

Proposed Four Corners Sanitary Sewer Collection System



Town of Mansfield, Connecticut

Community Information Meetings

August 2014

Project Team



Moderator

- Ken Rawn – Four Corners Sewer and Water Advisory Committee Chairman

Town of Mansfield

- Matthew Hart – Town Manager
- John C. Carrington, PE – Director of Public Works
- Cherie Trahan – Director of Finance
- Linda M. Painter, AICP – Director of Planning and Development
- Bill Lindsay, CIPFA – Independent Bond & Investment Consultants, LLC

Weston & Sampson Engineers, Inc.

- Daniel R. Lawrence, PE – Senior Associate
- Valarie Ferro, AICP – Senior Technical Director
- Derek M. Dilaj, PE – Project Engineer
- Lawrence A. Kenney – AMS Consulting, LLC

Project Goals



- Develop a long-term solution to conditions that are impacting private septic systems
- Prevent regulatory violations
- Retain existing commercial businesses
- Attract new compatible development to expand the tax base
- Ensure safe drinking water
- Provide long term protection to Town's natural resources

Project Area



Four Decades of Planning



Year	Activity
1968	Townwide Sewer Feasibility Study identifies the Four Corners area one of three 'first priority' areas for new sewer construction
1984	Private well contaminated from Volatile Organic Compounds (VOCs)
1987	Town involves Connecticut Department of Energy and Environmental Protection (CTDEEP) and Connecticut Department of Public Health
1988	The State of Connecticut determines that conditions "...create an unacceptable risk of injury to the health and safety of persons using the ground water as a public or private source of water for drinking."
	CTDEEP informs the Town of Mansfield of its responsibilities, pursuant to State Statute, for assuring potable water
1990	Town of Mansfield implements long-term monitoring program for the Four Corners Area
	Begin addressing leaking gas stations and failing septic systems
2004	CTDEEP directs the Town of Mansfield to address ongoing wastewater problems
2006 – 2008	Wastewater Master Plan prepared for Town of Mansfield, recommends Sanitary Sewers
2008	Four Corners Sewer Advisory Committee meets for first time; expanded to Sewer and Water Advisory Committee in 2009

If We Do Nothing...



- Septic system failures will continue.
- Aging systems will require upgrade or replacement.
- Non-engineered system for a residential property in general is between \$15,000 – \$25,000.
- Engineered systems could be required for failed systems; these can range between \$50,000-\$75,000 for a residence and \$100,000-\$500,000 for a business.
- Wetlands and waterbodies could become contaminated.
- Existing business operations are challenged.
- High maintenance costs of commercial systems reduce growth potential for business.
- New business interests are deterred.
- CTDEEP has authority under Statute 22a-428 to impose a Pollution Abatement Order.

