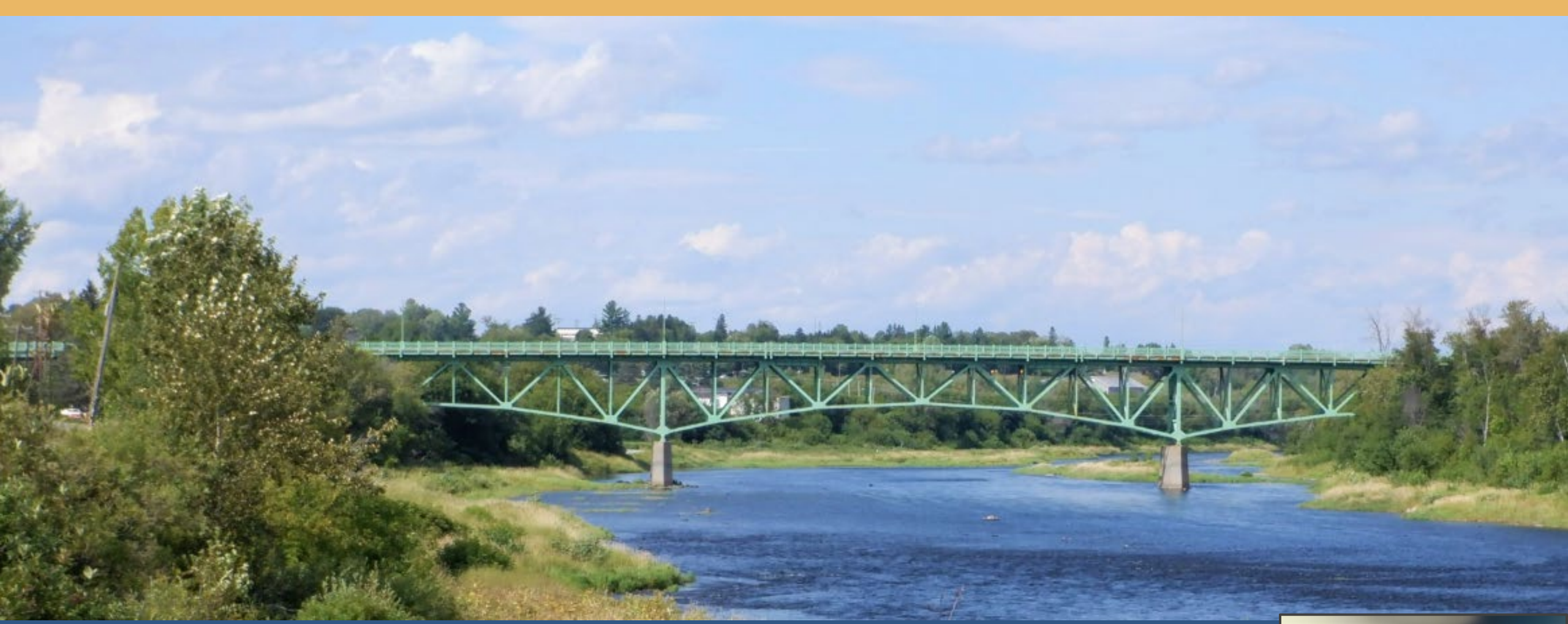

WIN 27278.00, Caribou
AROOSTOOK RIVER BRIDGE

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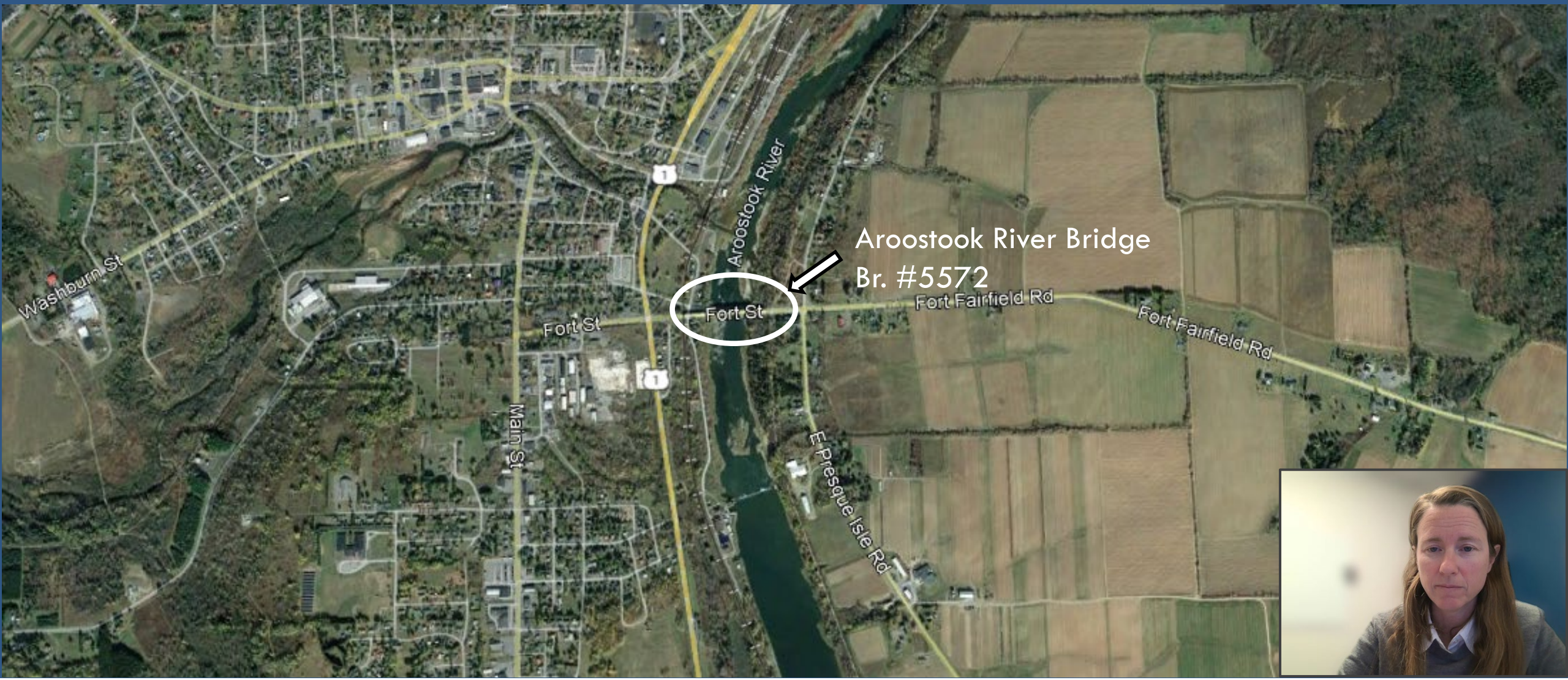
PROJECT LOCATION



