



Yarmouth
Ellis C. Snodgrass Memorial Bridge

Julie Brask, P.E., Project Manager

Work Identification Number (WIN):
028304.00

YARMOUTH,
ELLIS C. SNODGRASS MEMORIAL BRIDGE (#5635)
BRIDGE IMPROVEMENT



PROJECT OVERVIEW

This project will improve the Ellis C. Snodgrass Bridge to Cousins Island in the town of Yarmouth, Maine

- The bridge carries Cousins Street (Gilman Road) over Casco Bay

Scope Alternatives

- Rehabilitation
- Full Replacement

ELLIS C. SNODGRASS MEMORIAL BRIDGE

- Built in 1955 - Originally constructed to facilitate construction of the power plant
- 33 Spans (~60 feet each) for a total bridge length of 2,000 feet.
- Spans a 50-foot-wide navigable channel of Casco Bay.





EXISTING BRIDGE CONDITION



EXISTING BRIDGE CONDITION



NSW 049

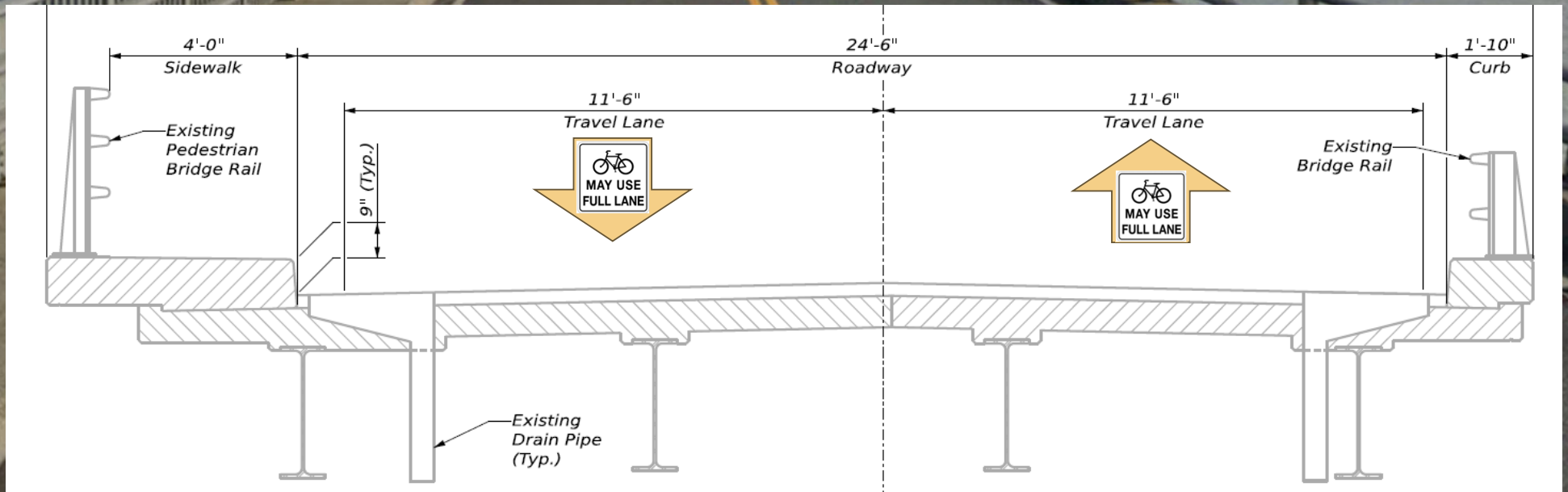


NRE 049

EXISTING BRIDGE CONDITION



EXISTING BRIDGE CONDITION



EXISTING BRIDGE SECTION



REHABILITATION ALTERNATIVE

Rehabilitation may involve the following to improve the existing condition of the bridge:

- Replacement of concrete deck and sidewalk.
- Replacement of deck joints and bearings.
- Rehabilitation of the concrete pier caps.
- Reconstruction of the concrete pile jackets.
- Installation of new cathodic protection system.

Pros:

- No permanent impacts to the waterway.
- Lower cost than replacing the bridge entirely.

Cons:

- Longer duration of traffic impacts.
- No improvement to sidewalk width or roadway width.
- Design Life limited by the existing in-water piers.