Four Corners Septic Systems Effectiveness

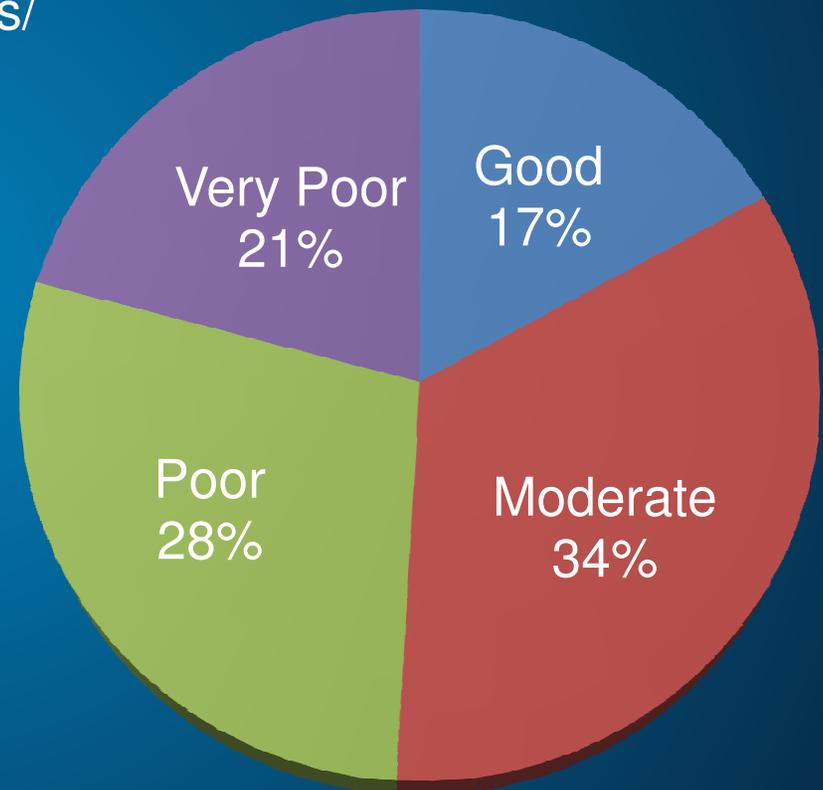


Since 1998:

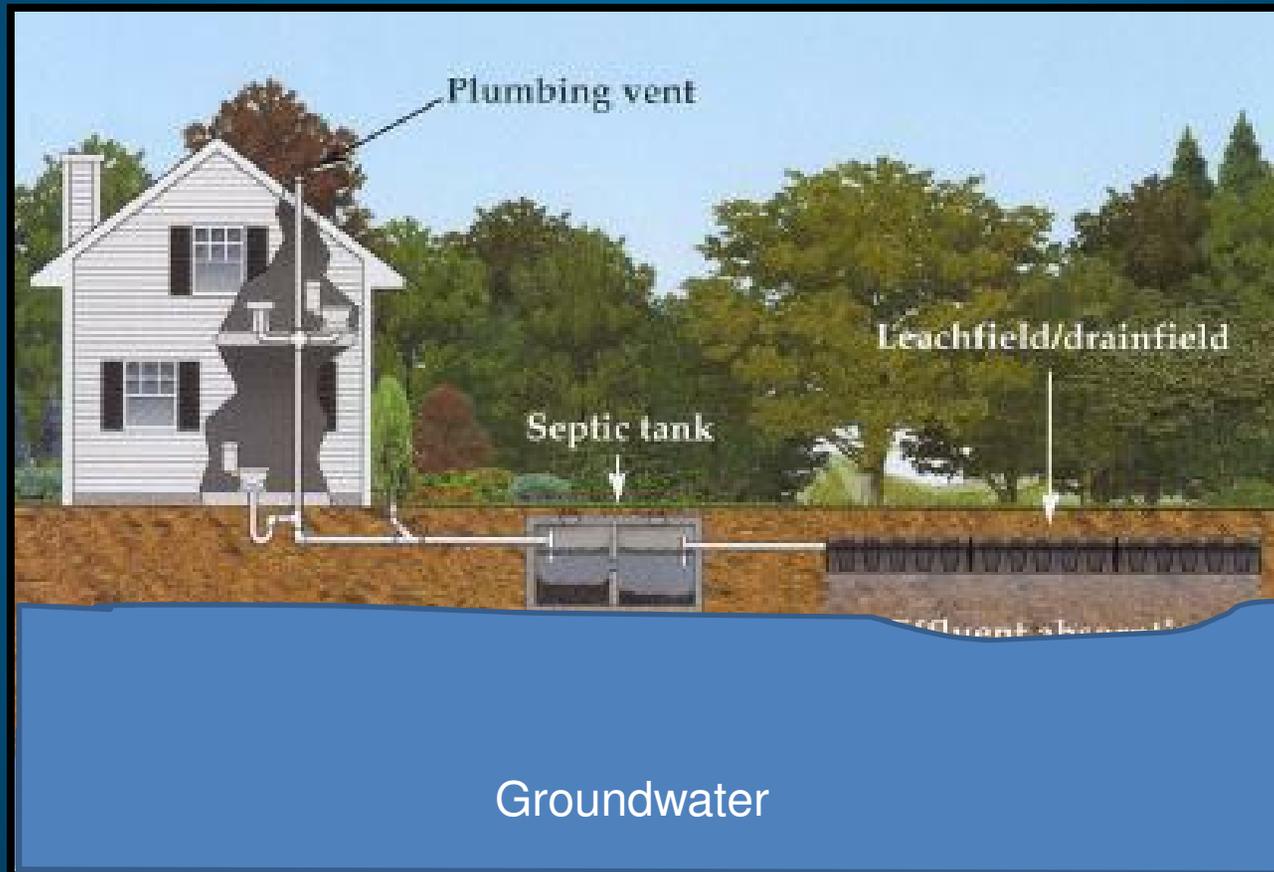
- **10** documented cases of overflows/failures
- **27** repairs to existing systems
- **3** known cases of systems being pumped weekly or more often to maintain operation

