

Paying for Large Projects in Small Communities: Templeton's Replacement of its Main Wastewater Pump Station



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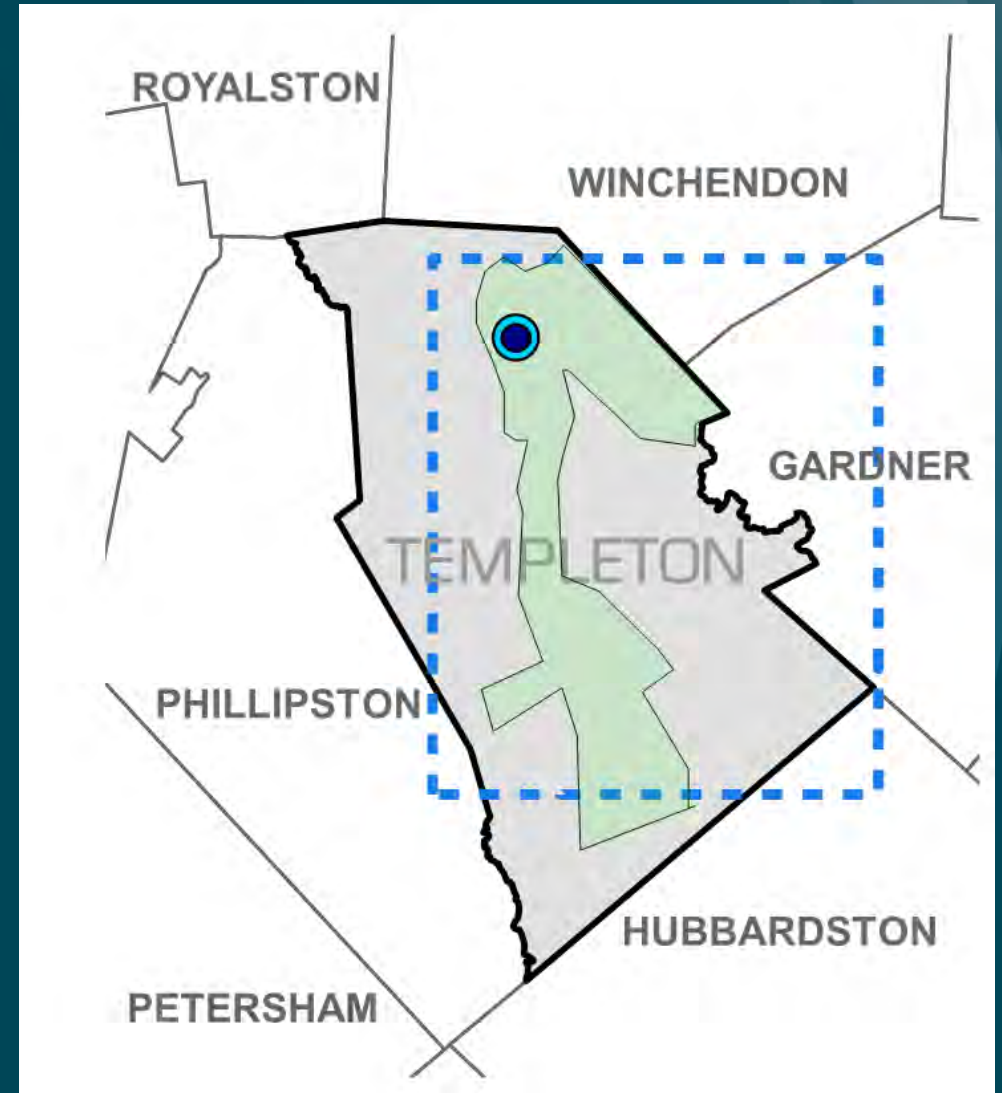
Boston, MA

AGENDA

- Project Background
 - Town of Templeton
 - Pleasant Street Pump Station
 - Proposed Project
- USDA Water & Environmental Funding Programs
- Water & Waste Disposal Loan & Grant Program
- USDA Program Considerations
- Construction Phase

Templeton, Massachusetts

- Worcester County
- Population – 8,153 (2018)
- 1,400 sewer customers/connections
- \$432 annual user charge (minimum tier)



Pleasant Street Pump Station Service Area

Pleasant Street Pump Station

- Year Built – 1976
- Capacity – 900,000 gpd
- In Flood Plain
- On Federal Land (ACOE)



