

Sagamore Avenue Sewer Extension City Council Meeting

City of Portsmouth, NH

February 3, 2020

Suzanne Woodland, Deputy City Attorney
Terry Desmarais, PE, City Engineer



Introduction

- **Origin of the Sagamore Sewer Project**
- **Addressing Public Questions and Concerns at Public Meetings**
- **Motion for Work Session**



Origin Of This Project

- **Pre 2005 Failed Septic And Use Of Holding Tanks**
- **2005 Project First Appears CIP**
- **2008 Engineering Study**
- **2010 Bacteria Study by DES**
- **2011 Engineering Update**
- **2014 Great Bay Non-Point Source Study (DES)**



Incorporation of Project into Consent Decree

- **Supplemental Environmental Project**
 - Keeps the dollars local
 - Delivers local environmental benefits
 - Links with other projects in the watershed
 - DPW Area Stormwater Treatment Project
 - Water Quality Monitoring
 - Lafayette Road (DOT) Stormwater Project
 - Peverly Hill Road Stormwater Improvements
- **March 2016 City Council Approves Consent Decree Second Modification**

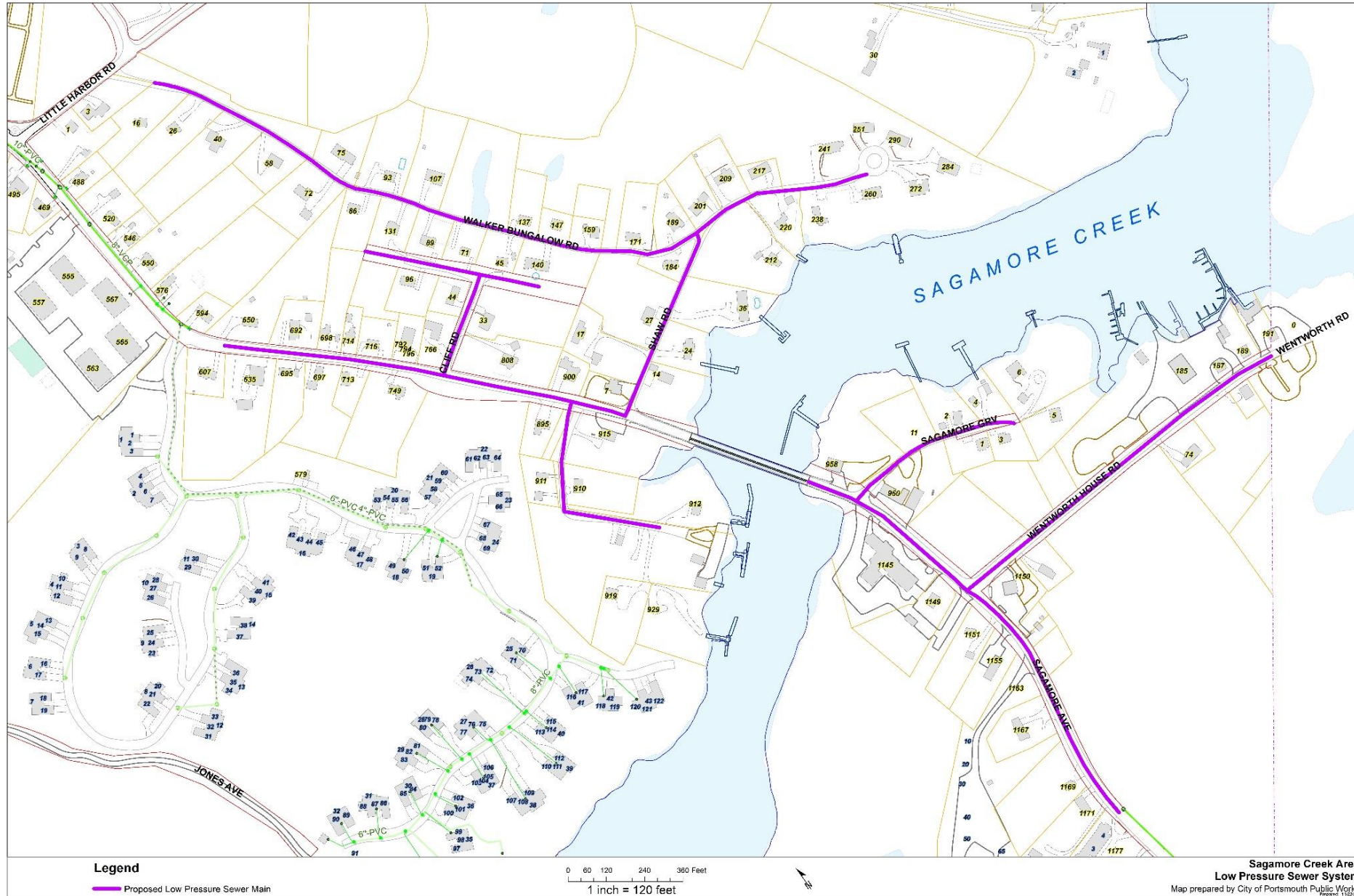


Implementation

- **2018/2019 FB Environmental Completed Water Quality Sampling**
- **2018 Sagamore Ave Sewer Extension Preliminary Design Report**
- **July 2019 City Council Bond Authorization**



