



**PINOLE/HERCULES WASTEWATER
SUBCOMMITTEE
AGENDA**



**JUNE 1, 2017 8:30 A.M.
PINOLE CITY HALL, COUNCIL CHAMBER
2131 PEAR STREET
PINOLE, CA 94564**

- 1. CALL TO ORDER-PLEDGE OF ALLEGIANCE**
- 2. ROLL CALL**
- 3. INTRODUCTIONS**
- 4. CITIZENS TO BE HEARD-FOR ITEMS NOT ON THE AGENDA**
- 5. OPERATOR'S REPORT** **BY RON TOBEY**
- 6. STATUS UPDATE OF RODEO SANITARY DISTRICT OUTFALL TESTING (VERBAL)**
BY TAMARA MILLER
- 7. CAPITAL PROJECT - PH WPCP UPGRADE**
 - a. LOAN STATUS (VERBAL)** **BY ANDREA MILLER**
 - b. CONSTRUCTION STATUS (POWERPOINT) BY TAMARA MILLER/MIKE ROBERTS**
- 8. PINOLE DRAFT 2017/18 BUDGET FOR WPCP OPERATIONS (DEPT 648)**
BY ANDREA MILLER
- 9. ADJOURN TO THE NEXT REGULAR SUBCOMMITTEE MEETING IN PINOLE**



AGENDA ITEM 5

TO: PINOLE HERCULES WASTEWATER SUBCOMMITTEE

FROM: RON TOBEY; PLANT MANAGER

DATE: JUNE 1, 2017

SUBJECT: OPERATIONAL REPORT

Receive a verbal report from the Plant Manager.

Topics will include:

1. Monthly Flow Data
2. Monthly Process Performance Indicators
3. Toxic Pollutants

Wastewater Treatment Plant
ACTIVITY REPORT

March 2017

PINOLE FLOW DATA	GALLONS
TOTAL FLOW	60,310,000
HIGH DAILY FLOW	3,260,000
LOW DAILY FLOW	1,530,000
AVERAGE DAILY FLOW	1,950,000
HERCULES FLOW DATA	GALLONS
TOTAL FLOW	42,300,000
HIGH DAILY FLOW	1,750,000
LOW DAILY FLOW	1,090,000
AVERAGE DAILY FLOW	1,360,000

RAINFALL
MONTH **3.24**
FISCAL YEAR **29.53**

Wastewater Treatment Plant
ACTIVITY REPORT

April 2017

PINOLE FLOW DATA	GALLONS
TOTAL FLOW	54,110,000
HIGH DAILY FLOW	3,230,000
LOW DAILY FLOW	1,380,000
AVERAGE DAILY FLOW	1,800,000

HERCULES FLOW DATA	GALLONS
TOTAL FLOW	41,810,000
HIGH DAILY FLOW	1,930,000
LOW DAILY FLOW	1,150,000
AVERAGE DAILY FLOW	1,390,000

RAINFALL

MONTH 2.64

FISCAL YEAR 32.17

March 2017 Process Performance Indicators

PARAMETER	UNIT	MONTHLY EFF LIMIT	INFLUENT Mo/AVG	EFFLUENT Mo/AVG	% REMOVAL
cBOD ₅	Mg/L	25	224	6.59	97
TSS	Mg/L	30	322	7.65	98
Coliform	MPN	240	N/A	2	N/A
Enterococcus	MPN	35	N/A	1	N/A
NH ₃	Mg/L	110	-	18	N/A

April 2017 Process Performance Indicators

PARAMETER	UNIT	MONTHLY EFF LIMIT	INFLUENT Mo/AVG	EFFLUENT Mo/AVG	% REMOVAL
cBOD ₅	Mg/L	25	244	7.88	97
TSS	Mg/L	30	326	6.85	98
Coliform	MPN	240	N/A	1	N/A
Enterococcus	MPN	35	N/A	N/A	N/A
NH ₃	Mg/L	110	-	14	N/A

March 2017 Toxic Pollutants

PARAMETER	UNIT	AVERAGE MONTHLY EFF LIMIT	MAXIMUM DAILY EFF LIMIT	EFFLUENT MONTHLY AVERAGE	EFFLUENT DAILY MAX
Mercury	ug/l	0.066	0.072	0.0023	0.0023
Copper	ug/l	58	120	4.4	4.4
Cyanide	ug/l	20	43	ND	ND

April 2017 Toxic Pollutants

PARAMETER	UNIT	AVERAGE MONTHLY EFF LIMIT	MAXIMUM DAILY EFF LIMIT	EFFLUENT MONTHLY AVERAGE	EFFLUENT DAILY MAX
Mercury	ug/l	0.066	0.072	0.0022	0.0022
Copper	ug/l	58	120	3	3
Cyanide	ug/l	20	43	ND	ND

ND - Non Detect

Update to
Pinole-Hercules Wastewater Subcommittee
June 1, 2017

**Pinole-Hercules
Water Pollution Control Plant
Upgrade Project**

Headworks and Grit Removal

- The internal wall and floor sections of the headworks are now complete and roof sections are formed to complete structure
- The grit structure wall elevations are being formed and poured.
- Work for these structures is 75% complete



Electrical Work in Progress

- The Electrical building walls have been completed. Electrical panels have been craned in through the open roof and are now being sealed in.



