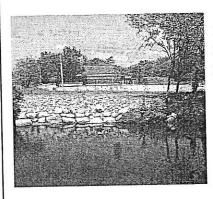




The Town of Coventry's Municipal Sewer System



Presented by: Kent M. Nichols, P.E., Weston & Sampson Barry A. Yaceshyn, P.E., Weston & Sampson

Presented at: Coventry Sewer Commission Meeting January 27, 2011

Introduction

- Planning Process
- Historic Timeline
- Other Sewer Completed
- Ongoing Efforts
- Moving Forward

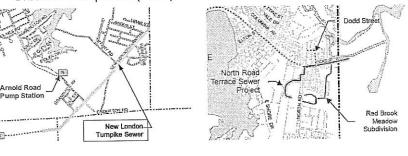
Sewer Planning Process

- · Wastewater Facility Planning
 - "Preliminary Engineering Survey and Report on Sewerage and Sewage Treatment for the Town of Coventry", Fenton G. Keyes Associates, November 1966.
 - "Facilities Plan for Wastewater Collection and Treatment Facilities", C.E. Maguire, Inc., 1977.
 - "Amended Facilities Plan", Hayden, Harding, and Buchanan, Inc., June 1981.
 - "Facilities Plan Supplement", Weston & Sampson, August 1982.
 - "Industrial Sewer Study", Weston & Sampson, June 1986.
 - "Wastewater Facilities Plan", Weston & Sampson, June 1995.
 - "Facilities Plan Reaffirmation", Weston & Sampson, Sept 2003.
 - "Onsite Wastewater Management Plan", Weston & Sampson, October 2003
 - "Facilities Plan Update", Weston & Sampson, February 2010.

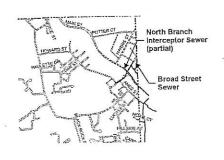
Historical Timeline

- August 19, 1971 —Town-wide referendum to authorize borrowing \$7,000,000 for the construction of a municipal sewer system was defeated.
- <u>November 28, 1984 (IMA)</u> Coventry enters an Intermunicipal Agreement (IMA) with the Town of West Warwick for the use of their wastewater treatment plant and transmission infrastructure (2.25 MGD ADF/5.36 MGD PDF).
- 1980s:
 - The New London Turnpike Sewer was constructed in the early 1980's by RI Port Authority to provide service to the West Greenwich Industrial Park development located in north-eastern West Greenwich.

- 1980s (cont'd)
 - 1985 Arnold Road Pumping Station and Force Main was constructed by the town to service the Cal Chemical Corporation's industrial complex. The project was funded by a grant from the Federal Department of Housing and Urban Development (HUD).
 - 1985 The Coventry Housing Authority's North Road Terrace Sewer was constructed by the town to service the North Road Terrace complex and part of Tiogue Ave. The project was funded by a grant from the Federal Department of Housing and Urban Development (HUD).



- 1980s (cont'd)
 - 1985 A portion of the North Branch Interceptor Sewer was constructed by the town to service the Victor Corporation Industrial Complex. The project was funded by a grant from the Federal Department of Housing and Urban Development (HUD).
 - The Broad Street sewer extension was constructed by West Warwick as part of their system in the Harris area. The project provided gravity sewer service to portions of Broad Street and Summit Avenue, North Main Street, Lamphear Street. Approximately 21 properties in Coventry front on this sewer.



- Hopkins Hill Road Sewer:
 - June 2, 1987 Town-wide referendum to authorize borrowing \$750,000 for the construction of a dry sewer line to be installed on Hopkins Hill Rd. was approved.
 - 1991 As part of a Rhode Island Department of Transportation (RIDOT) road reconstruction projects, the town constructed the Hopkins Hill Road sewer. The project included various diameter gravity sewer in Hopkins Hill Road and Tiogue Avenue. The sewer was activated upon completion of the Tiogue Avenue Interceptor and Sandy Bottom Road Pumping Station project (see Contract 03-01, 03-02, & 03-03, August 2003).



