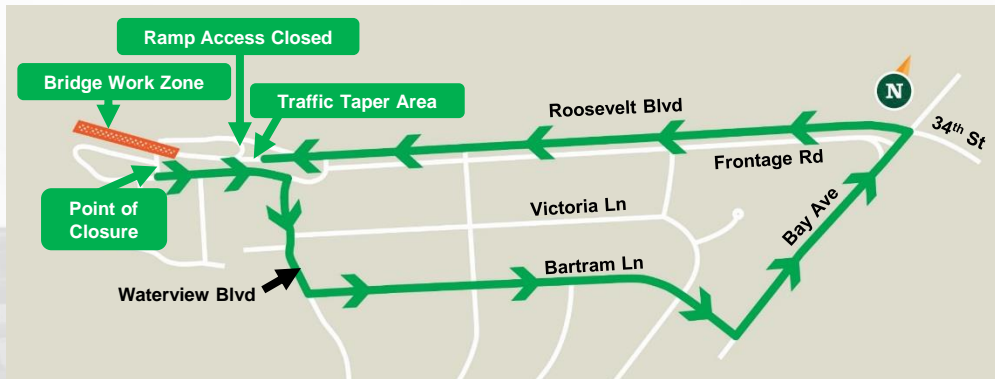
Traffic Control & Staging – Stage 1



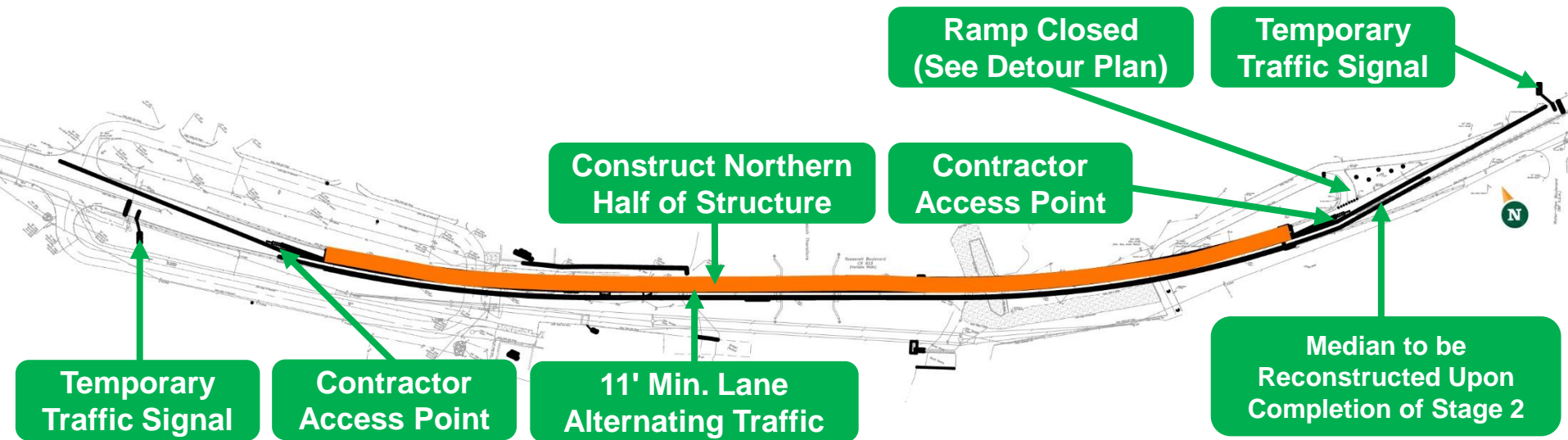
Westbound Ramp Access Detour Map



Traffic Control & Staging – Stage 2



Westbound Ramp Access Detour Map



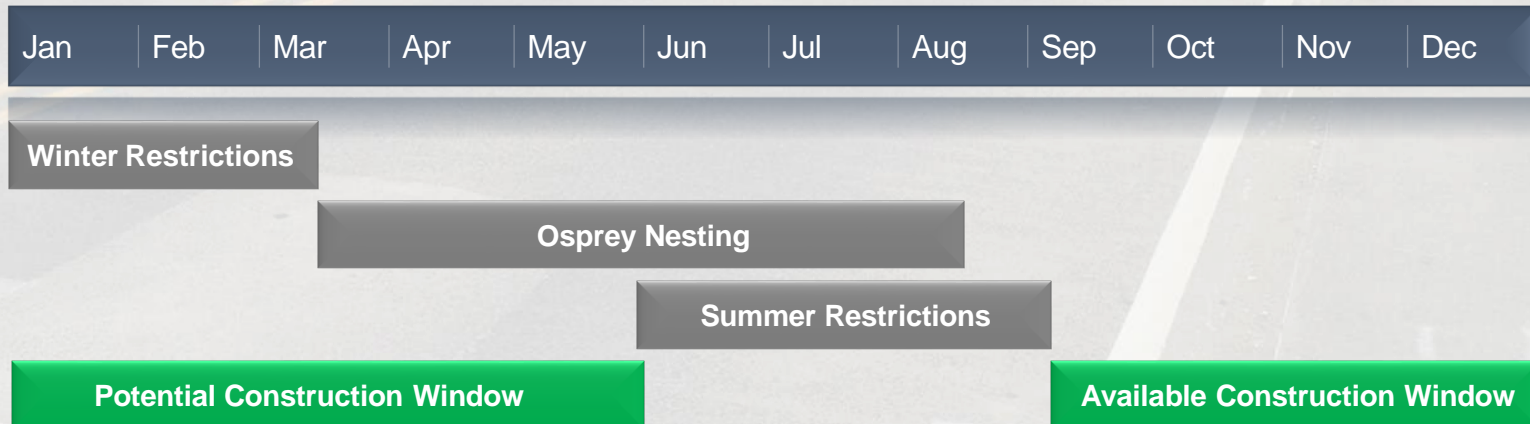
Staging

- Concrete construction barrier layout
 - Full length or partial length (lane closure full length)
- Emergency Pull Off Areas
- Contractor Access at Approaches
 - Half the length of the bridge at a time (2 stages)
