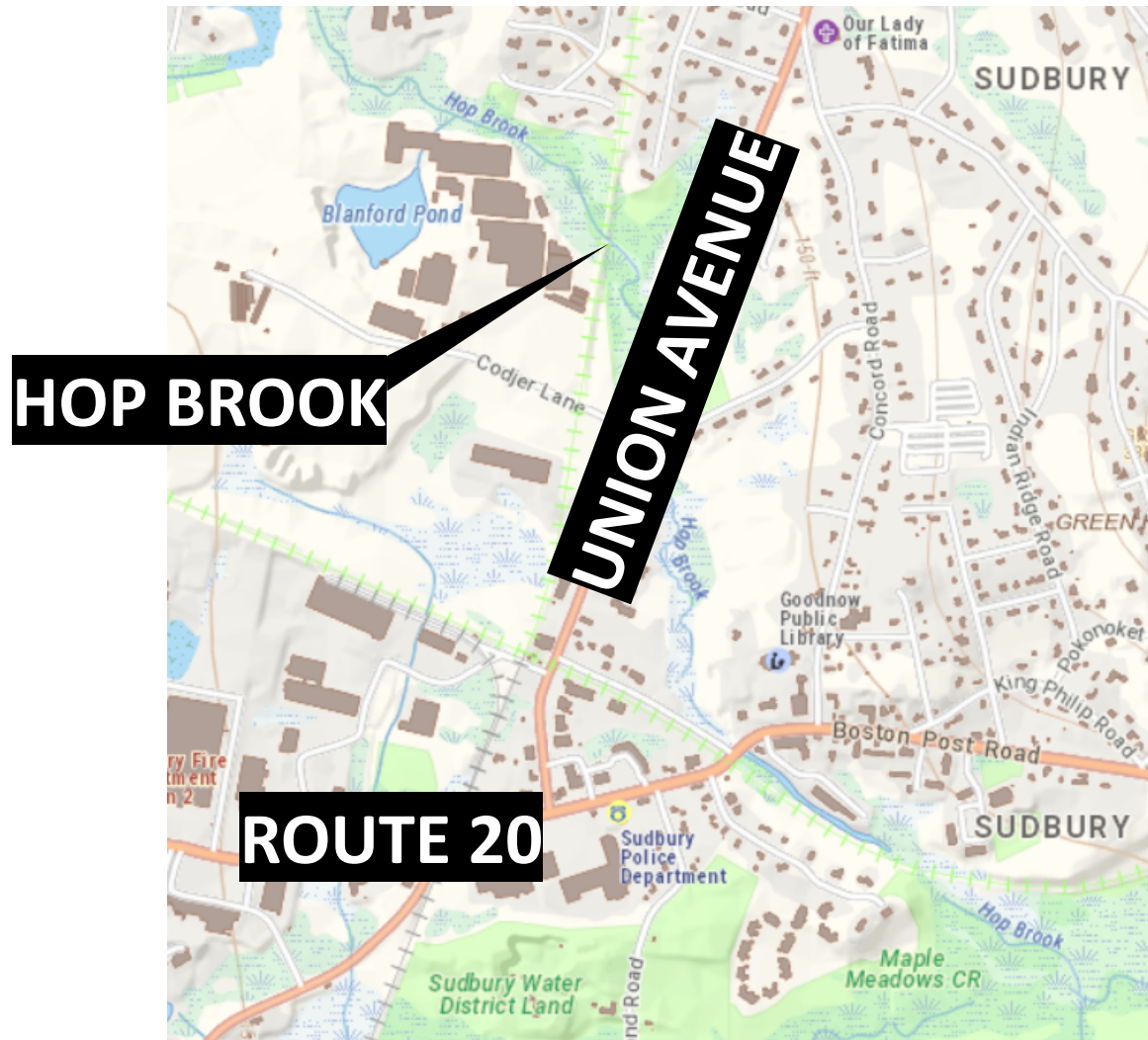


Structural Design

Design Standards

- **AASHTO LRFD Guide for Development of Bicycle Facilities**
- **AASHTO LRFD Bridge Design Specifications**
- **AASHTO LRFD Guide Specifications for Design of Pedestrian Bridges**
- **Complies with American with Disabilities Act (ADA)**
- **H-10 truck (20,000 lb. vehicle) – ambulance/emergency vehicle**
- **Pedestrian live load of 90 pounds per square foot**
- **Sketch Plan stage – 25% Design next step moves toward final design**