Due to:

- Poorly Draining Soils
- High Groundwater
- Aging Septic Systems



High Water Table Impacts a Functioning System



Proposed Solution



- Implement recommendations from 2008 Facilities Plan
 - Sanitary Sewers as the most cost effective option
 - Discharge to UConn Wastewater Treatment Facility which has been upgraded in part to service Town of Mansfield
- Take advantage of a \$3.0M State of Connecticut Grant
- Coordinate with adjacent projects to minimize disruption
 - CT Water Company water pipeline extension
 - North Hillside Road extension project
 - Willimantic River well field transmission main replacement

Project Details

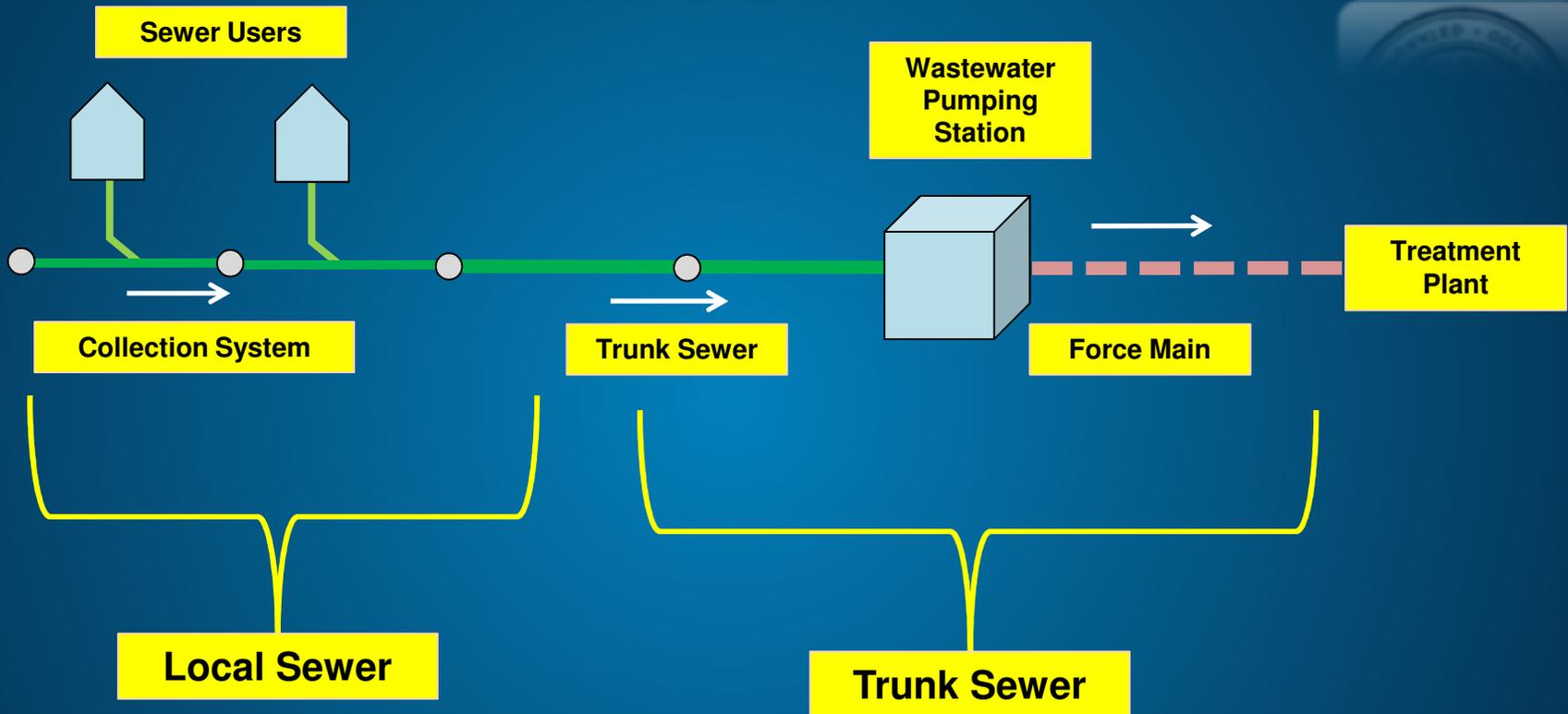


The Proposed Plan

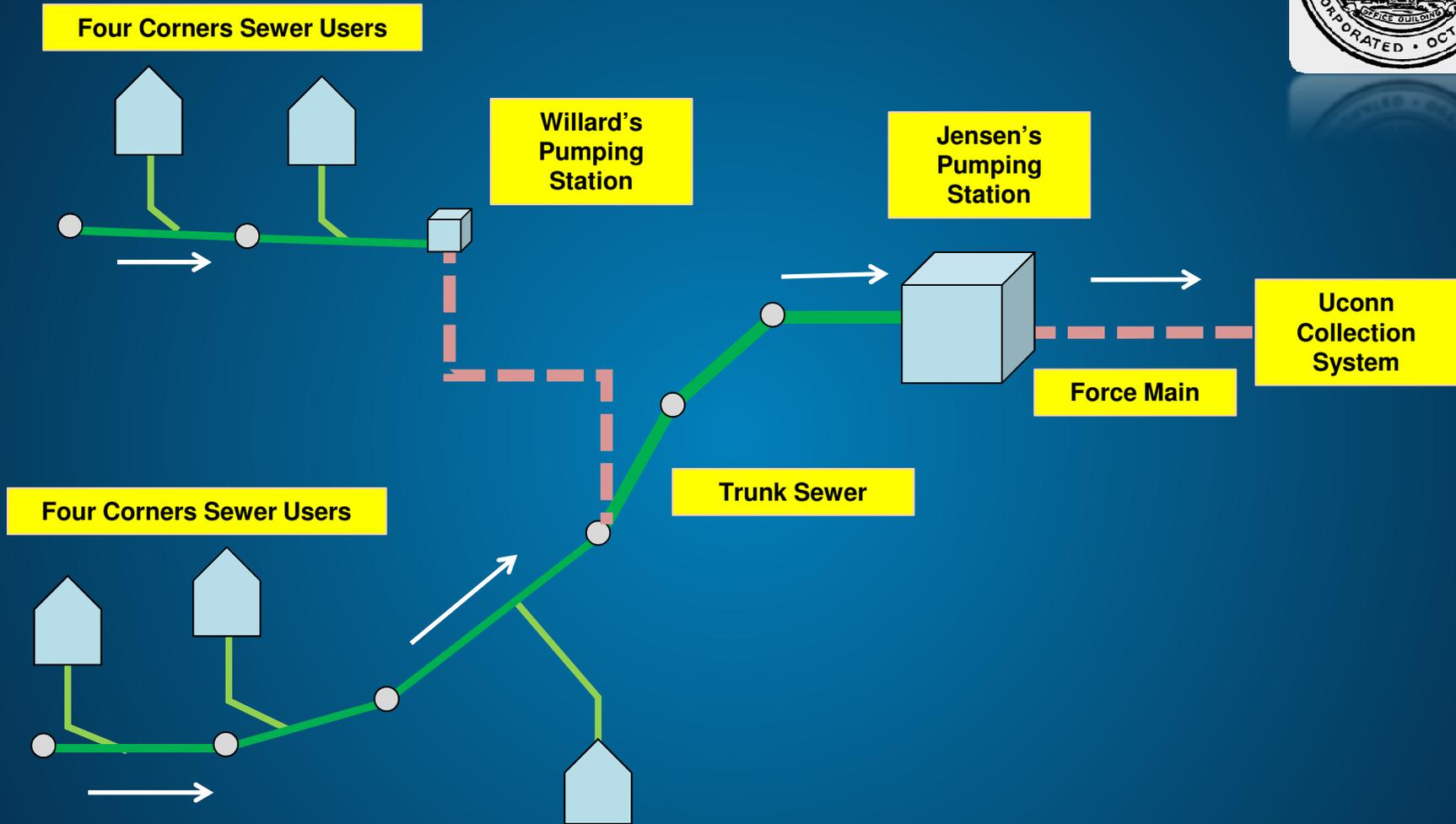
- Sewer lines
- Trunk sewer
- Submersible pumping stations
- Service connections to property lines
- Connecting a total of 61 properties
 - 20 Residential / Multi-family
 - 25 Non-Residential
 - 14 Unimproved Land
 - 2 Public Properties



