

# Water and Wastewater System Capital Cost Recovery Study

City of Ann Arbor District Library  
Downtown Location - 343 S. Fifth Avenue

Wednesday, March 18, 2015  
4:00 p.m. to 5:30 p.m.



## Public Meeting Summary

### 1. Welcome and Introductions – Troy Baughman, City of Ann Arbor

- **Participant List** – see Attachment #1
- **Meeting Summary** -- posted on the City's project website at:  
<http://www.a2gov.org/departments/systems-planning/Pages/Water-and-Wastewater-System-Capital-Cost-Recovery-Study.aspx>

### 2. Capital Cost Recovery Charge Approach for Study – Brian Jewett, Black & Veatch

- Core principles were followed in the development of the Capital Cost Recovery Program:
  - a. Defensible
  - b. Cost recovery for system investment
  - c. Equitable
  - d. Simple to administer
  - e. Simple to understand
- Capital Cost Recovery Approach for Ann Arbor
  - a. Step 1 – Buy-in and Extension Approach for:
    - i. Existing assets
    - ii. Extension costs – City
    - iii. Asset valuation
    - iv. Credits
  - b. Step 2 – Selected Demand Based Approach to address:
    - i. Current and future customers
    - ii. Water/Sewer Peak Demand
    - iii. Maintaining Same Level of Service
  - c. Step 3 -- Facility Costs
    - i. Existing Assets = assets still in use and construction-in-progress
      1. Value = today's cost to replace assets
      2. Depreciation recognizes that existing customers have used the useful life of older assets

3. The value of assets at today's replacement cost with depreciation backed out was calculated using the Engineering News Record – Construction Cost Index, the "ENI-CCI" is an industry standard tool used to value assets.
- ii. Extension Assets = to serve areas where new assets are required
  1. City constructed assets
  2. Value based on 1998 Utility Service Plan assets then forwarded to today's dollars.
- d. Step 4 – Credits
  - i. Past special assessments and improvement charges
  - ii. Past contributed capital deducted from existing assets
  - iii. Current capital contributions (e.g. main extension)
  - iv. Current system outstanding debt
- e. Step 5 – Charge Mechanism
  - i. Current connection charges in Ann Arbor are based on tap size.
  - ii. Industry standard is to charge by a meter size charging mechanism because:
    1. It is a good measure of demand on the system
    2. It is easy to explain and administer
    3. Customer rates are based on meter size

### 3. Preliminary Capital Charges for Water & Sewer – Brian Jewett

- a. Preliminary Baseline Water Capital Charges – Existing Assets
  - i. Capital cost recovery charge elements = meter size, existing asset buy-in meter equivalent, flat cost per meter.
  - ii. Proposed capital charge schedule would apply to a connection to an existing main that has not contributed previously to the system.
  - iii. Non-capacity generating items such as fleet are included in flat cost component.
- b. Preliminary Water Capital Charges - City Constructed Extensions
  - i. Build-out project cost is divided by Residential Equivalent Unit (REU) to arrive at a cost per REU.
  - ii. One REU = (1)  $\frac{3}{4}$ " displacement meter
- c. Preliminary Baseline Sewer Capital Charges -- Existing Assets
  - i. Capital cost recovery charge elements = meter side, meter equivalents, existing asset buy-in component per meter equivalent, flat cost per meter.
  - ii. Proposed capital charge schedule would apply to a connection to existing infrastructure that has not contributed previously to the system.
- d. Preliminary Sewer Capital Charges - City Constructed Extensions
  - i. Build-out project cost is divided by Residential Equivalent Unit (REU) to arrive at a cost per REU.
  - ii. One REU = (1)  $\frac{3}{4}$ " displacement meter

**4. Development Scenarios**

a. City Constructs Water/Sewer Lines to Serve New Area

**Water**

Meter Size (in)	Development Project Meters	Number of REUs	Total Extension Cost	Total Capital Cost Recovery Charges	Total Project Charges	Maximum Cost per Meter
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**Displacement Meters**

0.75	20	20.00	\$365,499	\$105,480	\$470,978	\$23,549
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**Sewer**