The solids handling facilities

- The walls for new solids handling building and sludge thickener are now complete and sludge tank top and building roof are being formed.



The treatment plant site prior to start of construction



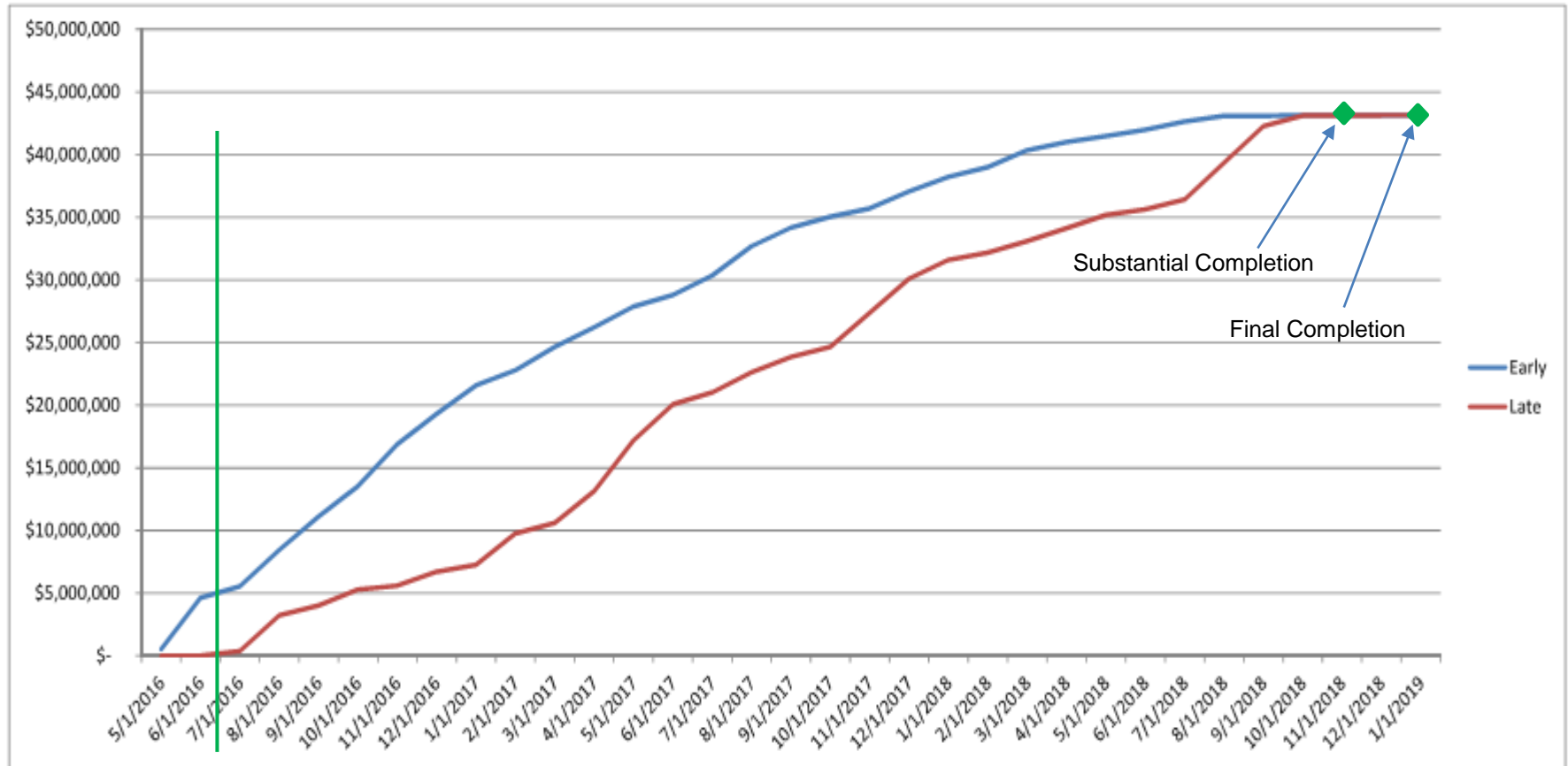
Treatment plant south end in May 2017



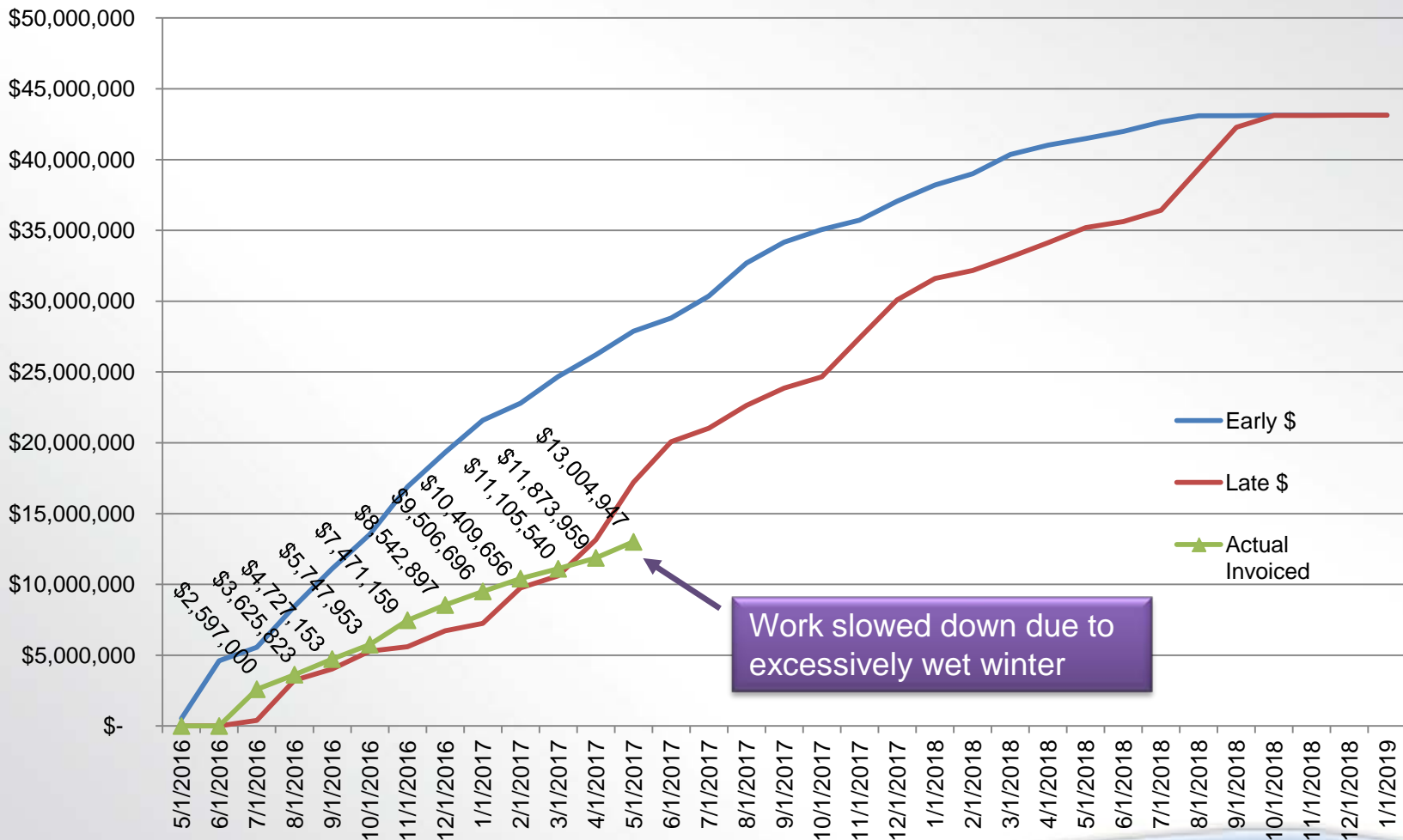
Plant north end in May 2017



Original schedule and cost breakdown



Progress/Payments to date