CURRENT SAGAMORE PROJECT LIMITS



Important Project Points

- **Property Owners Will NOT Be Required To Tie-In If They Have A Functioning Septic System**
 - Sewer Use Ordinance update will include this provision
- **Property Owners Will Have To Tie-In If Their Septic System Fails**
 - New Hampshire Department of Environmental Services (DES) will not issue a permit for a septic system replacement

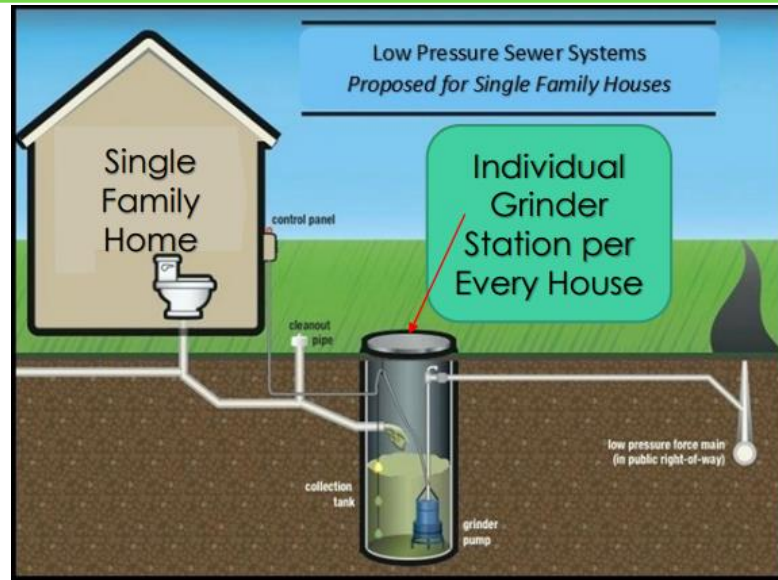


Public Meetings

- **September 4, 2019 Public Meeting at DPW**
 - Kickoff to field work
 - Cost apportionment greatest concern
- **Questions Received at Multiple City Council Meetings**
- **November 25, 2019 Public Meeting at Council Chambers**
 - Responses to questions
 - Updated cost proposal
- **December 9, 2019 Public Meeting at Council Chambers**
 - Defined future City Council decisions needed

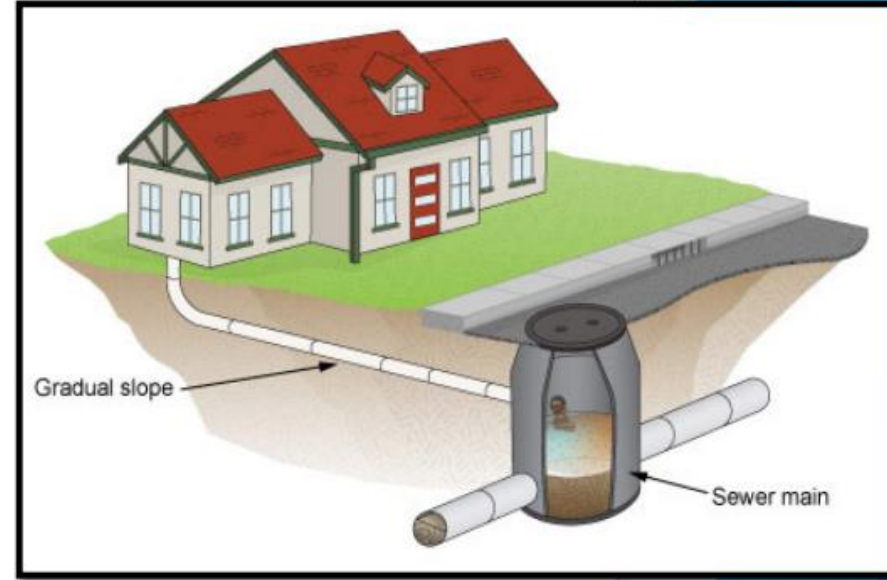


Sewer System Type - Low Pressure (LPSS)