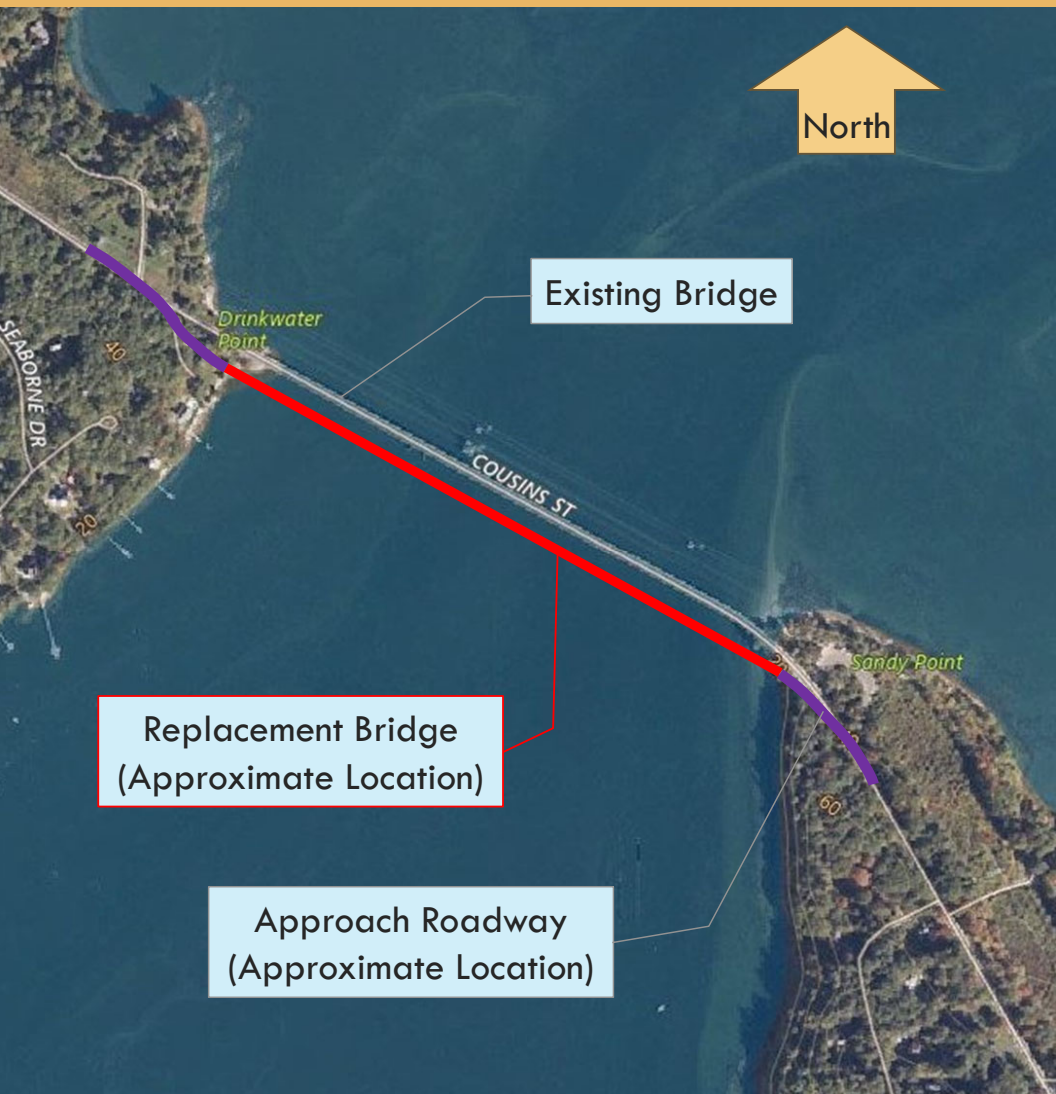
REHABILITATION ALTERNATIVE- MAINTENANCE OF TRAFFIC

Phased Bridge Construction:

- Traffic on Cousins Street (Gilman Road) will utilize Alternating One-way Traffic with temporary signals or flaggers.
- Traffic will be reduced to one lane through the work zone. The bridge will be constructed in two halves.
- Workzone length will be dependent on the signal timing (i.e., wait time).
- Due to length of this bridge, traffic impacts may last 3+ years.



Alternating One-Way Traffic



REPLACEMENT ALTERNATIVE

Full Bridge Replacement may involve the following:

- Build new bridge adjacent to the existing bridge.
- Reduce the number of piers in the water.
- Use corrosion resistant structural components.

Pros:

- Longer design life.
- Least amount of impact to traffic.
- Opportunity to improve pedestrian and bicycle facilities on bridge.

Cons:

- In-water construction.
- More expensive than Rehabilitation.

REPLACEMENT ALTERNATIVE- MAINTENANCE OF TRAFFIC

Single Phase Bridge Construction:

- Traffic on Cousins Street (Gilman Road) will continue using the existing bridge for most of the construction duration.

Phased Roadway Approach Construction:

- Impacts to traffic will be limited for tie-ins of the approach roadway to the existing roadway.
- Traffic on Cousins Street (Gilman Road) will utilize Alternating One-way Traffic with temporary signals or flaggers.
- Traffic impacts anticipated to last less than one construction season.



Traffic Maintained on Existing Bridge



ANTICIPATED PROJECT SCHEDULE

Preliminary Design

- 2025-2026

Final Design

- 2027-2028

Advertise for Construction

- 2028

Construction

- 2028-2032
- May take 3-5 years to complete.



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or

Please leave a comment at link below

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CONTACT INFORMATION