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PROJECT LOCATION

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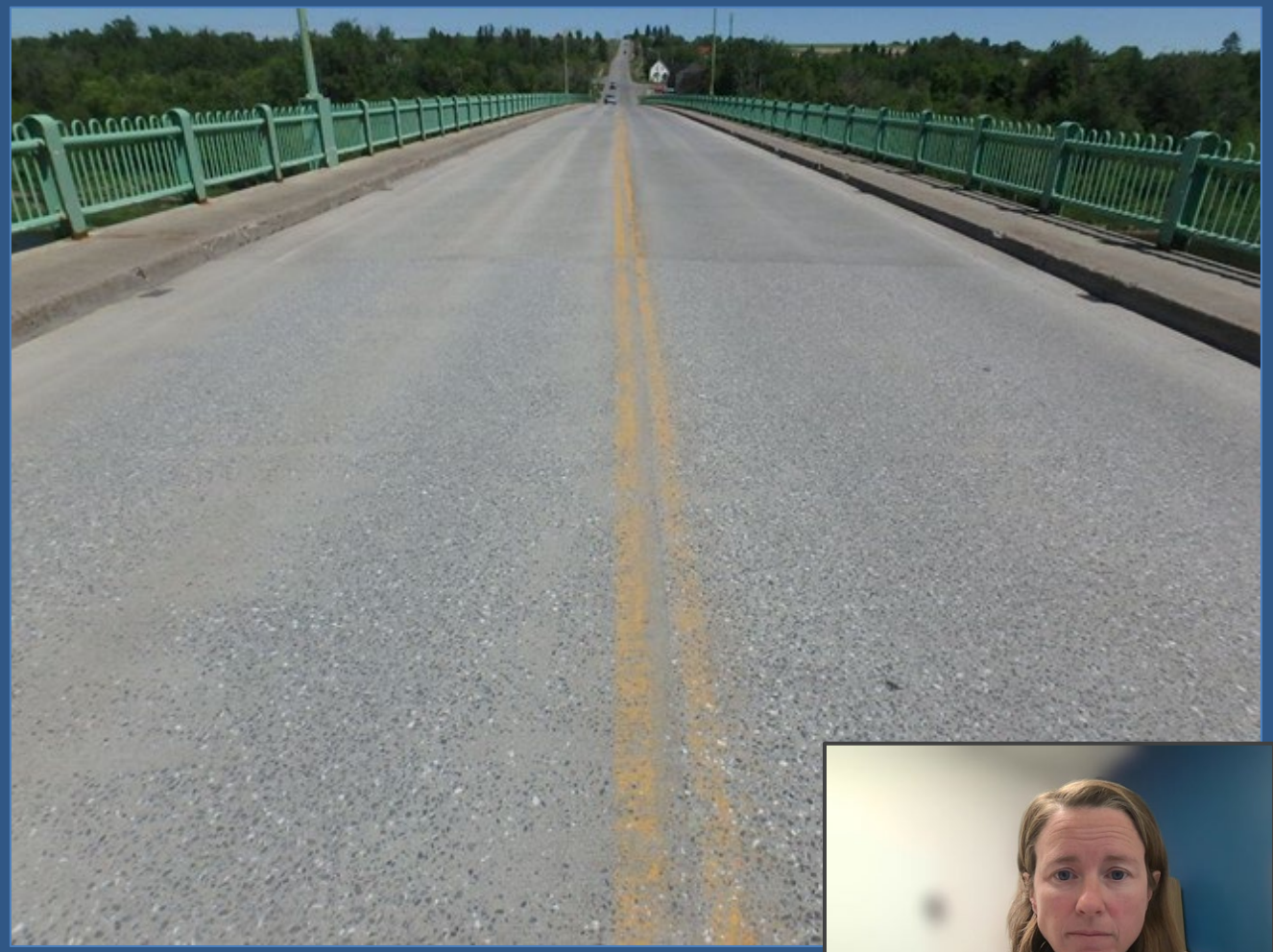
EXISTING CONDITIONS

- Bridge Length: 900’-0”
  - Three Span Truss with 175’, 250’ and 175’ spans
  - Four approach spans each 75’ spans
- Bridge Width: 37’-2”
  - 28’-0” curb-to-curb with a 4’-0” sidewalks on both sides
- Steel truss and steel beam superstructure
- Built in 1952
  - 2005 Pin replacement, wearing surface replacement and joint rehabilitation
- Bridge is historic



Bridge Deck – Looking East

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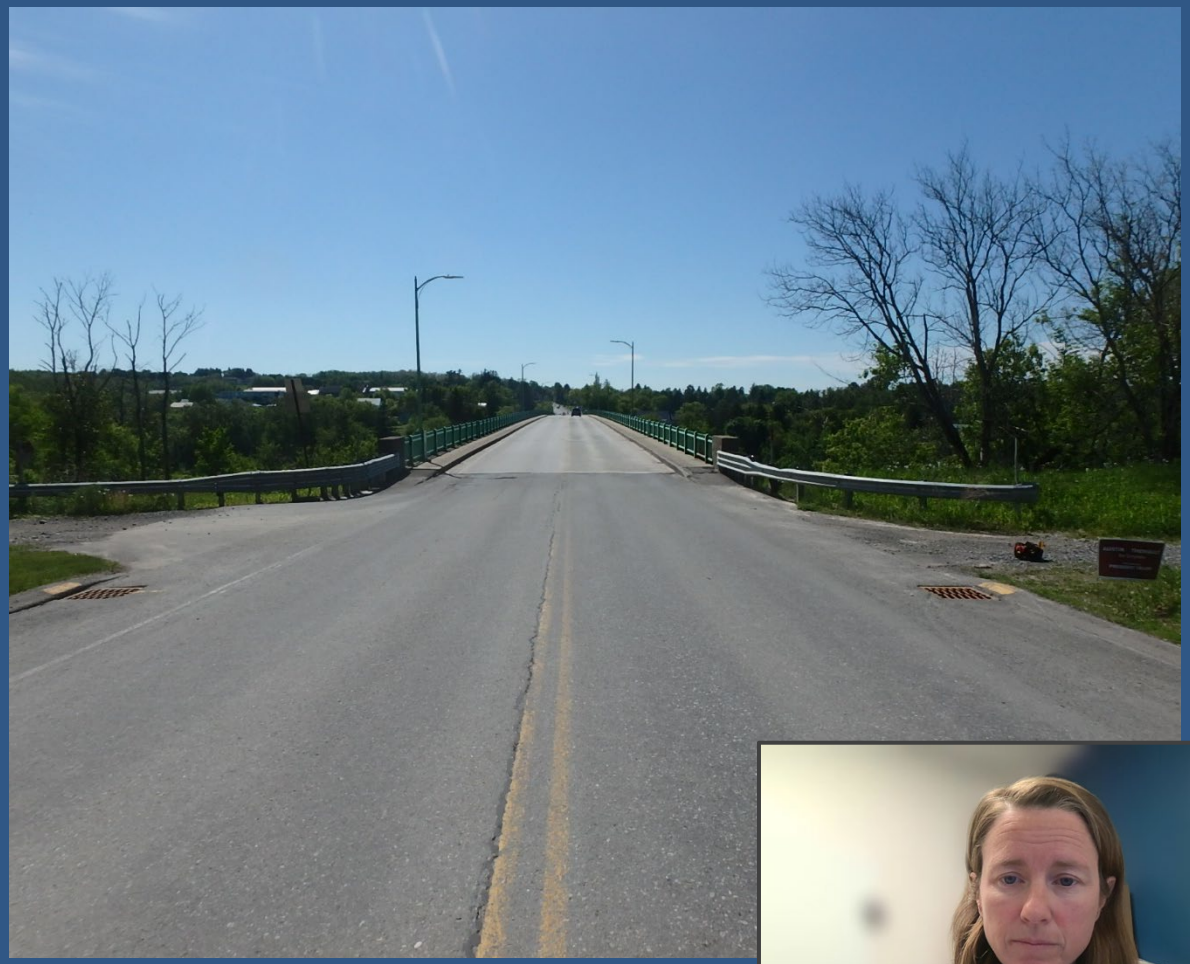
EXISTING CONDITIONS

