

AGENDA

CITIZENS UTILITY ADVISORY BOARD

Wednesday, February 6, 2013
6:00 p.m.

JOHNSON CREEK FACILITY CONFERENCE ROOM
6101 SE JOHNSON CREEK BLVD.

- | | | |
|-------|--|--------------|
| I. | CALL TO ORDER | CUAB Chair |
| II. | INTRODUCTIONS | CUAB Chair |
| III. | CONSENT AGENDA | CUAB Board |
| | A. Approve Minutes from January 9, 2013 | |
| IV. | REPORTS | |
| | A. SSMP Annual report presentation
(presentation attached) | Jason Rice |
| | B. Stormwater Master Plan update – CIP
(information attached) | Gary Parkin |
| V. | DISCUSSION | |
| | A. Water Division – Cross Connection Program | |
| | B. Moving meeting site to Public Safety Building | |
| VI. | MATTERS FROM THE BOARD | CUAB Members |
| VII. | OTHER | |
| VIII. | INFORMATION SHARING | ALL |
| IX. | FUTURE MEETING DATE/AGENDA ITEMS | ALL |
| | Next meeting: March meeting will be March 6, 2013. | |
| X. | ADJOURN | |

CUAB MEETING MINUTES
Wednesday, January 9, 2013
Johnson Creek Facility Conference Room
6101 SE Johnson Creek Blvd.

Members Present

Beth Kelland, Chair
Kevin Hasey
Monty Schroeder

Members Absent

Vincent Alvarez, Vice Chair

Staff Present

Gary Parkin, PW Operations Director

I. CALL TO ORDER

The meeting began at 6:15 p.m.

II. INTRODUCTIONS

III. CONSENT AGENDA

The meeting minutes of the November 29, 2012 meeting were approved.

IV. REPORTS

A. Utility Budget update- reviewed quarterly reports

Gary Parkin reviewed the Revenue and Expense report as of the end of November with the group. Of note:

- Street Surface Maintenance Program (SSMP) will be presented by Jason Rice prior to the annual report to Council.
- State Gas Tax fund is catching up to close deficit.
- Stormwater fund – Master Plan update will be presented to CUAB this spring prior to adoption by Council.
- Wastewater fund – Gary to check on user fee revenue which shows a higher than anticipated collection.
- Water fund – is recovering from beginning deficit, shared from the Water Division (Don) is that November pumping totals were down – something to watch as the billing for Nov/Dec is recorded. Also to watch, the Harrison Street

Water System Improvements Phase 2 will be bid out this spring, it was bid out last fall and rescinded as the bids were too high.

V. DISCUSSION

A. Moving the CUAB meeting site to PSB was discussed. No problems noted by members, changing the meeting time to accommodate PSB schedule was discussed – second Thursday and Wednesday would not work (interfere with NDA meetings). Gary will follow up with the move consideration.

B. Work Plan for the current year was discussed. The plan looks good and ready for review by the City Council (at their April 16, 2013 meeting). Noted were:

- A report on the smoke testing of the new sewers in the NESE area was requested.
- The CUAB needs to review the wastewater rate implications in late 2013.
- Information on the Riverfront Park and Kellogg for Coho projects was requested (primarily due to their proximity to the sewer treatment plant).

VI. MATTERS FROM THE BOARD

None.

VII. INFORMATION SHARING

None.