Hop Brook - Location



Existing Conditions - Hop Brook

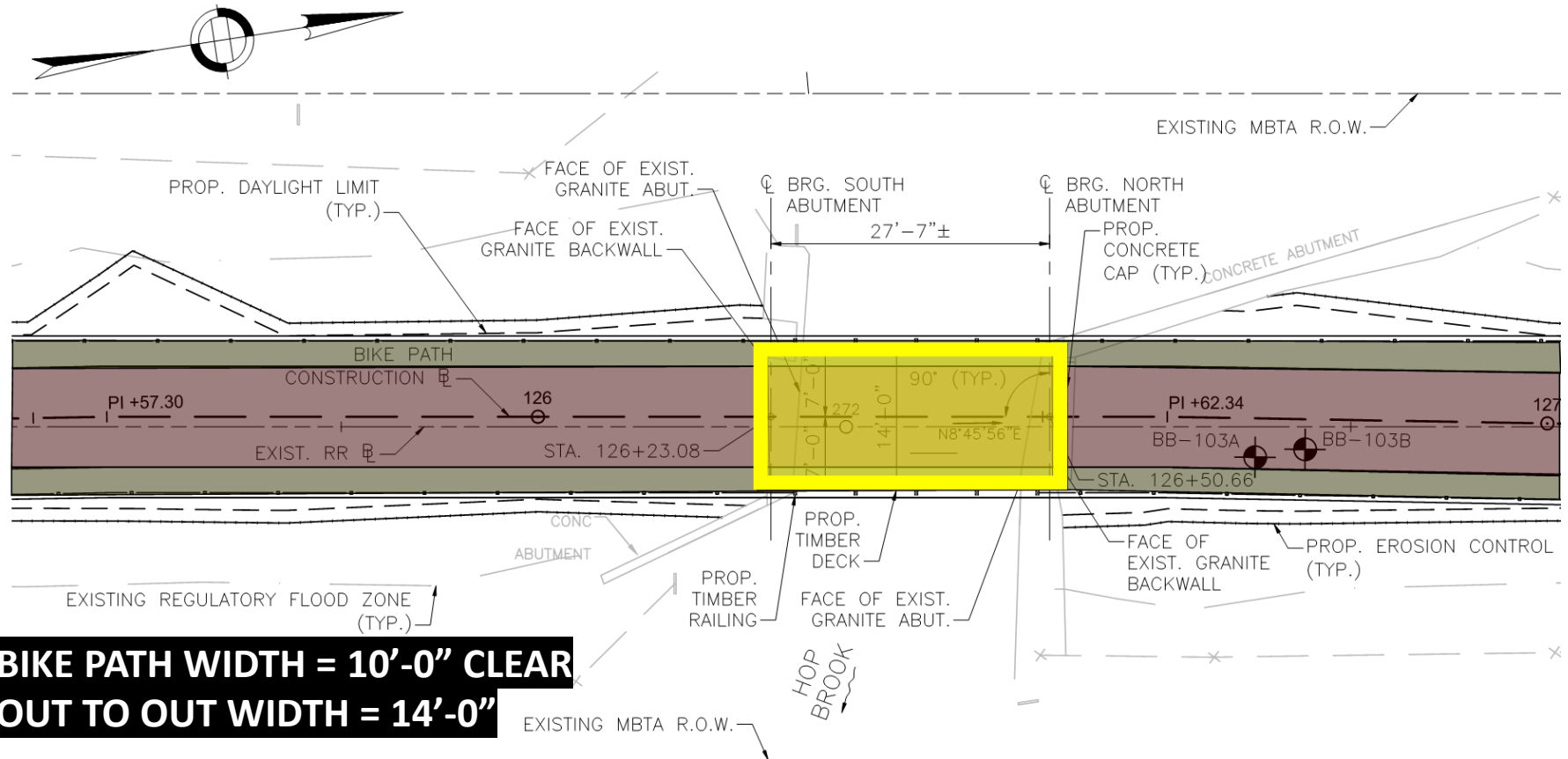


EXISTING BRIDGE DECK

Proposed Design - Hop Brook

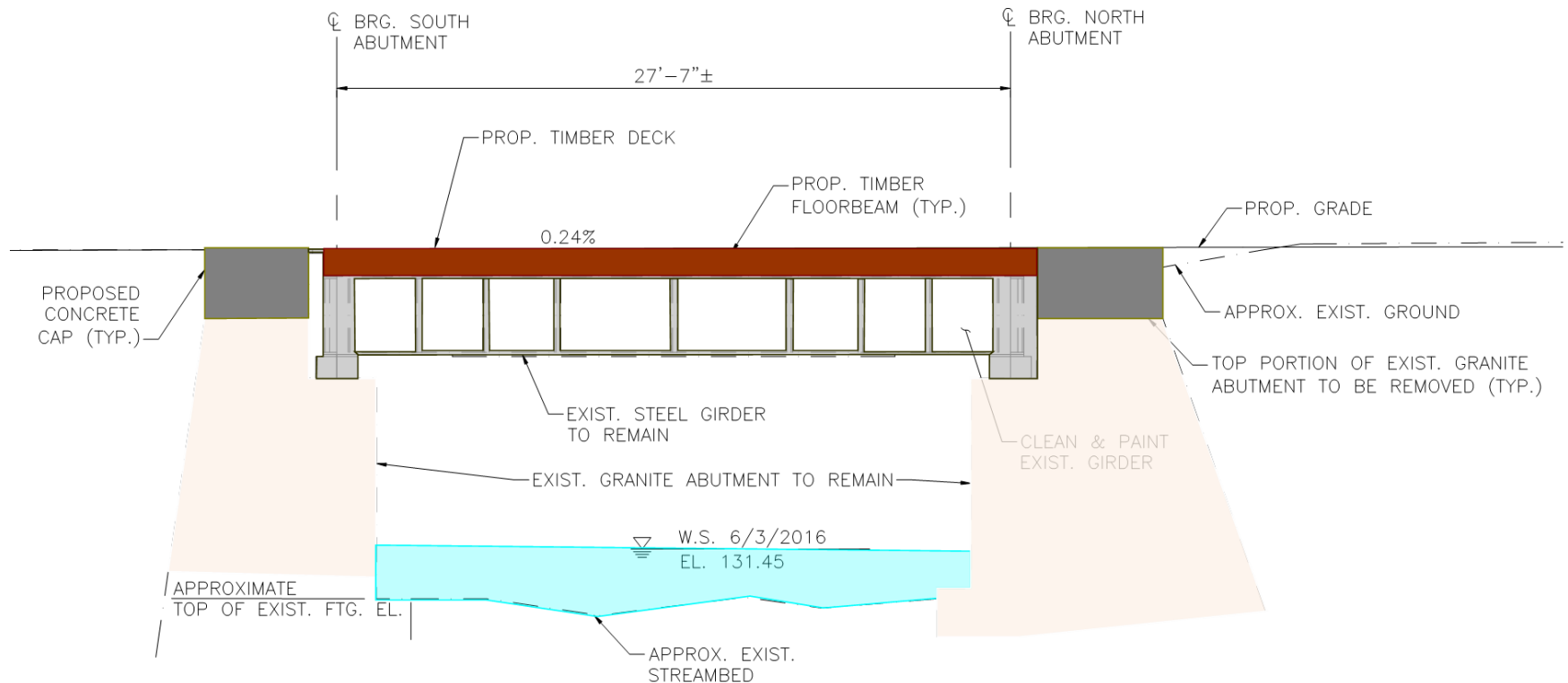
- Reuse existing steel superstructure
- Clean and repaint existing beams
- Replace railroad ties and rails with pressure treated timber decking and pressure treated railings

