

Feasibility Report

DOWNTOWN VILLAGE IMPROVEMENT PROJECT

April 15, 2014

Feasibility Report

- Authorize Feasibility Report
- Accept Feasibility
- Order Plans and Spec's
- Accept Plans & Spec's & Authorize Ad for Bid
- Bid Project
- Prepare Assessment
- Improvement & Assessment Hearing
- Award Bid
- Construct Project

Background

- Roadways – Local & CSAH 21
 - Approx. 50 yrs old
 - Pavement in Poor condition
 - Maintenance and patching
 - Need Stormwater Collection and treatment



Background

- Sanitary Waste

- SSTS/201 limitations

- Groundwater and Surface Water
 - Lot size
 - Wells
 - Existing locations
 - Floodplain
 - Right of way
 - Levee

- Compliance determination

- Current standards
 - Updated Facility Plan



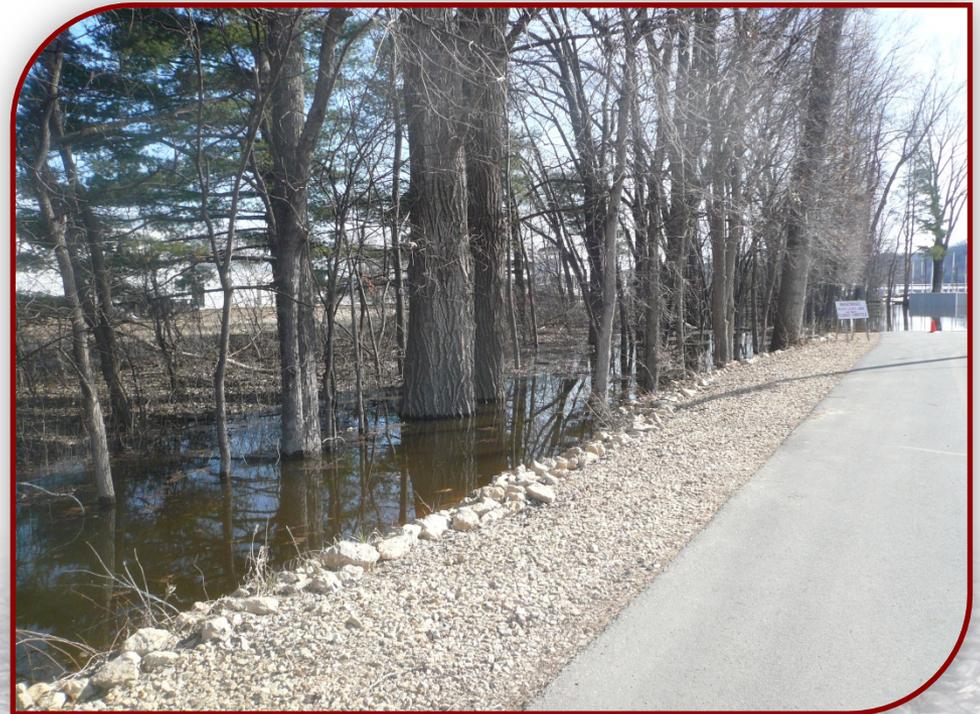
Background

- Flood Levee
 - Constructed in 1969
 - Not accredited
 - 50% limitation
 - Properties in flood plain
 - Insurance costs
 - Re-occurring flooding costs
 - SSTs within levee
 - Not permitted
 - USCOE - NFIP
 - Lake St. Croix TMDL



Background

- **Drainage**
 - Urban area with no collection
 - 4 County Roads
 - Flooding & Ponding
 - Erosion and sediment
 - Lack Stormwater
 - Treatment
 - Volume control



