

# Town of Hopedale, MA Park Commission



## **HOPEDALE TOWN PARK – RETAINING WALL EVALUATION**

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# PRESENTATION AGENDA

1. Introduction
2. Project Overview
3. Wall Evaluation
4. Subsurface Investigation
5. Replacement Alternatives
6. Discussion

# PROJECT OVERVIEW

- 1. Wall Evaluation (Completed September 2023)**
  - Inspect the existing wall and quantify deficiencies
- 2. Subsurface Exploration (Completed September 2023)**
  - Assess soil properties for wall foundation design
- 3. Alternatives Analysis (Completed November 2023)**
  - Review solutions and choose a Preferred Alternative
- 4. Preliminary Design (Estimated Completion February 2024)**
  - Initial design and layout of the Preferred Alternative
- 5. Final Design (Estimated Completion May 2024)**
  - Initial design and layout of the Preferred Alternative



# WALL EVALUATION

## Hopedale Town Park Retaining Walls

Hopedale, MA

**Legend:**

- Good Condition
- Fair Condition
- Poor Condition
- Failed to Critical Condition



NO EXISTING  
RETAINING WALL  
IN THIS SECTION

HOPEDALE TOWN PARK RETAINING WALL  
HOPEDALE, MA

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WALL CONDITION AND STATION PLAN

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DATE: 11 October 2023  
SCALE: AS SHOWN  
FIGURE: 1





