Town of Littleton

Littleton Common Smart Sewer

Board of Selectmen Update
March 4, 2019
Site Analysis Process

• Parcel Assessment
• Weighted Criterion
• Top Three Sites
• Less Optimal Sites
• Questions
Town of Littleton
Smart Sewer Program
Assessment of Every Parcel In Littleton, MA

Using Geographic Information System (GIS), parcels were eliminated from consideration if they did meet the following criteria:

- Make up greater than two (2) total acres
- Not have significant wetland cover
- Not have agricultural protection
- Not be designated as conservation land

➢ 66 parcels were found to have met these criteria
➢ 13 final sites were identified
Revisiting Screening

• Littleton Highway Department (39 Ayer Road identified as preferred site)

• Screening was revisited after review of specific sites
• Littleton Board of Selectmen elected to look for more appropriate sites
• Stricter criterion was enforced to find the best fit sites
  • Proximity to residential homes
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Smart Sewer Program
Further Evaluation of the 66 Parcels

• Each of the following criterion was given a weight based on its relative degree of influence over the cost of the project, ease of construction, and impact to the surrounding community
  • Ownership of parcel
  • Proximity to service area and discharge site
  • Proximity to sensitive receptors and residences
  • Trucking access
  • Efficiency of energy use (heating)
  • Need for additional regulatory approvals
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Top Three Sites

1. 39 Ayer Road – DPW/LELWD, Highway Department (MUNICIPALLY OWNED)

2. 149 Ayer Road – Gravel Pit, Aggregate Industries

3. 550 King Street – IBM, Hudson Properties
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Site 1: 39 Ayer Road
DPW/LELWD, Highway Department, Municipally Owned

- Closest acceptable parcel to the groundwater discharge point and service area via the existing force main
- Distance to existing force main discharge at Littleton High School (56 King Street)/GWD Fields: ~0.8 miles
- Closest residence: ~650 Feet
- Estimated budget cost for piping and paving: ~$1.3 Million (baseline)
- No land acquisition is required
- Site currently sees trucking consistently
Site 2: 149 Ayer Road
Aggregate Industries, Gravel Pit

- Offers large amount of industrial land far from residences or other sensitive receptors
- Distance to existing force main discharge at the Littleton High School WWTF/GWD Fields: ~1.2 miles
- Estimated budget cost for piping and paving is ~$2.4 Million
- The price for acquiring a needed area on this parcel is subject to negotiation but is anticipated to be several hundred thousand dollars
- Site currently sees trucking consistently
- Additional site limitations are unknown
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Site 3: 550 King Street  
IBM, Hudson Properties

- Representatives from Hudson indicated that they are not willing to sell any portion of their land for the CWERC site
- Distance to the groundwater discharge site: ~2.4 miles
- Closest Residence: ~700 Feet
- Would require that the High School plant be refit and kept in service
- The estimated budget cost for piping and paving is ~$2.8 Million
- The Town would need to purchase a section of this land, which is anticipated to be several hundred dollars
# Site Analysis Table

**Preliminary Prioritization Criteria**

<table>
<thead>
<tr>
<th>Index</th>
<th>Address</th>
<th>Site Descriptor</th>
<th>Ownership</th>
<th>Proximity to Service Area</th>
<th>Proximity to SWG Site</th>
<th>Trunking Access</th>
<th>Heat</th>
<th>Distance to Nearest Residence</th>
<th>On NHESP Habitat/Wetland Resource Area</th>
<th>Total Weighted Points</th>
<th>Aerial FT</th>
<th>Points</th>
<th>Weight Total</th>
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</tbody>
</table>
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Additional Sites

• Site 4: 80 Ayer Road – Middlesex Corporation
  • Environmentally constrained, $400,000 more than Site 1
• Site 5: 150 Ayer Road – Farm Field
  • Agricultural land, $900,000 more than Site 1
• Site 6: 74/76 Whitcomb Avenue – DPW/LELWD, Highway Department
  • Proposed Water Treatment Plant, closest residence: ~300 Feet
• Site 7: (0) Great Road – The Point
  • Owner has refused CWERC site, far from groundwater discharge site
• Site 8: 30 Porter Road – Open Land on Parcel with One Large Building
  • Environmentally constrained, close to proposed Water Treatment Plant
• Site 9: 194 Ayer Road – Triumph Modular
  • Open space on parcel is less than 2 acres, far from Route 495
• Site 10: (0) Great Road – Open Land
  • Far from service area/groundwater discharge site, Owner has refused CWERC site
• Site 11: 2 Cataldo Pond Way – Kimball Farm
  • Recognized as estimated habitat by NHESP, far from groundwater discharge site
• Site 12: 196 Ayer Road – Agricultural Land
  • Agricultural land, closest residence: ~540 Feet
## Comparison of Top 3 Sites

### Financial Impacts on Total Project Costs

<table>
<thead>
<tr>
<th>Potential CWERC Sites</th>
<th>Relative Cost of Site Use</th>
<th>Differential Costs from Site 1</th>
<th>Impact of Differential Cost on Betterments</th>
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<tbody>
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<td>Site 3</td>
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<td>~$2 M</td>
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<tr>
<td>550 King Street</td>
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Town of Littleton
Smart Sewer Program – Alternative Site Analysis
Questions?