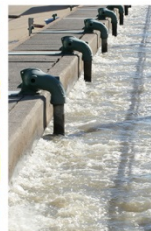


MSD Rules & Regulations and Fee Updates

Fall 2017



August 1, 2017 DRAFT for Public Comment – All Proposed
Changes Indicated in Red

THE METROPOLITAN ST. LOUIS SEWER DISTRICT



RULES AND REGULATIONS
AND ENGINEERING DESIGN
REQUIREMENTS FOR
SANITARY SEWER AND
STORMWATER
DRAINAGE FACILITIES

JANUARY 2018

THE METROPOLITAN ST. LOUIS SEWER DISTRICT



RULES AND REGULATIONS
AND ENGINEERING DESIGN
REQUIREMENTS FOR
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FEBRUARY 1, 2018

MSD Rules & Regulations

- Draft Regulations Update redline version with proposed changes was advertised for public comment August 11, 2017. Email blast was sent to stakeholders, and also DRAFT changes posted on MSD website.
- Comments received until September 22, 2017.
- Most changes are clarifications
- Six previous amendments from the last 10 years have been incorporated. New list of amendments goes to zero.
- Will be adding information pertaining to formatting requirements for electronic submittal of plans & other documents for online review & permitting. This to be included in Amendment 1 to the Regs in Spring 2018

Summary of Clarifications & Changes

- Regulations will only be available on www.stlmsd.com – no hard copies will be printed
- Clarifications to address sewer maintenance issues
- Wording added to align with CSR & state rules & laws
- Administration and plan submittal requirement clarifications
- Sanitary sewer requirement clarifications
- Storm sewer and stormwater management requirement clarifications
- Land surveyor seal requirements on easement plats
- Minimum insurance requirements for construction – added pollution liability when MSD is providing cost reimbursement
- Plan submittal and preconstruction meeting requirements for projects with pump stations and force mains

Administration

- **Section 1.030**
 - Allows Professional Landscape Architect Seal for non-structural post construction stormwater BMPs only (Stormwater Credits)
 - Allows design professional to send in a Sealed letter if Seal on project plans is more than one year old, and project site conditions have not changed
- **Section 1.040.02**
 - Will include information on electronic submittal requirements for the new MSD online Plan Review, Permitting, and Construction Inspection website
- **Section 1.040.03**
 - Specifies that any proposed change to property lines shall at a minimum require submittal of the proposed changes to the District for review, and that submittal of full site improvement plans for review and approval will be required in most cases, unless directed otherwise by the District

Sanitary Sewers

- **Section 3.020.08**
 - Sanitary sewer separation from water main as allowed in 10 CSR 20-8
- **Section 3.030.09 1. c.**
 - Further describes manhole lining requirements where force main connections are made into the gravity sanitary system
- **Section 3.030.09 5.**
 - Describes requirements for sanitary sewers with locations in conjunction with water mains
- **Section 3.030.09 13.**
 - Allows for private sewers in some industrial or institutional situations where the same entity owns adjacent parcels and lot consolidation is not possible

Sanitary Sewers

- **Section 3.030.09 18.**
 - Sanitary sewer special requirements for levee-protected areas and high groundwater table areas
- **Section 3.030.09 19.**
 - References lateral tracer wire requirements per local plumbing codes and Missouri Revised Statute 319.033.1
- **Section 3.030.09 20. and 21.**
 - Connections to Brick, Non-Reinforced Concrete or Other Non-Circular Sewers
 - Connections to Drop Shafts

Storm Sewers

- **Section 4.020.07 10.**
 - Requirements for storm sewers in levee-protected areas and high groundwater table areas
- **Section 4.020.08**
 - Clarification on requirements in sinkhole areas, to protect water quality and preserve the sinkhole's existing hydrologic condition (tributary flow rate and tributary flow volume)
- **Section 4.020.08 2. d.**
 - Requires geotechnical engineer to provide a P.E. Sealed certification letter stating the project was constructed in accordance with the design plans and geotechnical report

