

### WIN 028406.00 SPURWINK BRIDGE – CAPE ELIZABETH/SCARBOROUGH, ME BRIDGE #2796



### **Trevor Gleason** *MaineDOT Project Manager*

### Kristopher F. Reed, M.S., E.I. (ME) MaineDOT Designer

Work Identification Number (WIN): 28406.00

# **PROJECT LOCATION**

## CAPE ELIZABETH/ SCARBOROUGH, MAINE

Spurwink **River Fishing** Wharf

Rachel Carson National Wildlife Refuge





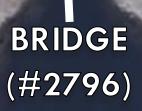




Spurwink RD/ Route 77

NORTH

**To Cape Elizabeth** 



# **PROJECT GOALS**

Improve Existing Conditions:

- Replace Bridge Surface Frequent surface cracking present.
- Repair Bridge Drains Rusting/erosion damage. lacksquare
- Repair Bridge Foundation Foundation has erosion damage. ightarrow

### Minimize Impacts to:

- Traveling vehicles and pedestrians (Route 77 to Crescent Beach State Park)
- Environmental resources (Rachel Carson National Wildlife Refuge) ightarrow

Identify a Cost-Effective Solution



# EXISTING CONDITIONS – ROADWAY INFORMATION

### Traffic Data:

- Average Annual Daily Traffic (2022): 4800 vehicles per day
- Posted Speed Limit: 35 MPH



#### West Approach View



# EXISTING CONDITIONS – BRIDGE SURFACE CRACKS

Bridge Condition – Frequent surface cracking present.



East View



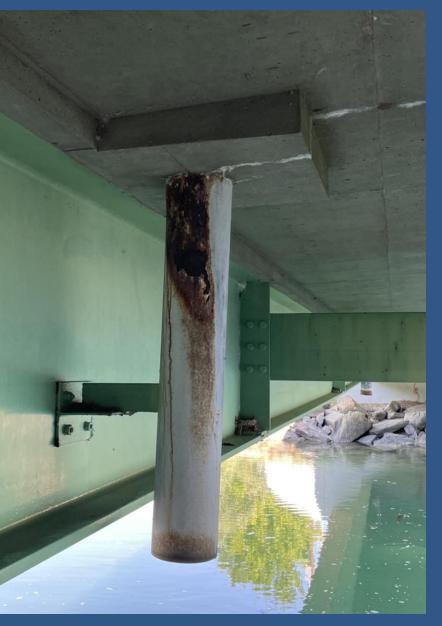
## EXISTING CONDITIONS – DRAIN DAMAGE

Bridge Condition – Drains rust/erosion damage.



Drain Gate (Erosion Present)





Drain Downspout (Rust Present)

# EXISTING CONDITIONS – FOUNDATION DAMAGE

Bridge Foundation Condition – Erosion damage.



North Foundation



Aerial Bridge View





#### South Foundation

## PROPOSED WORK

## New Pavement/Drain Repair



Plug Drains

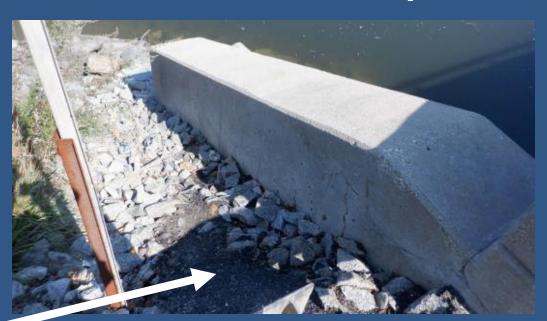
> Filled with Stone (Riprap)

New West Drain

East View



### Foundation Repair



#### North Foundation



South Foundation

# MAINTENANCE OF TRAFFIC:

### Staged Construction

• Recommended and Proposed Alternative





Jordan Point

# **MAINTENANCE OF TRAFFIC:**

### Staged Construction:

- Temporarily close one road section at a time during construction. •
- Maintain alternating one-way traffic using temporary traffic signals. •



#### Work Window: Early Fall

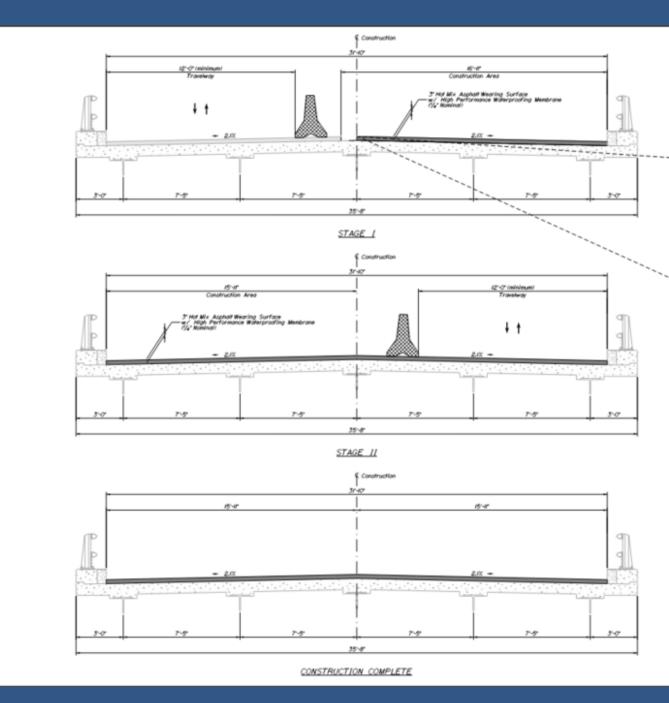
- Reduces seasonal traffic from Crescent Beach State Park. ullet
- Avoids local endangered species nesting season.



# MAINTENANCE OF TRAFFIC PLANS:

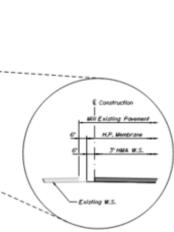
#### Staged Construction:

• Example from a staged construction wearing surface replacement project in Brunswick, ME.









## **NEXT STEPS**

### **Completion preliminary design**

- Conceptualize potential design solutions
- Preliminary public meeting
- Develop concept designs considering public input
- Evaluate the merit of each concept design
- Develop preliminary design recommendations
- Formal public hearing 🔶 WE ARE HERE
- Completion of final design
- PS&E process to complete project development
- Advertise Project
- Start construction