# STA 0+00 TO 2+20





# STA 2+20 TO 2+80





# STA 2+80 TO 4+30



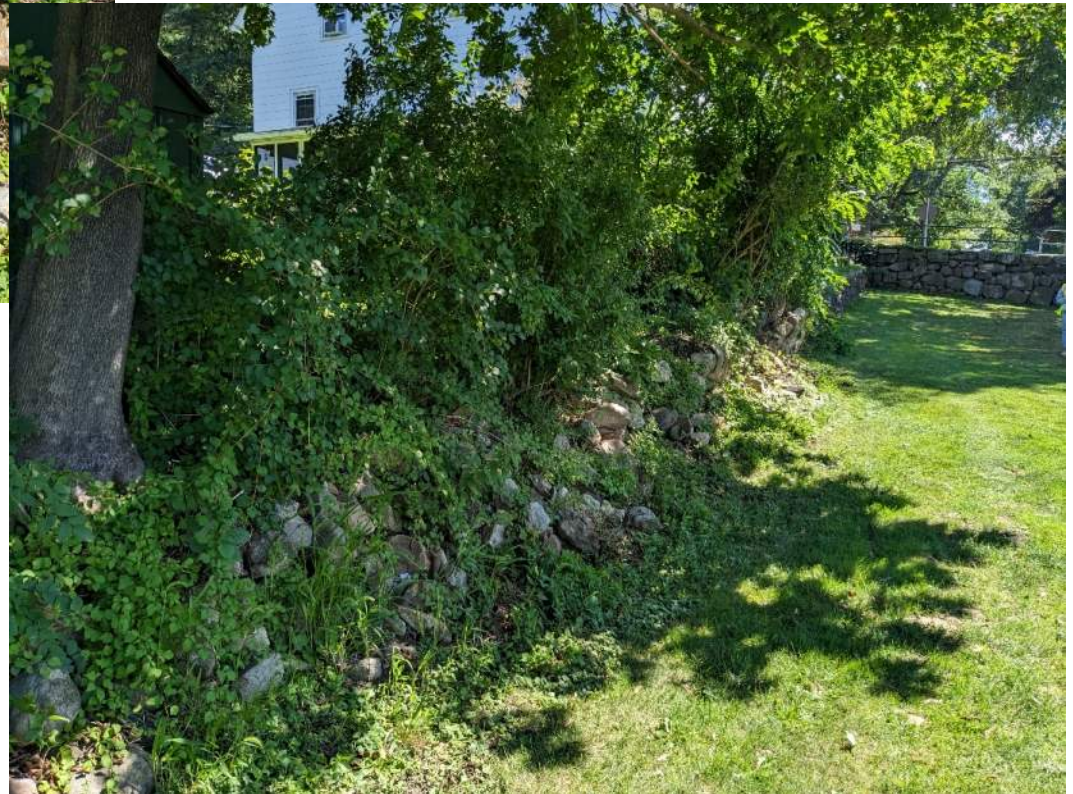


# STA 4+30 TO 7+40





# STA 9+60 TO 10+15





# STA 10+15 TO 10+60





# STA 10+60 TO 11+60





# STA 11+60 TO 12+10



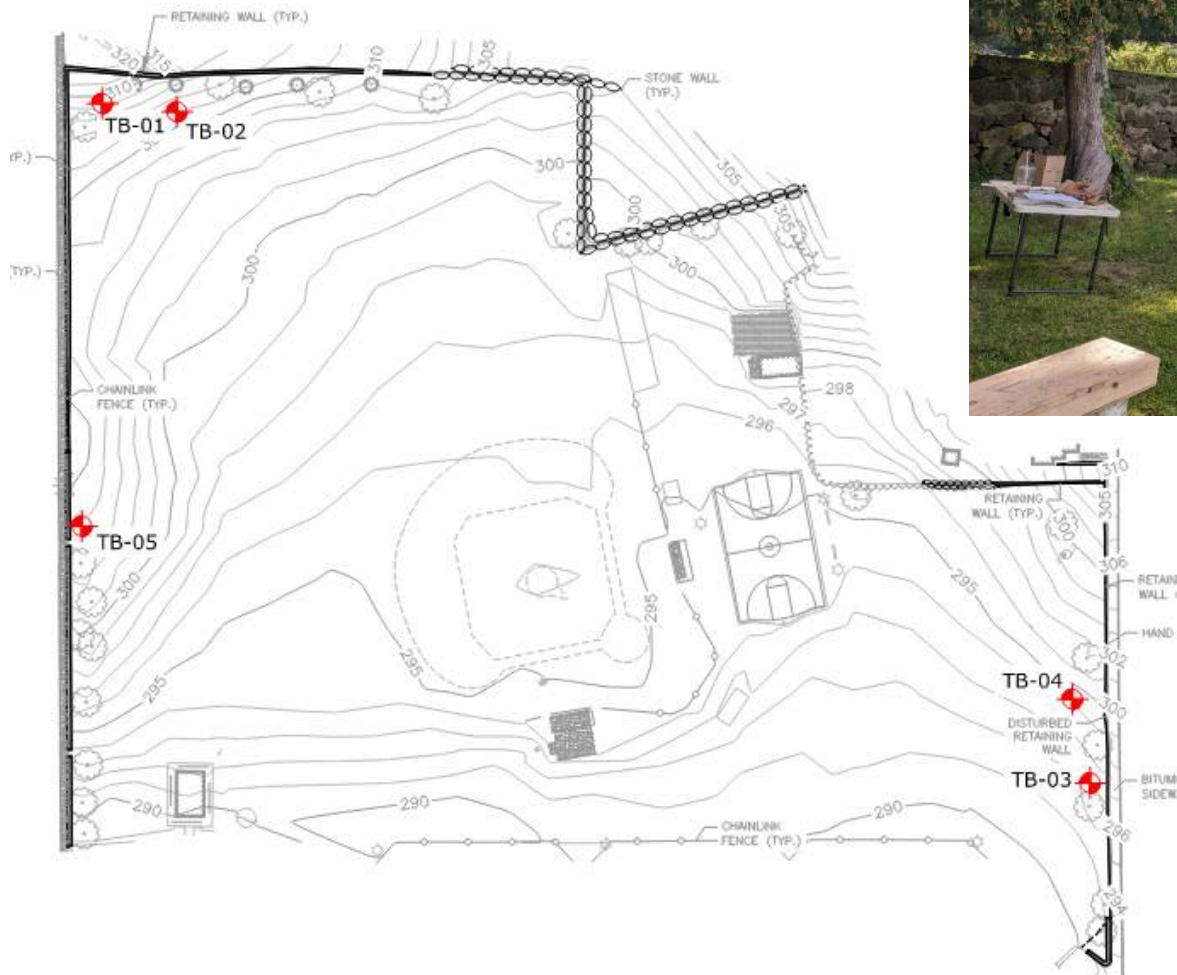


# STA 12+10 TO 13+10





# SUBSURFACE INVESTIGATION





# ALTERNATIVES ANALYSIS



# ALTERNATIVE 1 – DO NOTHING

1. Continued deterioration of the wall and eventual collapse of compromised areas.
  - Outcome of a wall collapse would be unfavorable due to proximity of abutters, public sidewalks / roadways and utilities

