

# NEIGHBORHOOD MEETING

## GEORGE STREET BRIDGE REPLACEMENT PROJECT

FEBRUARY 14, 2023



McFarland Johnson

# Project Design Team

## City of Keene:

- Brett Rusnock, PE – City Project Manager
- Donald Lussier, PE – City Engineer

## Consulting Engineers – McFarland Johnson, Inc.:

- Samuel White, PE – Project Manager
- Matthew Moore, PE – Project Engineer



# Presentation Outline

1. Project Location
2. Why Replace the Bridge?
3. Project Limits
4. Design Considerations
5. Construction & Traffic Control
6. Questions



# Project Location



# Why Replace?

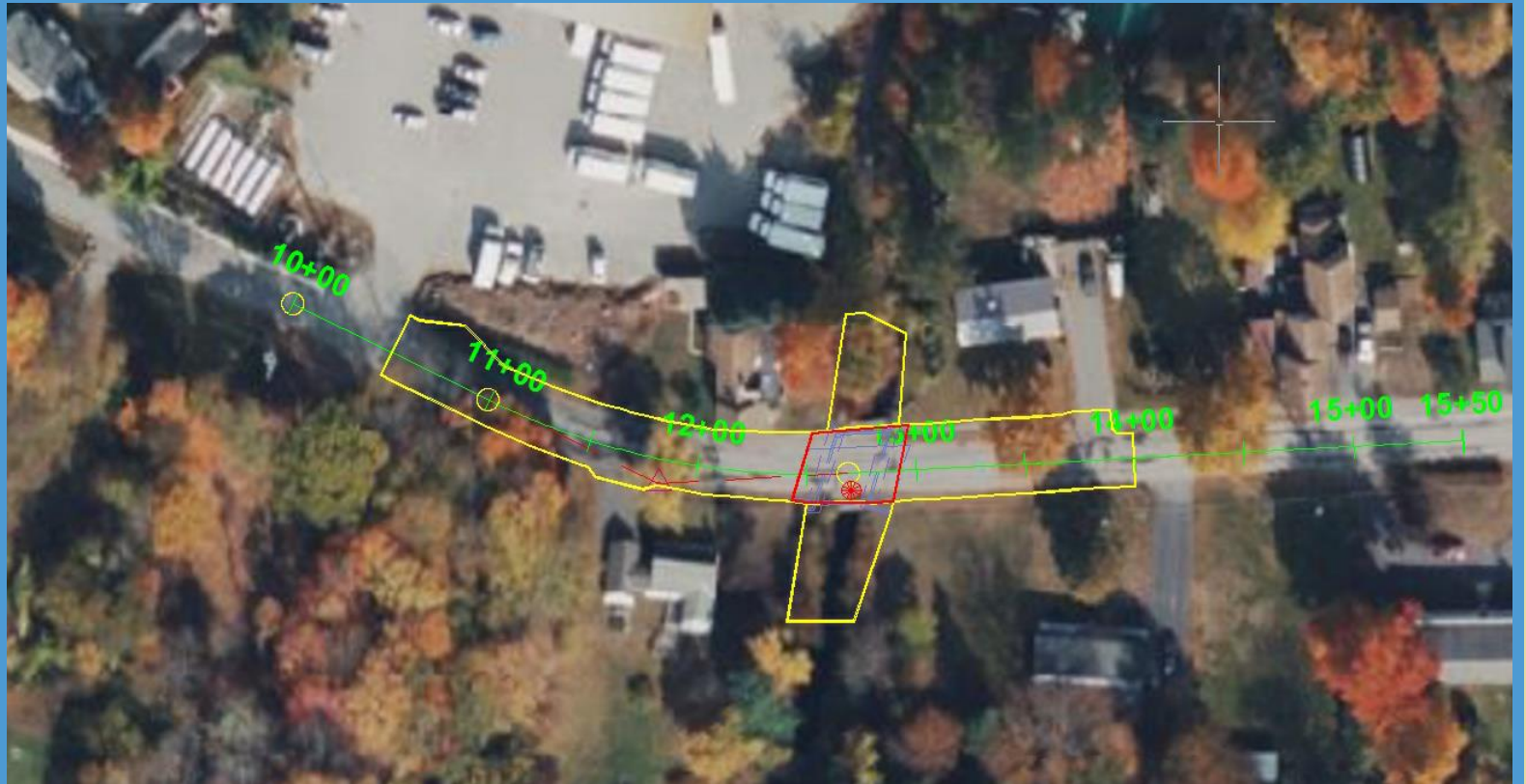
- ✓ Built in 1923
- ✓ Municipal Red List
  - ✓ Superstructure Rated 'Poor'
  - ✓ Substructure Rated 'Serious'
- ✓ Deteriorated Concrete
- ✓ Replacement Needed