Typical Layout



Proposed Collection System



Estimated Project Costs



+ Planning and Design Cost

+ Construction Cost

\$ Total Construction Cost

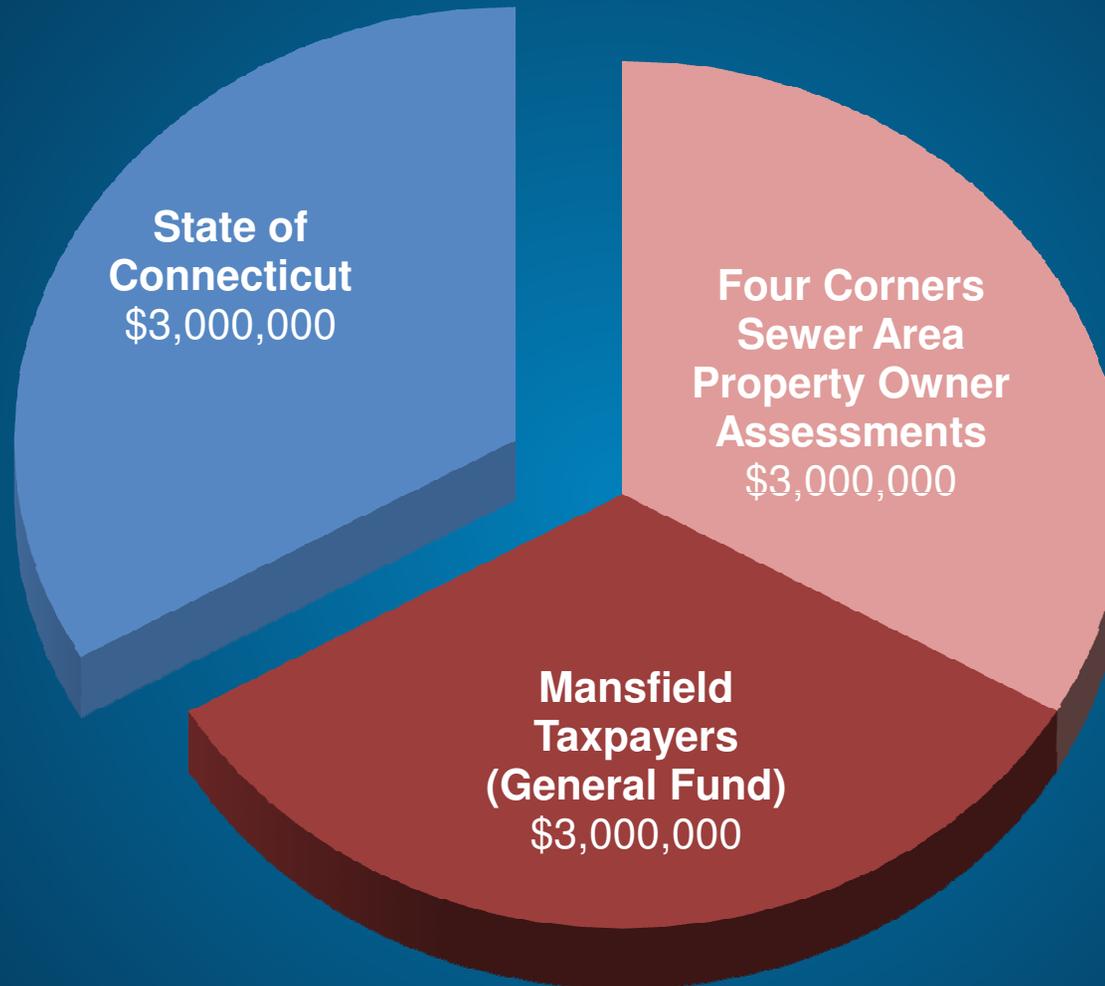
+ Bond Issuance Cost

+ Interest Cost

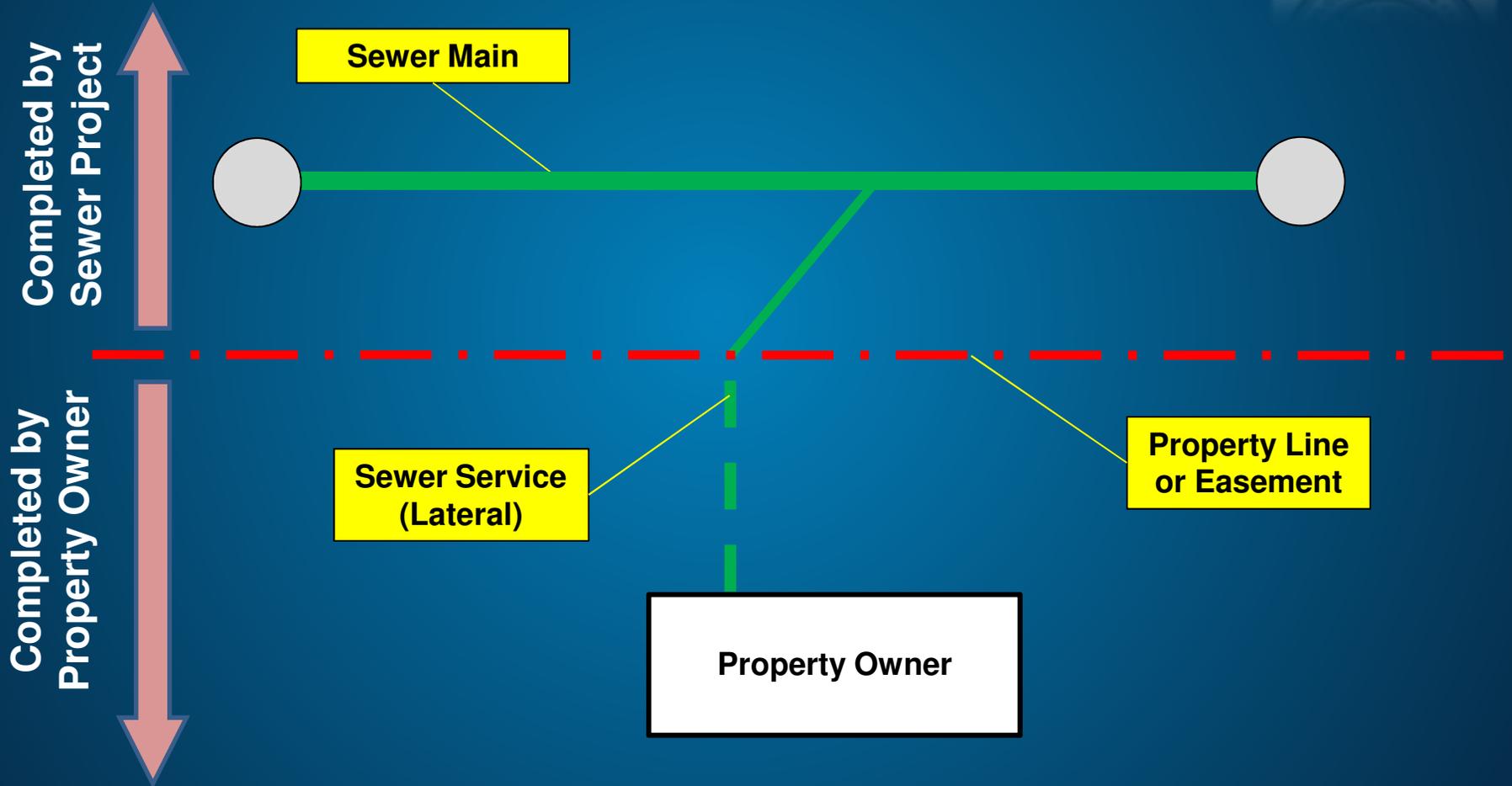
\$ Total Financing Cost

\$ Total Project Cost

Proposed Cost Sharing



Cost Apportionment



Four Corners Property Owner Sewer Assessment



- **Town of Mansfield's ordinance (Chapter 159) governs how assessments will be levied.**
- **Assessments are different for each property and are dependent on use, size, and shape.**
- **Assessments are calculated upon completion of construction of the sanitary sewer system.**
- **Property owner notification is required and a public hearing held.**