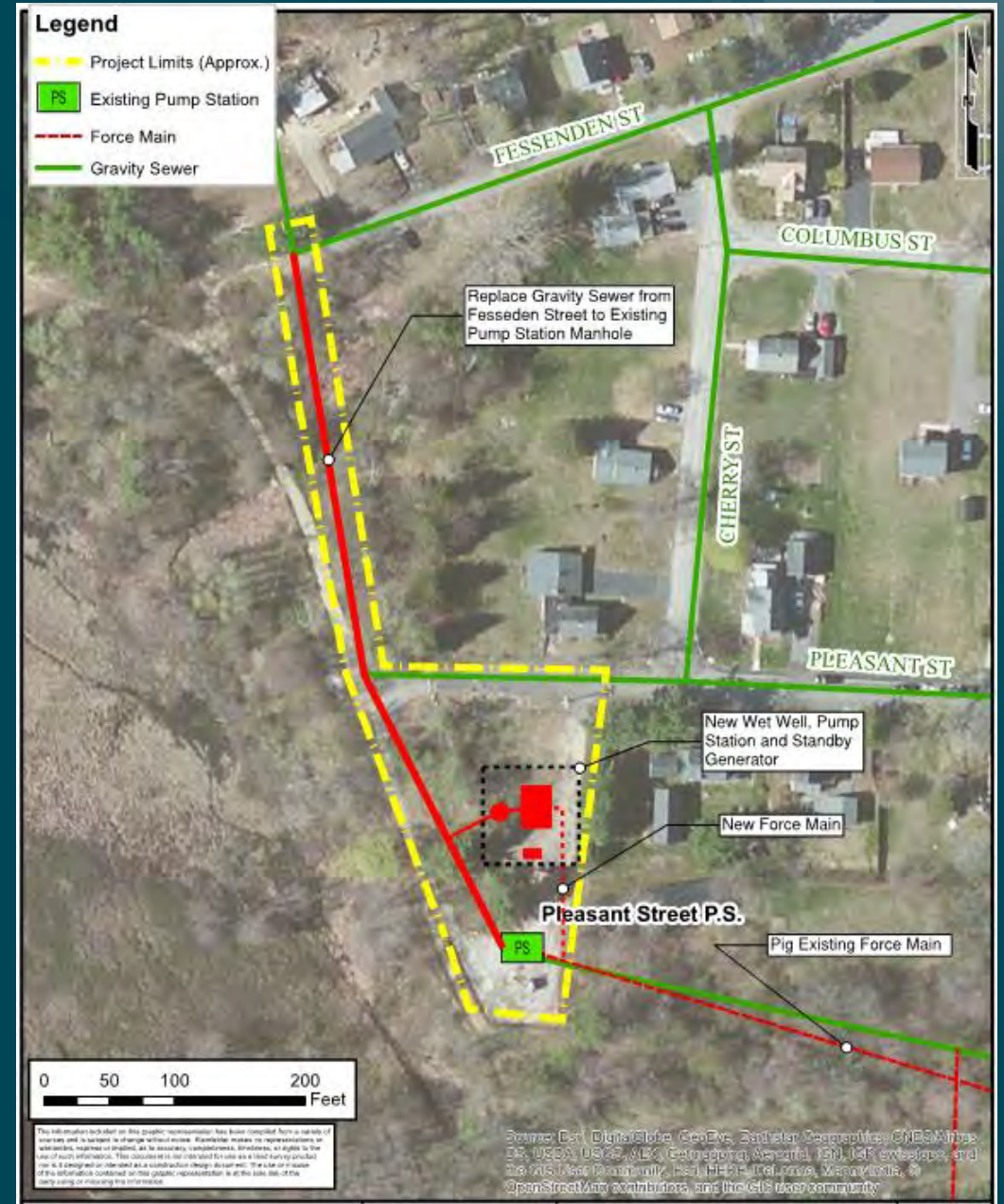
Existing pump station in flood plain on federal lands