VIII. FUTURE MEETING DATE/AGENDA ITEMS

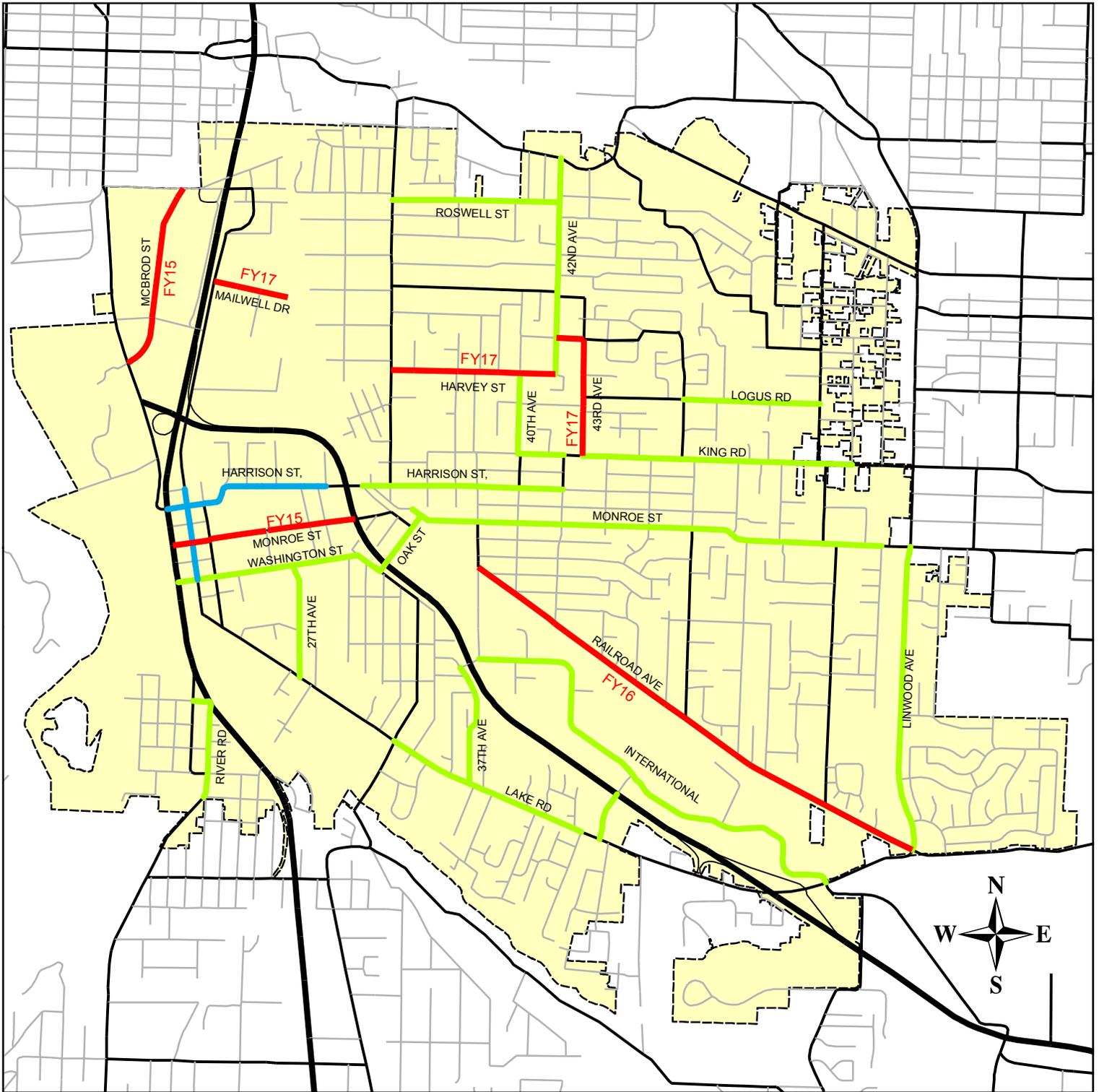
Regular meeting (at Johnson Creek facility) will be February 6, 2013 at 6:00 p.m. Stormwater Master Plan and feedback from wastewater billing were noted as items for discussion.

IX. ADJOURN

The meeting ended at 8:05 p.m.