Process for Assessment



- Complete construction of sanitary sewer project
- WPCA holds Public Hearing on proposed assessment
- WPCA determines how much of total project cost will be assessed to property owners
- Upon approval by WPCA sewer assessment is recorded with Town Clerk
- Assessment shall then be published in newspaper
- Appeals must take place within 21 days of filing with Town Clerk
- Any person may appeal to Superior Court for the Judicial District or Tolland County

Method for Sewer Assessment



- Property assessments will include proportionate share of Total Project Cost
- If a property is redeveloped resulting in a greater intensity an additional assessment is levied.
- Each property is different and estimated individually
- Property assessment is apportioned to properties as follows:
 - 1/2 via Front Footage
 - 1/2 via Units

Preliminary Assessments Residential Properties



- Assumes \$3.0 million of construction costs plus proportionate share of financing costs are to be recovered through property assessments.
- Assuming a repayment period of 20 years.
- Examples of Single-Family Residential Sewer Assessments
 - 1 acre lot with 120' of front footage (\$17,000 or \$850/yr)
 - 2 acre lot with 200' of front footage (\$27,000 or \$1,350/yr)
 - 16 acre lot with 500' of front footage (\$63,000 or \$3,150/yr)

Preliminary Assessments Commercial / Multi-Family Properties

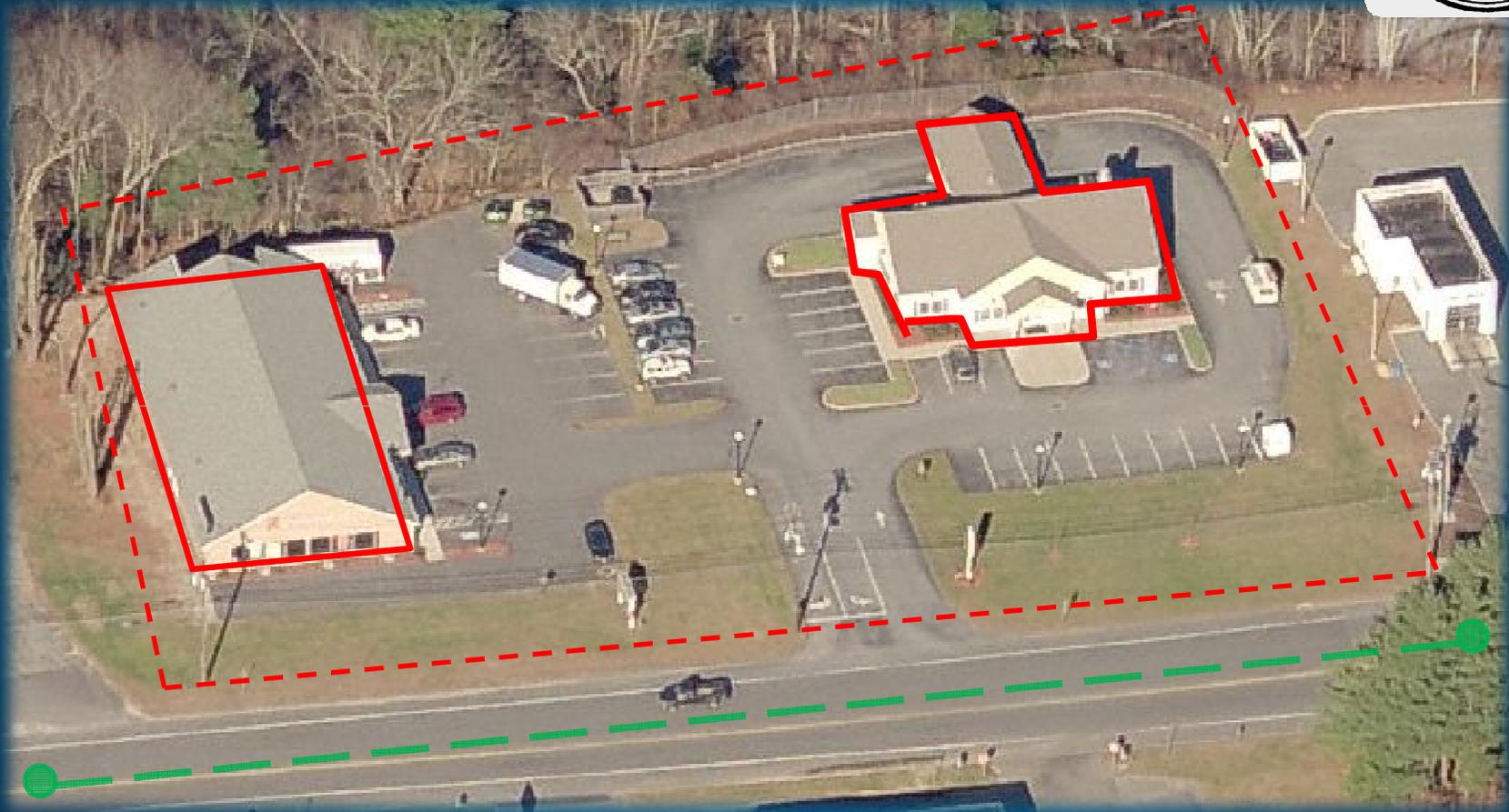


- Assumes \$3.0 million of construction costs plus proportionate share of financing costs are to be recovered through property assessments.
- Assuming a repayment period of 20 years.
- Examples of Commercial Sewer Assessments
 - 0.3 acre lot with 90' of front footage (\$16,000 or \$800/yr)
 - 5.5 acre lot with 300' of front footage (\$84,000 or \$7,000/yr)
 - 7.9 acre lot with 425' of front footage (\$170,000 or \$8,500/yr)

Adjusted Front Footage Assessment



Unit Assessment Commercial



Gross Building Square Footage = 24,000 square feet
Units = 24,000 square feet / 1,500 square feet = 16 Units

Unit Assessment Residential