Low Pressure Sewer System

- Advantages
 - Lower construction costs due to shallower bury depth of pipe (Shallow ledge in project area)
 - Is not dependent on grade and topography
 - Less invasive construction
- Disadvantages
 - Higher property owner annual operation and maintenance costs



Gravity Sewer (No Pressure)

- Advantages
 - Lower long term costs to the home owner
- Disadvantages
 - Higher construction costs
 - More invasive/destructive construction
 - Requires pump stations based on topography
 - Requires permanent easements for cross country sewer lines



EONE Low Pressure Pump Stations

- **Long Track Record**
 - 60,000 Installs in New England
- **Industry Standard**
- **Simple And Reliable, Least Amount Of Worry**
- **10-15 Year Pump Life Span**
- **Local Installation And Long Term Ownership Have Been Successful**

D-Series | DH071 & DR071 Grinder Pump Station



Typical
Annual
Electric
Cost: \$36

<https://www.youtube.com/watch?v=VW7daUv18Rg>



Existing EOne Pump System In Place

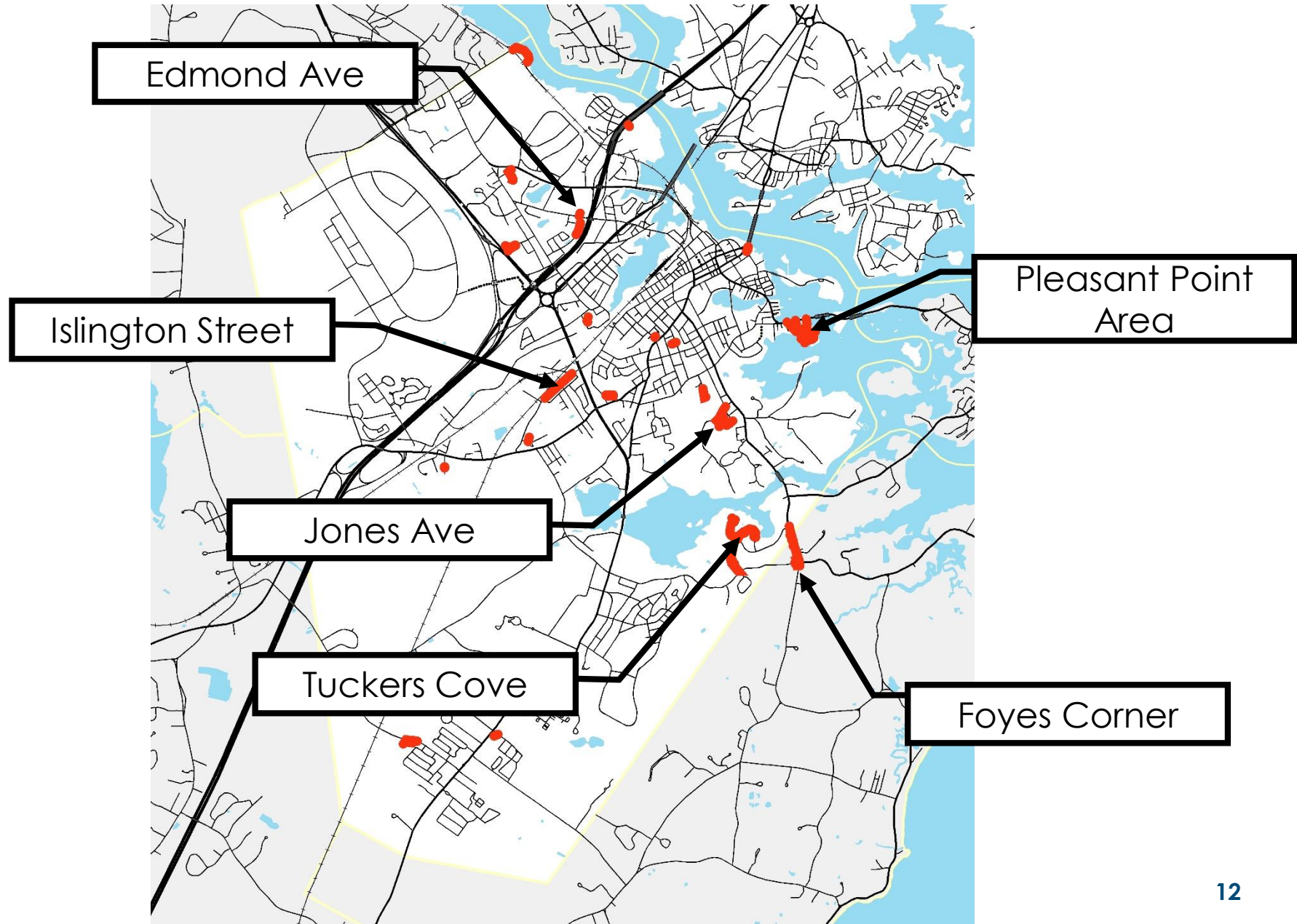


Pump
Cover

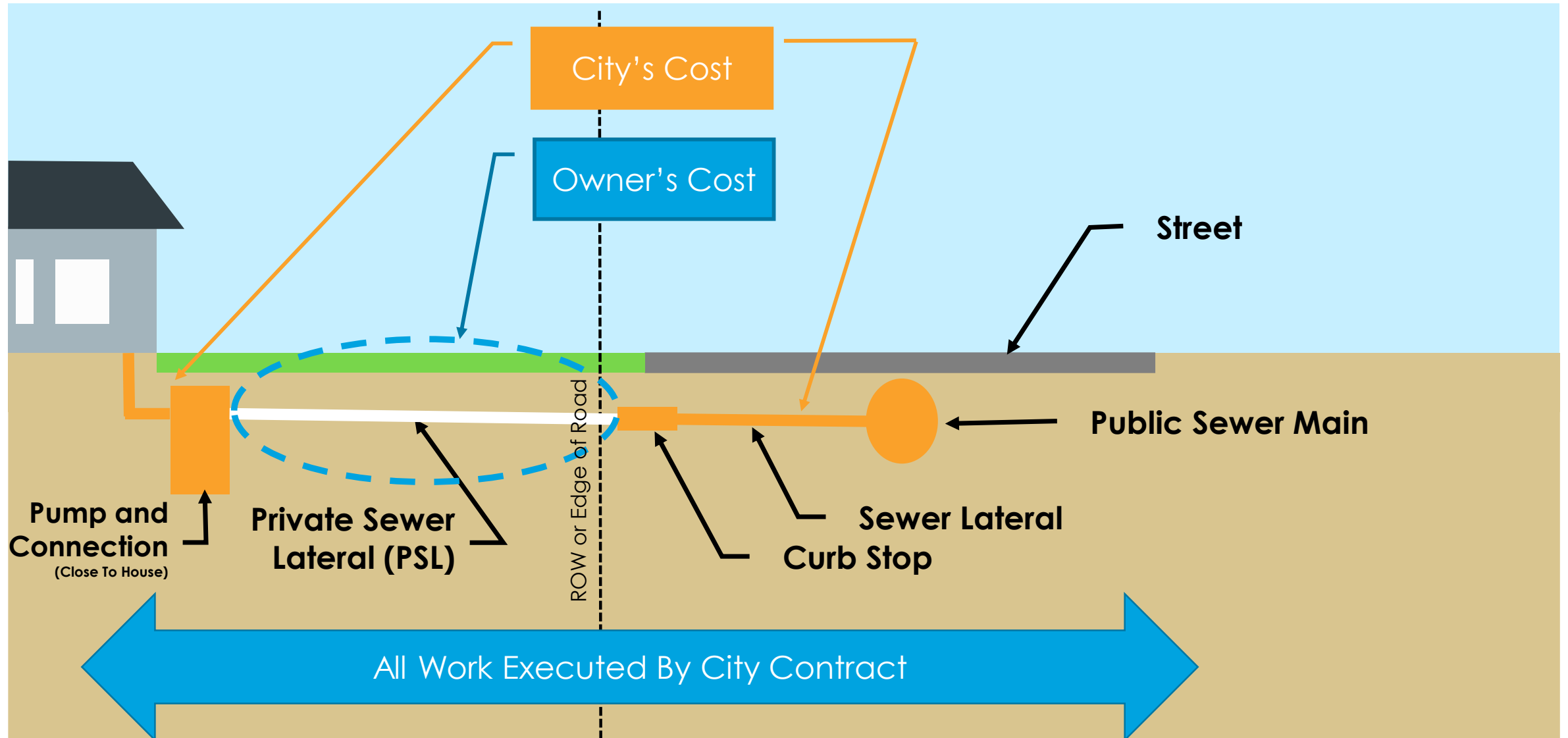
Electrical
Panel



Current LPSS In the City of Portsmouth



Cost Apportionment Proposal For City Council Consideration



Motion for Work Session

- **Sagamore Ave Sewer Extension Work Session to Address Outstanding Policy Decisions Such As:**
 - **Cost Apportionment**
 - **What Happens At Sale Of Property**
 - **How to Handle Properties That Do Not Connect Until Later**
 - **If the Cost to Abandon Existing Septic Will be Private or City**
 - **Who Pays for Replacement of Pump at End of Life (~15 Year Mark)**
 - **Who Pays for Maintenance of Pumping System**
 - **Additional Funding Authorization**