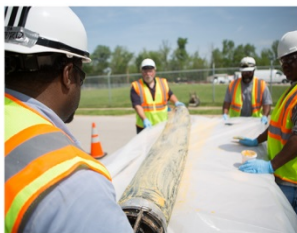
Storm Sewers

- **Section 4.030.05**
 - Title of this section changed from “Open Channels” to “Improved Channels” and clarifications added to minimize channelization of natural streams, and that such work shall meet Corps of Engineers requirements
- **Section 4.060**
 - Clarification added to align with the current MS4 Stormwater Phase II Permit, particularly Minimum Control Measure 5 – Post-Construction Stormwater Management in New Development and Redevelopment
- **Table 4-5, second page, part A. and B.**
 - Describes instances when stormwater management facilities may be required when runoff differential increase is less than 2 cfs
 - Mentions runoff volume techniques shall be incorporated into the detention design to the maximum extent practicable

Easement Plats, Insurance, Pump Stations & Force Mains

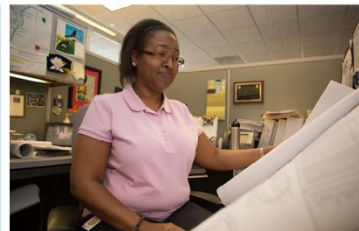
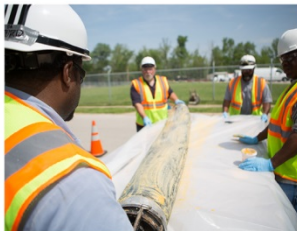
- **Section 7.060.03 5.**
 - Requires easement plats to be sealed, signed, and dated by a Missouri Registered Professional Land Surveyor.
 - Sample Easement Plat included at the end of Chapter 7
- **Section 10.090.03**
 - Pollution Liability Coverage Required if MSD is providing cost reimbursement in excess of \$100,000
- **Sections 13.020 and 13.030.02**
 - Requires submittal and review of plans for pump station, force main, and low pressure sewer system components of a project to be a separate record that is reviewed and approved separately from the rest of the development plans
- **Section 13.020.04 and 13.030.04**
 - Requires preconstruction meeting for pump station, force main, and low pressure sewer system work
- **Section 13.020.05**
 - Pump Station Radio Connection Fee

Engineering Fee Updates



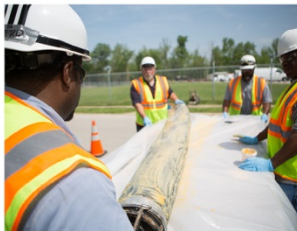
Engineering Fee Basis

- Fees charged for services to recover actual costs
- Ensure costs not borne by general users of System
- Fees are fair and reasonable
- Analysis of Engineering and Service Fees completed



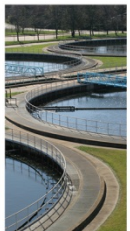
Current Engineering Fees (2007)

- **Plan Submittal and Review Fees**
 - Submittal Charge - \$450.00
 - Subdivisions, commercial projects - \$150.34 per acre
 - Sewer extensions - \$0.57 per lineal foot
 - Conceptual Review – Basic \$440.00, Detailed \$2,000.00
- **Permit and Inspection Fees**
 - Connection Permit - \$50.00
 - Construction Permit - \$195.00
 - Sanitary and Combined Sewer - \$3.39 per foot
 - Storm Sewer - \$2.50 per foot
 - Pump Station - \$2,500.00 per station
- **Industry Permit Fees**
 - Base Fee - \$150
 - Sample Point Fee - \$100/sample point
 - Volume Fee - \$0.72/CCF
- **Connection Fees**



Plan Review Current Revenues

Description	Number (3yr Ave)	Revenue
Plan Submittals	529	\$238,000
Review Fees	1211 acre	\$186,000
Conceptual	43	\$23,000
	Total	\$447,000