West Approach – Looking East



East Approach – Looking West

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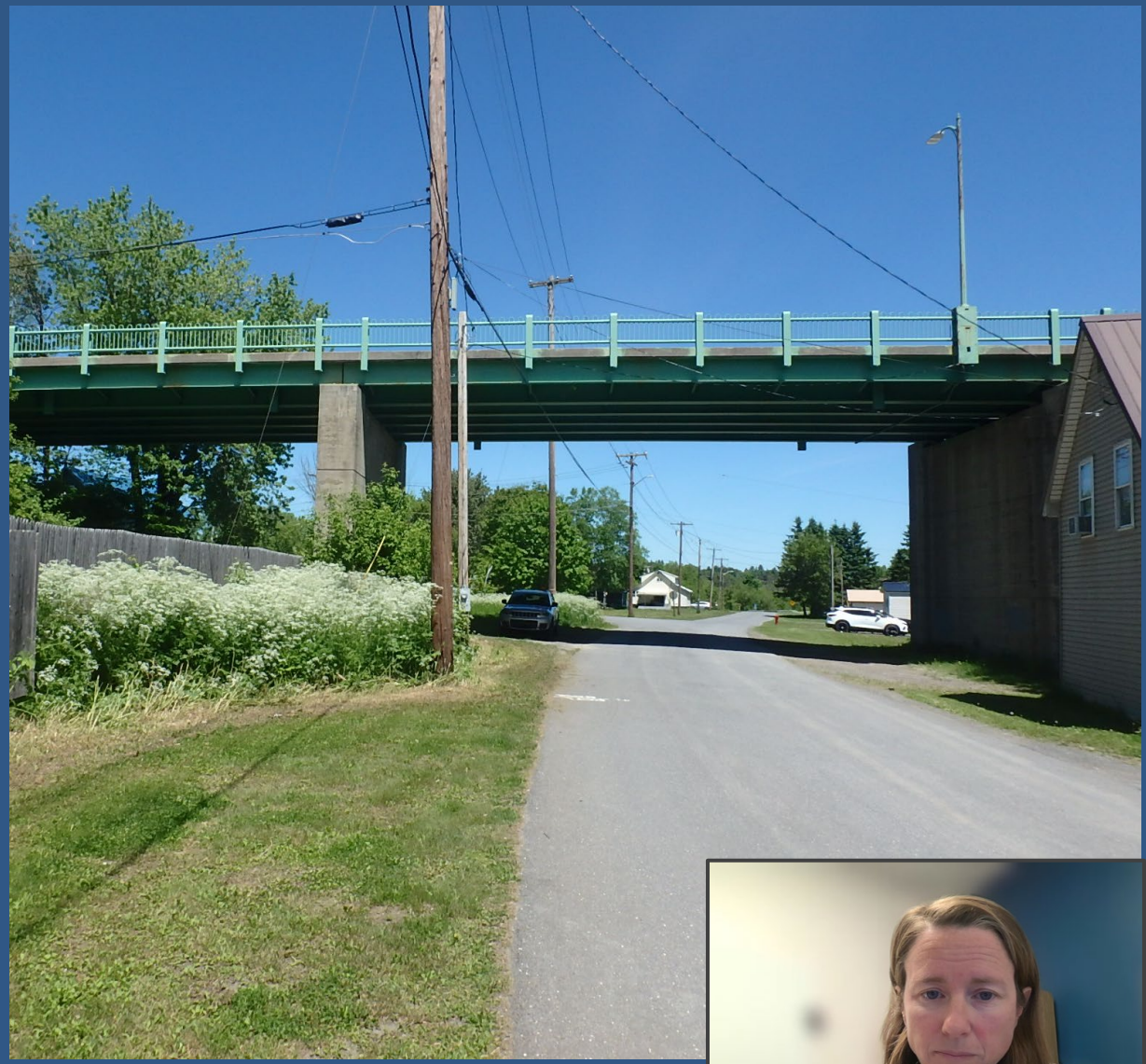
EXISTING CONDITIONS

West Approach – ATV Trail Entrance



Overhead Utilities –
Lower Lyndon Street

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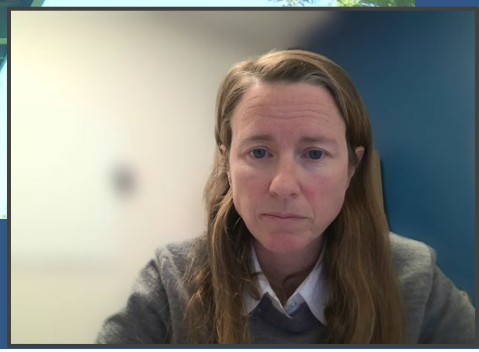
EXISTING CONDITIONS

Bottom of Deck – Truss Span

Bottom of Deck – Approach Span



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EXISTING CONDITIONS

Repair Area – Pin Support Beam

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EXISTING CONDITIONS

Repair Area – Looking Outside

Repair Area – Looking Inside

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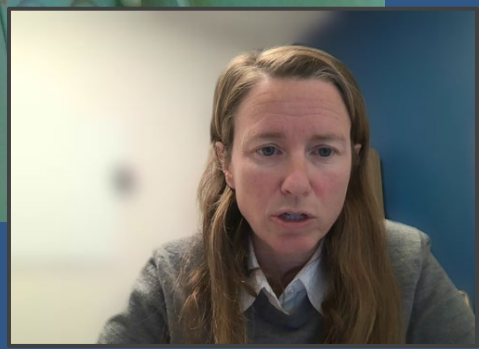
EXISTING CONDITIONS

End of Deck – Pavement Cracking & Repair

Deck Deterioration – Bridge Joint



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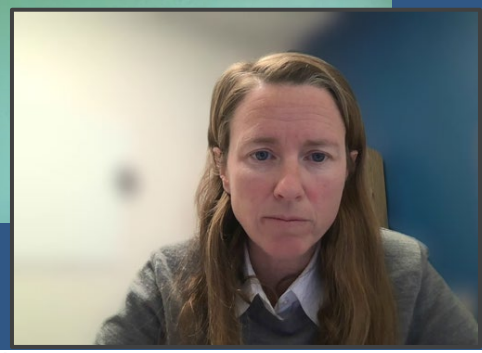
EXISTING CONDITIONS

Deck Overhang

Deck Deterioration – Haunch Underside



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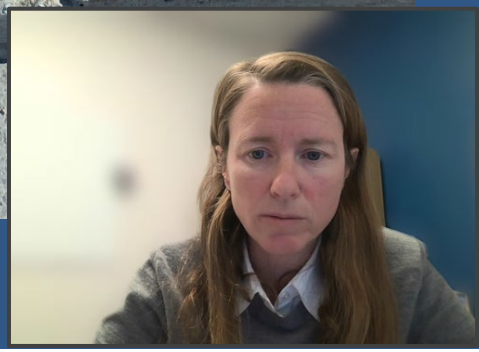
EXISTING CONDITIONS

North Curb – Looking East

Curb Deterioration



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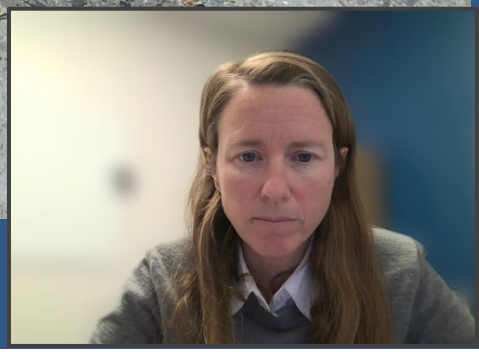
EXISTING CONDITIONS

Bridge Rail Section

Sidewalk Joint Armor Deterioration



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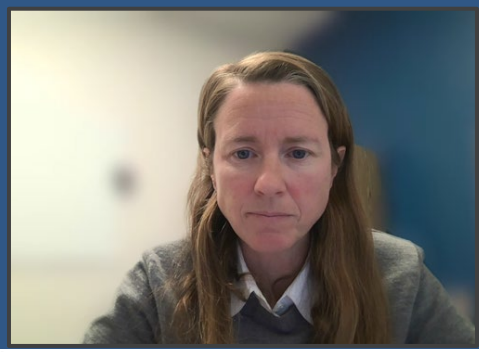
PROJECT GOALS

- Bridge Rehabilitation and Improvement Project
  - Primarily Deck Replacement Project
- Improve Existing Conditions:
  - Rehabilitate/Replace bridge components
  - Deck Condition
  - Improve load capacity/maintain load rating
    - Deck replacement includes making floor system composite improving load rating
    - Current bridge and recommended rehabilitation allow for state legal loads
    - Current RPV restrictions will be maintained with rehabilitation
- Work with communities on traveling vehicles
  - On-going coordination with town officials, emergency services, schools and ATV/Snowmobile clubs
- Identify a Cost-Effective Solution