Meter Size (in)	Development Project Meters	Number of REUs	Total Extension Cost	Total Capital Cost Recovery Charges	Total Project Charges	Maximum Cost per Meter
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**Displacement Meters**

0.75	20	20.00	\$399,438	\$134,136	\$533,574	\$26,679
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b. Developer Constructs Water Assets to Serve New Development Site

**B. DEVELOPER CONSTRUCTS ASSETS – WATER CONTRIBUTED UTILITY ASSETS**

Line No.	Meter Size (in)	Development Project Meters	Gross Capital Cost Recovery Charges	Contributed Asset Credit	Net Capital Cost Recovery Charges
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**Displacement Meters**

1	0.62	0	\$0	51.4%	\$0
2	0.75	5	\$26,370	51.4%	\$12,825
3	1.00	0	\$0	51.4%	\$0
4	1.50	0	\$0	51.4%	\$0
5	2.00	5	\$135,881	51.4%	\$66,087

**Magmeters**

6	0.75	0	\$0	51.4%	\$0
7	1.50	0	\$0	51.4%	\$0
8	2.00	5	\$186,424	51.4%	\$90,669

**Total Project Fee: \$169,582**

- c. Developer Constructs Sewer Assets to Serve New Development Site

## B. DEVELOPER CONSTRUCTS ASSETS – SEWER CONTRIBUTED UTILITY ASSETS

Line No.	Meter Size (in)	Development Project Meters	Gross Capital Cost Recovery Charges	Contributed Asset Credit	Net Capital Cost Recovery Charges
<b>Displacement Meters</b>					
1	0.62	0	\$0	11.0%	\$0
2	0.75	5	\$33,534	11.0%	\$29,845
3	1.00	0	\$0	11.0%	\$0
4	1.50	0	\$0	11.0%	\$0
5	2.00	5	\$176,250	11.0%	\$156,862
6	3.00	0	\$0	11.0%	\$0
7	4.00	0	\$0	11.0%	\$0
<b>Magmeters</b>					
8	0.75	0	\$0	11.0%	\$0
9	1.50	0	\$0	11.0%	\$0
10	2.00	5	\$242,119	11.0%	\$215,485
<b>Total Project Fee:</b>					<b>\$402,192</b>

### 5. Next Steps

- a. Changes to the program will require changes to city code. The goal is to have fees in effect January 2016.
- b. Next steps - March to July:
  - i. Hold 3/18/15 Stakeholder meetings
  - ii. Complete revisions and prepare report
  - iii. Seek City Council approval as part of budget process

### 6. Questions/Answers:

- a. Q: In general, do the fees go up or down? A: It depends on the scenario.
- b. Q: If there are pipes in the ground and assessments have been paid previously, will there be a credit? A: Yes, the City wants to recognize costs already contributed to the system.
- c. Q: What do you do if there are no records regarding improvement charges paid previously? A: Those details are currently being worked on.
- d. Q: Where did the 51.4% come from in contributed water asset credit? A: It is a mechanism to recognize when developers put in new mains. In some cases there isn't information regarding improvement costs paid. Contributed capital credit represents the percentage of total assets for distribution mains (i.e.12" and below).
- e. Q: Could developers provide actual cost for credits? A: The City tried this in the past and didn't work out well.