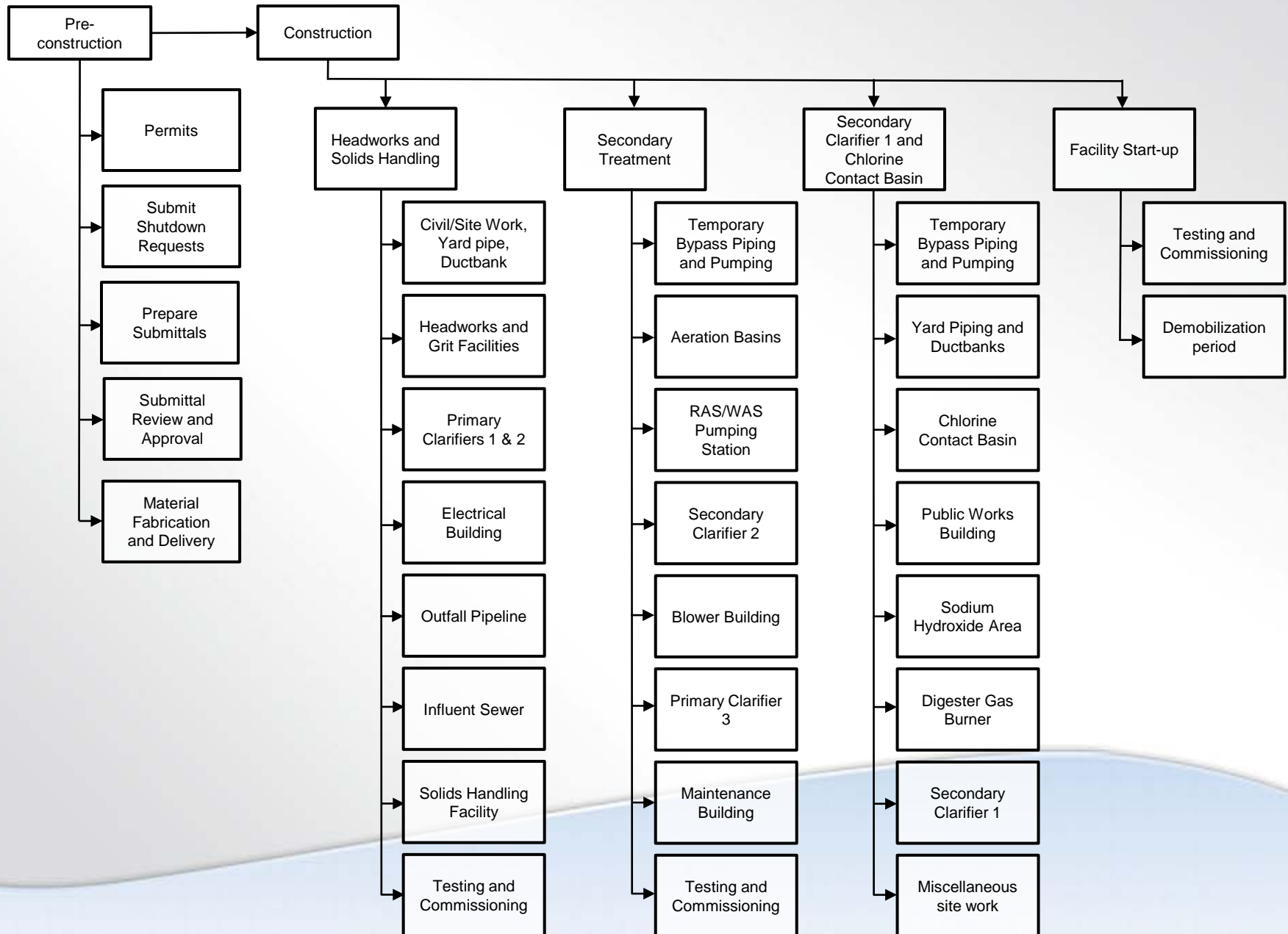


Billings for Work through May 2017 total \$13,004,947

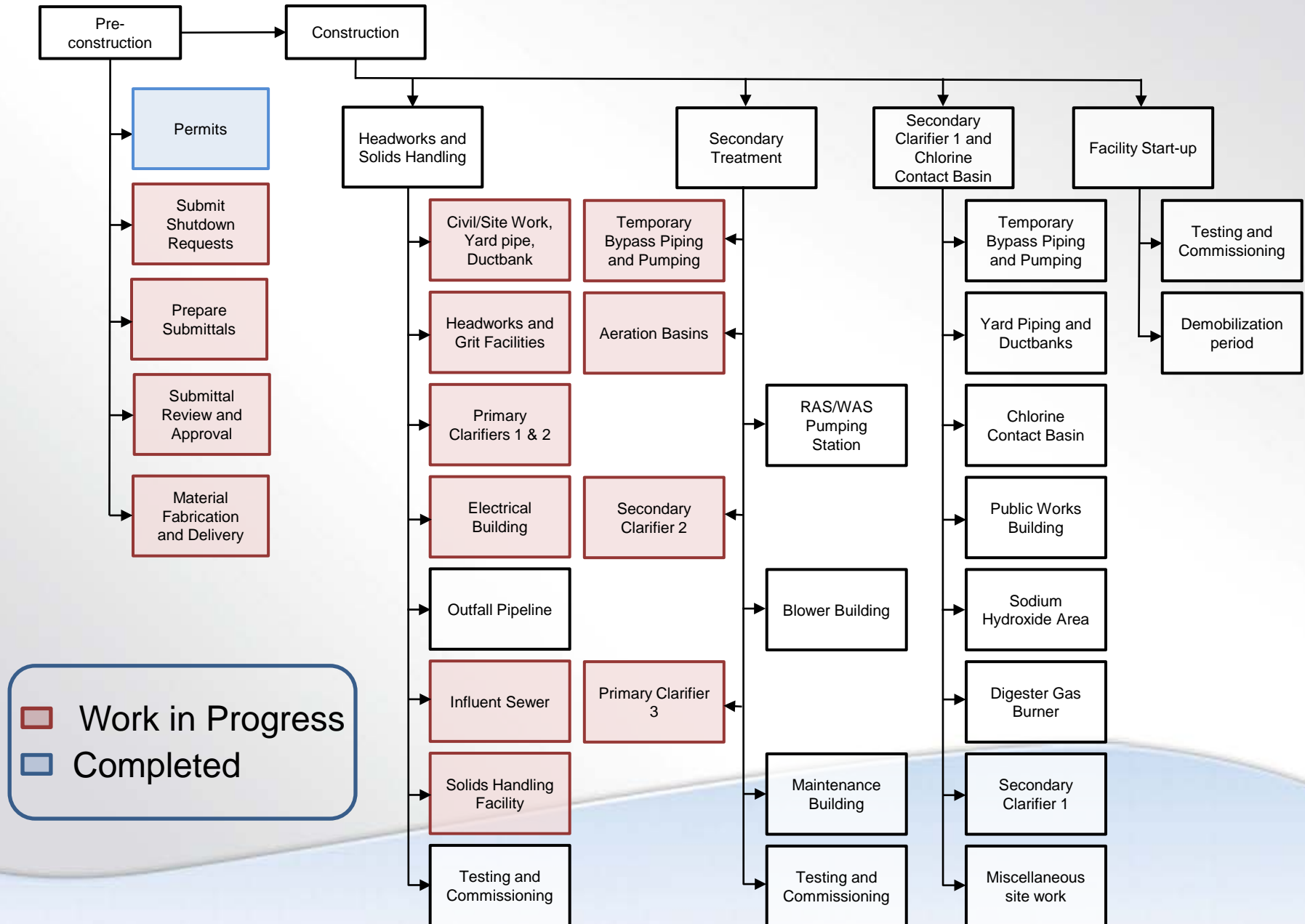
Work has been re-sequenced to regain time lost to excessive winter weather