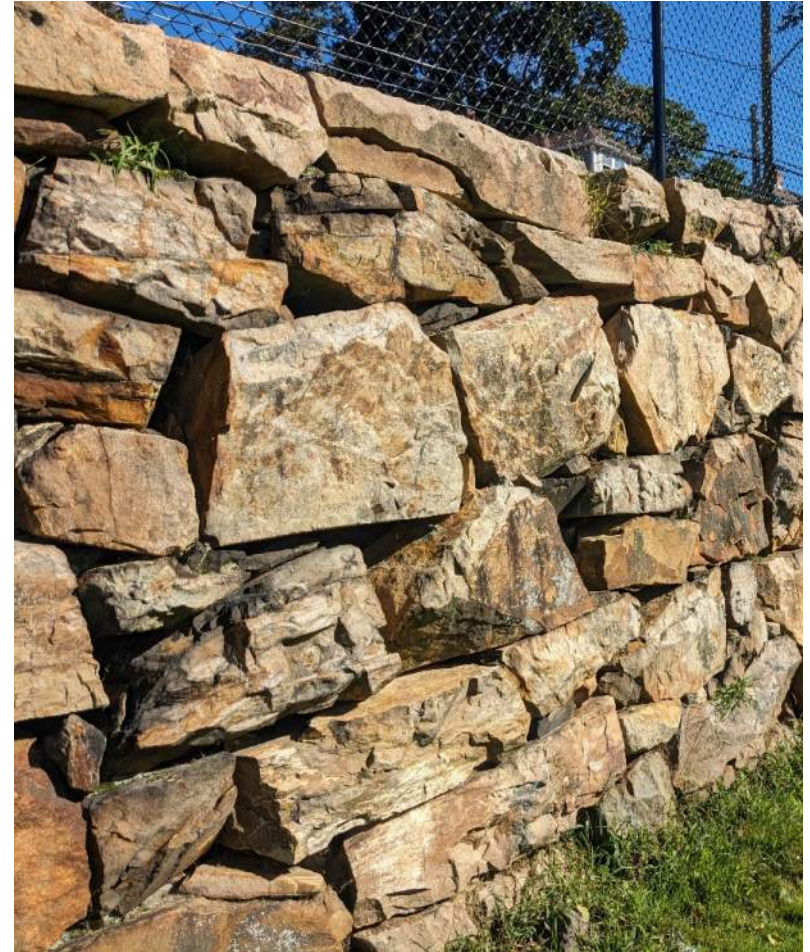




# ALTERNATIVE 2 – DISMANTLE AND RESTACK

Remove and restack the existing wall. Supplement with additional stone as needed.

- Estimated Cost: \$1,630,000
- Estimated Construction Schedule: 4 Months
- Impacts During Construction
  - Temporary Shoring needed at 25 Northrop Street
  - Lane closures on Northrop Street and Freedom Street
- Wall would look similar to existing wall