- f. Q: What about credit in a situation where there is an existing main that the developer was asked by the City to replace? In this case there was a main existing already. A: The City is looking into the details of providing a credit for this contribution.
- g. Q: What is top price for connection to the sewer being planned in Geddes Ave.? A: It is within a couple hundred dollars of the current combined improvement charge and connection charge amount. The proposed sanitary cost based on a ¾" equivalent meter is \$26,679.
- h. Comment: I commend the fact that depreciation is being recognized in this approach.
- i. Q: If you change the cost fees in January, what is the trigger? A: The capital charges are assessed when the meter is set in place.
- j. Q: What is the cost for fire protection? A: The City is currently looking at determining a meter equivalency for fire lines to measure approximate flow.
- k. Q: There is no significant flow for fire protection, why would you charge for capacity at peak demand? A: The capital charge is for capacity to ensure flow is available on demand and when needed. The proposed fee structure is based on the average peak demand.
- l. Q: Why is the charge so high if the likelihood of flow going through the meter is so low? A: Currently there is a charge for a sewer fire lead, that charge will be eliminated and only a water fire lead connection will be charged.
- m. Comment: Request that you look at this charge closer and consider a lower fire protection only charge.
- n. Q: In the past, the improvement charges have been very high. There are pipes being used for many years, new people are paying 2-3 times the improvement charges as the current customers. How do you assume that this is fair for the new party? A: The accounting life is less than the design life of the infrastructure. The City CAFR's highest useful life is 50 years, this approach is fully depreciated in 1960 and older pipes.
- o. Q: If fees are subject to final review, these fees should be reviewed to refine the costs to be in line with other City fees. A: These costs are noted as the maximum that could be charged. Benchmarking against other utilities must be done carefully. The policies, development demands, and accountable formulae are likely very different.
- p. Q: On an existing lot in an old neighborhood, there are currently an improvement charge, connection charge, tap fee, and meter set fee. With the new model what is included? A: The current improvement and connection charge would be included together with a credit provided for any previously paid improvement charge/historical special assessments.
- q. Q: How will on-going construction be assessed? A: Current connections will pay the current fees. The timing of fees for connection is based on when the meter is installed.
- r. Q: How will Geddes Ave. historical fees be handled? A: Since sanitary sewer currently does not exist in Geddes, there would not be a historical special assessment/improvement charge that could be credited.

- s. Q: Is the maximum charge what is being proposed? A: No.
- t. Q: Will Riverview costs be the same in a few years when utilities are extended to serve this area? A: The fee model will be adjusted annually on a cost forward basis. Assets and depreciation will be updated annually.
- u. Q: Is the City Utility Operating Budget online? A: It should be in the Budget Book the Financial Services area of the City's website. The three utility systems each have their own funding sources. They are Enterprise systems that can only use funds received for specifically for each one.
- v. Comment: Approximately 7 years ago, there were no improvement charges for in-City lots. Weren't the charges implemented to raise money for the City?
- w. Q: How is this an equitable program when the older users have paid less than new users? A: This study did not address prior charges, it is based on creating an equitable approach going forward using industry standards.
- x. Why not raise the water rates so everyone pays uniformly? Can you address this in your approach? A: Many agencies raise water rates when they reduce connection charges. This raises new issues in terms of equitability.
- y. Comment: The City should look at lowering the connection charges to encourage more connections to the system.
- z. Comment: People that moved in earlier actually paid the charges back to the developer with the cost of the house sale.
- aa. Q: The new Mayor is concerned about providing affordable housing. The existing homes on Geddes Ave. will pay \$80,000 to connect to the sewer system. How is this affordable housing and will there be affordable options to this capital fee? A: This is something that the governing body would address.
- bb. Will the city loop back to inform stakeholders regarding new information? A: Those that have expressed interest in being placed on the Stakeholder list will receive an email. All updates will be posted on the City project website at:  
<http://www.a2gov.org/departments/systems-planning/Pages/Water-and-Wastewater-System-Capital-Cost-Recovery-Study.aspx>
- cc. Who do I talk to at the City to suggest that the new charges be pulled ahead sooner than January? A: Speak with your city council member.
- dd. How will the credits be derived? A: This is a decision made by the City Utility Administration.

## Participant List – Attachment #1

James & Catherine Allen	Homeowners
Daniel Barry	
Alissa Beveridge	Homeowner
Marcel Bonnewit	First Martin Corp.
Alex deParry	Ann Arbor Builders
Jennifer Hall	Ann Arbor Housing Commission
Benedict Ilozor	
Greg Kacvinsky	Homeowner-Geddes
Darren McKinnon	First Martin Corp.
Eric Organek	
Angela Pantazatos	AIA
Julie Seagraves	
Steve Sivak	
Konstantin Tanin	
John Teeter	First Martin Corp.
Richard Timmons	Colliers
Troy Baughman	Ann Arbor Systems Planning, Project Manager
Cresson Slotten	Ann Arbor Systems Planning, Unit Manager
Brian Jewett	Black and Veatch, Project Manager
Teresa Weed Newman	Project Innovations