Beth Kelland, Chair

Gary Parkin, Scribe



MILWAUKIE
Dogwood City of the West

Street Surface Maintenance Program Map

Legend

- Future Projects
- FY 2014 Projects
- Completed Projects

0 1,000 2,000 3,000
Feet

ATTACHMENT 2

February 2013
Updated Budget Schedule

FY	Account #	Budgetary Title	Activity Type		Estimate	Actual	
Year 5 11/12		Street Maintenance Fee			598,000	608,678	
		Franchise fees (privilege)			318,000	324,400	
		Local Gas Tax			161,000	178,995	
		Revenue			1,077,000	1,112,073	
		Fund Balance/Working Capital			1,352,865	1,352,865	
		Total Revenue			2,429,865	2,464,938	
		420-6060-0000	Contractual Services	Testing, Inspection		40,000	22,956
		420-6180-0000	Operation Equipment, Repair & Maint.			2,000	1,500
		420-6530-0000	Bad Debt Expense			3,000	
			General Administrative Services	Inspection Services		40,000	
		Pavement Assessment (Visual)	Road Network Assessment		20,000		
		Crack/Slurry/Fog Seals	Preventive Maintenance		100,000		
	420-7510-0000	Lake Road	Transfer to ODOT	T02	490,000	90,525	
	420-7510-0000	International Way (37th to Harmony)	Overlay/Rehab		400,000		
	420-7510-0000	Harrison/Monroe/International		S01		221,837	
	420-7510-0000	Quiet Zone		T03		12,388	
	420-9500-0000	Transfer to General Fund				212,000	
	634-8720-0000	Transfer to Fund 650 (Engineering)	Transfer		100,000		
	634-8730-0000	Transfer to Fund 600 (CD)	Transfer		67,000		
	634-8740-0000	Transfer to Fund 600 (Public Works)	Transfer		37,000		
	634-9510-0000	Contingencies	Contingencies		133,500		
			FY Expenses		1,432,500	561,206	
			FY Revenue		2,429,865	2,464,938	
			FY Fund Balance		997,365	1,903,732	
FY	Account #	Budgetary Title	Activity Type	Project Code	Estimate (as of 1/21/2013)	Actual	
Year 6 12/13		Street Maintenance Fee			601,000	304,124	
		Franchise fees (privilege)			327,000		
		Local Gas Tax			176,000	61,093	
		Revenue			1,104,000	365,217	
		Fund Balance/Working Capital			997,365	1,903,732	
		Total Revenue			2,101,365	2,268,949	
		420-6060-0000	Contractual Services	Testing, Inspection		2,500	2,500
		420-6500-0000	Utility Billing Expenses			15,000	6,174
			Operation Equipment, Repair & Maint.			2,000	
			Crack/Slurry/Fog Seals	Preventive Maintenance		65,000	
	420-7510-0000	International Way					
		Harrison Phase 1 (32nd to 42nd)					
		Monore Street (Oak to Linwood)					
		Freeman Way (Lake to 224)	Construction	S01	1,400,000	1,332,239	
	420-7510-0000	McBrod	Survey	S07	12,375	12,375	
	420-7510-0000	Lake Road	Transfer to ODOT		12,950	12,950	
	420-9500-0000	Transfer to General Fund			202,000	101,000	
			FY Expenses		1,711,825	1,467,238	
			FY Revenue		2,101,365	2,268,949	
			FY Fund Balance		389,540	801,711	
FY	Account #	Budgetary Title	Activity Type		Estimate	Actual	
Year 7 13/14		Street Maintenance Fee			601,000		
		Franchise fees (privilege)			330,000		
		Local Gas Tax			178,000		
		Other					
		Revenue			1,109,000	-	
		Fund Balance/Working Capital			389,540	801,711	
		Total Revenue			1,498,540	801,711	
		420-6060-0000	Contractual Services	Testing, Inspection		50,000	
		420-6500-0000	Utility Billing Expenses			15,000	
			Operation Equipment, Repair & Maint.			2,000	
		General Administrative Services	Inspection Services		40,000		
		Crack/Slurry/Fog Seals	Preventive Maintenance		65,000		
	-	Harrison Phase 2 (99E to 32nd)					
		Main Street (Scott to Adams)	Construction	S06	855,000		
	420-9500-0000	Transfer to General Fund	Transfer		212,100		
			FY Expenses		1,239,100	-	
			FY Revenue		1,498,540	801,711	
			FY Fund Balance		259,440	801,711	



Street Surface Maintenance Program

6th Annual Report – February 19, 2013

Presented by:
Jason Rice, Civil Engineer

Presentation Outline

- Current Projects
- Upcoming Projects
- Overall Condition of the network
- Revenue Summary
- Program Goals



Ten Year Program Schedule

Year 1: 37th, Washington, 42nd

Year 2: King, Oak, Logus

Year 3: Linwood, River

Year 4: Roswell, Lake, Slurry Seal

Year 5: Harrison Phase I, International Way

Year 6: Monroe Phase I, Freeman Way

Year 7: Harrison Phase II, Main St.

Year 8: Monroe St. Phase II, McBrod

Year 9: Railroad

Year 10: 43rd, Howe, Harvey, Mailwell



Recently Completed Projects



- International Way – June 2012
 - Surface Rehabilitation – 4” grind and inlay and 3” overlays
 - 37th Avenue to Harmony Road



- Harrison Street Phase I – August 2012
 - Base and Surface Reconstruction
 - Campbell Street to 42nd Avenue



- Monroe Street Phase I – August 2012
 - Base and Surface Reconstruction
 - Railroad Avenue to Roswell Avenue



Upcoming Projects



- Harrison Street Phase II – August 2012
 - Base and Surface Reconstruction
 - Campbell Street to McLoughlin Blvd.
 - Estimated cost of \$555,000



- Main Street – August 2012
 - Localized Base Repair and Surface Reconstruction
 - Scott Street to Washington Street
 - Estimated cost of \$300,000



Slurry and Crack Sealing

- Inexpensive method for increasing pavement life for “good” streets (PCI >70)
- Will cost \$65,000 per year



Crack Sealing

- Staff is currently performing a cost analysis to see how this service could be best accomplished.
 - Options being considered are:
 - Contracting outside City Staff
 - Renting the equipment and having City Staff perform the work
 - Purchasing the equipment and having City Staff perform the work



Revenue Summary

	Street Maintenance Fee	Local Gas Tax	PGE Privilege Tax
FY 2010-11 Actual	\$625,873	\$167,589	\$311,652
FY 2011-12 Actual	\$608,678	\$178,995	\$324,400
FY 2012-13 Budgeted	\$601,000	\$176,000	\$327,000
FY 2012-13 Actual (thru January)	\$304,124	\$61,093	Collection occurs in June



