



Barnstable Town Council

Update on Wastewater Efforts In Barnstable

Department of Public Works
December 16, 2021

• Strawberry Hill Road Sewer Expansion Project



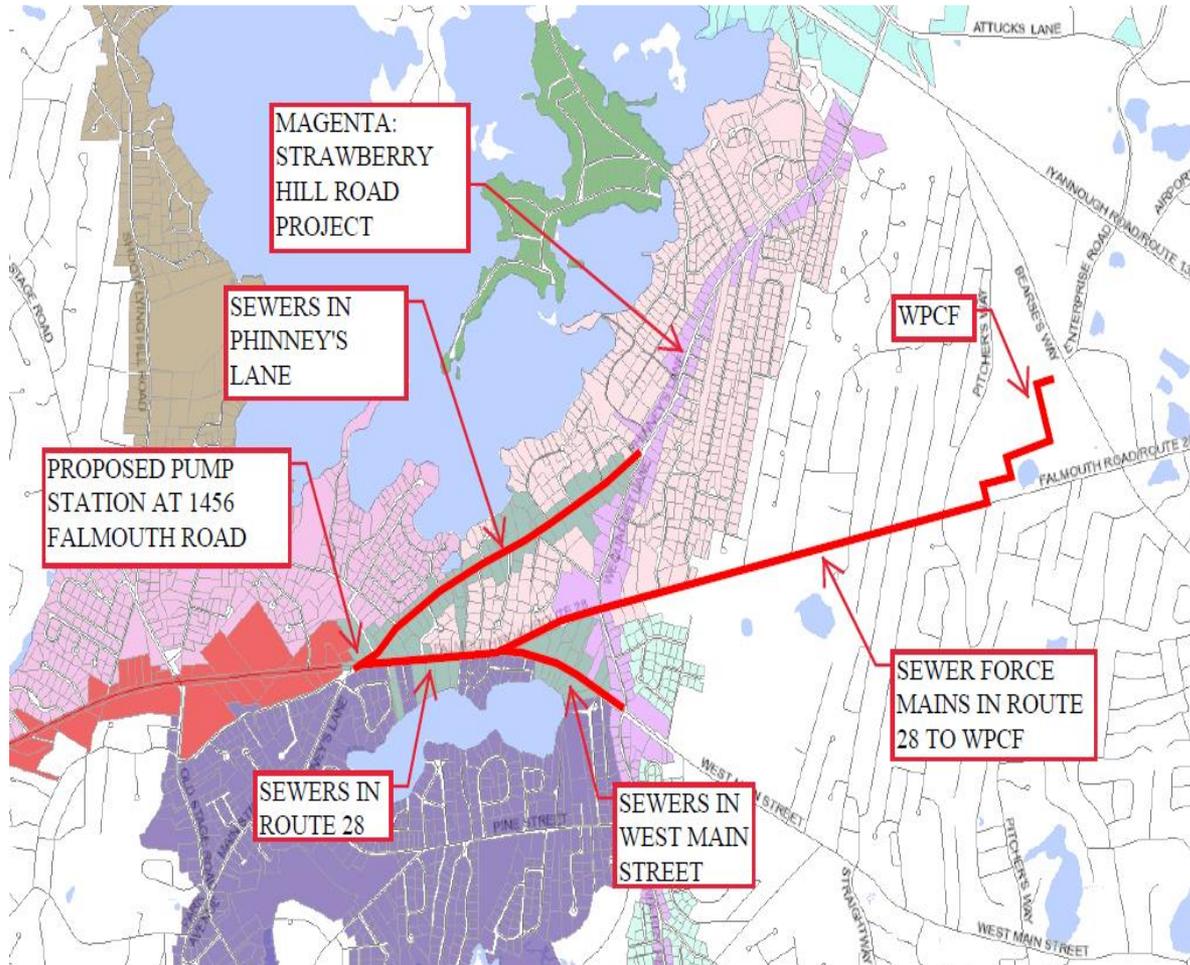
- 2,200 LF of gravity sewer main installed to date
 - SHR from PS to Old Craigville Road.
 - CBR from Lake Elizabeth Drive to Magnolia Drive
- Two sewer crews now. Third mobilizing in next few weeks.
 - Crew 1: Strawberry Hill Road
 - Crew 2: Craigville Beach Road
 - Crew 3: Force main and services on SHR
- Vineyard Wind's crews at Covell's Beach Parking Lot and on Independence Drive.
- Project anticipated to be completed in Spring, 2023



Project Updates Since November



• *Route 28 East Sewer Expansion Project*



- *SRF Loan Application Submitted*
- *Design and permitting continues*
- *Virtual informational session held on 11/16/21*
- *Potential easement acquisition on abutting property (195 Phinney's Ln)*
- *Bidding anticipated this winter*
- *Construction to commence late spring/summer*

