





WATER & SEWER COMMISSION October 22, 2019

AGENDA ITEMS

- Review of Commission By-Laws & schedule
- SEMCOG Grant Application
- Water & Sanitary Asset Management Projects
- Private Fire Hydrant Inspection Program



COMMISSION BY-LAWS & MEETING SCHEDULE

RECOMMENDED BY-LAWS....

-call for meetings to be held quarterly on the fourth Tuesday of the following months: January, April, July, October
-identify specific responsibilities of the "Department Representative" assigned to the Commission.
-eliminates term limit requirements for Commission officers
-identify a quorum as the majority of Commission positions (which means no less than three (3) members are required)
-updates language to reflect gender-neutrality in descriptions of titles of officers and other Commission members



SEMCOG GRANT APPLICATION UPDATE

- A grant opportunity was offered by SEMCOG as part of a larger strategy to obtain infrastructure data on roads identified for future federally funded projects
- An undetermined amount of funds are available to assist local communities to gather data on their respective infrastructure and share information with SEMCOG
- The application deadline was September 30, 2019.
- With the collaboration of Joel Sabin GIS Technician), Elizabeth Renaud (Executive Assistant) and James T. Taylor (Water & Sewer Director) an application was submitted to SEMCOG one week prior to the deadline.
- We are waiting on a final response. (We did receive a request for additional information earlier this month...might be a good sign)





Water & Sanitary Pipe Inventory & Condition Assessment

- 51,200 ft of sanitary pipe televised over the summer
- 920,771 ft of water pipe has been identified by year of installation and pipe material

Vertical Asset Inventory & Condition Assessment

- 1. Site visits in August were performed to inspect each sanitary asset
- 2. Reviewed history of sanitary assets with Operators





Question	Condition Weight	Answer		
All Components Present	1			
		1	Yes	
		5	No	
All Safety Features Present	0			
		1	Yes (or Not Applicable)	
		5	No	
General Appearance	1			
		1	Excellent	
		2	Good	
		3	O perational	
		4	Failure Imminent	
		5	Failure	
Functional	1			
		1	Fully Eurotional	
		2	Mostly Eurotional	
		3	Requires Moderate	
		5	Cleaning/Maintenance	
		4	Requires Significant	
		5	Cleaning/Maintenance Siezed Binded not working	
Installation /A conscibility	1	5	ologod, Dillogo, not working	
Thistallation/Accessibility	1		Testellad annual a service a service	
		1	Installed property, easy to access	
		2	Installed properly, minor access	
		3	Minor installation problems, minor access	
			obstructions	
		4	Minor installation problems, access	
		5	Improperly installed, access obstructed	
Absence of Cavitation	1			
		1	Yes	
		5	No	
A branco of Looks	1	-		
Absence of Leaks	-	1	Vec	
		-	Ne	
		2	NO	
Acceptable Noise	1			
		1	Yes	
		5	No	
A cceptable V ibration	1			
		1	Yes	
		5	No	
Corrosion - Metal	1			
		1	Like New	
		2	Minor Corrosion	
		3	Pitting And Some Metal Loss	
		4	Significant Metal Loss	
		5	Severe Pitting	
Chain/Cable/Hooks	1			
		1	Excellent	
		2	Minor Wear	
		3	Moderate Wear	
		4	Major Wear	
			E siluro Imminont	
Connections Ob		5	i alute Infinitenc	
Connections OK	1			
		1	Yes	
		5	NO	
Festoon and Power Cable Condition	1			
		1	Excellent	
		2	Minor Wear/Deterioration	
		3	Moderate Wear/Deterioration	
		4	Significant Wear/Deterioration	
		5	System Failure	
Guide Rail Condition	1			
		1	Excellent	
		3	Minor Corrosion	
		5	Severe Corrosion	

 Inspections to be performed on all water vertical assets and GPS locations acquired



Asset Criticality

- Probability of Failure (POF)
 - How likely is Asset to Fail?
 - 1 thru 5 Rating
- Consequence of Failure (COF)
 - How Important is the Asset?
 - 1 thru 5 Rating
- Business Risk Exposure (BRE)
 - Prioritizes Assets
 - BRE = POF x COF
 - 1 thru 25 Rating

25	20	15	10	5	5	e B
20	16	12	8	4	4	end
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Probability of Failure

HighHigh Priority (16 - 25)MediumMedium Priority (5 - 15)LowLow Priority (1 - 4)

Capital Improvement Plan

Information Used to Develop CIP

- Remaining Useful Life of Asset
- BRE Score
- Staff Knowledge
- Repair History
- 20 Year CIP (Thru 2039)
 - First 5 Years are Good
 - Next 15 Years are Speculative
- 3% Annual Inflation
- CIP Includes
 - Asset Replacement
 - Major Asset Rehabilitation





How do we pay for it all?



A detailed report on the progress of the Water Asset Management **Project will be** presented to the **Commission** in November



Van Buren Township Private Fire Hydrant Inspection Program 2019



Collaboration between **VBT Water/Sewer Department, BT Fire Department**, and select Local Businesses in order to protect the health, safety, and well-being of the public as well as the quality and effectiveness of available infrastructure.

1814 Public Hydrants in our System

115 Private Hydrants in our System

Public Hydrants

Private Hydrants

Township Owned Currently Inspected by VBT Water/Sewer Staff on Routine Basis



Privately Owned

While inspections are not required by VBT FD, property owners are required to maintain hydrants.

Found in Large Commercial and Industrial Developments, Mobile Home Parks, Planned Unit Developments, and other areas that are metered at the property line.

The Importance of Inspecting Private Hydrants



Because the Township is not responsible for maintaining private hydrants, there is a risk that firefighters could attempt to use a nearby private hydrant during a fire **only to find it dysfunctional or inaccessible.**

Benefits of Inspecting Private Hydrants





Improved Emergency Response from Fire Department

Protection of Township Water Quality



Centralized & accessible data with improved data quality.

Data Collection Process



- VBT Fire Department to conduct scheduled inspections.
- FD Staff will record info on tablet provided by Water/Sewer Department.
- Info is then captured by GIS System and added as a layer to the map, allowing the Township to track and analyze private hydrant information, status, and issues.

Data Collection

- Photo of Hydrant GPS Location Date of Install Breakaway? Valve Location Size of Main Storz?
- Is it Operational?
- Flow Data

Winterized Date Accessibility Issues?







Questions?









NEXT SCHEDULED MEETING: November 26, 2019