- City staff and design engineer were consulted about starting demolition of secondary clarifier 2 and construction of primary clarifier 3 earlier to begin in May 2017.
- Staff and designer have confirmed that there is sufficient treatment capability for the dry weather season without secondary 2 available.
- New headworks and grit handling facilities will be online before start of wet season and facilitate treatment capacity in lieu of secondary clarifier 2.
- This re-sequence resulted in gaining back most of the float lost to the past winter at no additional cost.

Baseline Overview of Schedule Work Activities



Activities started early to recover weather impacts



Upcoming Notable Activities

- Start-up of new Headworks
 - July 28, 2017
- Work on plant outfall pipeline
 - August 8, 2017
- Start-up of new Grit Handling facility
 - August 24, 2017

Change Orders Executed To Date

Number	Subject	Cost
1	Temporary Public Restrooms and Wash Station during construction	\$ 21,271.00
2	New AC Road along the Northeast Side of the Plant for Continued County Access	\$ 32,363.00
3	Credit for Deleting Two Duck Bill Check Valves at Aeration Basins	\$(12,018.00)
4	Revised Davis Bacon wage determination	\$ 0.00
5	Concrete Scanning for Existing Primary Clarifiers	\$ 2,320.00
6	Headworks - Concrete Fillets and Fills Modifications	\$ 22,893.60
7	RTU Modifications to Control Plant Instrumentation	\$ 21,621.00
8	Replace Carbon Steel Low Pressure Air Piping with Stainless Steel	\$ 77,431.00
9	Install Polymer System Progressive Cavity Pumps in-Lieu of Specified Peristaltic Pumps	\$ 3,299.00
10	Relocate Headworks and Ferric Chloride Storage Facilities	\$ 0.00
11	Re-route natural gas line around MH-1	\$ (1,705.00)
12	Change masonry block from normal weight to medium weight	\$ (1,401.00)
13	Remove and dispose of asbestos cement pipe at mixed liquor box	\$ 2,154.00
14	Pump discharge piping changes at headworks	\$ 35,036.00
15	Deletion of water stop and influent pump pads at headworks	\$ (5,094.00)
TOTAL EXECUTED CHANGE ORDERS		\$ 198,170.60

Executed change orders total 1.5 percent of work completed to date

Potential Change Order Requests Currently In Review

Number	Subject
1	Demolish and replace approximately 50 feet of existing asbestos cement 24-inch effluent line
2	Reroute existing utilities at surge tank
3	Add electric hoist at influent pumps
4	Credit for deletion of grit handling water stop
5	Headworks hatch modifications
6	Guard rail modifications at headworks and aeration basin
7	Electrical conduit and wire modifications
8	Credit for reduced strength concrete for fill walls at headworks
9	Lead paint abatement at existing polymer building
10	Influent sewer modifications
11	Aeration basin modifications for contact stabilization
12	SCADA system updates
13	Paving and grading modifications at Solids building
14	Composite sampler modifications
15	Tree removal at new PG&E service location
16	Re-coating existing centrifuge
17	Modifications to Primary flow distribution box

Schedule

- Actual Notice to Proceed
 - May 11, 2016
- Substantial Completion Date
 - October 28, 2018
- Final Completion Date
 - December 26, 2018

Mission

The mission of the Water Pollution Control Plant (WPCP) is to treat the wastewater for the City of Pinole and the City of Hercules.

Program Description

Produce an effluent that meets or exceeds State and Federal standards, minimize the emission of unpleasant odors, and meet the Air Quality Control Board requirements, while processing solids in a safe manner.

Key Objectives

- Operate the facility in compliance with standards set by the Regional Water Quality Control Board.
- Support the construction activities of the WPCP Upgrade.
- Support the ongoing training needs of the WPCP Staff.