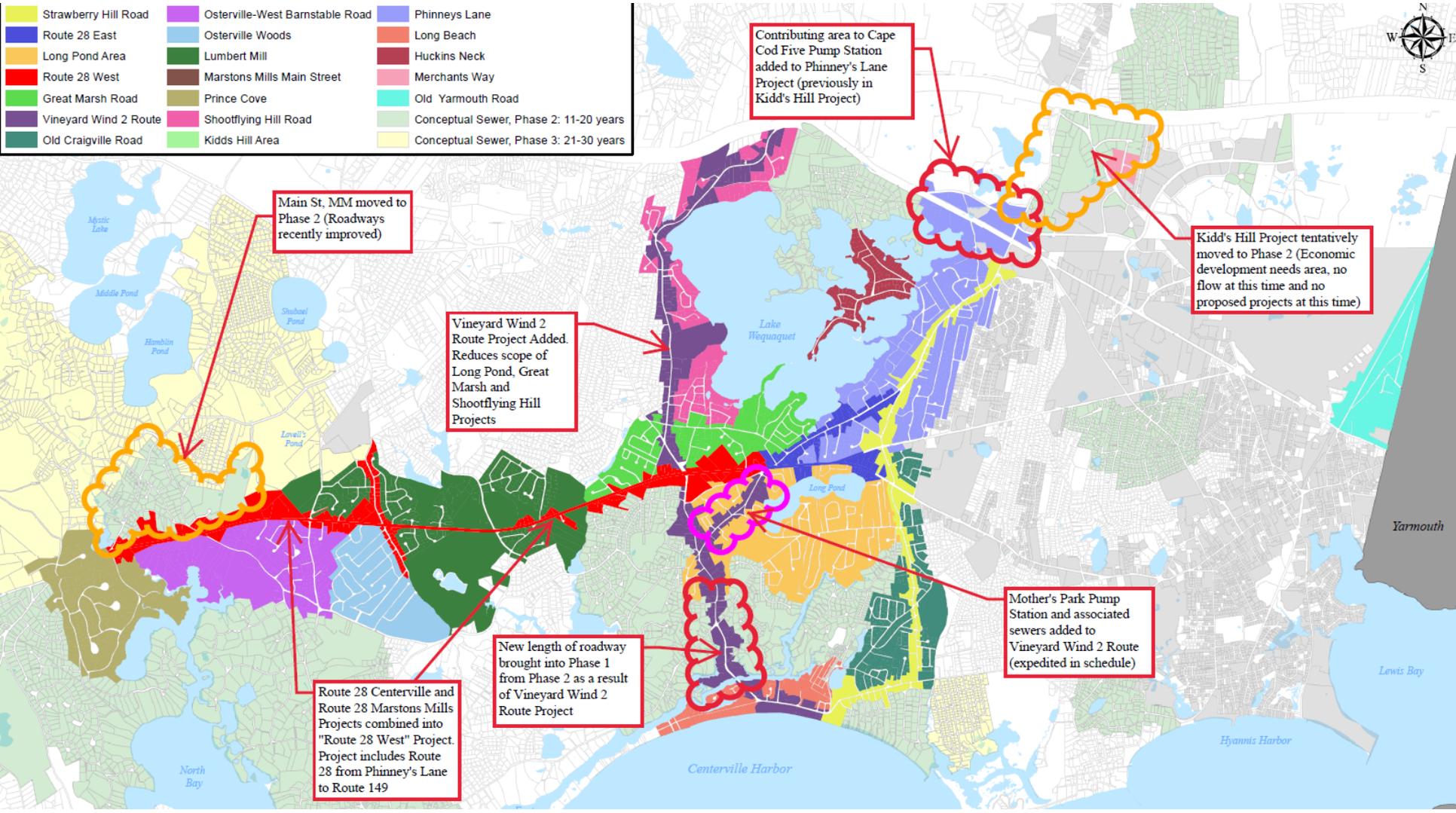


Project Updates Since November



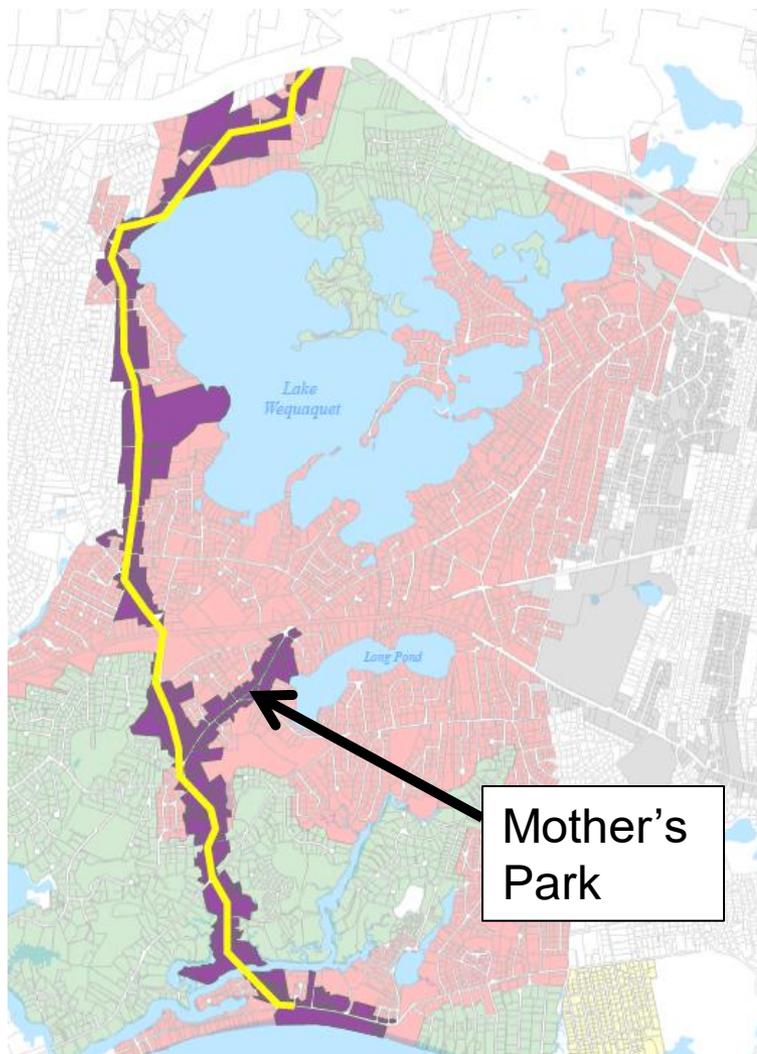
Adaptive Management Updates to Phase 1

Strawberry Hill Road	Osterville-West Barnstable Road	Phinneys Lane
Route 28 East	Osterville Woods	Long Beach
Long Pond Area	Lumbert Mill	Huckins Neck
Route 28 West	Marstons Mills Main Street	Merchants Way
Great Marsh Road	Prince Cove	Old Yarmouth Road
Vineyard Wind 2 Route	Shootflying Hill Road	Conceptual Sewer, Phase 2: 11-20 years
Old Craigville Road	Kidd's Hill Area	Conceptual Sewer, Phase 3: 21-30 years