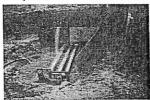
- January 14, 1994 Town-wide referendum to authorize borrowing \$8,000,000 for the construction of a municipal sewer system was defeated.
- January 13, 1997 Town Council adopts an ordinance governing the use of public and private sewers and drains. This ordinance outlines the laws surrounding connections to the public sewer system, use of the public sewer system, and established sewer assessments.
- July 8, 1997 House of Representatives Bill 97-H 6576 "An Act to create a Sewer Authority for the Town of Coventry and to Authorize said Town to Plan, Construct, Finance, and Maintain Sewage Works" is passed by the General Assembly and becomes law. (Section 19 of Chapter 330 of the Public Laws of 1997)
- 2000 –Improvements mandated by DEM to the West Warwick Treatment Facility are completed. Due to the Intermunicipal Agreement, Coventry is responsible for approximately 25% of the costs based on total capacity at the West Warwick Treatment Plant.

- 2001 –Tertiary Upgrades mandated by DEM to the West Warwick Treatment Facility (approx. \$22,000,000) are completed. Due to the Intermunicipal Agreement, Coventry is responsible for approximately 25% of the costs based on total capacity at the West Warwick Treatment Plant.
- July 17, 2001 Coventry's liaison to the West Warwick sewer subcommittee is granted voting power by The Town of West Warwick.
- April 2002 Town representatives met with Amgen and RI-EDC to propose & negotiate the installation of a sewer main through Coventry to West Warwick.
- 2003 Construction begins on upgrades to the Upper and Lower Maisie Quinn Interceptors in West Warwick, approx \$12,000,000 for line upgrades and pump station to transmit additional flow capacity. Coventry is responsible for 27% of the costs on the Upper portion and 24% of the Lower portion due to the Intermunicipal Agreement (based on total capacity in each interceptor respectively).

- March 24, 2003 Town Council unanimously adopts changes to the town's Sewer Ordinance that increases the residential sewer assessment from \$3500 to \$4200 and the commercial assessment from \$30 per \$1000 valuation to \$35.
- June 2003 Facility Plan Reaffirmation completed which updates sewer sizing to include Amgen's flows and make accommodation for the allotment of sewer capacity to the Centre of New England sub area.
- July 31, 2003 The Town Council unanimously ratifies a sewer infrastructure construction agreement with Amgen. Amgen contributed \$6,000,000 for engineering & construction for Coventry's infrastructure upgrades; the Town of Coventry will cover the balance of the construction costs (through sewer assessments) and retain 100% ownership of the system.

- <u>August 2003 to March 2004</u> Construction on the Coventry Fast Track Sewer Project, also known as:
 - Contract 03-01 Sewer installation on Tiogue Avenue, Sandy Bottom Road and Washington Street,
 - Contract 03-02 Sandy Bottom Road Sewer Pump Station, and
 - Contract 03-03 Forcemain from West Greenwich to the dry sewer line on Hopkins Hill Road (previously installed in 1991).
 - West Warwick Pulaski Street to Maisie Quinn
 - West Greenwich Pump Station FM to Contract 3 FM











- <u>January 12, 2004</u> Established the Coventry Sewer Subcommittee Town Council unanimously passes Resolution #4-04-2306.
- <u>March 11, 2004</u> The Coventry Sewer Subcommittee holds its first meeting.
- April 26, 2004 Town Council unanimously adopts changes to the town's Sewer Ordinance that increases the residential sewer assessment from \$4200 to \$6600 and the commercial assessment from \$35 per \$1000 valuation to \$55. This ordinance also establishes Annual Use Charges for Operation and Maintenance and Capital Replacement of the Coventry sewer system.

 <u>August 2006 to June 2008</u> – Construction on the Hopkins Hill Road Relief Sewer Project also know as Contract 4.

Contract 4 – Built as a relief to the sewer on Hopkins Hill Road.
Included sewer main from Hopkins Hill Road, Pine Ridge, and Ramblewood Estates developments to Tiogue Avenue where it connects to the existing sewer at the intersection of Hopkins Hill Road.

 Contract 4 Additions - Due to user demand (failing septic systems) and participation through Town Public Meetings, the following sewer installations were added to this Contract

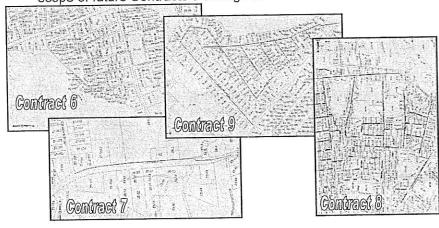
 <u>August 2006</u> - Wood Street and Ray Street sewer mains were added prior to the bid and award of Contract 4.