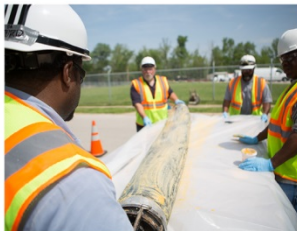


QUALITY
SERVICE
ALWAYS



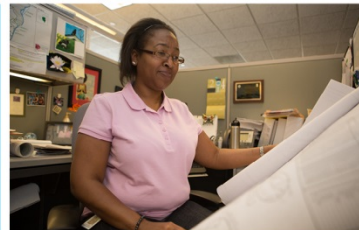
Permit and Inspection Current Revenues

Description	Number (3yr Ave)	Revenue
Construction Permits	549	\$107,000
Footage Permits	185,000 ft	\$527,000
Connection Permits	2,247	\$112,000
Pump Station	3	\$7,500
	Total Revenue	\$754,000



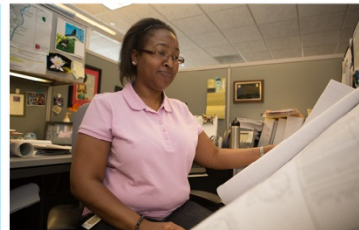
Engineering Fees Revenue and Costs

	Current Revenue	Actual Costs
Plan Review	\$ 447,000	\$ 762,000
Permit & Inspection	\$ 754,000	\$1,505,000
Total	\$1,201,000	\$2,267,000
Difference	(\$1,066,000)	



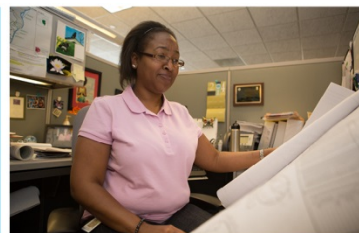
Significant Changes

- Nature of Development and Land
 - Projects: 950 then, 600 now
 - Acres: 2800 then, 1300 now
- Complexity of Reviews
 - Site characteristics
 - Consent decree coordination
 - MS4 Water Quality Requirements
 - Stormwater BMPs in Rules and Regs (2006)
 - BMPs: 0 then, 1000 now
- Inspection
 - Tap crew eliminated
 - Permits: 2700 then, 3900 now
- Increased Labor Benefit Costs



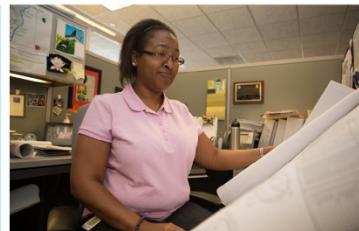
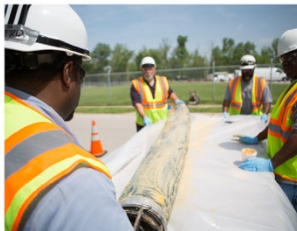
Regulatory (\$0.02 tax)

- District-wide Stormwater Regulatory fund
 - Ad Valorem Tax
 - \$0.0197 per \$100 assessed valuation
 - For stormwater services required by State and Federal regulations
- Costs allocated to fund
 - Municipal Separate Storm Sewer System (MS4) Permit compliance
 - Stormwater BMP plan review, permit, inspection



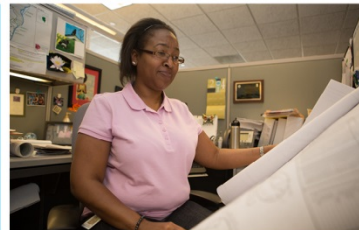
Public Benefits

- Services provided directly to the public
 - Engineer of the Day
 - Easement Encroachment/Vacation
 - Public Education, HOA Assistance
 - Municipal Coordination
 - Community Facing Software - Accela
- Services on behalf of the public
 - Protecting Public Health and the Environment
 - Coordination with Project Clear
 - Researching System Complaints
 - Economic Development



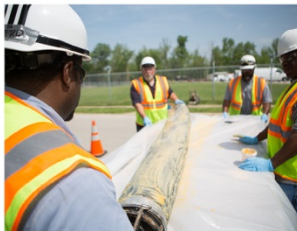
Proposed Plan Review Fees

Current Fee	Proposed Fee Update
Ordinance 12413	New Ordinance
\$450.00 Plan Submittal Charge	\$450.00
\$150.34 per acre Review Fee (1 acre minimum)	\$375.00 per acre (0.5 acre minimum)
\$0.57 per foot Review Fee on Linear projects	\$1.40 per foot
\$ 440.00 Basic Conceptual \$2000.00 Detailed	\$470.00 Conceptual Review