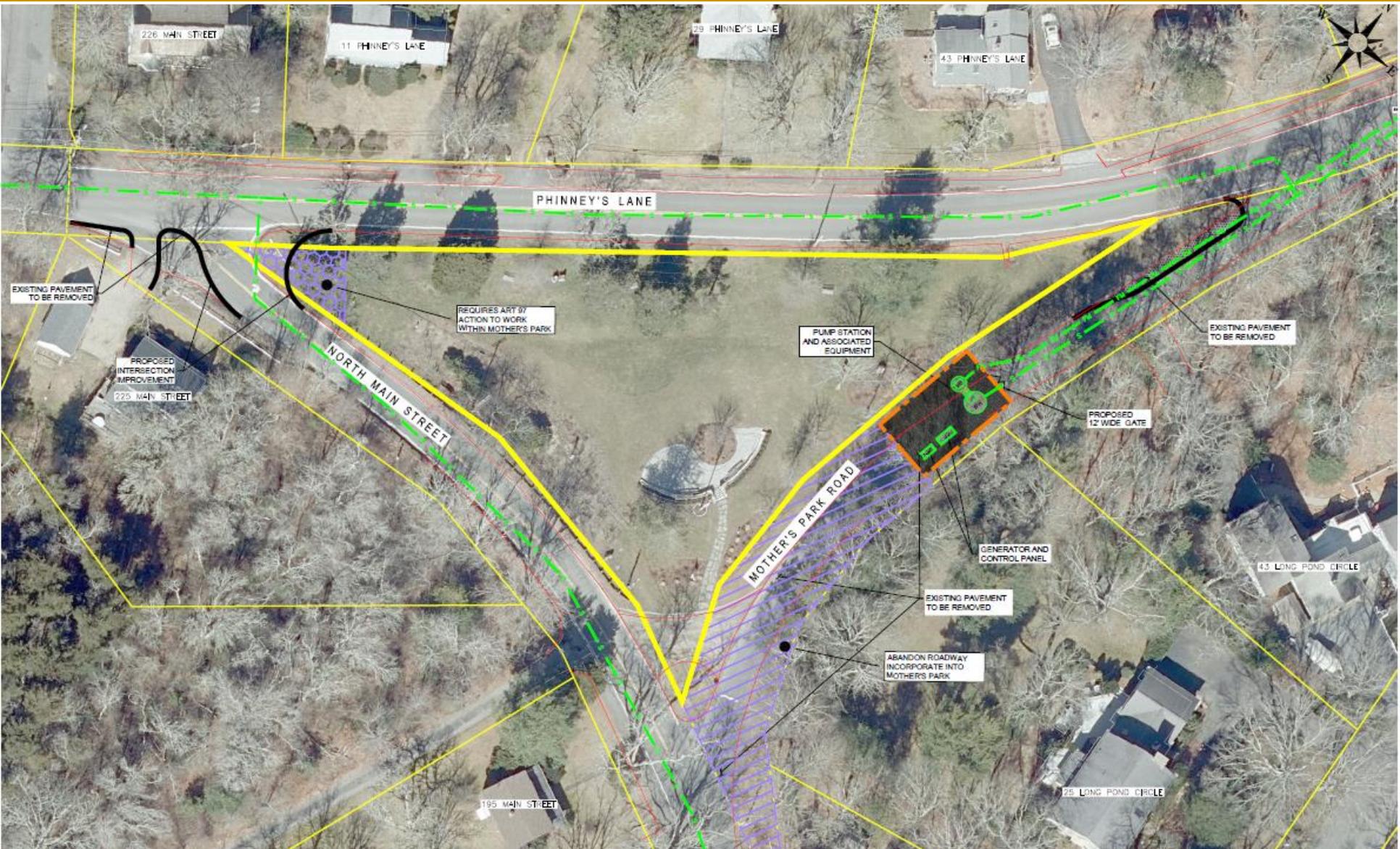
Project Updates Since November

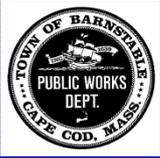


- **“Vineyard Wind 2” On-Shore Route**
 - Route is located in roads requiring sewer
 - Second read this evening for funds to design sewers along route (2022-044)
 - Project includes Mother’s Park Area Pump Station and associated sewers
 - Virtual informational session held last night on Mother’s Park Area pump station proposal.



Project Updates Since November





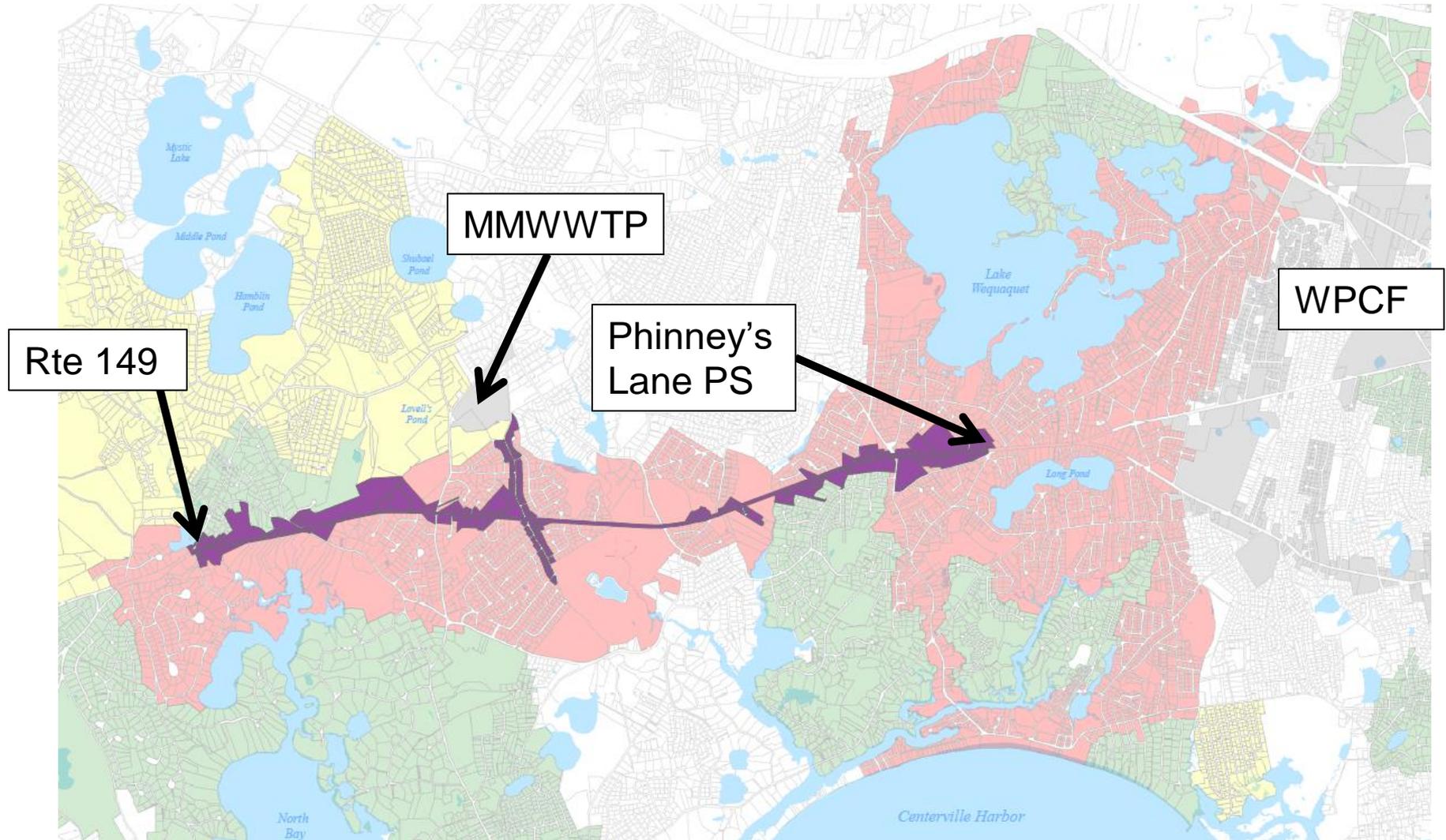
Project Updates Since November



- *Route 28 “West” Sewer Expansion*
 - *Phinney’s Lane to Route 149*
 - *Previously 2 projects (Route 28 Centerville & Route 28 Marstons Mills)*
 - *Necessary infrastructure for sewer expansion into Three Bays Watershed*
 - *Includes conversion of MMWWTP into pump station.*
 - *Survey has been completed*
 - *Second read this evening for design funds (2022-045).*



Project Updates Since November





Project Updates Since November



- *Route 28/ Yarmouth Road – MassDOT*
 - *Install sewers w/in project limits to support future sewer expansion.*
 - *Sewer bids far exceed engineer's estimate provided by MassDOT.*
 - *Second read this evening for supplemental appropriation (2022-052)*
 - *Work anticipated to commence in spring 2022.*
 - *Northern Construction is MassDOT's contractor.*