Success Indicators

- Permit Compliance
- Certified Staff
- Preventive Maintenance of Assets

Position Summary

Position	2013-14	2014-15	2015-16	2016-17	2017-18
Treatment Plant Manager	1.00	1.00	1.00	1.00	1.00
Administrative Secretary	0.00	0.50	0.00	0.00	0.00
Water Pollution Control Plant Supervisor	1.00	1.00	1.00	1.00	0.00
Water Pollution Control Plant Operation Supervisor	0.00	0.00	0.00	0.00	1.00
Environmental Analyst	1.00	1.00	1.00	1.00	1.00
Environmental Assistant	1.00	1.00	1.00	1.00	1.00
Operator	6.00	6.00	6.00	6.00	6.00
Water Pollution Control Plant Intern	0.00	0.46	0.46	0.46	0.46
Total	10.00	10.96	10.46	10.46	10.46

SEWER ENTERPRISE FUND - 500
SEWER TREATMENT PLANT - 641

EXPENDITURE SUMMARY

	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	\$ Chg	% Chg
	Actual	Actual	Actual	Budget	Proposed		
Personnel							
Full-time Salary - 40101	647,086	644,908	672,214	778,744	762,478	(16,266)	-2%
Overtime - 40201	24,355	20,952	18,787	54,000	34,500	(19,500)	-57%
FLSA Overtime- 40202	-	-	-	-	2,885	2,885	100%
Holiday Pay - 40105	7,068	7,503	10,423	-	43,069	43,069	100%
Part-time Salary - 40102	223,457	14,136	(101)	20,000	11,856	(8,144)	-69%
Vacation Accrued - 40103	14,477	36,250	7,621	-	-	-	0%
Long-Term Disability - 41008	-	214,207	145,264	-	-	-	0%
Clothing Allowance - 40305				2,000	2,000	-	0%
Benefits & Insurance - 46123	348,979	380,387	407,564	429,110	417,506	(11,604)	-3%
Total Salary & Benefits	1,265,422	1,318,343	1,261,774	1,283,854	1,274,294	(9,560)	-1%
Services and Supplies							
Safety Clothing - 44410	15,305	12,889	16,890	15,040	15,040	-	0%
Equipment Maintenance - 42107	208,097	170,875	166,438	269,080	269,080	-	0%
Fuel - 44301	-	-	3,258	-	-	-	0%
Maintenance Structure/Imp - 42108	7,330	16,029	21,882	42,000	42,000	-	0%
Memberships - 42401	2,018	2,015	2,477	5,000	5,000	-	0%
Office Expense - 42201	2,423	5,395	3,840	5,000	5,000	-	0%
Professional Services - 42101	49,131	31,733	16,414	90,000	127,500	37,500	29%
Equipment Rental - 42511	-	-	-	1,000	1,000	-	0%
Settlement -42508	-	-	10,000	-	-	-	0%
Special Department Expense - 42514	3,894	-	235	-	-	-	0%
Travel & Training - 42301	4,429	1,897	2,893	7,000	7,000	-	0%
Utilities - 4310X	485,957	526,157	528,443	575,000	600,000	25,000	4%
Compliance Inspections - 42109	24,759	9,671	32,332	25,000	25,000	-	0%
WPCP Sludge Removal - 44302	83,505	80,230	80,279	85,000	90,000	5,000	6%
WPCP Chemicals - 44303	692,166	582,946	574,335	688,000	688,000	-	0%
WPCP Permit Fees - 44304	44,832	38,274	56,543	50,000	64,588	14,588	23%
WPCP Lab Operations - 44305	78,780	87,522	64,976	85,000	85,000	-	0%
Total Services and Supplies	1,702,626	1,565,633	1,581,235	1,942,120	2,024,208	82,088	4%
Capital Outlay							
Equipment - 42107	-	38,116	24,168	-	-	-	0%
Total Capital Outlay	-	38,116	24,168	-	-	-	0%
Internal Cost Allocations							
Administrative Debits - 46122	233,777	200,212	159,674	261,144	258,820	(2,324)	-1%
IS Charges - 46124	28,366	25,679	15,084	23,287	38,533	15,246	40%
Legal Charges - 46126	-	-	2,235	50,000	50,000	-	0%
Total Internal Cost Allocations	262,143	225,891	176,992	334,431	347,353	12,922	4%
Total	3,230,191	3,147,983	3,044,169	3,560,405	3,645,855	85,450	2%