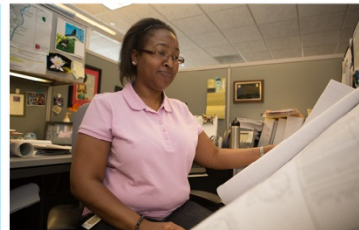
Proposed Permit/Inspection Fees

Current Fee	Proposed Fee Update
\$195.00 Construction Permit	\$195.00
\$3.39 per foot Sanitary/Combined	\$5.80
\$2.50 per foot Storm Sewer	\$4.20
\$50.00 Connection Permit	\$75.00
\$2,500.00 Pump Station	\$4,000.00



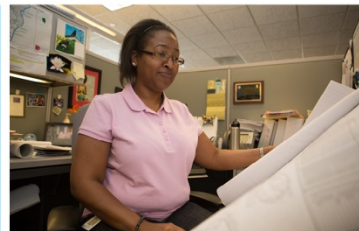
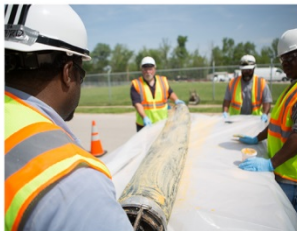
Proposed Industry Permit Fees

Current Fee	Proposed Fee Update
Base Fee \$150.00	\$180.00
\$100.00 per sample point	\$120.00 per sample point
\$0.72 per CCF	\$0.86 per CCF



Connection Fee Basis

- Connection Fees recover the cost of system capacity constructed for new users
- Last study to set fees performed in 1994, and implemented by Ordinance 9346
- Current review used Water Environment Federation Manual, “buy-in method”
- Based on asset equity:
investments less depreciation less debt



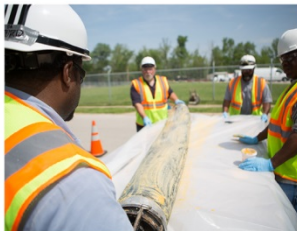
Connection Fees

Water Tap Size	Average Annual Capacity	Current Fees 11/01/1994	Proposed Fees 07/01/2017	\$ Change	% Change
<i>inches</i>	<i>gpd</i>	\$	\$	\$	%
All Single Family	413	1,072	1,126	54	5.0%
3/4	413	1,072	1,126	54	5.0%
1	621	1,669	1,693	24	1.4%
1 1/2	1,141	3,031	3,111	80	2.6%
2	1,765	4,736	4,812	76	1.6%
2 1/2	2,379	NA	6,485	NA	NA
3	3,221	8,744	8,782	38	0.4%
4	5,301	14,711	14,453	(258)	-1.8%
6	10,501	28,351	28,631	280	1.0%
8	16,741	51,368	45,644	(5,724)	-11.1%
10	24,021	82,655	65,493	(17,162)	-20.8%



Impact on Typical Projects

Project	Fee Type	Current	Proposed	% Diff
Single Family Residence	Plan Rev	\$ 600	\$ 825	
	Permit/Insp	\$ 100	\$ 150	
	Connection	\$1,072	\$1,126	
	Total	\$1,772	\$2,101	19%
Large (62 lot) Subdivision	Plan Rev	\$ 2,216	\$ 4,856	
	Permit/Insp	\$22,904	\$37,486	
	Connection	\$66,464	\$69,812	
	Total	\$91,585	\$112,154	22%



Impact on Typical Projects

Project	Fee Type	Current	Proposed	% Diff
Small Commercial	Plan Rev	\$ 657	\$ 967	
	Permit/Insp	\$4,821	\$6,449	
	Connection	\$4,736	\$4,812	
	Total	\$10,214	\$12,229	20%
Large Commercial	Plan Rev	\$ 4,809	\$11,775	
	Permit/Insp	\$24,741	\$40,431	
	Connection	\$ 4,008	\$ 3,970	
	Total	\$33,558	\$56,176	67%