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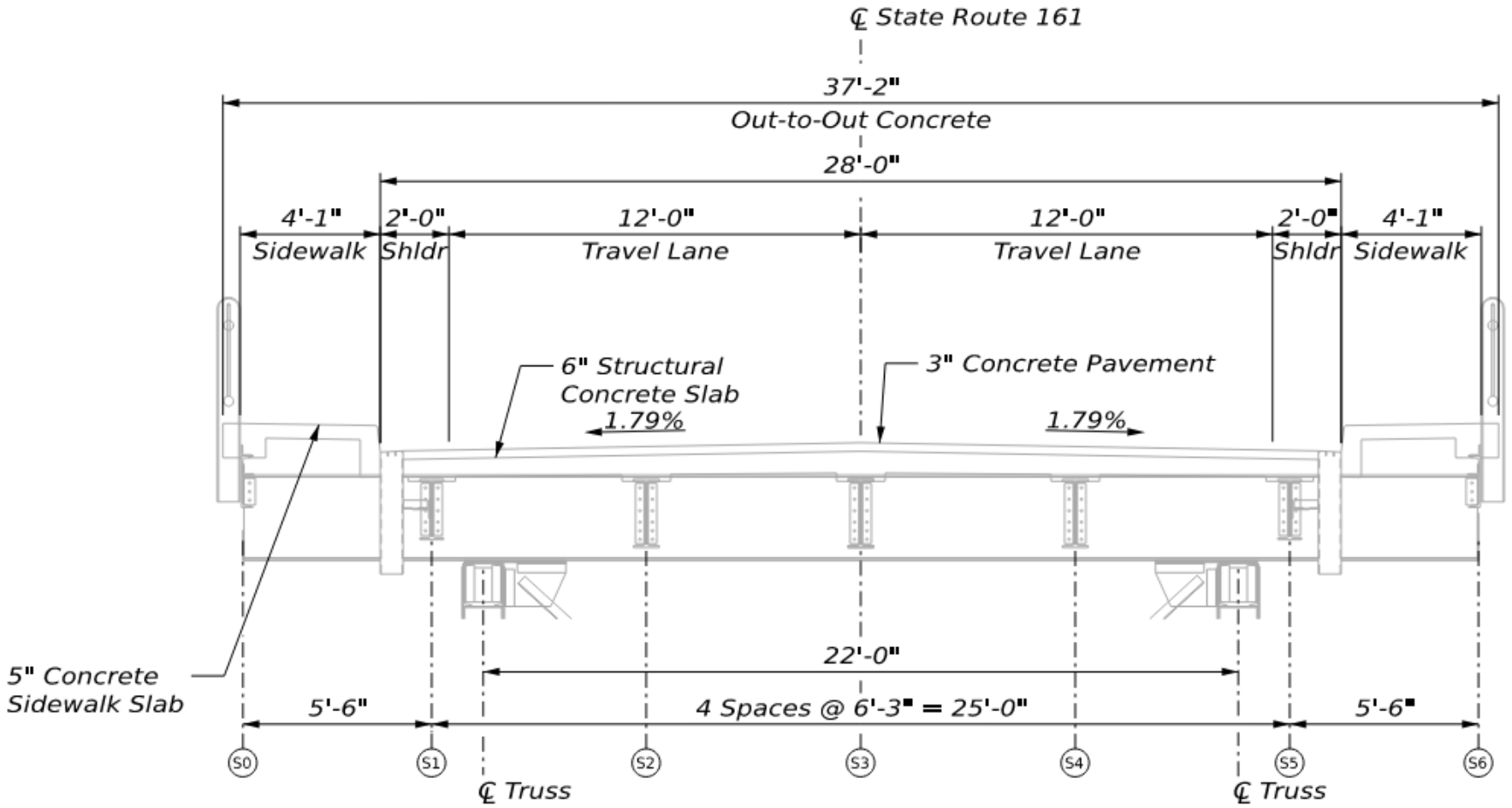
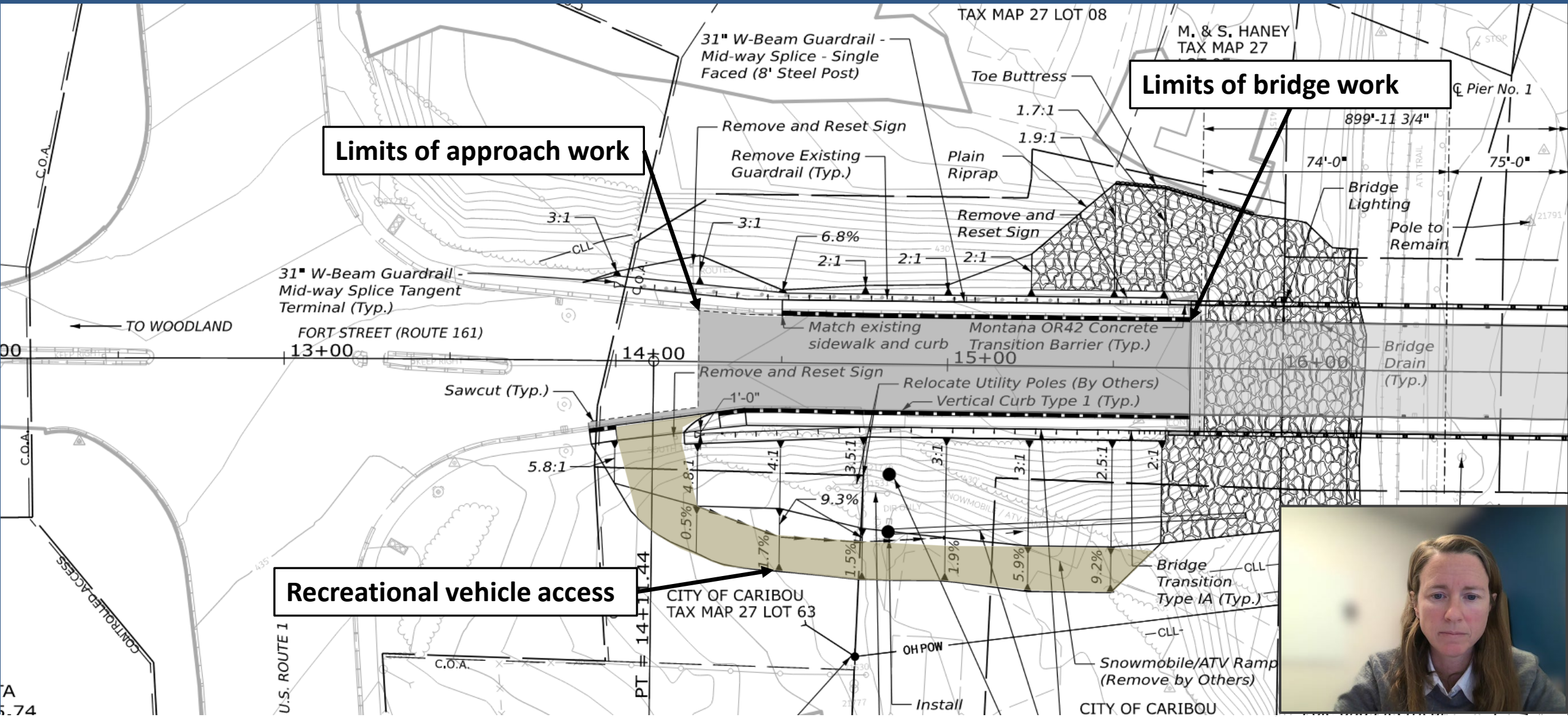
EXISTING TYPICAL SECTION