Overall Condition of the Network

	July 2004	January 2013	2017 Estimated	Program Goal (2017)
Arterials	63	63	83	75
Collectors	69	55	65	
Residential	67	55	50	--



Additional Benefits

- The Street Surface Maintenance Program
 - Helps establish Milwaukie's bike network & connectivity (Linwood)
 - Makes safer routes to schools (Logus, Linwood, Lake)
 - Improves stormwater drainage (all)
 - Improves the city's appearance
 - Organizes other infrastructure priorities creating efficiencies
 - Makes public works visible to Milwaukie citizens!



Questions?



Table X. CIP Scoring ⁽¹⁾

CIP Number	CIP Name	Overall Score ⁽²⁾	Criteria													
			Historical Problem/ Persistent Problem		Flooding Issue/ Safety Concern		WPCF/ NPDES Permit Requirements		Ongoing Maintenance Need		Water Quality Improvement		Concurrence		Sustainability	
			(EGR)	(MNT)	(EGR)	(MNT)	(EGR)	(MNT)	(EGR)	(MNT)	(EGR)	(MNT)	(EGR)	(MNT)	(EGR)	(MNT)
1-1	Willow Detention Pond Retrofit	23	1	1	1	1	3	3	1	1	3	2	1	1	3	1
1-2	Stanley-Willow UIC Decommissioning	21	1	1	1	1	3	3	1	1	1	2	1	1	3	1
4-1	Main Street at Milport Road	17	3	1	2	1	1	1	1	1	1	1	1	1	1	1
5-1	Meek Street	31	3	3	3	3	3	1	2	3	3	1	2	1	2	1
5-2	Harrison Street Outfall	30	2	3	3	3	1	3	2	2	1	2	3	2	2	1
6-1	Washington Street	21	3	3	2	1	1	1	1	1	1	2	1	2	1	1
6-2	Washington Green Streets	27	1	1	1	1	3	3	1	1	3	3	1	2	3	3
12-1	International Way and Wister	15	1	1	2	1	1	1	1	1	1	1	1	1	1	1
13-1	UIC Decommissioning on Lloyd	36	3	3	3	3	3	3	3	3	2	2	1	2	2	3
13-2	Linwood Elementary	25	3	2	2	2	2	2	1	1	1	2	1	3	2	1
13-3	Railroad Avenue at Stanley	29	3	2	3	3	1	1	3	2	1	1	3	3	2	1
13-4	Railroad Avenue Channel	26	1	1	3	3	2	1	3	2	2	1	2	2	2	1
14-1	Apple Storm Improvements	28	3	3	3	3	1	1	3	3	1	2	1	1	2	1
15-1	Hemlock Street	18	1	1	2	3	1	1	1	1	1	2	1	1	1	1
G1	47 th and Llewellyn	23	1	1	3	3	1	1	3	3	1	1	1	1	2	1
G2	36 th near King Avenue	25	1	1	3	3	2	1	3	3	2	1	1	1	2	1
G3	55 th near Monroe Avenue	25	1	1	3	3	2	1	3	3	2	1	1	1	2	1

Note:

(1) Scoring under the EGR was completed by City engineering staff; scoring under the MNT column was completed by City maintenance staff.

Table X. CIP Priority Ranking

Priority Ranking	CIP Number	CIP Name	Overall Score	Estimated Cost	Combined Score (by Criteria)							Cost/Score
					Historical Problem/ Persistent Problem	Flooding Issue/ Safety Concern	WPCF/ NPDES Permit Requirements	Ongoing Maintenance Need	Water Quality Improvement	Concurrence	Sustainability	
1	13-1	UIC Decommissioning on Lloyd	36	\$793,700	6	6	6	6	4	3	5	\$22,047
2	5-1	Meek Street	31	\$3,088,200	6	6	4	5	4	3	3	\$99,619
3	5-2	Harrison Street Outfall	30	\$619,400	5	6	4	4	3	5	3	\$20,647
4	13-3	Railroad Avenue at Stanley ¹	29	\$357,300	5	6	2	5	2	6	6	\$12,321
5	14-1	Apple Storm Improvements	28	\$180,100	6	6	2	6	3	2	3	\$6,432
6	6-2	Washington Green Streets	27	\$511,300	2	2	6	2	6	3	6	\$18,937
7	13-4	Railroad Avenue Channel ¹	26	\$52,900	2	6	3	5	3	4	3	\$2,035
8	G2	36 th near King Avenue	25	\$104,600	2	6	3	6	3	2	3	\$4,184
8	G3	55 th near Monroe Avenue	25	\$23,000	2	6	3	6	3	2	3	\$920
8	13-2	Linwood Elementary	25	\$469,700	5	4	4	2	3	4	3	\$18,788
11	1-1	Willow Detention Pond Retrofit	23	\$68,600	2	2	6	2	5	2	4	\$2,983
11	G1	47 th and Llewellyn	23	\$155,600	2	6	2	6	2	2	3	\$6,765
13	1-2	Stanley-Willow UIC Decommissioning	21	\$100,200	2	2	6	2	3	2	4	\$4,771
13	6-1	Washington Street	21	\$1,804,100	6	3	2	2	3	3	2	\$85,910
15	15-1	Hemlock Street	18	\$560,600	2	5	2	2	3	2	2	\$31,144
16	4-1	Main Street at Milport Road	17	\$241,200	4	3	4	2	3	2	2	\$14,188
17	12-1	International Way and Wister	15	\$90,000	2	3	2	2	2	2	2	\$6,000