 - Full length of the bridge, EB followed by WB (2 stages)

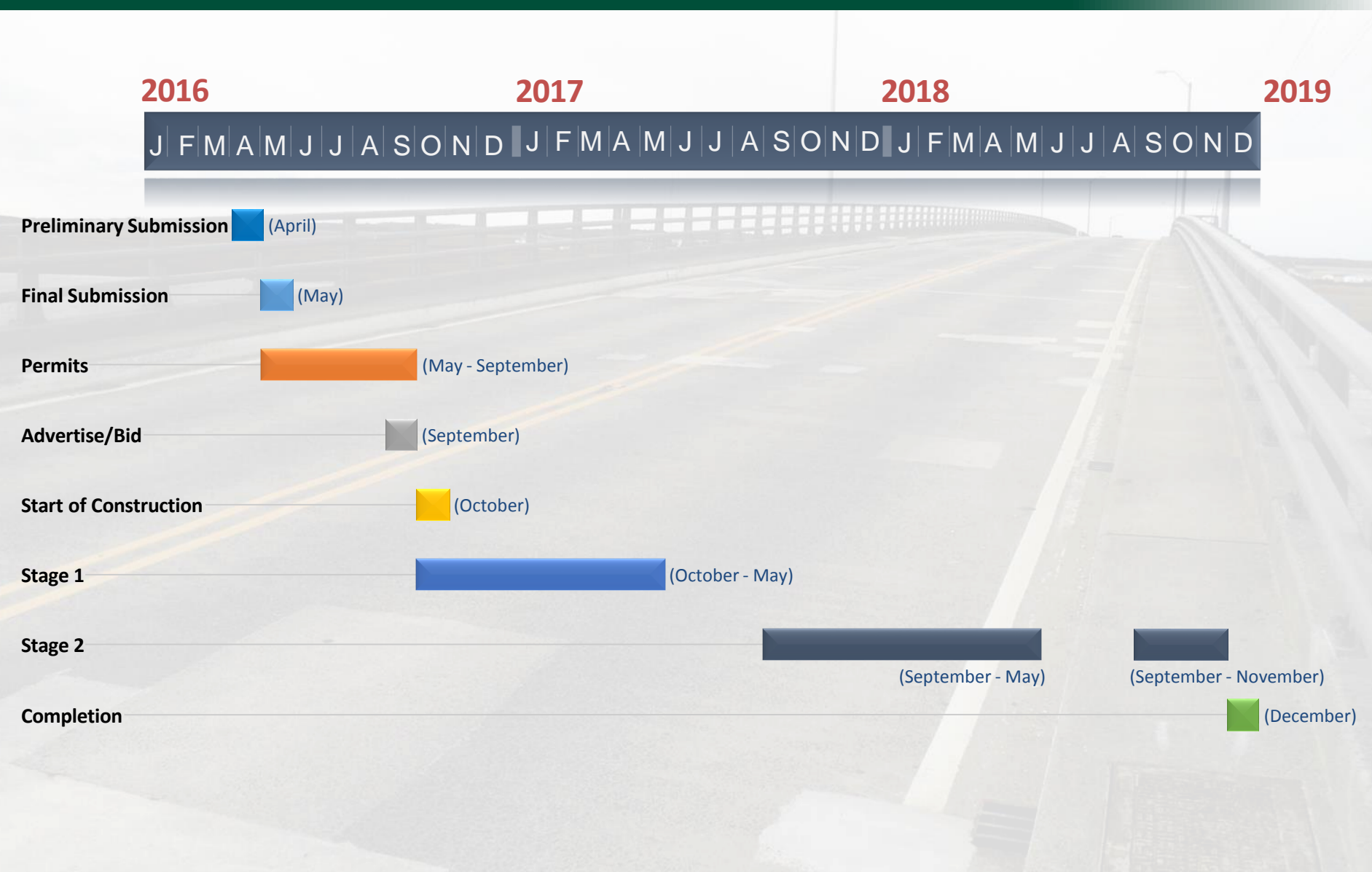


Preliminary Schedule

- Restrictions:
 - Summer restrictions (Memorial Day to Labor Day minimum)
 - Winter concrete curing complications (January - March)
 - Osprey Nesting Restrictions (March 15 to August 15)
- Available construction window: 4 to 9 months
- Timeline (2-3 cycles)



Preliminary Schedule



Thank you!

Questions?



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