MAJOR NON-PERSONNEL EXPENSE DETAILS

		FY 2016-17	FY 2017-18
44410 Safety Clothing		\$ 15,040	\$ 15,040
Laundry service for uniforms, safety shoes/boots, gloves, etc.	\$ 15,040		
42107 Equipment Maintenance		\$ 269,080	\$ 269,080
Repairs as needed to treatment plant equipment: pumps, motors, machine work, instrumentation, electric parts, gas, oil, tires hose replacement, etc.	\$ 269,080		
42108 Maintenance Structure/Imp		\$ 42,000	\$ 42,000
Maintenance and repairs to grounds and facilities:			
Janitorial services	\$ 10,000		
Various structure refurbishment	20,000		
Cathodic inspection for Rodeo Sanitary District outfall - Pinole Share	12,000		
42401 Memberships		\$ 5,000	\$ 5,000
Memberships:	\$ 5,000		
CA Water Environment Association (CWEA)			
Traffic Control Supervisors Association (TCSA)			
Water Environment Federation (WEF)			
Technical publications			
42201 Office Expense		\$ 5,000	\$ 5,000
Basic stationery, supplies, fax paper, copying paper, computer paper, books, maps and periodicals, etc.	\$ 5,000		
42101 Professional Services		\$ 90,000	\$ 127,500
Engineering Services	\$ 10,000		
NPDES permit renewal application process and documentation prep	40,000		
Assessment of headlosses in pipe to outfall (<i>carry forward</i>)	40,000		
PCTV quarterly subcommittee meeting	2,500		
Wastewater fee model update	35,000		
42511 Equipment Rental		\$ 1,000	\$ 1,000
	\$ 1,000		
42301 Travel and Training		\$ 7,000	\$ 7,000
Training of State Certified Operators in new procedures related to upgrades.	\$ 7,000		
4310X Utilities		\$ 575,000	\$ 600,000
PG&E	\$ 540,000		
EBMUD	60,000		
42109 Compliance Inspections		\$ 25,000	\$ 25,000
Public outreach materials, Sampling and analysis, laboratory supplies and safety equipment.	\$ 25,000		
44302 WPCP Sludge Removal		\$ 85,000	\$ 90,000

Sludge hauling to EBMUD and Landfill.	\$ 90,000		
44303 WPCP Chemicals		\$ 688,000	\$ 688,000
Chemicals for Plant Operations	\$ 688,000		
44304 WPCP Permit Fees		\$ 50,000	\$ 64,588
NPDES renewal permit fee	\$ 62,088		
County Fuel Tank Fees, and Air Toxic Fees.	\$ 2,500		
44305 WPCP Laboratory Operations		\$ 85,000	\$ 85,000
A-Laboratory supplies	\$ 70,000		
B-Accelerated Chronic Toxicity Testing	15,000		

CITY OF PINOLE

SEWER ENTERPRISE FUND - 500

	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
REVENUE:	ACTUAL	ACTUAL	ACTUAL	REVISED BUDGET	PROPOSED
Charges for Services	5,670,160	6,024,646	6,117,244	7,214,424	7,214,424
Other Revenue	5,219	8,692	30,288	-	-
TOTAL SEWER ENTERPRISE REVENUE	5,675,379	6,033,338	6,147,532	7,214,424	7,214,424
EXPENSES:					
Sewer Treatment Plant	3,230,191	3,147,983	3,020,001	3,560,405	3,645,855
Sewer Collection	535,184	623,780	604,971	1,181,149	1,086,651
WPCP Equipment & Debt Service	434,949	410,772	910,225	636,488	526,948
Depreciation Expense	660,644	646,842	783,754	580,000	580,000
TOTAL SEWER ENTERPRISE EXPENSE	4,860,968	4,829,377	5,318,951	5,958,042	5,839,454
NET RESULTS	814,411	1,203,961	828,581	1,256,382	1,374,970
FUND BALANCE, JULY 1	4,792,415	5,606,826	6,810,787	7,639,368	8,895,750
FUND BALANCE, JUNE 30	5,606,826	6,810,787	7,639,368	8,895,750	10,270,720