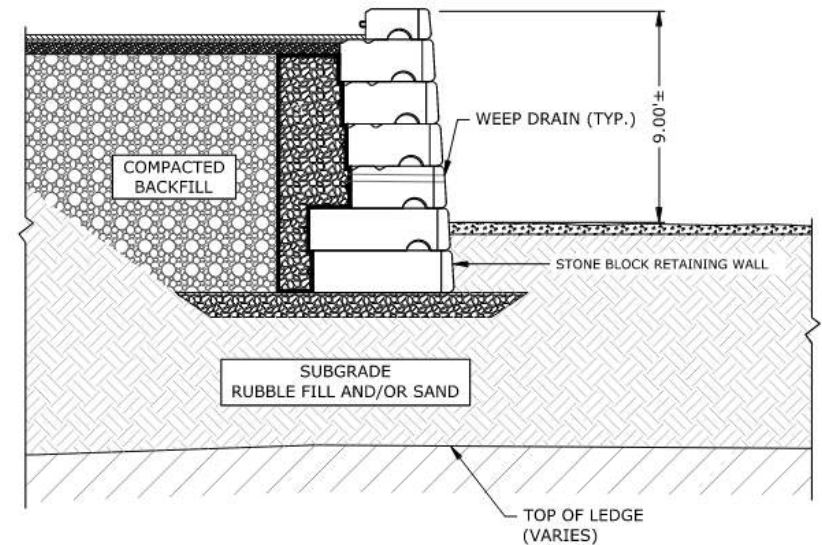




# ALTERNATIVE 3A – IN-PLACE CONCRETE BLOCK WALL

Remove the existing wall and replace with a modular concrete block wall in the same position.

- Estimated Cost: \$1,120,000
- Estimated Construction Schedule: 3 Months
- Impacts During Construction
  - Temporary shoring needed at 25 Northrop Street
  - Lane closures on Northrop Street and Freedom Street
- Concrete block with pattern instead of real stone

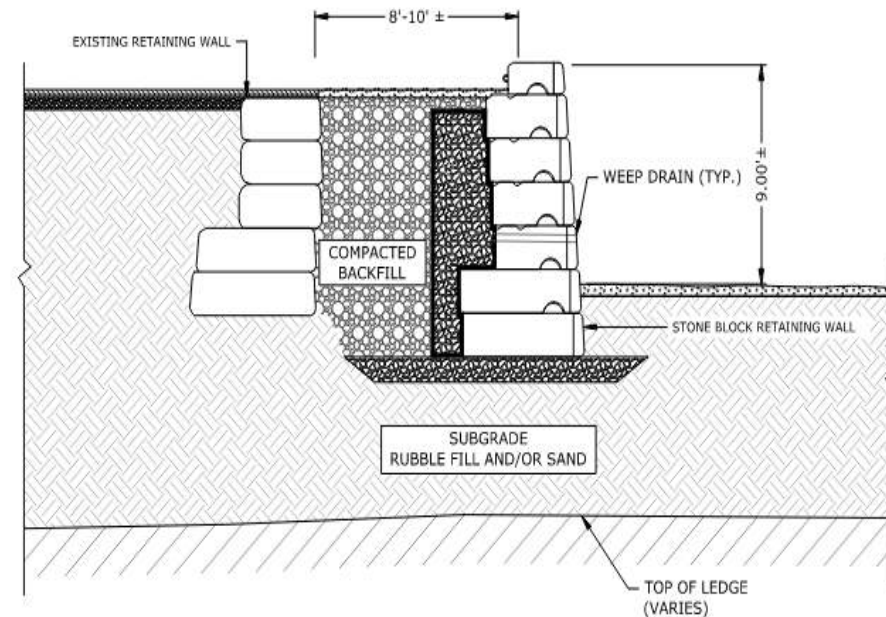




# ALTERNATIVE 3B – IN-FRONT CONCRETE BLOCK WALL

Build a new modular concrete block wall in front of the existing stone wall

- Estimated Cost: \$ 650,000
- Estimated Construction Schedule: 2.5 Months
- Impacts During Construction
  - Closure of sidewalk along Freedom Street
  - Security fence at 25 Northrop Street
- Concrete block with pattern instead of real stone