Old Pump Station, Wetwell and Control Building



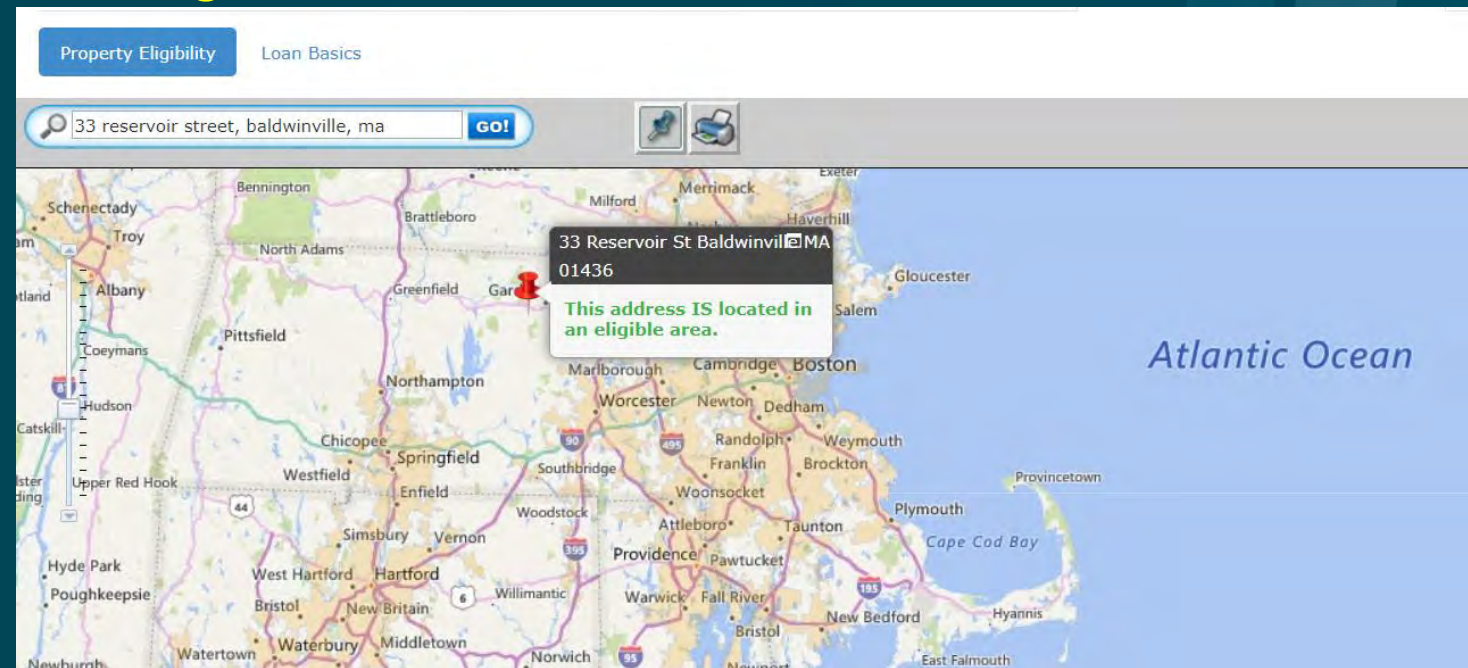
Proposed Project

- Preferred Alternative: **Replace Pump Station**
 - Outside flood plain
 - On Town Land
- Reconfigure Collection System (600 feet)
- Pre-Fab Wet Well and Pump Station
 - 35-foot deep excavation
- Reuse Control Building
- New Exterior Diesel Generator
- \$2.3M Project Budget



USDA – Water and Environmental Funding Programs

- Population < 10,000
- Relevant Funding Programs:
 - Technical Assistance and Training Grants
 - Predevelopment Planning Grants
 - **Water & Waste Disposal Loan & Grant Program**



Water & Waste Disposal Loan & Grant Program

○ Application Process:

- 27 Item Checklist
- Preliminary Engineering Report
- Environmental Report

○ Funded Amount:

- \$575,000 Grant (25%)
- \$1,725,000 Loan (75%) at 2.25% interest (40-year term)

○ Funds Used For:

- Legal
- Financial Advisory
- Engineering (design, survey, construction administration)
- Land acquisition



United States Department of Agriculture

June, 2014

Water and Environmental Programs

USDA Program Design & Construction Considerations

- American Iron and Steel Requirement
- Agreements must be EJCDC form
- USDA Promotes Open Source Bidding (sole source is discouraged)
- As a project under-runs budget, the Grant is eliminated first
- No change orders after substantial completion

- Application & Financial Consulting Costs – \$32,000

USDA Program Loan Terms & Conditions

- Grants subject to availability and not guaranteed
- Available Funds and Competition vary annually
- Funds distributed on reimbursement basis
- Loan interest rate varies

CONSTRUCTION

- General Contractor: Ricciardi Brothers Inc.
- PS Manufacturer: United Concrete
- Total Project Budget: \$2,300,000
- Final Project Amount: \$2,059,911
- Construction Bid : \$1,837,500
- Final Construction Amount: \$1,841,791
- Duration: 446 days



Construction



*Lowered Land to
Minimize Depth of
Excavation*

Construction



*Pump Station
Superstructure at United
Concrete Factory*

Construction



*Gorman-Rupp
Pump Skid on Slab*

Construction



Install of Pump Station Sections

Construction



Wet Well Top Slab

Construction

*Pre-Fab Building
and Roof*



Construction



Divided Wet Well

Conclusion

- Active collaboration with Kleinfelder, the Town, the Contractor and USDA led to:
 - The replacement of a major wastewater pump station
 - Alleviating the Pleasant St PS costs for sewer users in Town of Templeton
 - Average user cost of \$45 per year over 40-years
 - Reimbursement of all planning and design fees to the Town



Thank You!!!

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