Proposed Design - Hop Brook



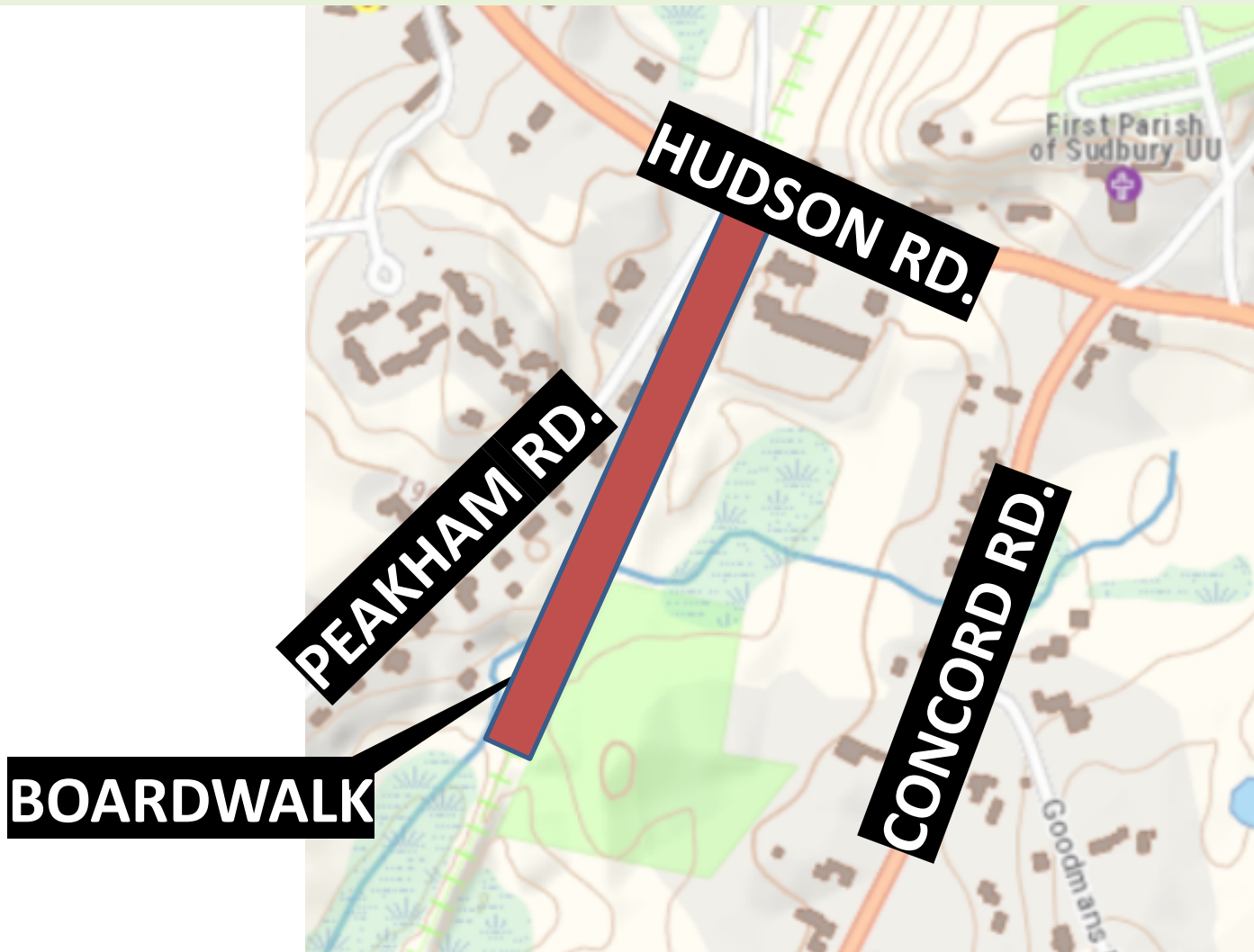
BRIDGE PLAN

Proposed Design - Hop Brook



PROPOSED SECTION

Boardwalk - Location



Existing Conditions - Boardwalk



EXISTING RAIL CORRIDOR

Existing Conditions - Boardwalk

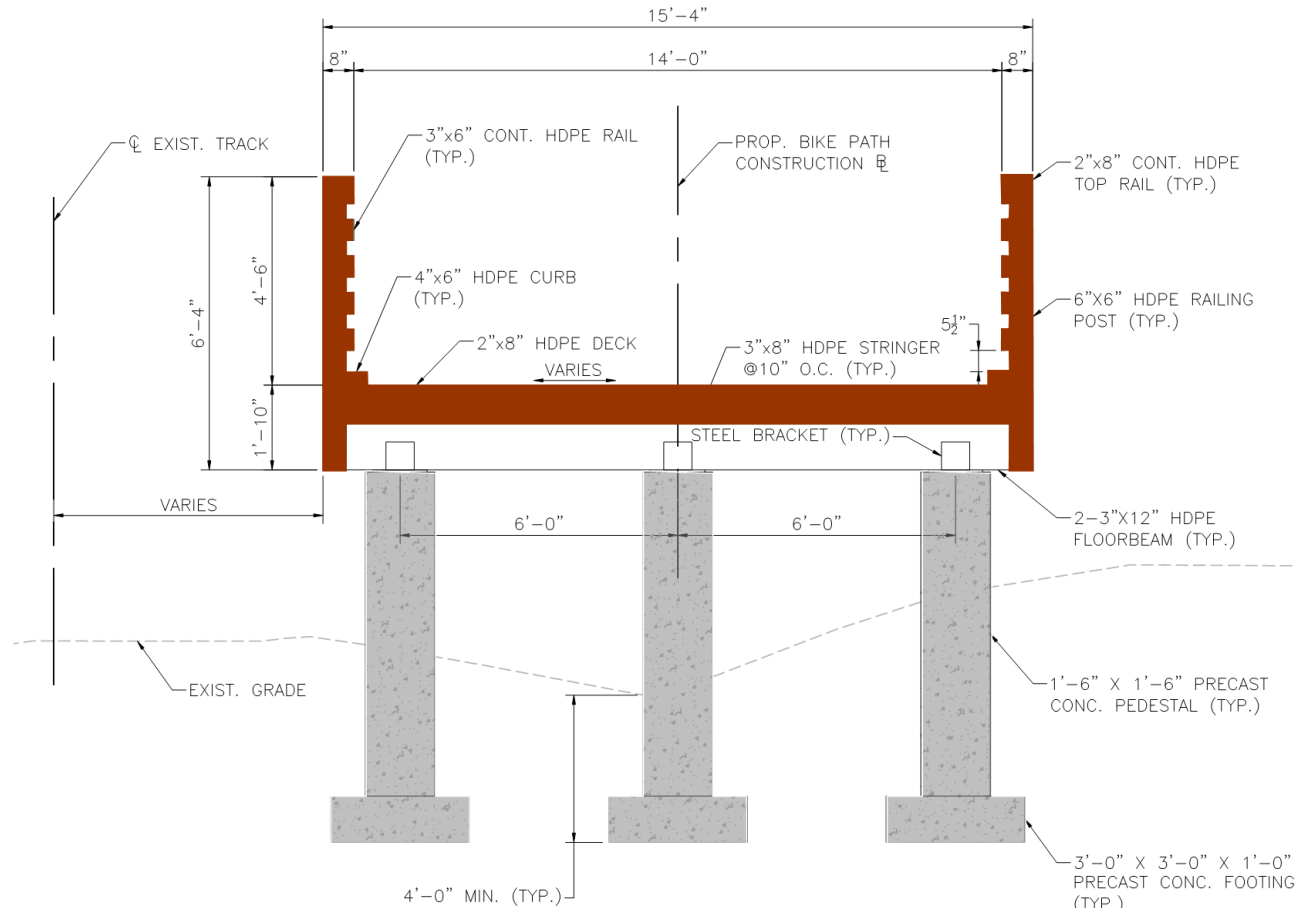


EXISTING RAIL CORRIDOR

Proposed Design - Boardwalk

- **Proposed Length approximately 750 feet**
- **Similar boardwalk along Assabet River Rail Trail in Acton, MA**
- **High-Density Polyethylene (HDPE) deck and support beams provide a 40 year life expectancy with minimal maintenance**
- **Minimizes environmental impacts**

Proposed Design - Boardwalk



PROPOSED SECTION

Proposed Design - Boardwalk



ARRT – BOARDWALK CONSTRUCTION

Proposed Design - Boardwalk



ARRT – BOARDWALK CONSTRUCTION

Proposed Design - Boardwalk



ARRT – FINAL COMPLETION