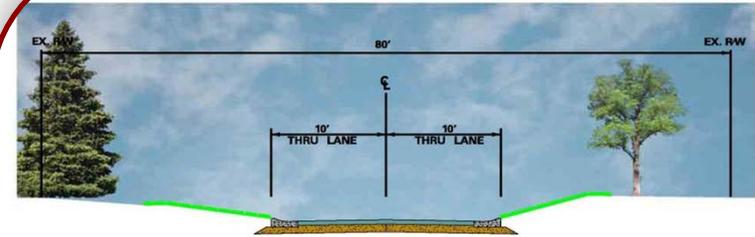
Public Engagement

- Citizen Task Force 2010
 - Identified
 - Issues
 - Needs
 - Solutions
- Sanitary Process
 - Public Hearings
 - Multiple community mtgs
- Individual Property Owner Impact
- CSAH 21 Improvements
- 429 process public hearings

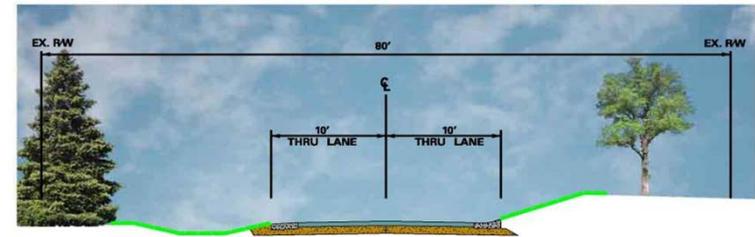


Proposed Improvements

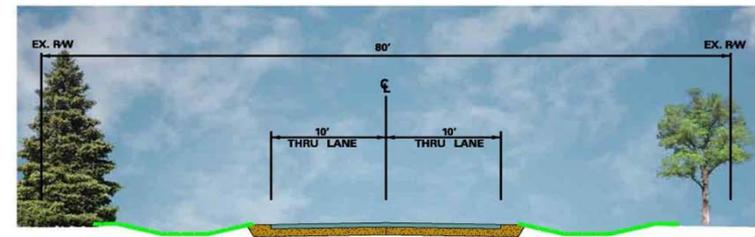
- Roadway
 - 20' wide (4'-6' of widening)
 - Sanitary Excavation
 - No barrier edge
 - Surmountable curb and gutter
 - Ribbon curb and gutter
- CSAH 21
 - Washington County lead
 - 34' to 55' wide (prelim)
 - City cost share beyond roadway