Note:

(1) Due to project concurrence issues and project cost savings, these CIPs are recommended for construction in conjunction with CIP 13-1.

Table X. CIP Cost/ Benefit Ranking

Cost/ Benefit Ranking	CIP Number	CIP Name	Priority Score	Estimated Cost	Cost/ Score
1	G3	55 th near Monroe Avenue	25	\$23,000	\$920
2	13-4	Railroad Avenue Channel	26	\$52,900	\$2,035
3	1-1	Willow Detention Pond Retrofit	23	\$68,600	\$2,983
4	G2	36 th near King Avenue	25	\$104,600	\$4,184
5	1-2	Stanley-Willow UIC Decommissioning	21	\$100,200	\$4,771
6	12-1	International Way and Wister	15	\$90,000	\$6,000
7	14-1	Apple Storm Improvements	28	\$147,500	\$6,432
8	G1	47 th and Llewellyn	23	\$155,600	\$6,765
9	13-3	Railroad Avenue at Stanley	29	\$357,300	\$12,321
10	4-1	Main Street at Milport Road	17	\$241,200	\$14,188
11	13-2	Linwood Elementary	25	\$469,700	\$18,788
12	6-2	Washington Green Streets	27	\$511,300	\$18,937
13	5-2	Harrison Street Outfall	30	\$619,400	\$20,647
14	13-1	UIC Decommissioning on Lloyd	36	\$793,700	\$22,047
15	15-1	Hemlock Street	18	\$560,600	\$31,144
16	6-1	Washington Street	21	\$1,804,100	\$85,910
17	5-1	Meek Street	31	\$3,088,200	\$99,619

City of Milwaukie Stormwater Master Plan - CIP Project Summary

CIP No.	CIP Type	CIP Name	Proposed CIP Location	Event(s) Deficiency Occurs	WQ Retrofit for NPDES Permit	Problem Description	Proposed CIP Description	Length of Pipe Installation, ft	Associated Subbasins	Contributing Drainage Area, Acres	Capital Implementation Cost Total, \$
System 1											
1-1	WQ	Willow Detention Pond Retrofit	55th Avenue, south of Firwood Avenue	Fut 25-yr	X	The existing Willow Detention Pond is located at the end of 55th Avenue, south of Firwood Avenue. The pond appears to drain approximately 15 acres of residential area in subbasin JCD80. As-built information on the pond inlet and outlet structure was not available at the time of this study; however, it is assumed that the pond was designed for flood control and was not constructed with water quality features.	Enhance treatment capability of existing pond through vegetation enhancement and promoting infiltration. Predicted flooding is not expected due to the pipe configuration and receiving wetland downstream of the facility. The CIP was not designed to address the model predicted flooding. No asbuilt information for Willow Pond currently available. May consider future upsizing of existing Willow Detention Pond to address larger contributing drainage area associated with subbasins JCD90 and JCD91 (from UIC # 24008 and #24027) (see CIP 1-2), but not included as part of this project.	0	JCD80, JCD90, JCD91	64.8	\$ 68,600
1-2	WQ, UIC	Stanley-Willow UIC Decommissioning	Stanely Avenue and Ball-Mitchell Park		X	Upstream UICs have limited vertical separation distance and were identified as "at-risk" per the City's GWPD.	Route drainage area from UIC 24008 and 24027 to existing Ball-Mitchell stormwater facility. Add vegetation to bottom of pond to enhance treatment capability of through filtration.	425	JCD90, JCD91	3.9	\$ 100,200
System 4											
4-1	FC	Main Street at Milport Road	East of McLoughlin Blvd at Milport Road.	Fut 10-yr, Fut 25-yr		The 12-in x 24-in elliptical CMP associated with modeled conduit JCB10d (21265-21059) and the 18-in concrete pipe associated with modeled conduit JCB10c (21059-ODMH017) are under capacity, causing predicted flooding along JCB10d between SE Main and SE Omark and in the parking lot between an industrial building and SE Main St. Flooding is predicted during the 10 and 25-yr existing and future land use scenarios.	This CIP includes replacement of JCB10d and JCB10c from manhole 21265 to manhole ODMH017 with 380-ft of 30-in concrete pipe using the same upstream and downstream invert elevations. Replacement of model conduits JCB10d and JCB10c (defined by the upstream node to downstream node number) includes replacement of 7 manholes.	380	JCB10	35.2	\$ 241,200