Project Updates Since November



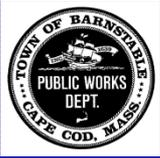
- *Planning on-going for other Sewer Projects*
 - *Phinney's Lane and Long Pond Sewer Projects*
 - *Surveys complete, preliminary design (in-house) on-going.*
 - *First projects involving Private Roads.*



Project Updates Since November



- *WPCF Updates*
 - *Evaluation of Nitrogen Removal Improvements*
 - *Contract awarded to Wright-Pierce*
 - *Evaluation to be completed by Spring of 2022*
 - *Effluent Disposal Evaluation*
 - *CDM Smith will be conducting refined modeling evaluation of identified options*
 - *Solids Processing Facility Upgrades*
 - *Construction on-going*
 - *WPCF Engineering Facility Study*
 - *DEP required for permit renewal in 2023.*
 - *Proposals being sought.*



Project Updates Since November



- *SRF*

- *Loan applications for 2021 projects being reviewed by SRF*

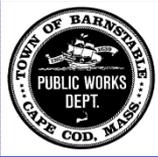
- *Route 28 East Sewer Expansion Project*
- *Freezer Road Sewer Pump Station Rehabilitation*

- *Project Evaluation Forms for 2022 projects being reviewed by SRF*

- *720 Main St Pump Station Replacement*
- *Old Colony Pump Station Rehabilitation*
- *I/I Program Implementation*