Option 1: Surmountable Curb and Gutter



Option 2: Ribbon Curb and Gutter



Option 3: No Curb and Gutter

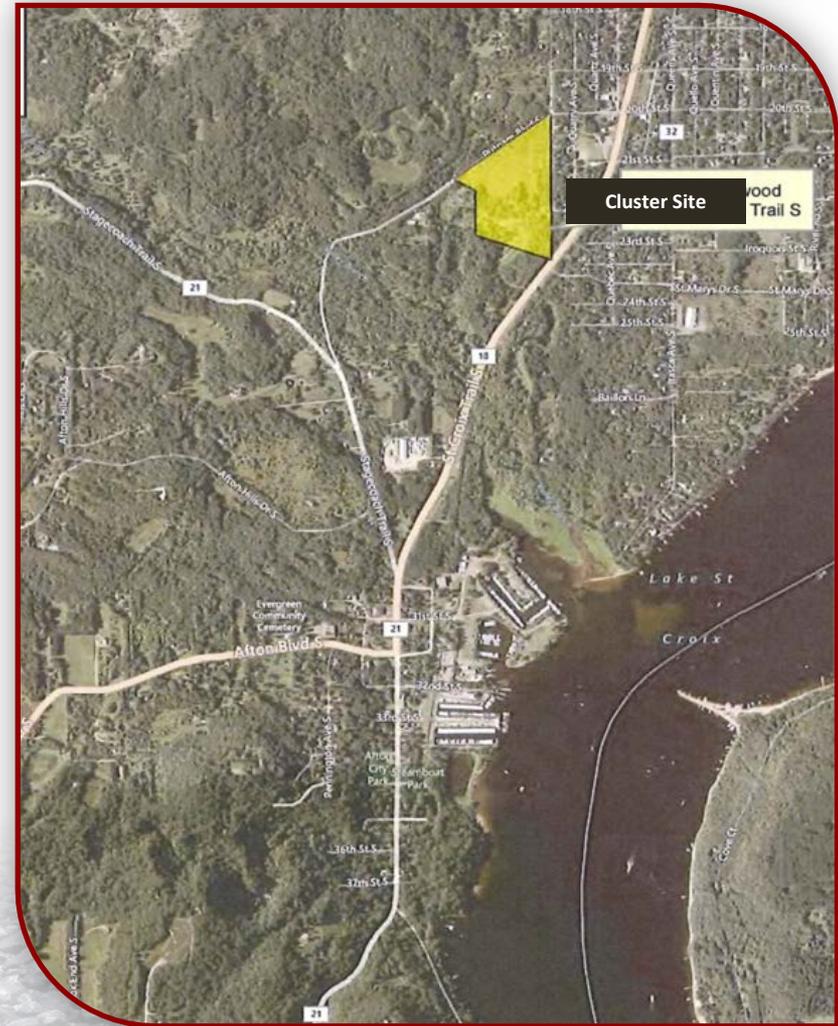
Proposed Improvements

- Sanitary Waste
- Reduce nutrient loading to Lake St. Croix
 - 200 lb/yr phosphorus-significant
 - 2,800 lb/yr BOD
- Collection System
 - Gravity Collection System
 - 8 inch mainline
 - const'n limits
 - 4 to 6 inch services to R/W
 - Lift Station
 - Forcemain to treatment site
 - 6 inch HDPE pipe
 - Directional drilling under creek requires DNR permit
- Ordinance Update
 - Connections
 - 2015 to 2023
 - Operation and Maintenance



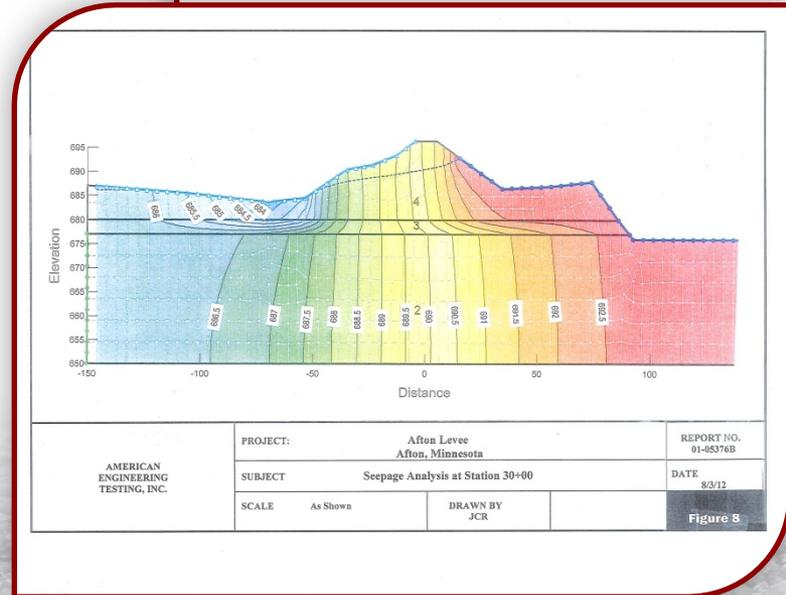
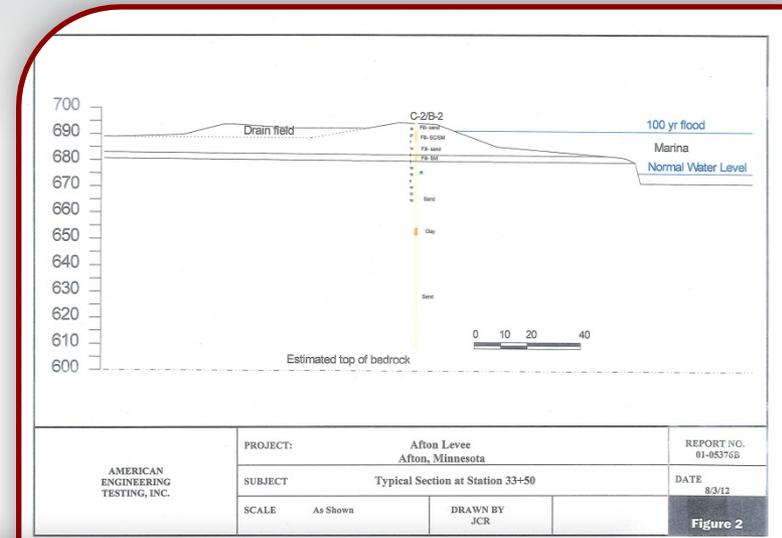
Proposed Improvements Sanitary Waste Cont'