City of Milwaukie Stormwater Master Plan - CIP Project Summary

CIP No.	CIP Type	CIP Name	Proposed CIP Location	Event(s) Deficiency Occurs	WQ Retrofit for NPDES Permit	Problem Description	Proposed CIP Description	Length of Pipe Installation, ft	Associated Subbasins	Contributing Drainage Area, Acres	Capital Implementation Cost Total, \$
System 5											
5-1	FC, WQ	Meek Street	Monroe Street to Meek Street along Railroad	Exst 10-yr, Exst 25-yr, Fut 10-yr, Fut 25-yr	X	The majority of System 5 is predicted to flood. CIP-2 in the 2004 Master Plan recommended routing a bypass for flow from Monroe Street, east of SE 32nd Ave to an ODOT system to the north of Meek Street. This CIP was partially constructed on Meek Street, but not connected to the storm drain system.	The Meek Street pipe system was constructed in 2005 with inadequate slope to maintain the existing concept per CIP-2 from the 2004 MP. Replace the existing pipe system down Monroe from 37th Ave to 32nd Ave. Install detention facility at SE Campbell between 32nd Ave and 34th Ave to mitigate peak flow. Install new pipe along the existing easement (City to verify) from Harrison to Meek along Murphy. Install new pipe to parallel existing railroad tracks from Meek to Balfour. Install new manhole west of 32nd Ave to separate Harrison Street system; install new manhole at Meek and 32nd Ave to separate 32nd Ave system north of Meek (to new Meek Street pipe) and south of Meek (to new pipe parallel to railroad). Utilize vegetated area at Balfour for water quality and infiltration.	5,171	JCA60, JCA52, JCS51, JCA50, JCA41, JCA40, JCA30	188.2	\$ 3,088,200
5-2	FC	Harrison Street Outfall	Harrison Street from outfall to 21st Ave	Exst 10-yr, Exst 25-yr, Fut 10-yr, Fut 25-yr		Flooding is predicted during the existing and future 10 and 25-year events. CIP 5-2 addresses the majority of the flooding along Harrison Street following construction of CIP 5-1. Following installation of CIP 5-1 in the model, flooding is still predicted on 21 st Street along modeled conduit JCA20 (21094_21364) and on Harrison Street along modeled conduits JCA30a (21239_21364) and JCA30b (CIP5_1_21239). In conjunction with light rail expansion, the existing 18" down Harrison will be replaced with a 24" pipe from 23rd to 26th Ave (not reflected in the cost of this CIP).	This CIP includes replacement of 696-feet of existing 24-in concrete pipe with 696-feet of 36-in along JCA10, from manhole 21364 to the outfall at Johnson Creek, which extends 40-feet from manhole 25213.	696	JCA40, JCA30, JCA20, JCA10	60.8	\$ 619,400
System 6											
6-1	FC	Washington Street	Washington Street from 28th Ave to Kellogg Lake	Exst 10-yr, Exst 25-yr, Fut 10-yr, Fut 25-yr		The 21-in pipe KC10a on Main Street near Kellogg Lake and the 18-in pipes KC10b and KC30a along Washington Street are under capacity, which is causing predicted flooding along Washington Street between Main Street and Hwy 224 during the 10 and 25-yr existing and future land use scenarios.	This CIP includes replacement of 239-ft of existing 21-in concrete pipe with 30-in pipe along KC10a from manhole 41005 to 41006. This CIP also includes replacement of 3,312 feet of existing 18-in concrete pipe with 24-in concrete pipe along KC10b from manhole 41109 to 41005 and KC30a from manhole 41029 to 41109.	3551	KC10, KC30, KC40, KC50, KC60	130.9	\$ 1,804,100