PROPOSED BUDGET
FY 2017-18
LABOR COST ALLOCATIONS

Position Title	Total Wages and Benefits	General Fund	Sewer Enterprise (WWTP)	Sewer Enterprise (Corp Yard)	Successor Agency	Housing Admin	Gas Tax Fund	Building Fund	Measure "S- 2014"	PSAF	SLESF	Strom Water	Refuse Mgmt	Measure "J"	Total
Council Members (5)	93,264	69,948	-	23,316	-	-	-	-	-	-	-	-	-	-	93,264
City Manager	294,263	102,992	14,713	73,566	73,566	14,713	-	14,713	-	-	-	-	-	-	294,263
City Clerk	166,168	124,626	-	-	41,542	-	-	-	-	-	-	-	-	-	166,168
Treasurer	24,065	18,049	-	6,016	-	-	-	-	-	-	-	-	-	-	24,065
Finance Director	227,223	122,700	34,083	-	59,078	11,361	-	-	-	-	-	-	-	-	227,223
Accounting Specialist (2)	212,809	180,888	31,921	-	-	-	-	-	-	-	-	-	-	-	212,809
Accounting Intern	17,215	14,633	2,582	-	-	-	-	-	-	-	-	-	-	-	17,215
Assistant City Manager	244,069	146,441	24,407	-	61,017	12,203	-	-	-	-	-	-	-	-	244,069
HR Specialist	99,072	84,211	9,907	-	-	4,954	-	-	-	-	-	-	-	-	99,072
Police Officer (Canine)	144,534	130,081	-	-	-	-	-	-	-	-	14,453	-	-	-	144,534
Police Officer	149,463	67,258	-	-	-	-	-	-	-	-	82,205	-	-	-	149,463
Police Officer	158,799	7,940	-	-	-	-	-	-	-	150,859	-	-	-	-	158,799
PW Director/City Eng	228,093	11,405	114,047	11,405	-	-	22,809	22,809	-	-	-	22,809	22,809	-	228,093
PW Specialist	113,753	22,751	-	28,438	-	-	17,063	22,751	-	-	-	11,375	11,375	-	113,753
Admin Secretary	108,635	10,864	27,159	54,318	-	-	16,295	-	-	-	-	-	-	-	108,635
Public Works Manager	147,081	73,541	-	29,416	-	-	7,354	-	-	-	-	29,416	7,354	-	147,081
PW Maint. Supervisor	134,920	60,714	-	33,730	-	-	6,746	-	-	-	-	26,984	6,746	-	134,920
Maintenance Workers (4)	363,718	109,115	-	72,744	-	-	36,372	-	-	-	-	72,744	18,186	54,558	363,718
Maintenance Worker (1)	89,966	-	-	-	-	-	-	-	89,966	-	-	-	-	-	89,966
PW Maint. Supervisor	114,029	-	-	85,522	-	-	5,701	-	-	-	-	11,403	5,701	5,701	114,029
Maintenance Workers (2)	171,053	-	-	128,290	-	-	8,553	-	-	-	-	17,105	8,553	8,553	171,053
Planning Manager	166,912	8,346	-	-	-	8,346	-	150,221	-	-	-	-	-	-	166,912
Building Inspector/Code Enf office	118,245	59,123	-	-	-	-	-	59,123	-	-	-	-	-	-	118,245
Project Manager	108,891	-	-	27,223	-	-	-	-	54,446	-	-	-	-	27,223	108,891
															-
	\$ 3,696,240	\$ 1,425,624	\$ 258,820	\$ 573,982	\$ 235,203	\$ 51,577	\$ 120,893	\$ 269,616	\$ 144,412	\$ 150,859	\$ 96,658	\$ 191,837	\$ 80,725	\$ 96,035	\$ 3,696,240

PERCENTAGE OF TOTAL 39% 7% 16% 6% 1% 3% 7% 4% 4% 3% 5% 2% 3% 100%

General Fund	Special Revenue	Sewer Enterprise	Successor Agency	Measure S
1,425,624	\$ 907,341	\$ 832,802	\$ 235,203	\$ 144,412

	100-0221	100-0222	100-0223	100-0342	100-0343	100-0351	209-0595	209-0592	Total
Police Chief	222,883		24,765						247,648
Lieutenant	156,319		39,080						195,399
Recreation Leaders (Seasonal)							11,184	24,893	36,077
Maintenance Workers (4)				21,823	43,646	43,646			109,115

PROPOSED BUDGET
FY 2017-18
LABOR COST ALLOCATION PERCENTAGES

Position Title	Total Wages and Benefits	General Fund*	Sewer Enterprise (WWTP)	Sewer Enterprise (Corp Yard)	Successor Agency	Housing Admin	Gas Tax Fund	Building Fund	Measure "S-2014"	PSAF	SLESF	Storm Water	Refuse Mgmt	Measure "J"	Total
Council Members (5)	93,264	75%		25%											100%
City Manager	294,263	35%	5%	25%	25%	5%		5%							100%
City Clerk	166,168	75%			25%										100%
Treasurer	24,065	75%		25%											100%
Finance Director	227,223	54%	15%		26%	5%									100%
Accounting Specialist (2)	212,809	85%	15%												100%
Accounting Intern	17,215	85%	15%												100%
Assistant City Manager	244,069	60%	10%		25%	5%									100%
HR Specialist	99,072	85%	10%			5%									100%
Police Officer (Canine)	144,534	90%									10%				100%
Police Officer	149,463	45%									55%				100%
Police Officer	158,799	5%								95%					100%
PW Director/City Eng	228,093	5%	50%	5%			10%	10%				10%	10%		100%
PW Specialist	113,753	20%		25%			15%	20%				10%	10%		100%
Admin Secretary	108,635	10%	25%	50%			15%								100%
Public Works Manager	147,081	50%		20%			5%					20%	5%		100%
PW Maint. Supervisor	134,920	45%		25%			5%					20%	5%		100%
Maintenance Workers (4)	363,718	30%		20%			10%					20%	5%	15%	100%
Maintenance Worker (1)	89,966	0%							100%						100%
PW Maint. Supervisor	114,029	0%		75%			5%					10%	5%	5%	100%
Maintenance Workers (2)	171,053	0%		75%			5%					10%	5%	5%	100%
Planning Manager	166,912	5%				5%		90%							100%
Building Inspector/Code Enf Offic	118,245	50%						50%							100%
Project Manager	108,891	0%		25%					50%					25%	100%
															-
	\$ 3,696,240	39%	7%	16%	6%	1%	3%	7%	4%	4%	3%	5%	2%	3%	100%

	100-0221	100-0222	100-0223	100-0342	100-0343	100-0351	209-0595	209-0592	Total
Police Chief	90%		10%						100%
Lieutenant	80%		20%						100%
Recreation Leaders (Seasonal)							31%	69%	100%
Maintenance Workers (4)				6%	12%	12%			30%