- Treatment Site/System
 - Recirculating Gravel Filter w/ denitrification-significant improv't
 - Outside the St. Croix Bluff Land and Floodplain
 - Large enough to buffer & small as to limit future expansion
 - Soils and Proximity
- Studies completed – MPCA approved
 - Community Assessment Report
 - Facility Plan
 - Environmental Information Worksheet
 - Hydrogeologic Study
 - MPCA State Dispersal Permit
 - Submitted



Proposed Improvements

- Levee
 - FEMA accreditation
 - Earth
 - Flood wall
 - Seepage System
 - Lift Station & Generator
 - Kelle's Creek
 - Protect adjacent property
 - CSAH 21 elevation



Proposed Improvements

- **Drainage**

- Rural/Urban Areas
- Collection and Conveyance
 - Local Drainage
 - CSAH 21
- Stormwater treatment
 - North end of town
 - Middle of town
 - South end of town
- Infiltration
 - BMP – Grants
 - PPL 18-57 score



Project Costs

**Table 1 – Downtown Village Improvement Project
Summary of Cost**

| | Total |
|--|---------------------|
| Schedule A – Roadway and Drainage Improvements | \$1,875,000 |
| Schedule B – Sanitary Sewer Improvements | \$3,415,000 |
| Schedule C – Sanitary Sewer Septic Removals | \$199,000 |
| Schedule D – Levee Improvements | \$3,497,000 |
| TOTAL | \$8,986,000* |

*Does not include \$6 Million for CR 21 Improvements

Includes 15% contingency and 25% overhead

Project Costs

- Sanitary Sewer Project = \$3.5M + \$.5M
(restoration road & drainage)
 - Local Match \$2M
 - City secured \$2M, from State Facilities Authority
- Levee \$5.2M
 - Commercial
 - Flood insurance
 - \$3.2M DNR
 - \$2M Local Match



Project Funding

Table 2 - Afton Downtown Village Project Funding

| | | State Funds / Grants | | | Local Funds | Washington County (CSAH 21) | Total |
|------------------------|----------------|----------------------|-----------|-------------|-------------|--------------------------------|--------------|
| | | DNR | BWSR | PFA | | | |
| Street and Drainage | City of Afton | \$110,000 | \$60,000 | \$545,000 | \$1,159,000 | | \$1,874,000 |
| | Washington Co. | | | | TBD | \$6,000,000 | \$6,000,000 |
| Levee | | \$1,749,000 | | | \$1,749,000 | | \$3,498,000 |
| Sanitary | | \$725,000 | \$199,000 | \$1,699,000 | \$991,000 | | \$3,614,000 |
| Adjustment PFA* | | | | -\$259,000 | \$259,000 | | |
| Adjustment DNR** | | \$584,000 | | | -\$584,000 | | |
| Total | | \$3,168,000 | \$259,000 | \$1,985,000 | \$3,574,000 | \$6,000,000 | \$14,986,000 |

*PFA grant agreement outlines maximum allowable contribution from the PFA toward sanitary related improvements of \$1,985,000.

**DNR grant agreement outlines maximum allowable contribution from the City toward levee related improvements of \$2,000,000.