City of Milwaukee Stormwater Master Plan - CIP Project Summary

CIP No.	CIP Type	CIP Name	Proposed CIP Location	Event(s) Deficiency Occurs	WQ Retrofit for NPDES Permit	Problem Description	Proposed CIP Description	Length of Pipe Installation, ft	Associated Subbasins	Contributing Drainage Area, Acres	Capital Implementation Cost Total, \$
6-2	WQ	Washington Green Streets	Washington Street from 23rd Ave to Oak St	NA	X	The contributing area from Washington Street is a high pollutant load generating area. Currently, the Trimet Light Rail Project is installing green street features to provide water quality treatment from Main Street to 23rd Avenue along Washington Street.	This CIP includes an extension of the green street features being installed by Trimet, from 23rd to Oak along Washington Street. The installation of CIP 6-1 will involve pipe replacement and repaving a portion of Washington Street, which provides an opportunity to complete green street features while the pipe replacement construction is occurring.	NA	KC30, KC40, KC50, KC60	62.6	\$ 511,300
System 12											
12-1	FC	International Way and Wister Street	International Way and Wister Street	Fut 25-yr		The 24-in MSB20d at International Way is negatively sloped and MSB20e and MSB20d are under capacity, resulting in predicted flooding along MSB20e.	Replace 80-ft of existing 24-in pipe with a 48-in pipe along MSB20d from manhole 61010 to manhole 61028.	80	MSB20, MSB21	64.6	\$ 90,000
System 13											
13-1	UIC, WQ, FC	UIC decommissioning on Lloyd	4 UICs along Lloyd Avenue and Stanley Avenue from Lloyd Avenue to Railroad Avenue	NA	X	UIC 34155 (west of Stanley Avenue) and UIC 34137 (intersection of 60th Avenue and Lloyd Avenue) are not operational, as reported by City maintenance staff. The City has attempted to retrofit these UICs; however, the UICs are still not functioning properly and flooding has been reported at the intersection of Lloyd Avenue and Stanley Avenue. UICs 34167 and 34138 are also included in this CIP due to their location along Lloyd Avenue.	This CIP includes decommissioning of four UICs and installation of 787 feet of new 12-in HDPE pipe along Lloyd Avenue from 60th Avenue west of Stanley Avenue. Along Stanley Avenue from Lloyd Avenue to Railroad Avenue, this CIP also includes replacement of existing concrete pipe with 1,314 feet of new 12-in HDPE pipe and 499 feet of 18-in HDPE pipe. To address water quality of new contributing area previously captured by UICs, this CIP includes installation of a rain garden.	2895	MSA22, MSA23, MSA24, MSA25, MSA26, MSA27	49.0	\$ 793,700
13-2	FC	Linwood Avenue	At Linwood Elementary School between Linwood Avenue and Stanley Avenue.	Exst 10-yr, Exst 25-yr, Fut 10-yr, Fut 25-yr		The 15-in concrete pipe associated with modeled conduit MSA80b (61148_61179) and the 18-in concrete pipes associated with modeled conduits MSA80a (61179_61151) and MSA70d (61151_65028) are under capacity. Flooding is predicted along this reach, which is located between Linwood Avenue and Stanley Ave on the Linwood Elementary School grounds. Capacity limitations are caused by undersized piping along MSA80b, MSA80a and MSA70d.	Conduct planning level study to initially evaluate options for flood mitigation. Pipe surcharge currently discharges to existing raingarden, ball fields, and open channel area. A planning study would to consider cost benefit options for partial pipe reconstruction and daylighting to channel for water quality and flood control, full pipe replacement, and grant funding opportunities for school district to expand existing onsite raingardens. The CIP cost estimate assumes full pipe replacement. Replace 683-ft of existing 18-in pipe with 30-in pipe along MSA70d. Replace 186-ft of existing 18-in pipe with 24-in pipe along MSA80a. Replace 243-ft existing 15-in pipe with 24-in pipe along MSA80b.	1112	MSA90, MSA80, MSA70	85.2	\$ 469,700