- *JBCC*

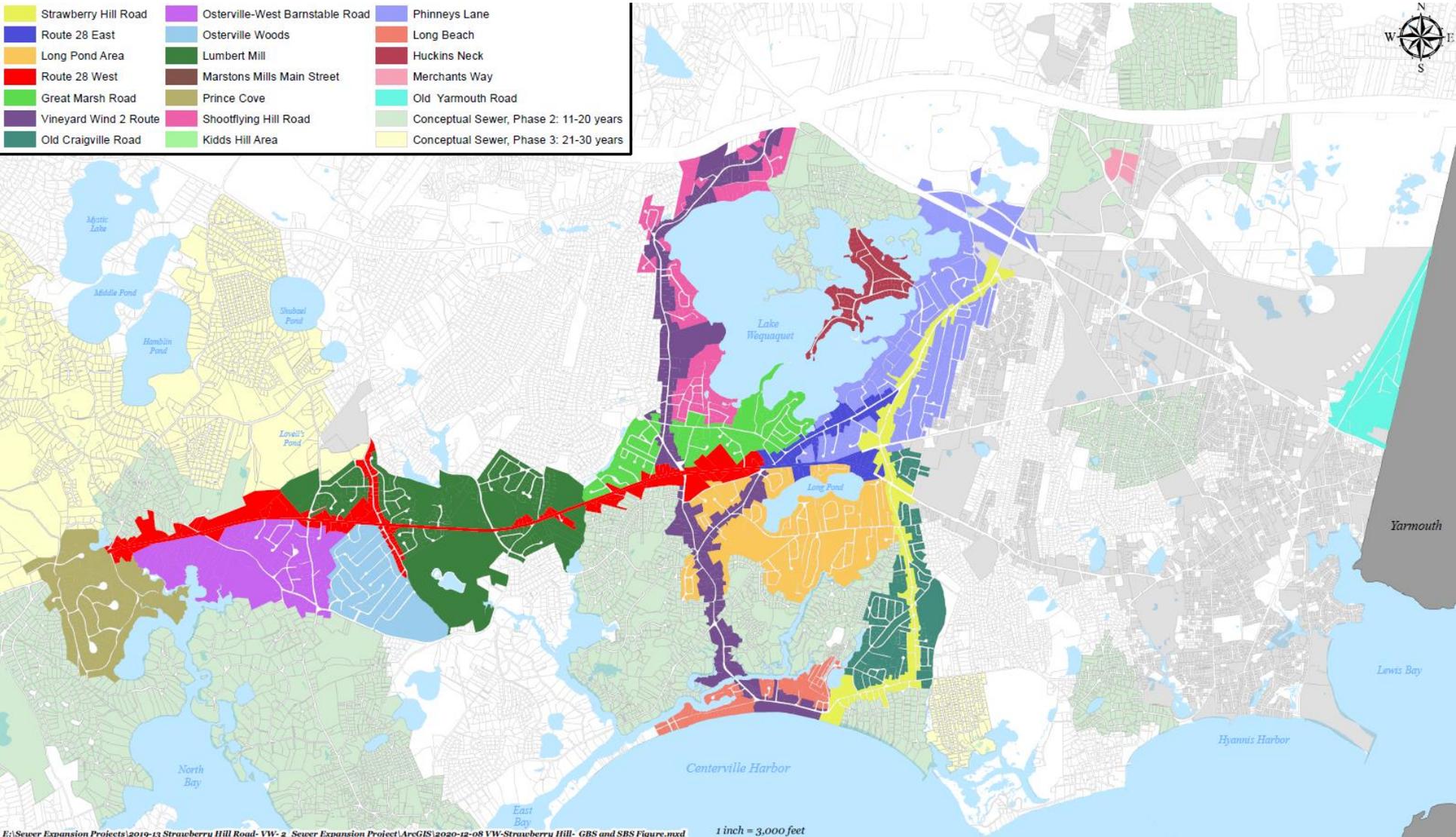
- *Negotiations continue*



Project Updates Since November

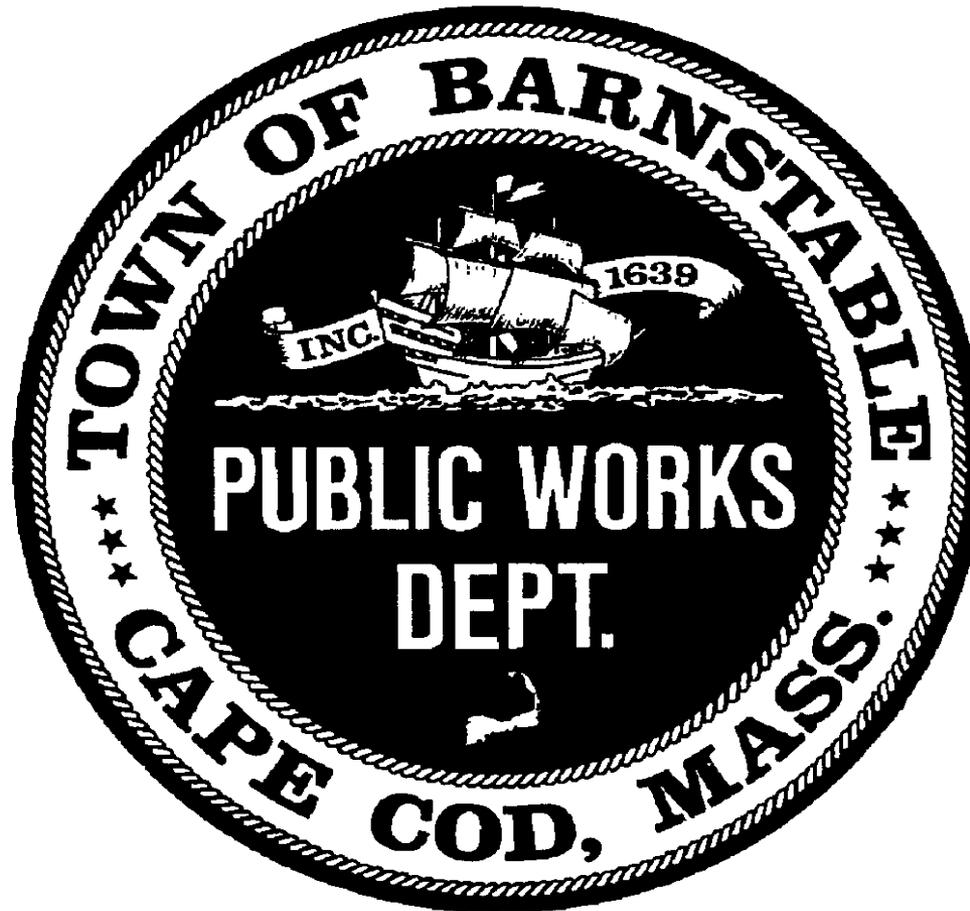


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|-----------------------|---------------------------------|--|
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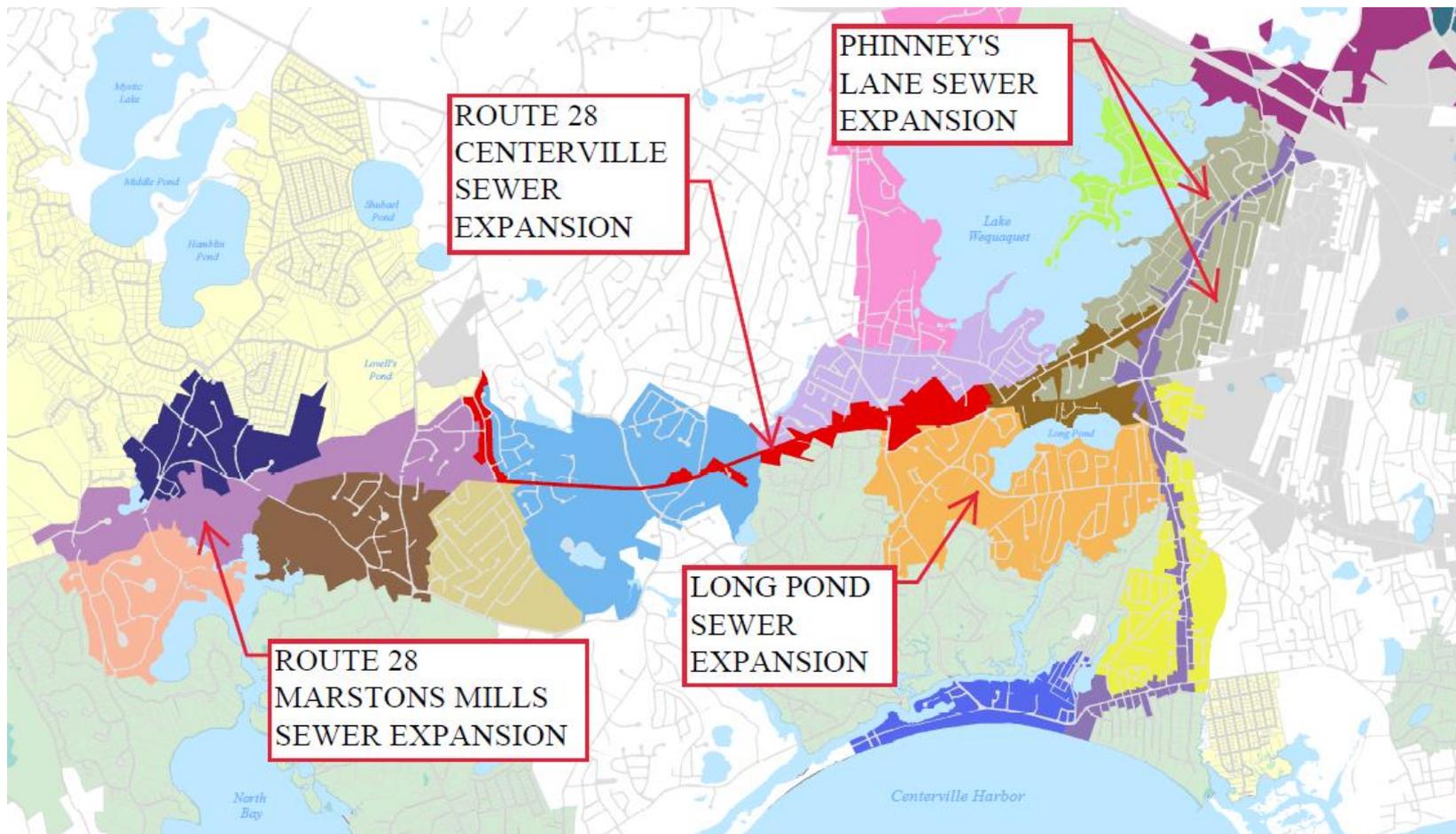


Discussion?