# Project Limits

- ✓ Work Must Be Associated With Replacing the Bridge
- ✓ Utility Reconstruction
- ✓ Paving
- ✓ Sidewalks
- ✓ Bank Stabilization

NHDOT State Bridge Aid Program:  
State Pays 80%    City Pays 20%



# Design and Construction Considerations

- ✓ ~500 Vehicles per Day
- ✓ Utilities – Above and Below Ground
- ✓ Abutting Properties
- ✓ Existing Bank Erosion



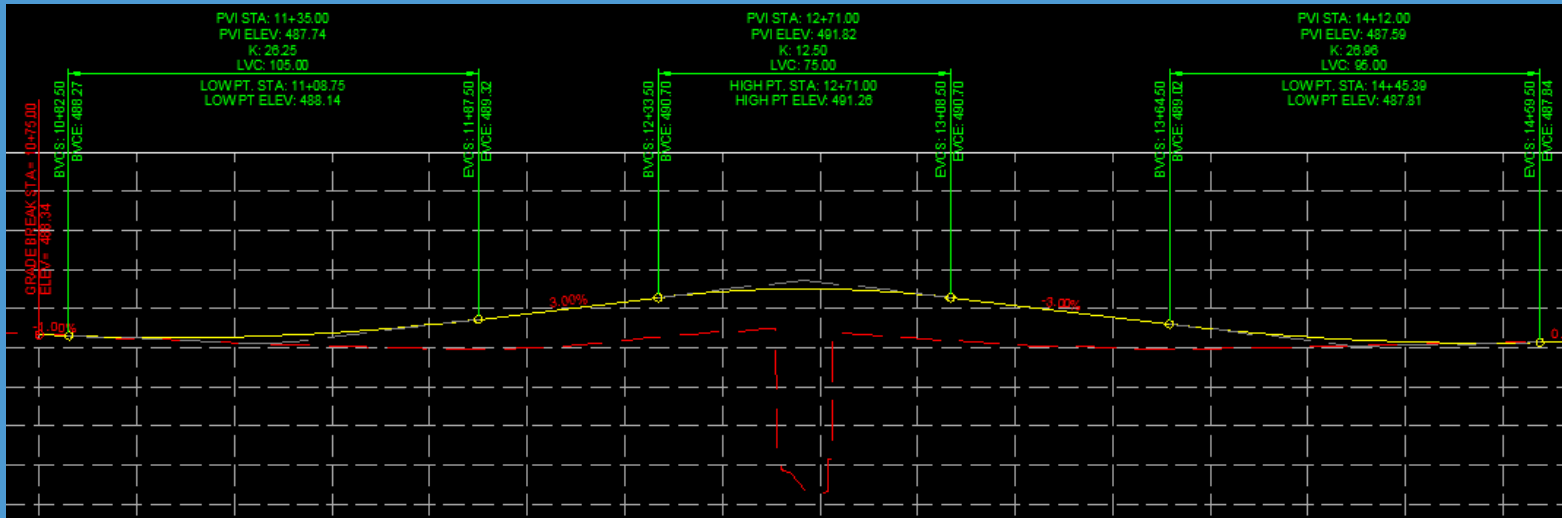
# Bridge Design Considerations

- ✓ Bank Erosion/Scour
- ✓ Hydraulic Capacity
- ✓ Stream Crossing Compatibility with Brook
- ✓ Wildlife Accommodations

