Platte Canyon Southwest Metropolitan Water & Sanitation Districts

Maintenance Goals - 2023

Objective

Schedule all water and wastewater facility maintenance tasks for Platte Canyon, Southwest Metropolitan, Bow Mar, Columbine and Valley utilizing labor, equipment, and material in the most efficient and cost effective manner possible.

Schedule Development Tasks Step 1

Generate work schedules from the Infrastructure Management Software program (Infor) for each District by month.

- Hydraulic Sewer Cleaning
- Sewer Main Television Inspection
- Root Cutting/Sawing Maintenance
- Chemical-Applied Root Treatment
- Grease Interceptor Inspection
- Water Main Flushing & Testing
- Fire Hydrant Maintenance
- Water Valve Maintenance
- Pressure Reducing Valve Maintenance
- Air-Vacuum Valve Maintenance
- Pump & Lift Station Maintenance

Schedule Development Tasks Step 2

Apply maintenance work standards to the maintenance tasks.

Hydraulic Sewer Cleaning	-	3,250 feet per day
Sewer Main Television Inspection	-	3,500 feet per day
Root Cutting/Sawing Maintenance	-	2,250 feet per day
Chemical-Applied Root Treatment	-	2,500 feet per day
Grease Interceptor Inspection	-	16 per day
Water Main Flushing & Testing	-	30 per day
Fire Hydrant Maintenance	-	27 per day
Water Valve Maintenance	-	35 per day
Pressure Reducing Valve Maintenance	-	5 per day
Air-Vacuum Valve Maintenance	-	10 per day
General Scheduled Maintenance	-	1,320 hours per year
General Unscheduled Maintenance	-	3,956 hours per year
General Maintenance Administration	_	1,956 hours per year

General Maintenance Tasks

Scheduled

- Pump Station Inspection & Maintenance
- Lift Station Inspection & Maintenance
- Vehicle Maintenance
- Safety and Staff Meetings
- Hydrant Pressure Monitoring

General Maintenance Tasks

Unscheduled

- Customer Service
- Utility Locates
- Building & Landscape Maintenance
- Water and Sewer Service Inspections
- Warranty Inspections Facilities
- Messenger Service
- Corrective Maintenance
- Overlay Operations

General Maintenance Tasks

Maintenance Administration

- Reporting
- Training
- Scheduling

Schedule Development Tasks Step 3

Adjust tasks and manpower to achieve most efficient and cost effective use of manpower, equipment, and materials

Exhibit A

Hourly Maintenance Labor Distribution (2017-2022)							
DISTRICT	2018	2019	2020	2021	20221	2023 ²	
Platte Canyon Maintenance						$\langle \cdot \rangle \langle \cdot \rangle$	
Regular Full-time	3,775	3,312	3,773	3,402	3,661	4,855	
Regular Overtime	207	125	87	149	162	146	
Temporary – Seasonal	0	0	0	0	0	0	
Total Hours	3,982	3,437	3,860	3,551	3,823	5,001	
Southwest Metro Maintenance							
Regular Full-time	7,230	7,673	7,430	7,426	8,351	8,653	
Regular Overtime	140	270	226	189	305	226	
Temporary – Seasonal	0	0	0	0	0	0	
Total Hours	7,370	7,943	7,656	7,615	8,656	8,879	
Bow Mar Maintenance							
Regular Full-time	397	196	413	423	342	311	
Regular Overtime	17	19	22	20	24	21	
Temporary – Seasonal	0	0	0	0	0	0	
Total Hours	414	215	435	443	366	332	
¹ Estimated actual hours worked							
² Hours necessary to complete tasks listed in Exhibit C							

Exhibit A (cont.)

DISTRICT	2018	2019	2020	2021	2022 ¹	2023 ²
Columbine Maintenance						
Regular Full-time	372	320	410	320	302	379
Regular Overtime	10	16	7	2	27	12
Temporary – Seasonal	0	0	0	0	0	0
Total Hours	382	336	417	322	329	391
Valley Maintenance						
Regular Full-time	586	605	771	671	849	491
Regular Overtime	31	20	7	145	115	76
Temporary – Seasonal	0	0	0	0	0	0
Total Hours	617	625	842	816	964	567
Regular Hours	12,360	12,106	12,797	12,242	13,505	14,689
Seasonal Hours	0	0	0	0	0	0
Overtime Hours	405	450	413	505	633	481
TOTAL HOURS	12,765	12,556	12,210	12,747	14,138	15,170

Exhibit B Proposed 2023 Maintenance Schedule

	Platte Canyon	Southwest Metro.	Bow Mar	Columbine	Valley	Total (Feet)
Sewer Maintenance						
Television Inspection	77,004	246,845	0	15,094	21,352	360,295
Hydraulic Cleaning	76,063	248,617	6,903	13,802	32,879	378,264
Root Cutting	43,371	9,928	546	0	8,500	62,705
Root Treatment	43,731	3,124	3,622	1,367	6,750	46,019
Grease Interceptors	140	412		12		564
Water maintenance						(Units)
Valves	1,196	3,193	137			4,526
Fire Hydrants (service)	491	1,562	59			2,112
Fire Hydrant (painting)	267	683	0			950
Distribution System Flushing	148	491	3			642
Pressure Regulating Valves	11	19				30
Air-Vac Valves	14	82				96

Exhibit C - Summary

- Total Manhours
- Maintenance Activities
- Scheduled Manhours
- Comparison of Scheduled to Available Hours