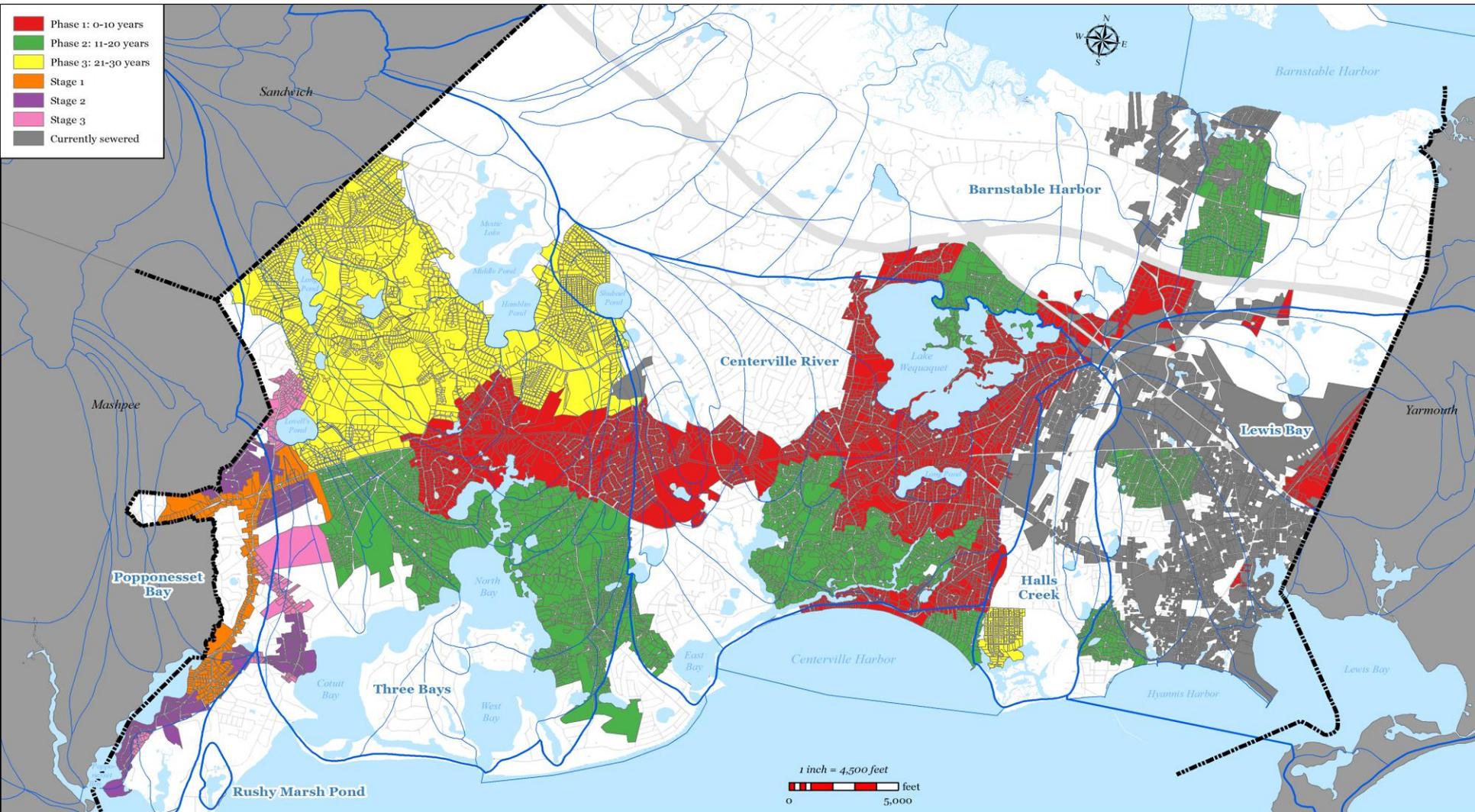


Project Updates Since October



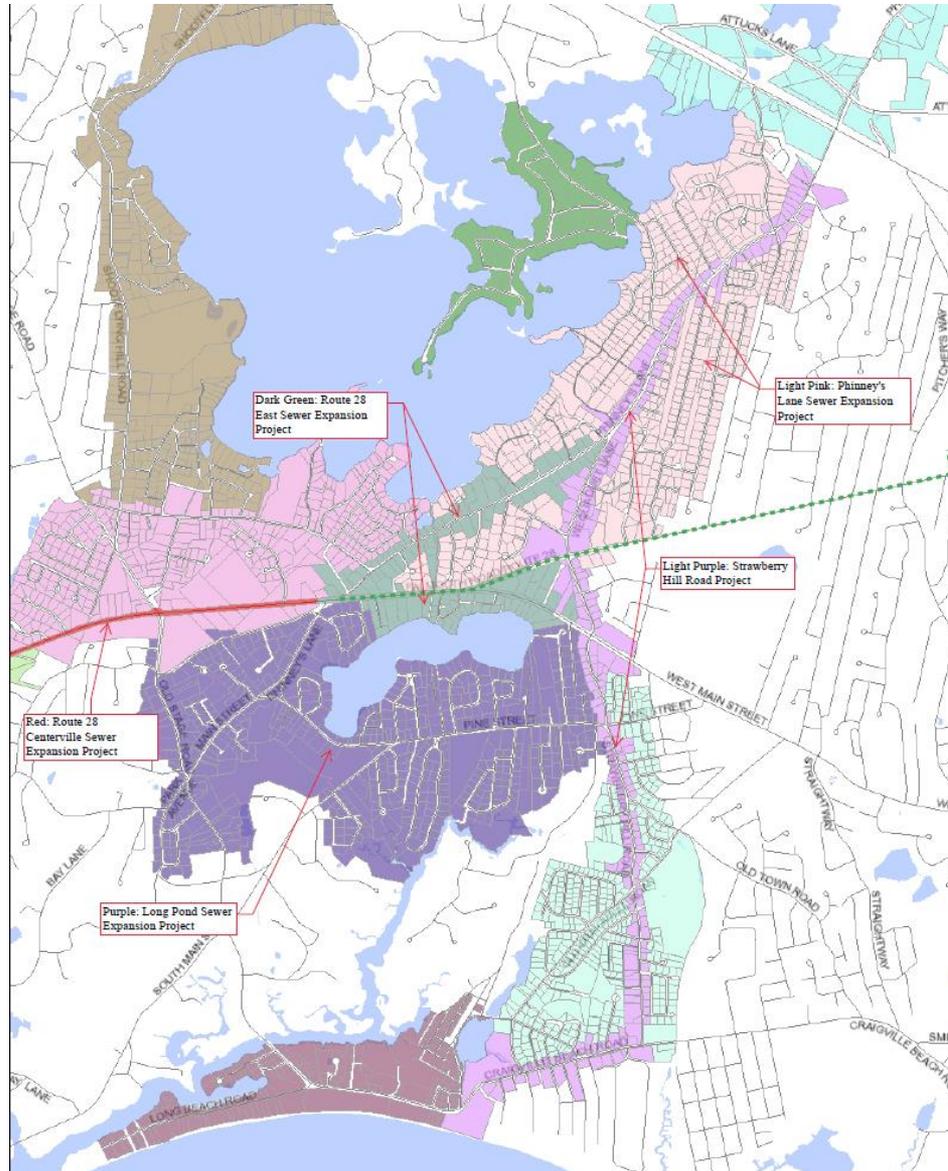


Phasing Plan



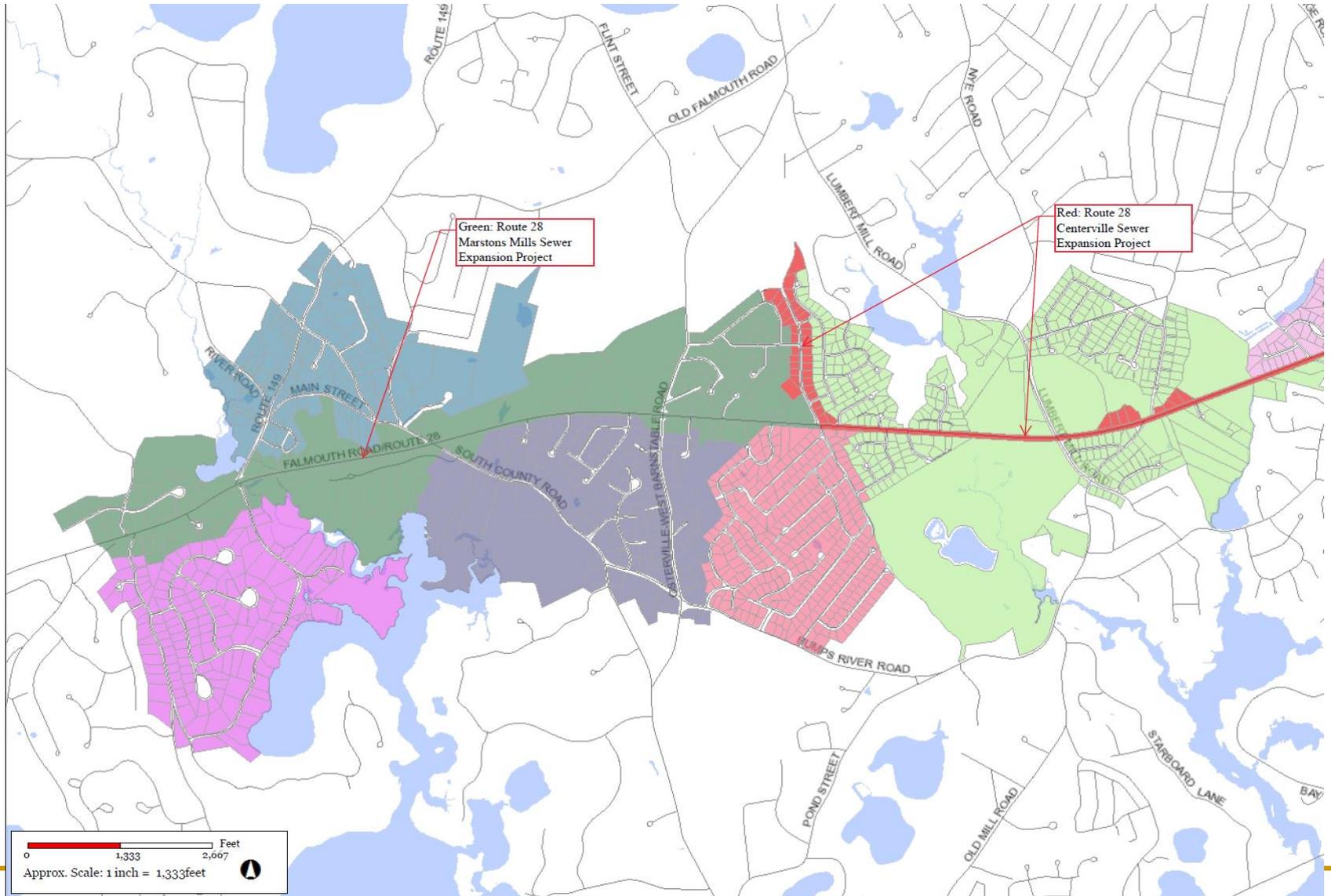


Phase I Projects - East



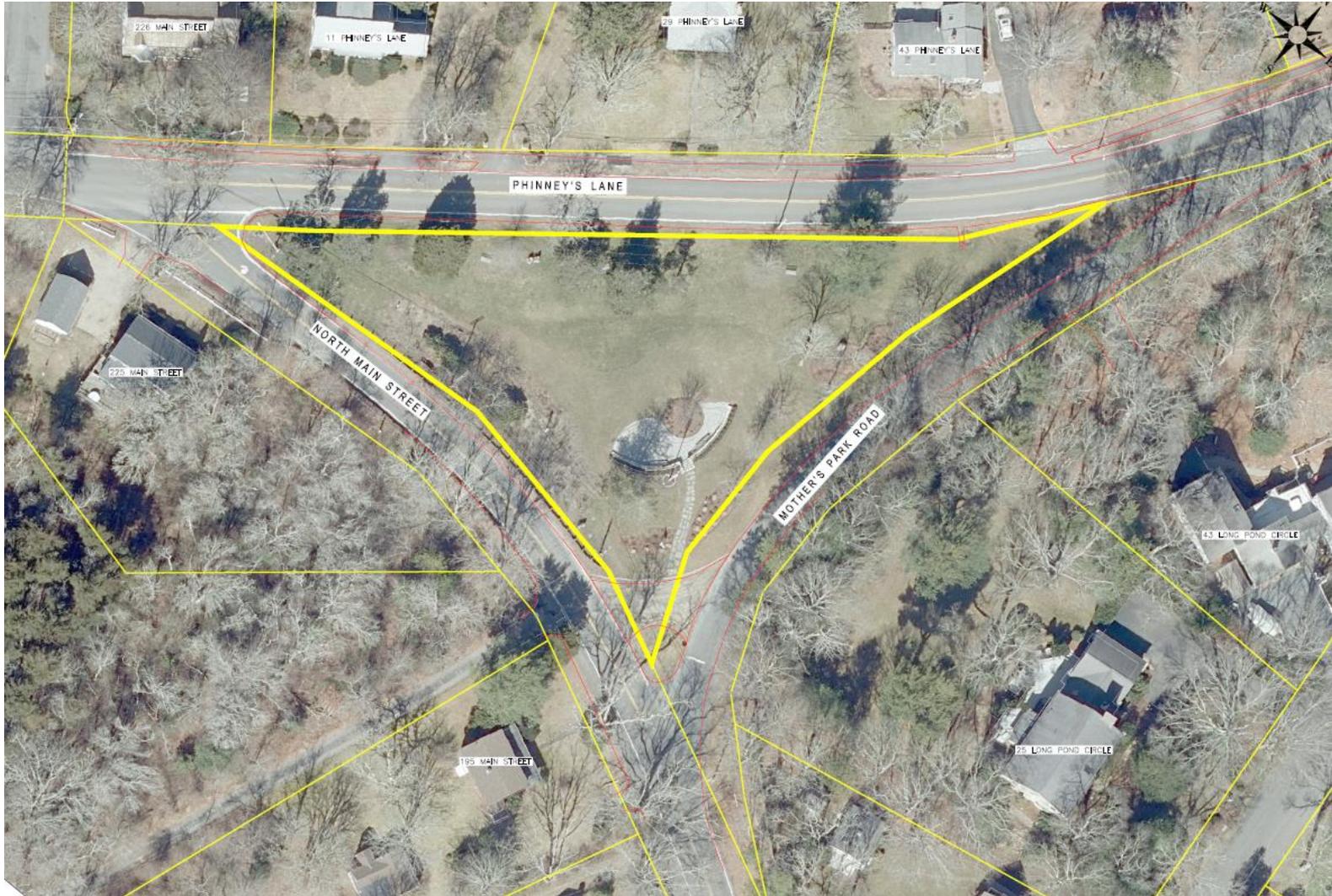


Phase I Projects - West



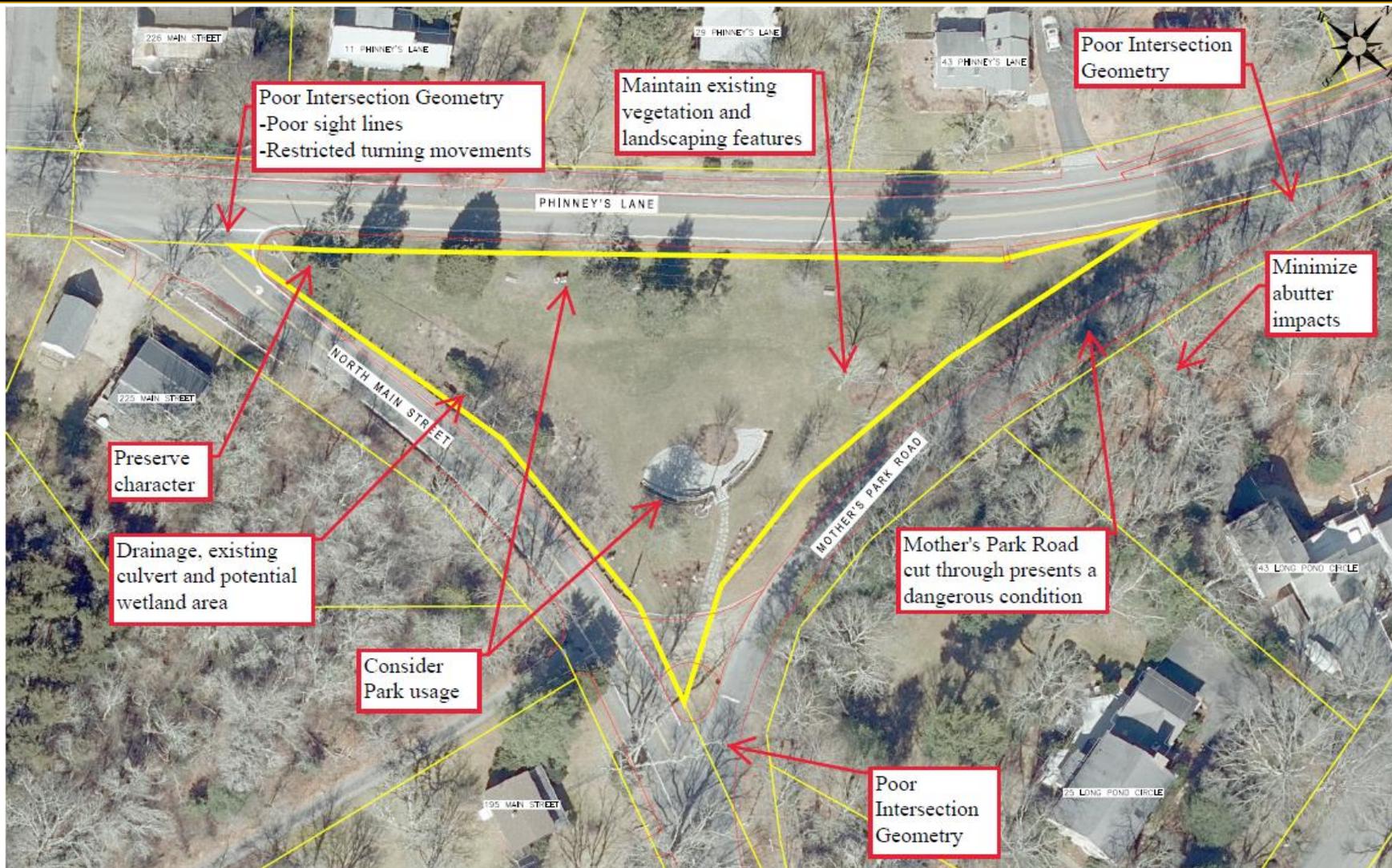


Mother's Park Existing Conditions





Key Considerations





Existing Conditions