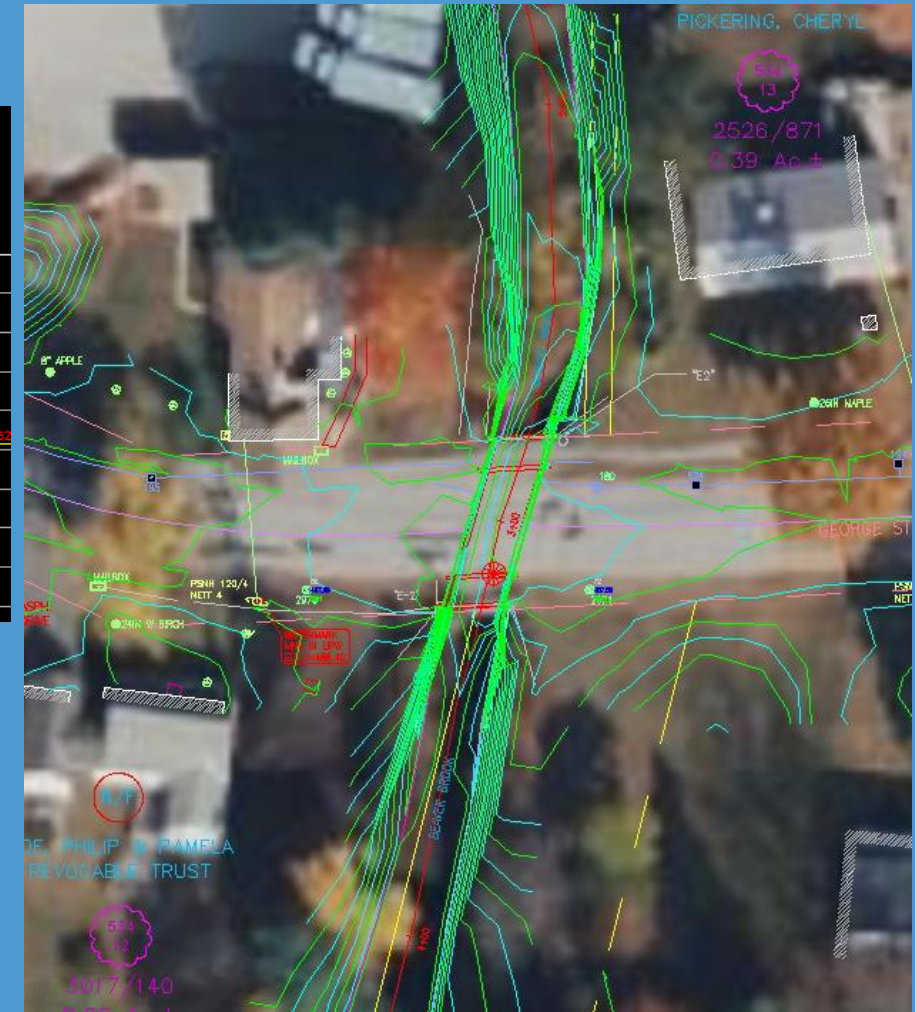




# Hydraulic Considerations

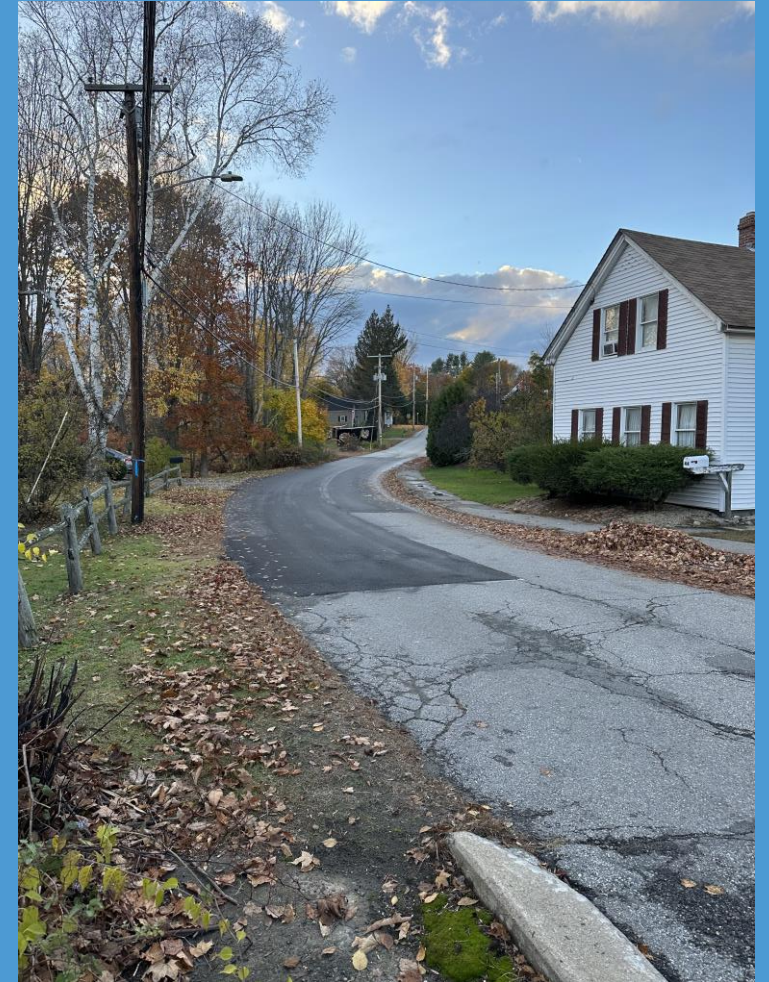
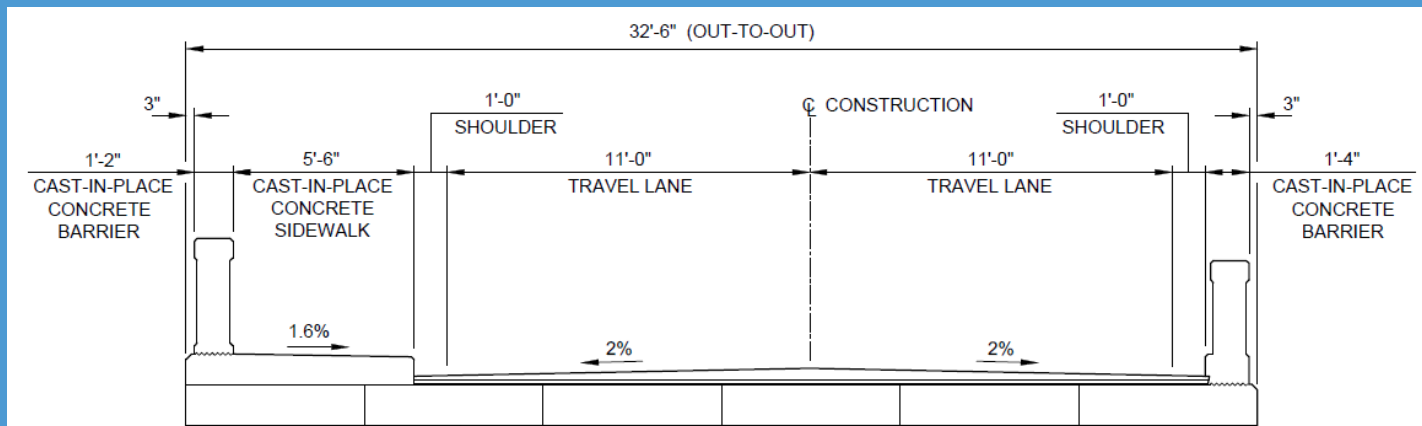


✓ Project is within a mapped FEMA Regulatory Floodway



# Roadway Design Considerations

- ✓ Roadway Safety
- ✓ Abutting Properties
- ✓ Drainage



# Utilities



# Guardrail



# Construction Traffic Control

## Roadway Closure on George St. at Bridge Site

- ~4 month roadway closure
- Traffic impacts before and after bridge construction
- Total construction duration ~6 Months
- Advertisement anticipated for Spring 2024
- Construction anticipated to begin Summer 2024





# Other Considerations

- ✓ Existing Problems / Challenges in the Area
- ✓ Opportunities



# Questions?





# Water Diversion Example



# Bridge Type Example