 July 30, 2007 – By construction change order, a sewer main on both Fairview Avenue (to Blackrock Road) and Anthony Street were added to Contract





- <u>September to October 2006</u> Town Council created the Sewer Assessment Board of Review, as required by Town By-Laws, by passing Resolution #79-06-2783 & Resolution #85-06-2789
- March 19, 2007 A project priority plan was adopted, outlining the scope of future Contracts 6 through 9.



- <u>September 2007 to December 2009</u> Construction on the Main Street Area Sewer Project also known as Contract 5.
 - Contract 5 This project included the installation of sewers in multiple locations in Town, including.
 - From the Sandy Bottom Road Pump Station to the Coventry Community Center on Main Street,
 - · Tiogue Avenue from Sandy Bottom Road to Idaho Street
 - Contentment Drive (serving the Coventry Housing Authority's Knotty Oak Village),
 - · Boston Street.
 - Contract 5 Additions:
 - By public bidding/construction change order, a sewer on Johnson Boulevard was added to Contract 5.

- July 8, 2009 Town Council adopts amendments to the town's Sewer Ordinance changing the process in which properties are assessed sewer betterment to that of an EDU basis, with final assessment values calculated based on the final total project costs (\$12,900 being the minimum to be assessed per EDU). This decision was based on a rate study performed by Woodcock & Associates.
- March 29, 2010 Facilities Plan Update is approved by RI_DEM. Allocates capacity in the municipal system to the industrial parcel owned by the Clariant Corporation & Rhodes Technologies, and re-allocates flow capacity for recent development and future expansion of the sewer system.



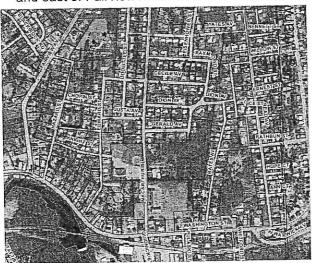
Ongoing Projects

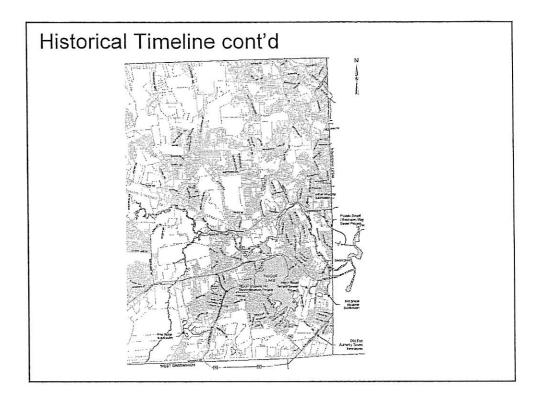
- May 2010 to Present Construction on the Lakeside Drive Area Sewer Project also known as Contract 6.
 - Contract 6 Sewer for areas adjacent to the west of Tiogue Lake from Tiogue Avenue to the North, Lakeside Drive to the South and East, and Arnold Road to the West. This project was partially funded under the American Recovery and Reinvestment Act (ARRA) of 2009.
 - Estimated completion date June 30, 2011 (Final Paving).



Ongoing Projects

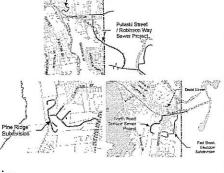
- October 2010 to Present Design of Quidnick Village Area Sewer Project, also known as Contract 8.
 - Contract 8 Sewer for areas located north of Washington Street and east of Fairview Avenue to the West Warwick Town Line.





Other Sewer Facilities

- Pulaski Street/Robinson Way Sewer
- Pine Ridge Subdivision
- · Dodd Street Low Pressure Sewer
- · Red Brook Meadow Subdivision
- Anthony Heights Subdivision
- · Privately Owned Wastewater Facilities
 - Woodland Manor Pump Station and Forcemain
 - Industrial Wastewater Treatment Facility on the former Clariant Corporation Property.



Moving Forward

- Financials
 - Coventry Billing
 - User Charges
 - Continued Rate Studies
 - Project Priority Lists/DEM/CWFA
- Local Regulations and Policies
 - Public
 - Private
- Future Contracts.
- Private Forcemain Takeover
- · Continued Facilities Planning