Proposed Conditions





Existing Conditions





Proposed Conditions





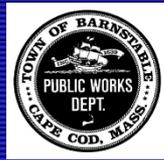
Proposed Conditions w/ Potential Landscaping



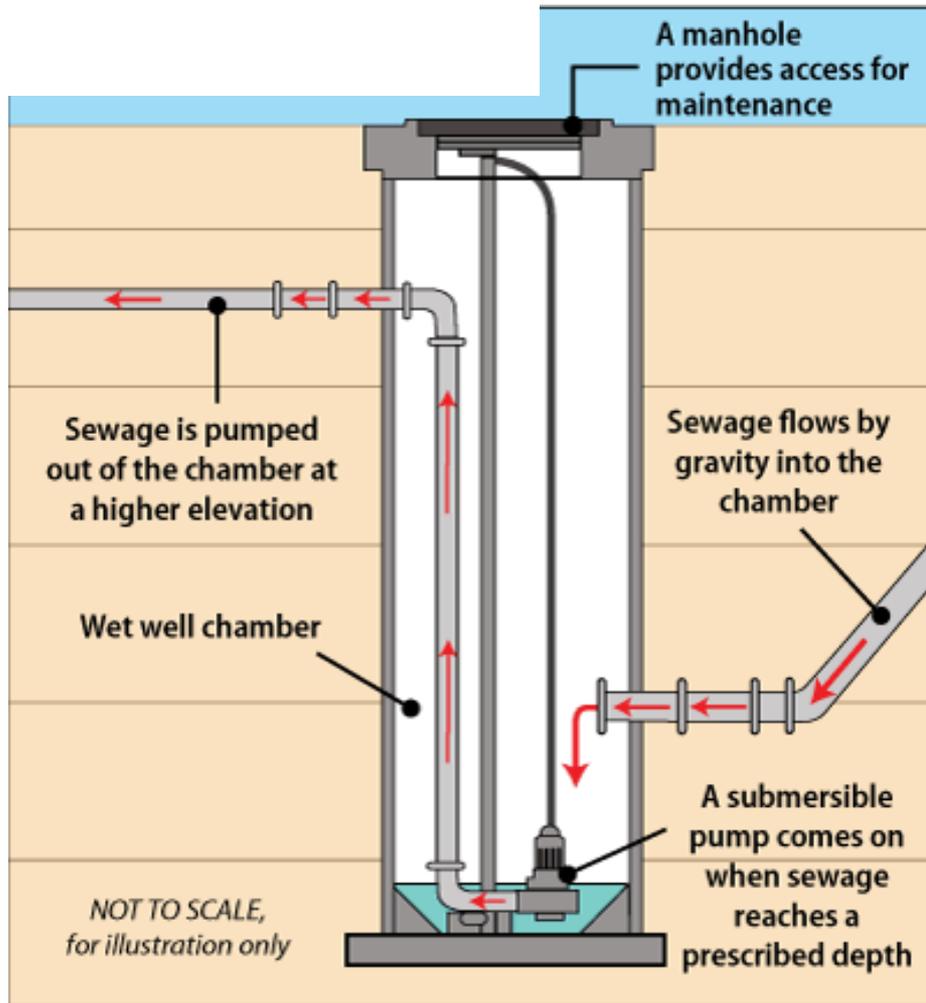


Similar Pump Station Recently Installed on Rendezvous Lane in Barnstable Village





How a Submersible Sewer Pump Station Functions





Pump Station Operations

- Crews required to visit the pump station once a day
 - Visits will be in a Town pickup truck and consist of visual inspection
 - Pump station monitored remotely
- Maintenance required at times to fix old/failing components.
- Generators are automatically exercised once a week for 15 minutes
- Odors and noise are generally not an issue for submersible pump stations when properly functioning
 - Equipment well below grade
- Landscaping is maintained by Town crews.