Potential local funding sources for this project include:

| | |
|-------------------------------------|-----------------------|
| Assessments to Benefited Properties | \$2.16 Million |
| CIP Fund | \$1.0 Million |
| General Fund | \$1.0 Million |
| Total Potential Local Funds | \$4.16 Million |

Grant funding cross over between Levee and Sanitary

Project Funding

| | |
|--------------------------------------|-----------------------|
| State funding (DNR, PFA, BWSR) | \$ 5,412,000 |
| Washington County Road Fund | \$ 6,000,000* |
| City Funds and Assessments | <u>\$ 3,574,000**</u> |
| The total project is estimated to be | \$14,986,000 |

*Estimated cost shown in the County's budget – design has yet to be completed

**Does not include City contribution to County Road 21 Project – City contribution to be determined once design is completed by the County

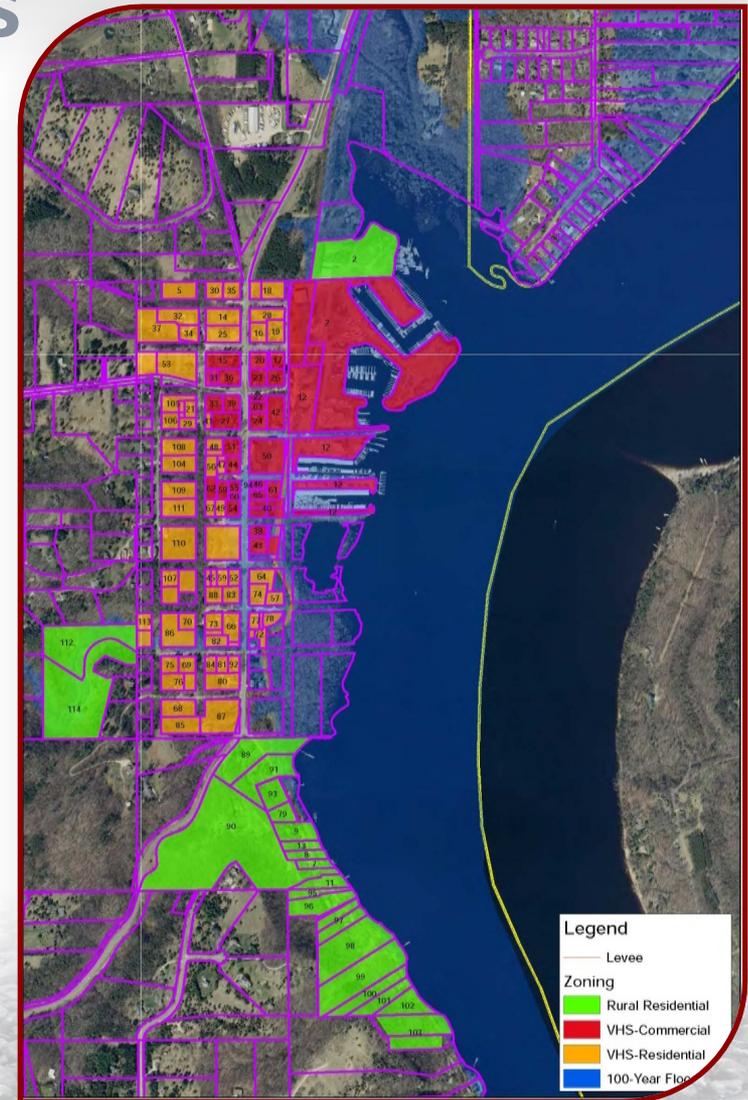
\$1 local dollars = \$3.75 project dollars

Assessments

- Based on Benefit
- Considered Improvements
 - Zoning & Shore Land Bluff Land
 - Highest and Best Use
 - Relative locations
 - Onsite improvements
 - Land Value and Size
- Did not consider
 - How business operates
 - If a business is not operating at capacity for the site