EXISTING TYPICAL SECTION

MaineDOT HNTB

REHABILITATION SCOPE – WEST APPROACH



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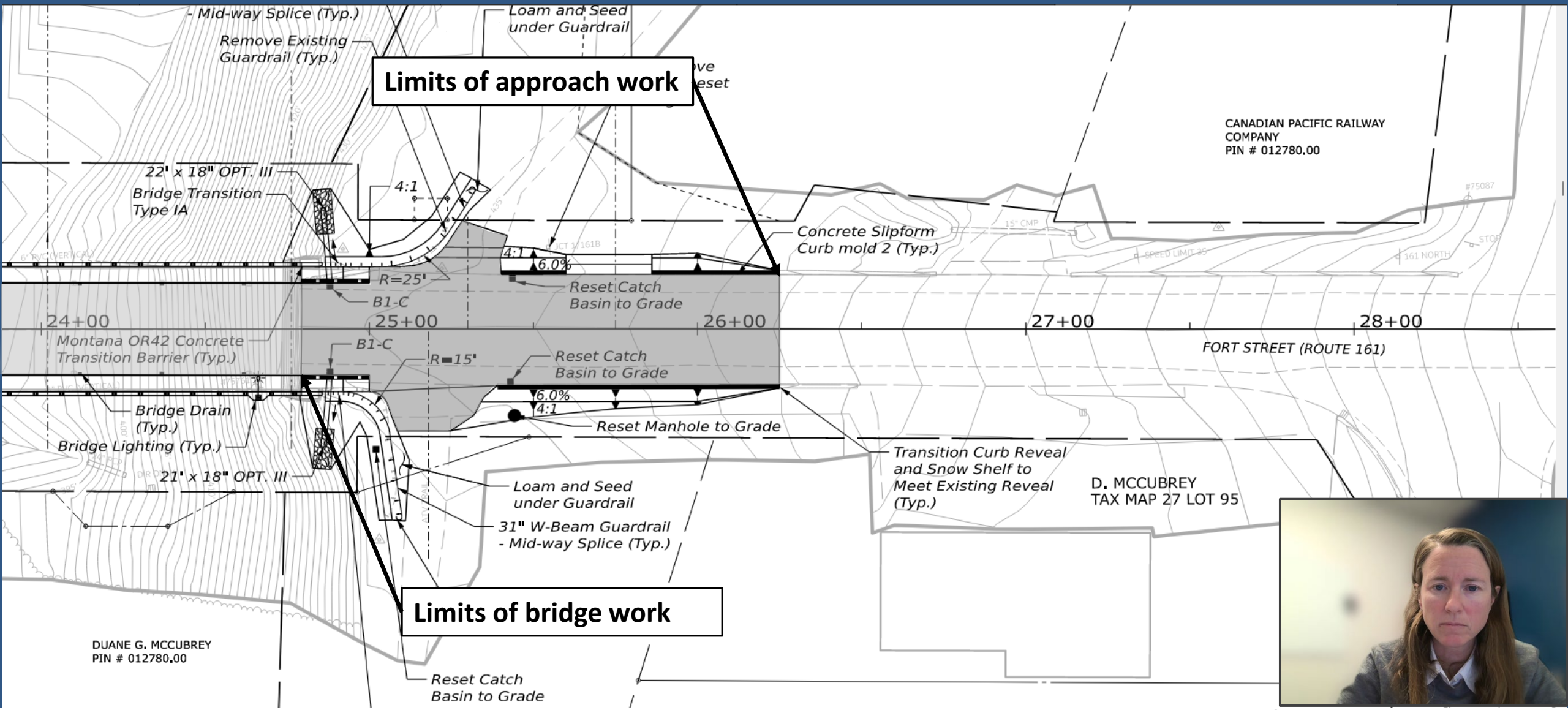
REHABILITATION SCOPE – EAST APPROACH



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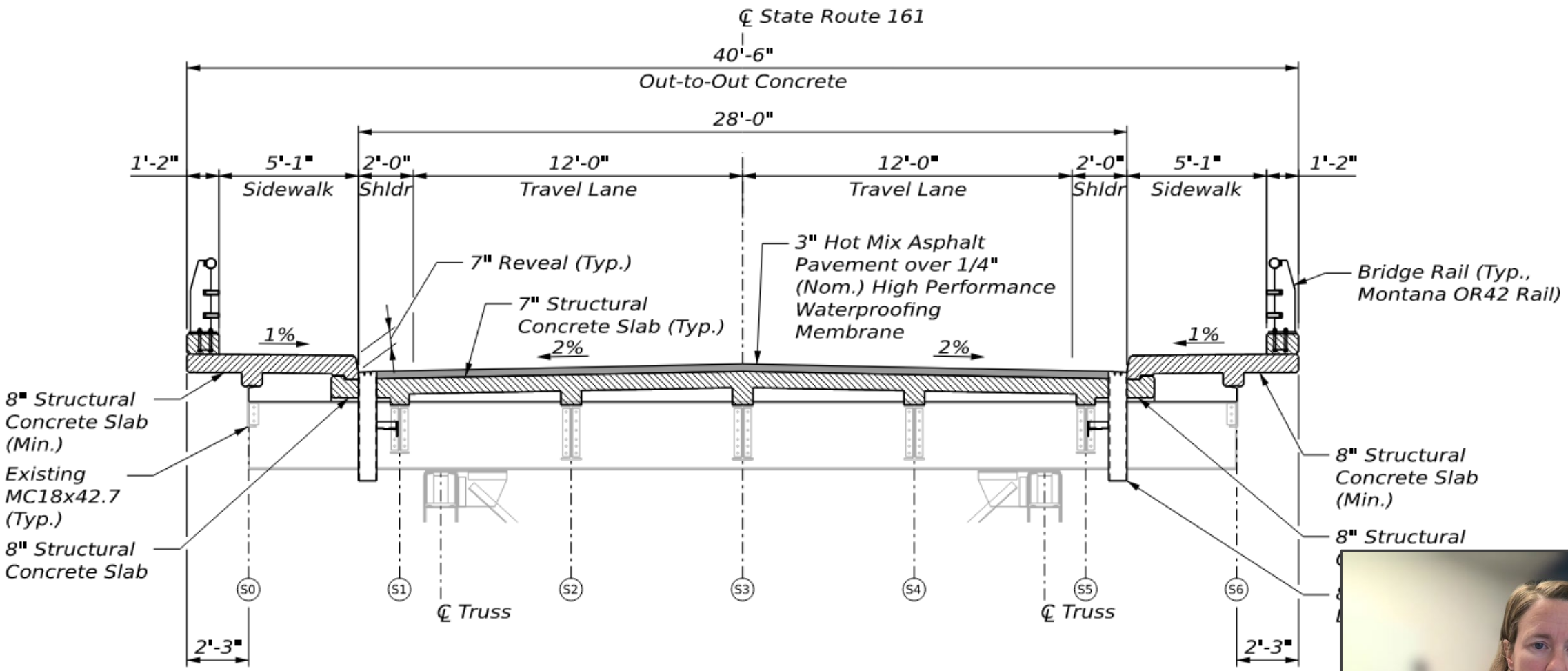
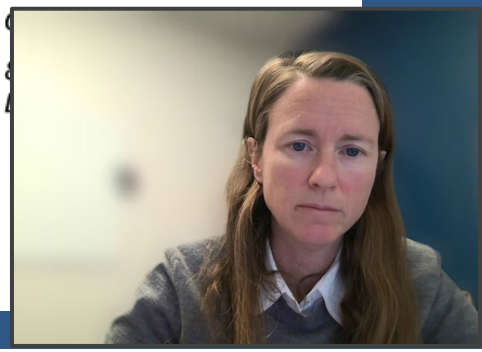
REHABILITATION SCOPE – TYPICAL SECTION



