The Little City That Could

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Dave Marshke, Utilities Superintendent, City of Burton
Paula Zelenko, Mayor, City of Burton
Michigan Municipal League
2016 Convention

THE LITTLE CITY THAT COULD

Burton, Michigan

Paula Zelenko, Mayor
Dave Marshke, Utilities Superintendent
Dima El-Gamal, PhD, PE, LEED-AP Stantec Consulting

September 15, 2016
Burton, Flint’s Neighbor

Background and Overview

- Second largest City in Genesee County
- 23.5 square miles
- 29,999 population
- Declining state shared revenues for over a decade: road funding etc.
- Extreme weather patterns impairing crumbling infrastructure
- Unemployment: General Motors, housing crash
- 40%+ loss in property values = loss of property tax revenue
- Cuts to employees, layoffs, early retirements, & unfunded pension liabilities
- Struggling City services due to understaffing: police, fire, roads, sewers, & water
Bad Economy + Bad Infrastructure =

* Home owners losing homes
* Vacant homes bring blight
* Blight drives down property values
* Crime increases: scrappers, vandals, & robberies
* Businesses closing, more empty buildings, more blight, crime increases

Where to start?

- Bring police numbers back up to 36 officers or more; 6.5 Millage
- Road deterioration
- Water infrastructure unstable (frequent breaks /aging system)
- Sanitary collection system not dependable (I & I), back ups, and aging lift stations
- Storm drains nonfunctional
Water System Infrastructure

* MDEQ - not be able to meet certification in the next 2-3 years.
* 90 + year old cast and ductile iron system
* Frequent water main breaks: 200+ main breaks in 10 years
* Service interruptions
* Water quality complaints on the rise: dirty, rusty, discoloration, & taste
* Tuberculation and corrosion compromising heavy metal protection
Existing Water System
WTF !?! Where’s The Funding !?!

- Stantec Consulting – Time to implement our 2009 CIP
- Loans, grants, bonds, & alternative materials combined with other area projects
- Water and Waste Advisory Board / Alternative Materials Sub-Committee
- Research, debates, & presentations
- Outdated information and misinformation
- Responsibility and duty to get the biggest bang for the taxpayer buck
- Unanimous decision by the Water and Waste Advisory Board
- The changing of the specification is not without compromise
Burton, Michigan 2016; Flint’s Neighbor

* Water infrastructure in progress (13 miles, 200 new hydrant, rehab Water Tower)
* Sanitary infrastructure in progress (cleaned & TV 77 miles, 2 mile of sewer rehab and replacement, 6 lift stations by 2016)
* Roadway construction in progress (6.3 miles major roads)
* Blight elimination in progress (123 demo permits, 127 clean ups)
* Tax reverted properties (4 subdivisions sold to developers; 1 built out 2016)
* 160 new businesses
* 63 new homes
* 40 police officers
* **BONUS**—As a disadvantaged community, we have received $1.5 M in principle forgiveness on our DWRF Loan.
* Still a delicate balance but our economy is recovering and open procurement was one of the keys.
Current Status

* Water System Improvements
  - Phases 1 and 2 complete
  - Phase 3 under construction
  - Phase 4 under design
  - Phase 4 Construction in 2017
  - Phase 5 on track for completion in 2019

* Sanitary System Improvements
  - Asset Management In progress
  - I & I Investigation in Progress
  - Pump stations under construction (final stages)
  - Sewer Rehab/upgrade under construction
  - On track for completion in 2017
Burton Water System – A Closer Look

- 90yr old cast/ductile iron system
- Inability to deliver required pressures in some areas during high demand events (tuberculation in iron pipes)
- 200+ water main breaks (10yrs)
  - direct impact on O&M budget
- Water quality issues/complaints on the rise
- Unreliable system
Breaks... Breaks... and more Breaks
Goals: Improve Level of Service

* Replacement of 95+ percent of Tower District area
* Improved water quality/pressures/demand
* System reliability
* Lower long term operating costs
* Most importantly – consumer confidence of system
Scope and Cost

* Five (5) phase over $20 million project

* Replacement of approximately 100,000 ft. (19 miles) of distribution system (mostly 6” and 8” existing watermains)

* Replacement of two (2) outdated Pressure Reducing Stations with SCADA upgrades
Challenges: Income Demographics
Challenges: Rates

Great Lakes Water Authority (formerly DWSD)
  ↓
  City of Flint
  ↓
Genesee County Water and Waste
  ↓
  City of Burton

- Each entity adds commodity charges to the receiving agency
THINK OUTSIDE THE BOX

- Alternative Material
- Open Procurement
- Nonconventional Funding
Specifying C-909 class PVC for all phases (DIP as Alternate)
  - Better product for Burton
  - It’s the “Right Fit”
  - Saving ratepayers big $$

Updated city specifications

Required (by primacy agency) to “Isolate” PVC area via backflow devices

Required (by primacy agency) to use “Bell Stops” at every joint

Additional requirements to increase PVC installation costs vs. ductile iron
Open Procurement

- Phase 1 = 26,300ft  ($651,000)
- Phase 2 = 20,800ft  ($446,000)
- Phase 3 = 14,500ft  ($289,000)
- Phase 4 = 18,400ft  ($400,000)*
- Phase 5 = 14,200ft  ($325,000)*

Total Savings  Over $2 million  (approx.)  *Estimates
Funding: Stantec at a Glance

- Founded in 1954
- 60 years of uninterrupted profitability: Publicly traded on two stock exchanges
- More than 400 locations
- Approximately 22,000 employees
Stantec Ann Arbor Office At a Glance

- Founded in 1923
- Formerly Ayres, Lewis, Norris & May

- Our local strength, knowledge, and relationships, coupled with our world-class expertise, have allowed us to meet our clients’ needs in more creative and personalized ways.

- Our offices in Michigan are structured so that multiple disciplines can be offered as components to one project team working directly for the client, or as singular services.
Proactive or Reactive

- Review City’s needs / wish list
- Evaluate funding sources
- Present a road map
Winning Team

* Elected officials
* DPW Staff
* Engineering Consultant
* Funding Agency
Project Funding: Rocket Science...
Not really

* Knowledge /Collaboration/Timing is KEY
* Identify project need
* Eligibility
* Evaluate Alternatives
* Compile Grant/Loan Packages
* Milestones
Stantec Funding – Pen to Paper

* Over $4 Million Grants/Principal Forgiveness
* ~ $30 Million Low Interest Loans (total by 2019)

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* Local Match
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Please fill out your session evaluation:

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