Parcel Size = 6 acres in R90 Zoning
Units = 6 acres / 2 acres/unit = 3 Units

Estimated Tax Implications



- **Total General Obligation Bond Issued** **\$6.0M**
- **Tax Base Portion** **\$3.0M**
 - **Net Debt Service to Tax Base (Year 1)** **\$278,353**
 - Equivalent to 0.275 Mill Increase
 - On Median Household (Assessed Value \$169,900)
 - Current Taxes: \$4,749
 - Estimated Taxes: \$4,796
 - Increase of \$47 per year
 - Net Debt Service decreases annually over life of bond
 - **Net Debt Service to Tax Base (Year 20)** **\$107,753**

Potential Grand List Increase



➤ Methodology:

- Physical Constraints and Bulk Requirements examined
- High Probability Sites Identified – 10 Selected
- Four Corners sanitary sewer area only

➤ Assumptions Applied based on 10 year absorption of new development

➤ Cost of additional municipal services were included

➤ Results:

➤ Preliminary Grand List Increase

- Non-Residential \$21.0 M +/-
- Residential \$13.0 M +/-
- Net New Annual Taxes (Year 10) – 2014 Dollars **\$255,800** ↑

Schedule



- **Public Information Sessions**
(August 14th, 18th, 20th, and 27th)
- **Water Pollution Control Authority Public Hearing**
(August 22, 2014 – 6:00 PM)
- **Water Pollution Control Authority and Town Council Meeting**
(September 2, 2014 – 7:00 PM - Tentative)
- **Elections and Referendum**
(November 4, 2014)
- **If Approved, Construction to begin Spring 2015**
- **If Approved, Construction completed in 2016**

Question and Answer



1. This is an opportunity to ask questions and learn.
2. Please be as brief as possible to allow everyone to speak.
3. Use the microphone and state your name and address.
4. Direct your question to the moderator not audience.
5. Be patient and courteous while you await your turn.
6. Please remain quiet while someone is speaking.
7. If you have more than one question, say so at beginning.
8. If we do not understand your question or cannot provide an answer we will provide answers on the town website (www.mansfieldct.gov).

Please visit the Town Website for updates
...www.mansfieldct.gov/FourCorners