PROPOSED TYPICAL SECTION



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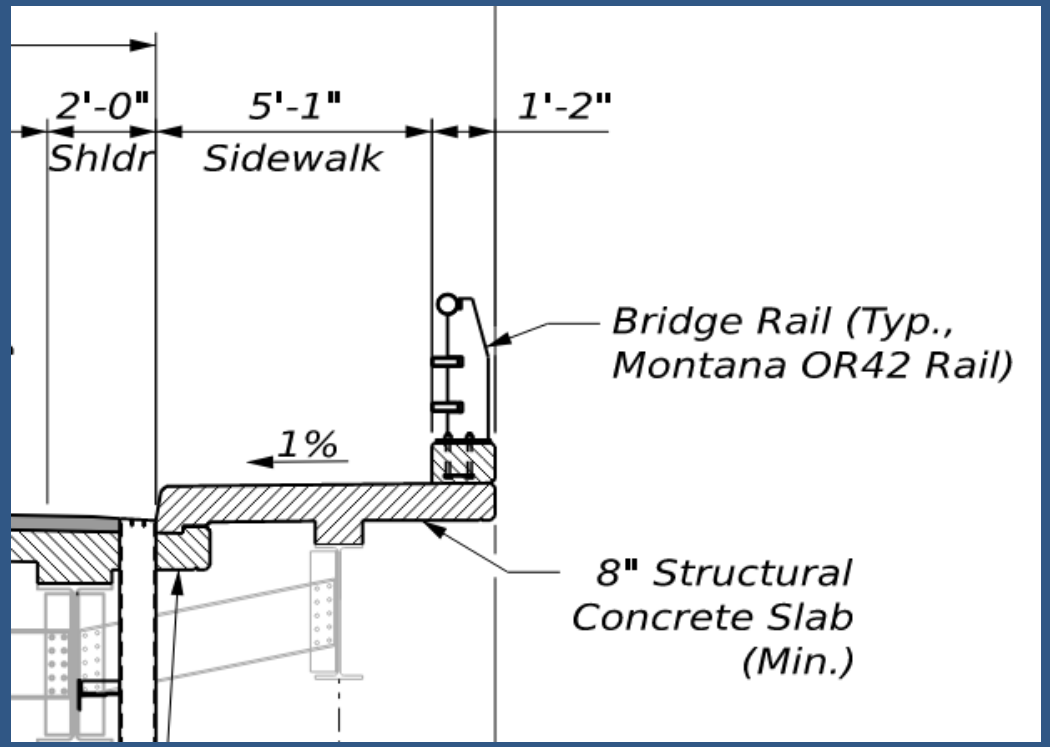
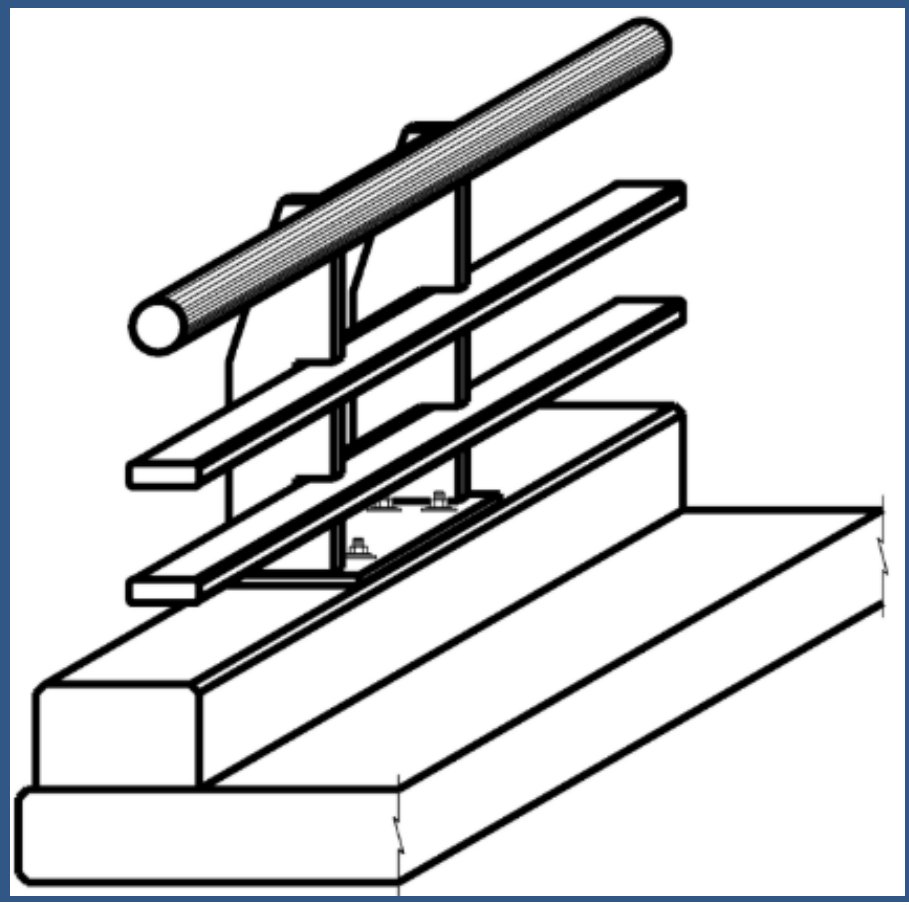
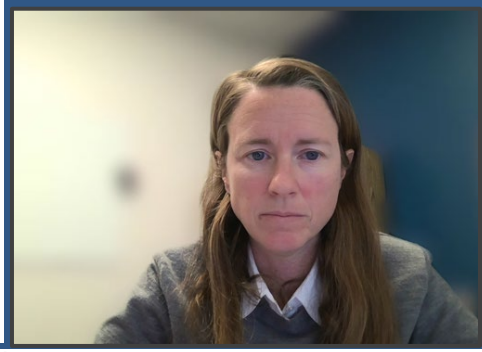
REHABILITATION SCOPE

- Existing curb-to-curb width maintained
- Sidewalks widened to 5’ width, Maintain raised sidewalk to minimize schedule and cost
- Sand lightweight concrete used to minimize required structural steel repair strengthening
- Corrosion resistant reinforcing
- Existing bridge lighting to be maintained







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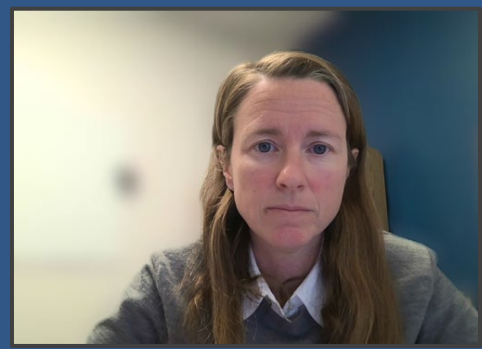
PROJECT CONSIDERATIONS

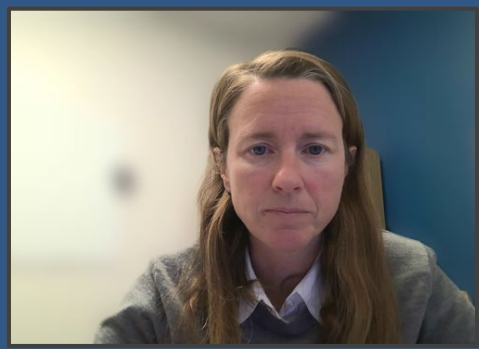
- Key Considerations for Alternatives:
  - Historic bridge
  - Service life of structures
  - Vehicle and pedestrian traffic
  - ATV and snowmobile vehicles access, ramp on southwest corner
  - Safety
  - Property & utility impacts
  - Initial construction & long-term costs
  - Ease of construction & construction duration
  - Adjacent intersections at both ends of the bridge



MAINTENANCE OF TRAFFIC

- On-Site Detour – Temporary Bridge
  - Road closure with traffic maintained on a temporary bridge
- Staged Construction
  - Project built in halves, maintain one lane of traffic on existing structure.
- Off-Site Detour
  - Road closure with traffic detoured onto surrounding roadways during construction.
- Hybrid Option with Off-Site Detour and Alternating Traffic
  - Combination of road closure with detour for shorter duration, maintain one lane of traffic on new deck

SELECTED OPTION



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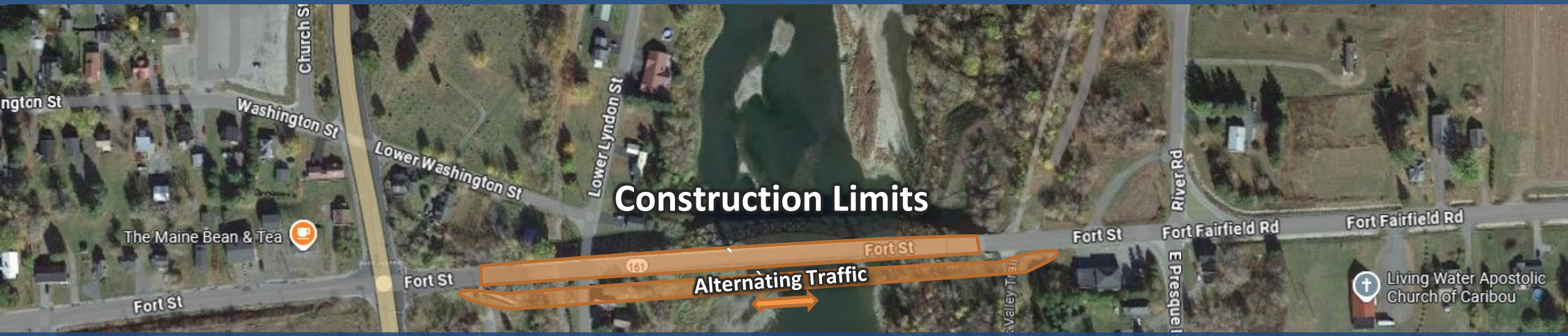
TRAFFIC MANAGEMENT OPTIONS