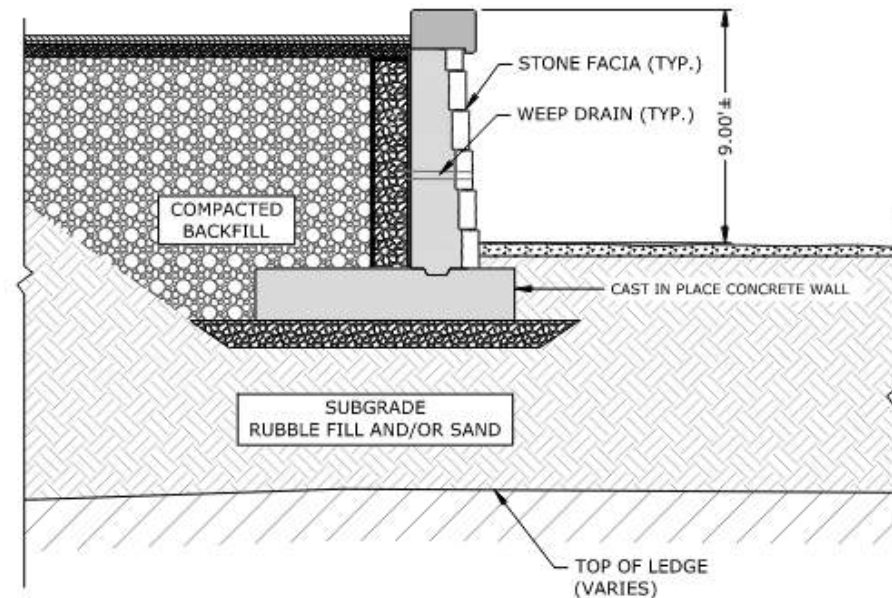




# ALTERNATIVE 4A – IN-PLACE C.I.P CONCRETE WALL WITH STONE FACADE

Remove the existing stone wall and build a new cast-in-place concrete wall in its place. Add an aesthetic stone façade.

- Estimated Cost: \$ 1,880,000
- Estimated Construction Schedule: 4 to 5 Months
- Impacts During Construction
  - Temporary shoring needed at 25 Northrop Street
  - Lane closures on Northrop Street and Freedom Street
- Stone façade similar in appearance to the existing wall.

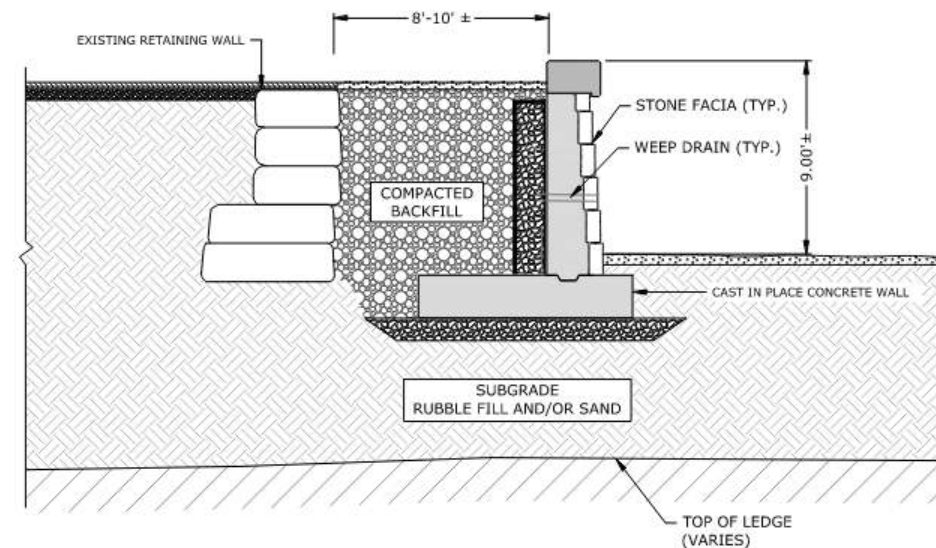




# ALTERNATIVE 4B – IN-FRONT C.I.P CONCRETE WALL WITH STONE FACADE

Build a new cast in place concrete wall in front of the existing stone wall. Add an aesthetic stone façade.

- Estimated Cost: \$ 1,530,000
- Estimated Construction Schedule: 3.5 Months
- Impacts During Construction
  - Closure of sidewalk along Freedom Street
  - Security fence at 25 Northrop Street
- Stone façade similar in appearance to the existing wall.







**THANK YOU!**

**QUESTIONS & DISCUSSION**