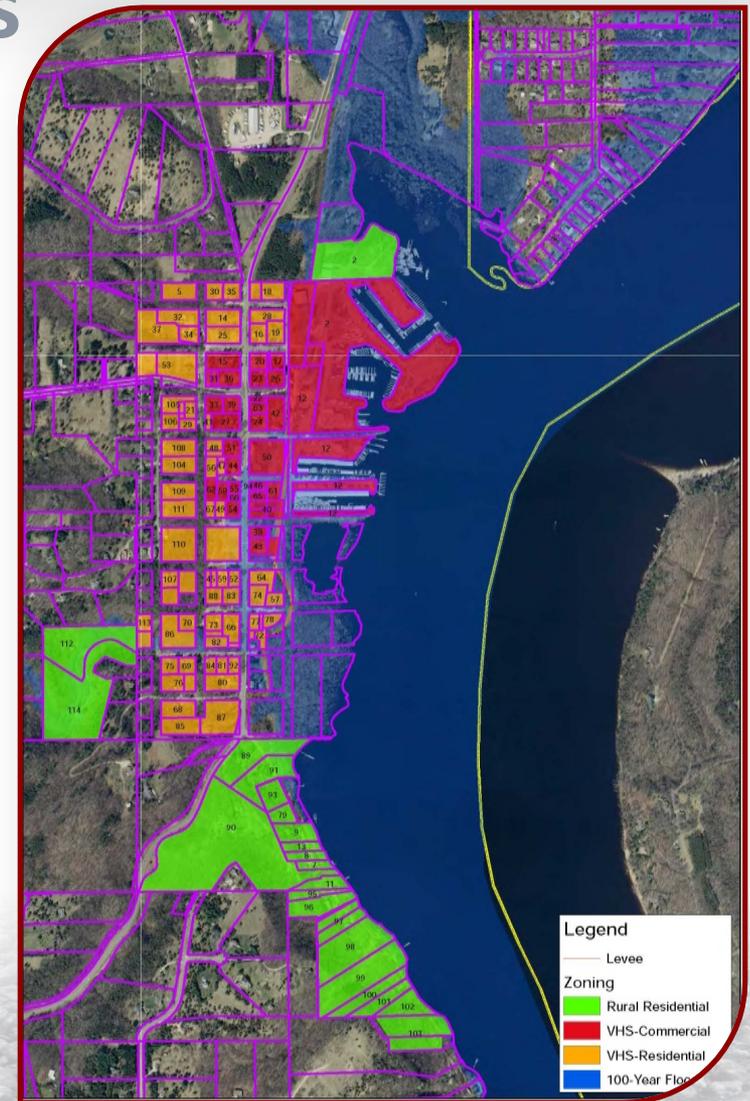
Preliminary Assessments

- Residential Assessments
 - Total Assessments: \$11,500- \$13,900
 - Average Assessment: \$12,600
 - Amortization (20 years @ 5%)
 - Annual Cost: \$960- \$1,120
 - Average Annual Cost: \$1,010
- Assessment Comparison for Sanitary Sewer
 - New subdivision \$25k to \$30k / unit
 - Un-serviced area \$12k to \$30k / unit
- Deferrals age 65+ with income qualifications



Preliminary Assessments

- **Small Commercial Assessments**
 - Total Assessments: \$13,900–\$55,900
 - Average Assessment: \$23,600
 - Amortization (20 years @ 5%)
 - Annual Cost: \$1,120 - \$4,490
 - Average Annual Cost: \$1,890
- **Large Commercial Assessments**
 - Total Assessments: \$67,800-263,100
 - Average Assessment: \$138,440
 - Amortization (20 years @ 5%)
 - Annual Cost: \$5,440 - \$21,120
 - Average Annual Cost: \$11,110



Schedule

Task

Completion Date

Accept Feasibility/Authorize Plans and Specs April 15, 2013

Public Information Meeting..... May 13, 2014

Sanitary Improvements:

Approve Plans and Specs Authorize Ad for Bid May 20, 2014

Receive Bids/Order Preparation of Assessments..... June 16, 2014

Public Information Meeting..... July, 2014

Hold Public Hearing/Hold Assessment Hearing/Order Project & Award Contract August, 2014

Begin Construction of the Sanitary Treatment Site September, 2014

Begin Construction of the Sanitary Collection System September, 2015

Completion of Sanitary Collection System..... December 31, 2015

Roadways, Levee, and Drainage Improvements:

Bidding (to be coordinated with Washington County) 2015/2016

Construction..... May - November, 2016

Final Completion of Construction June, 2017