On-Site Detour – Conventional Construction with temporary bridge



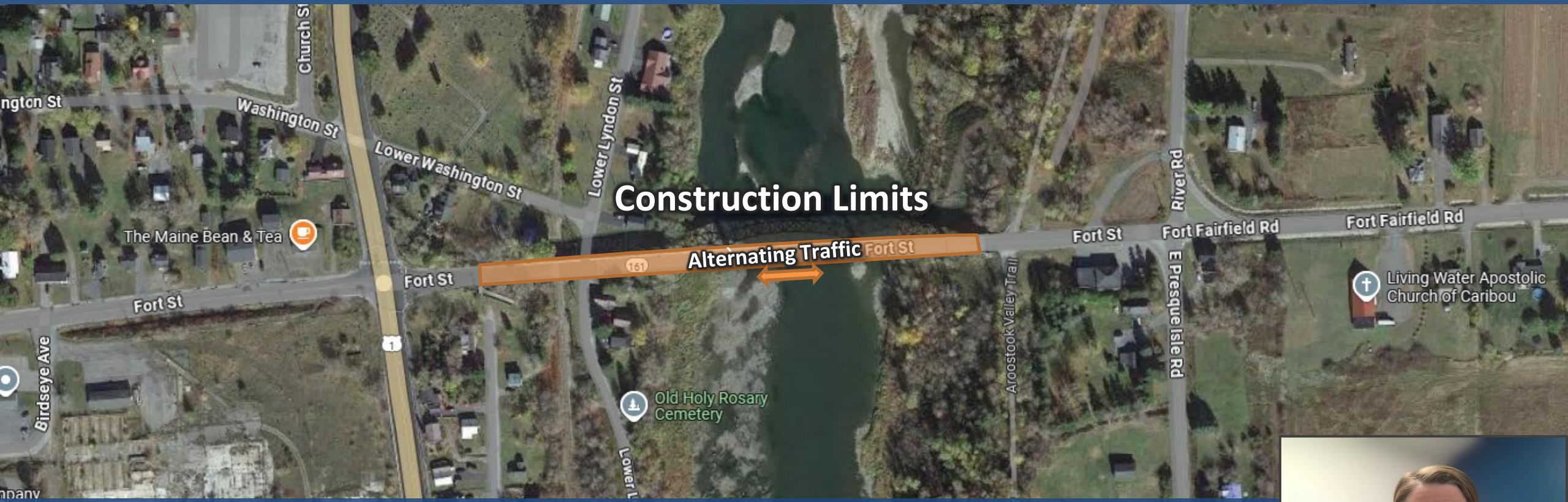
- Road closed with traffic detoured on temporary bridge through the project site
- One lane of traffic alternating with signals
- Construction cost 65% higher than lowest cost option due to long temp. bridge length/height
- Increased ROW impacts and temporary structures over properties

Construction Duration: 26 months

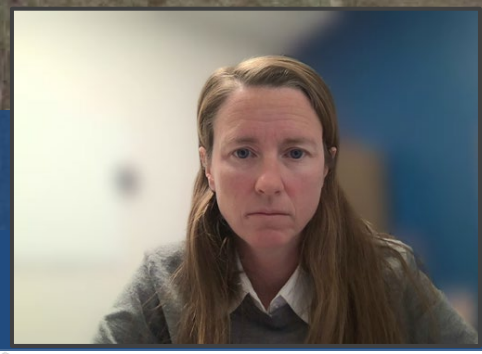
Traffic Impact Duration: 14 months

Traffic Management Options

Staged Construction with traffic maintained on site



- Project built in halves
- Maintain one lane of alternating one-way traffic on the existing structure
- Significantly more strengthening to the truss is required



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Staged Construction Challenges

- To keep traffic on the bridge during construction the concrete deck would need to be cut down the center of the bridge.
- A single bay of bracing members are highlighted – 100% of the diagonal bracing members would fail if traffic was on the bridge while half of the deck was removed.
- NOT FEASIBLE

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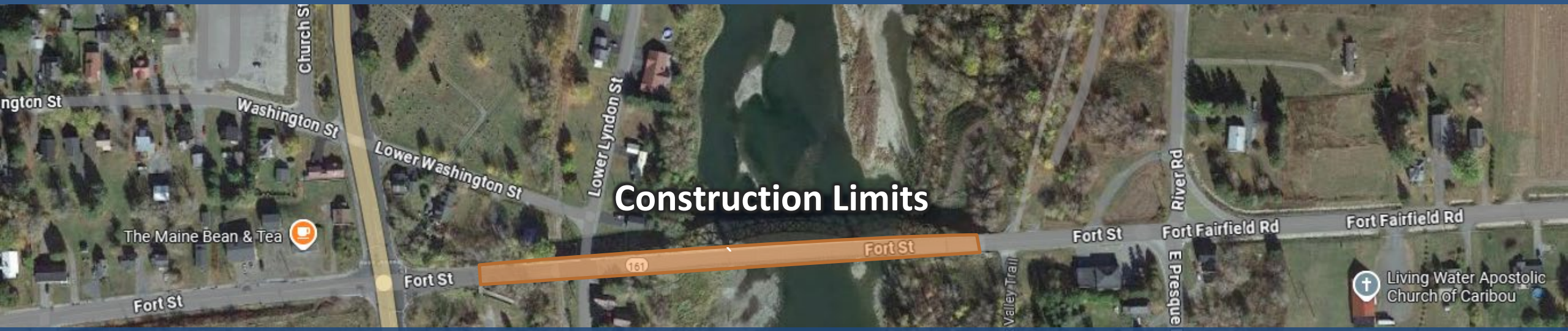
Traffic Management Options

Off-Site Detour with Full Closure

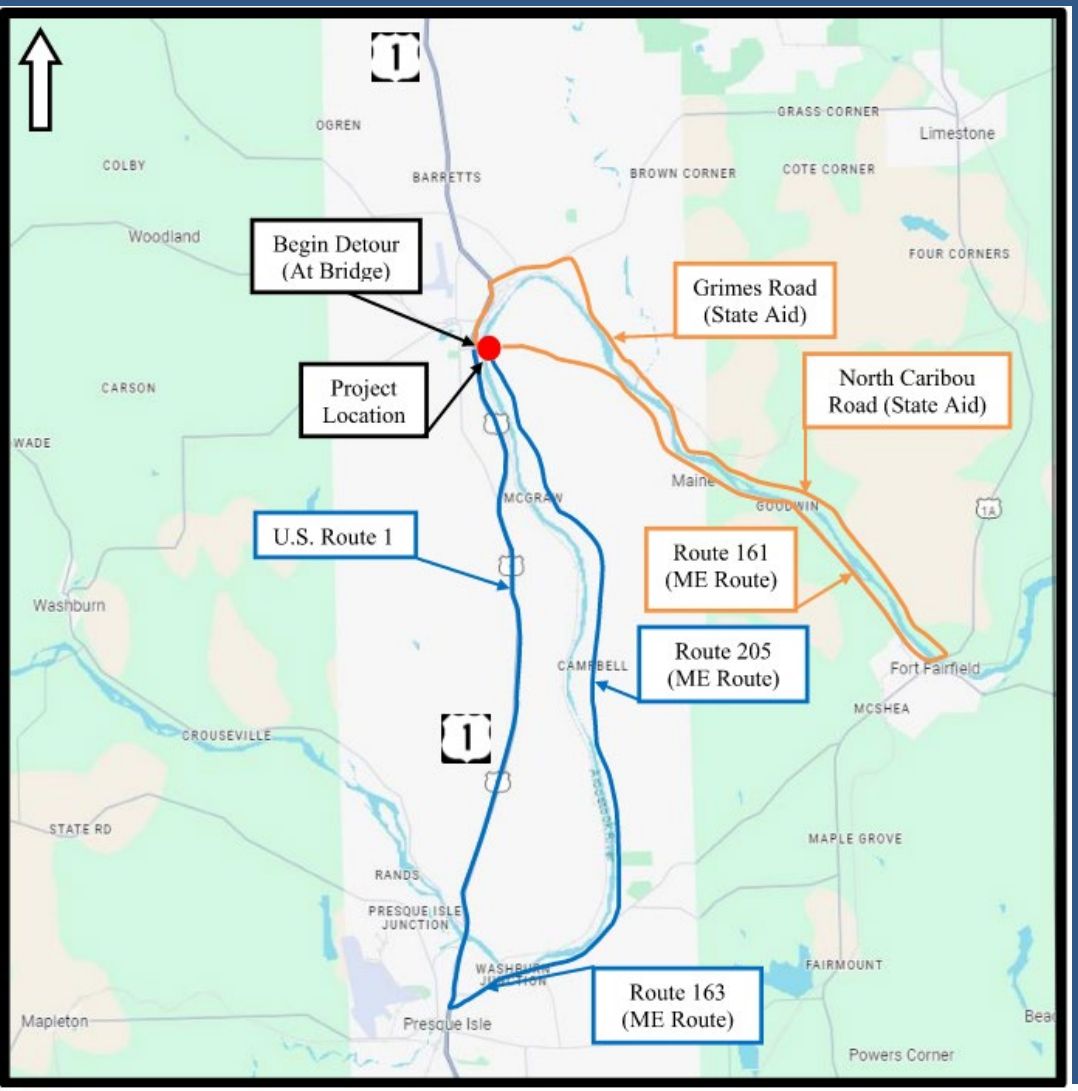


- Road closed with traffic detoured
- Shortest construction duration
- Generally safest MOT solution for contractor and public
- Generally lowest cost MOT solution
- Lowest construction cost option