City of Milwaukie Stormwater Master Plan - CIP Project Summary

CIP No.	CIP Type	CIP Name	Proposed CIP Location	Event(s) Deficiency Occurs	WQ Retrofit for NPDES Permit	Problem Description	Proposed CIP Description	Length of Pipe Installation, ft	Associated Subbasins	Contributing Drainage Area, Acres	Capital Implementation Cost Total, \$
13-3	FC	Railroad Avenue at Stanley	Railroad Avenue, near Stanley Avenue	Exst 25-yr, Fut 10-yr, Fut 25-yr		The 18-in culvert associated with modeled conduit MSA20a (66023_65033) is under capacity, causing predicted flooding along MSA20a over Railroad Avenue. Flooding is predicted during the 25-yr existing and 10 and 25-year future land use scenarios and was also observed during a storm event on November 19 th and 20 th , 2012.	This CIP includes abandoning the existing culvert under Stanley Avenue at Railroad Avenue. Flow from the channel on the west side of Stanley is routed through two new 60-ft parallel reinforced concrete culverts (18" diameter) under Railroad Avenue on the west side of Stanley in the same location as the existing 18" culvert. Flow from Stanley as described in CIP 13-1 is routed through a new 660-ft 18-in HDPE pipeline on the north side of Railroad Avenue from a new manhole at 62296 to a new manhole at C13-4. Intermediate manholes are placed to accept flows from Maple Street, Ash Street, and Grove Street. At new manhole C13-4, flow is routed through a new 60-ft reinforced concrete culvert (18" diameter), where this CIP outfalls to the Railroad Avenue channel.	840	MSA22, MSA23, MSA24, MSA25, MSA26, MSA27, MSA31, MSA70, MSA71, MSA72, MSA80, MSA90	134.2	\$ 357,300
13-4	WQ, Maint	Railroad Avenue Channel	Existing conveyance ditch along Railroad Avenue	NA	X	The existing channel along the north side of Railroad Avenue receives drainage from a large portion of the City. Limited maintenance appears to be conducted, which is limiting the ability of the channel to convey stormwater and provide water quality benefit	Conduct targeted maintenance activities including hand removal of non-native vegetation, sediment removal, and replanting activities. Maintenance activities to focus on approximately 2,000 linear feet of channel between Wood Avenue and Grove Avenue.	2000	MSA250, MSA230, MSA220, MSA215, MSA210	200.7	\$ 52,900
System 14											
14-1	FC	Plum and Apple Street	Apple Street near Plum Drive and extending to Juniper Street near Aspen Street	NA		Localized flooding is reported by City maintenance staff.	This CIP includes installation of 650-ft of new 12-inch HDPE pipe from the intersection of Plum and Apple Street to Juniper and Aspen Street	650	MSA61	9.6	\$ 180,100
System 15											
15-1	FC	Hemlock Street to Harmony Road	Intersection of Hemlock Street and Sequoia Avenue, then along an easement to Harmony Road.	Exst 10-yr, Exst 25-yr, Fut 10-yr, Fut 25-yr		The 15-in pipe segments associated with model conduits MSA100f (61115_61118), MSA100e (61118_CCCB154), and the 18-in pipe segments associated with model conduits MSA100d (CCCB154_CCCB146), MSA100c (CCCB146_CCCB159), and MSA100b (CCCB159_CCCB161) are under capacity, causing predicted flooding during existing and future land use scenarios from Hemlock Street, through private property to Harmony Way	This CIP includes replacement and realignment of this pipeline, which is currently located in backyards from Hemlock Street to Harmony Way. When constructed, this pipeline will replace a portion of the pipeline along Cedarcrest Drive, from Hemlock Street to Harmony Way. The diameter and elevation of this pipe is currently unknown, and should be identified in the design stage. Design assumptions assume area outside UGB is brought in and no flow control provided (would change need for 30" pipe).	1036	MSA100, MSA110	116	\$ 560,600
Other											
G1	FC, UIC	47th and Llewellyn	UIC at intersection of Llewellyn and 47th Ave.	NA		The City reports flooding at the intersection of 47 th and Llewellyn, near UIC 34076.	Due to the existing grade and lack of a nearby piped drainage system, this CIP includes the installation of additional UICs with associated inlets and inlet lead lines to alleviate flooding at 47 th and Llewellyn.	150	NA	8	\$ 155,600

City of Milwaukie Stormwater Master Plan - CIP Project Summary

CIP No.	CIP Type	CIP Name	Proposed CIP Location	Event(s) Deficiency Occurs	WQ Retrofit for NPDES Permit	Problem Description	Proposed CIP Description	Length of Pipe Installation, ft	Associated Subbasins	Contributing Drainage Area, Acres	Capital Implementation Cost Total, \$
G2	WQ, FC, UIC	36th near King	UIC on 36th Ave around Dwyer Street	NA	X	The City reports flooding between King Road and Harvey Street, at UIC 24014. This UIC is located at a low point in elevation along 36 th Avenue, between Harvey and King.	Due to the existing grade and lack of a nearby piped drainage system, this CIP includes installation of a raingarden or other stormwater feature to minimize flow into the UIC and provide water quality treatment of contributing impervious area within the ROW.	NA	NA	3.5	\$ 104,600
G3	FC, UIC	Flooding on 55th Ave between King Street and Monroe Street	Street flooding along 55th Ave.	NA	X	The city reports flooding at the intersection along 55th Ave, possibly due to a non functioning UICs. House currently sits below grade, which is the source of the complaints. No curbed streets in area and flat grade.	Utilize available, ROW area to install a soakage trench with perforated pipe to minimize flow into UIC.	125	NA	2.5	\$ 23,000

\$ 9,220,500

Legend:	FC	Flood Control
	WQ	Retrofit
	UIC	Addresses UIC needs
	Maint	Addresses maintenance issue/ concern