Construction Duration: 24 months

Traffic Impact Duration: 14 months

MAINTENANCE OF TRAFFIC



- Off-Site Detour
  - Road closed with traffic detoured
  - Shortest construction duration
  - Generally safest MOT solution for contractor and public
  - Generally lowest cost MOT solution

Route	Added Travel Distance / Time (Abutment to Abutment)	Added Travel Distance / Time (Through Vehicles)
Rt. 1 → Rt. 163 → Rt. 205	24.9 miles / 33 min.	0.2 miles / 0 min.
Grimes Rd. → N. Caribou Rd. → Rt. 161	23.2 miles / 30 min.	0.8 miles / 3 min

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TRAFFIC MANAGEMENT OPTIONS

SELECTED OPTION: Hybrid w/Full closure and offsite detour, traffic maintained on-site during sidewalk construction to reduce closure duration

Stage 1: Full Closure

Stage 2: Alternating Traffic

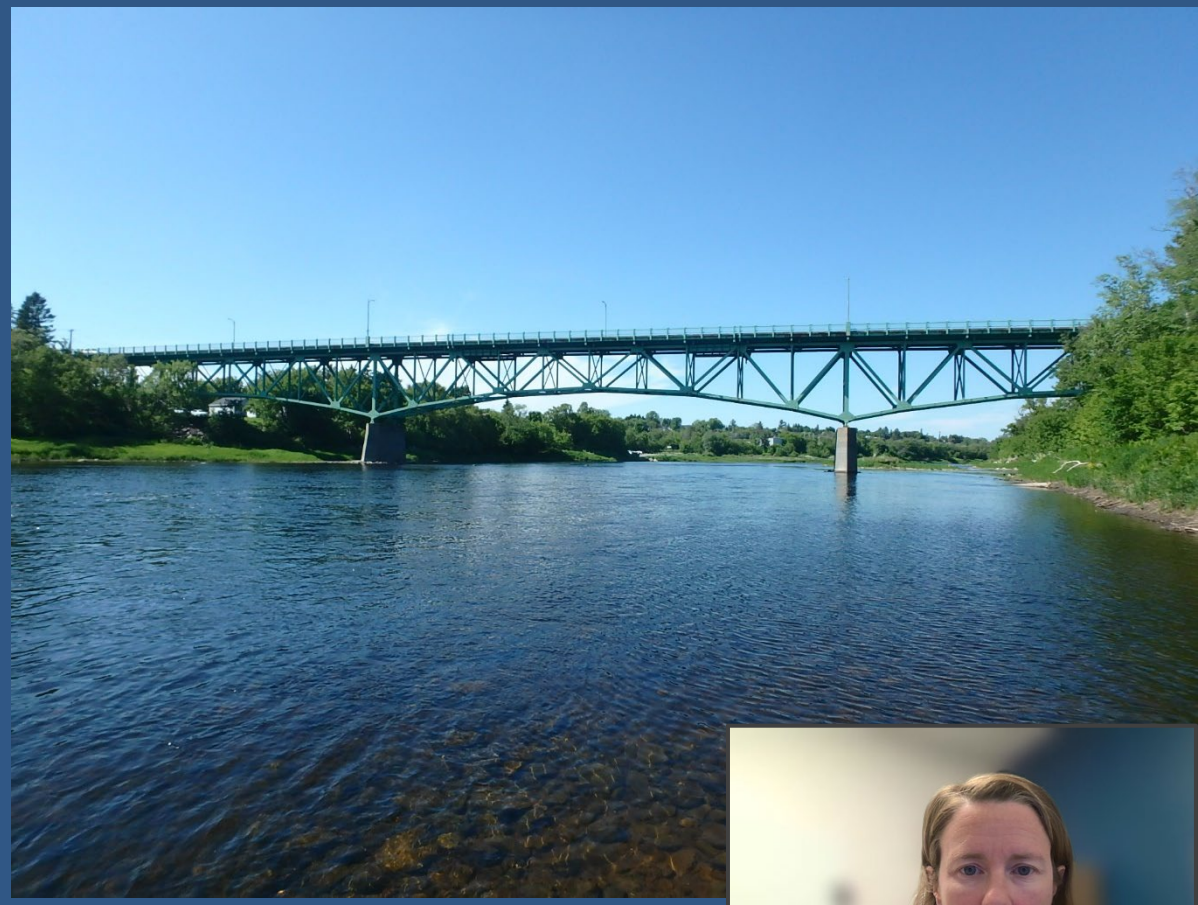
TRAFFIC MANAGEMENT OPTIONS

Hybrid Option evaluated using two construction methods:

- Conventional Construction
  - Typical cast in place concrete deck
  - Full closure duration: Approximately 8 months
  - Alternating traffic duration: Approximately 8 months
  - Construction cost 2% higher than lowest cost option
- Accelerated Bridge Construction (ABC) **SELECTED OPTION**
  - Precast concrete deck panels
  - Reduces full closure duration
  - Preliminary full closure duration: Approximately 5 months
  - Preliminary alternating traffic duration: Approximately 4 months
  - Construction cost 20% higher than lowest cost option due to construction techniques

SCHEDULE AND FUNDING

- Schedule
  - Conceptualize potential design solutions
  - Develop concept designs
  - Evaluate the merit of each concept design
  - Develop preliminary design recommendations
  - Public meeting ⟵ WE ARE HERE
  - Completion of final design
  - Advertise for construction
  - Funding: Funded for design and construction phase under latest MaineDOT Work Plan



ANTIPATED CONSTRUCTION SCHEDULE

- Preliminary Schedule
  - Advertise for construction — Fall 2026
  - Construction begins — Winter 2026/2027
  - Anticipated detour/closure — Summer 2027
  - Construction Complete — Fall/Winter 2027

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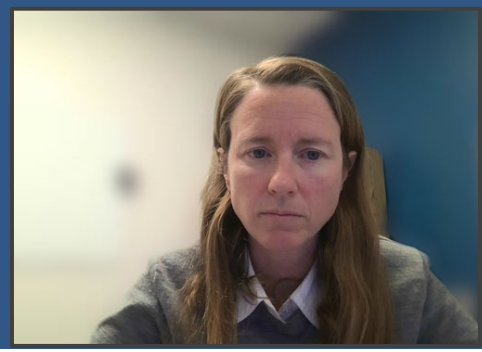
Summary

We appreciate you taking the time to go view this presentation and encourage you to ask questions or give comments. Often times people who know the area have additional information that is helpful to us. We would appreciate any additional information that you may have. Things such as flood history, high flood water elevations, local events, local businesses, anything that might impact traffic along the detour route, adjacent wells, abandoned utilities or anything that might be buried around the bridge construction area, can all be helpful for us to know about.



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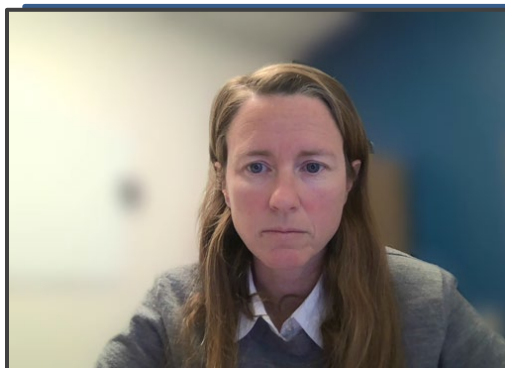

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