

CITY OF ANCHORAGE

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1965

BUDGET

WATER UTILITY

SUMMARY

DEPARTMENT Public Works	Water Utility		Operating Accounts				
CLASSIFICATION	ACTUAL COST 1962	ACTUAL COST 1963	ORIGINAL BUDGET 1964	ADJUSTED BUDGET 1964	DEPARTMENT REQUEST 1965	MANAGER RECOMMENDS 1965	COUNCIL APPROVES 1965
<u>Revenue</u>							
Customer Sales	1,014,563	1,186,785	1,337,000	1,332,000	1,510,000	1,510,000	1,510,000
Public Fire Protection	31,693	31,693	34,600	34,600	39,219	39,219	39,219
Sales to Other City							
Agencies	12,050	12,831	13,200	13,200	14,000	14,000	14,000
Miscellaneous Revenue	9,941	17,479	18,200	18,200	6,000	6,000	6,000
Federal Transitional Grant				50,000	60,000	60,000	60,000
Interest Revenue	12,221	5,502	4,000	4,000	-0-	-0-	-0-
Total Revenue	1,080,468	1,254,290	1,407,000	1,452,000	1,629,219	1,629,219	1,629,219
<u>Expenses</u>							
Source of Supply	119,880	116,542	138,523	138,173	146,783	146,285	146,285
Maintenance & Repair	92,907	53,484	77,989	73,406	86,100	85,100	85,100
Hydrants		43,667	44,488	43,200	49,225	49,225	49,225
Customer Service & Administration	164,755	161,189	219,988	230,188	287,393	277,046	277,046
Depreciation	206,061	256,548	266,000	286,000	330,070	330,070	330,070
Payment in Lieu of Tax	159,760	208,400	159,513	159,513	152,360	170,340	170,340
Interest	205,989	217,800	197,816	197,816	183,042	183,842	183,842
Total Expenses	949,352	1,057,630	1,104,317	1,128,296	1,235,775	1,241,908	1,241,908
NET INCOME	131,116	196,660	302,683	323,704	393,444	387,311	387,311

** Represents prior year construction funds remaining unused but restricted for construction.

DEPARTMENT Public Works		DIVISION Water	Operating Accounts		DETAIL		
CODE	CLASSIFICATION	ORIGINAL BUDGET 1964	ADJUSTED BUDGET 1964	DEPARTMENT REQUEST 1965	MANAGER RECOMMENDS 1965	COUNCIL APPROVED 1965	
	<u>Operating Revenue</u>						
4602	Consumer Sales	1,337,000	1,332,000	1,510,000	1,510,000	1,510,000	
4605	Public Fire Protection	34,600	34,600	39,219	39,219	39,219	
4607	Sales to Other City Agencies	13,200	13,200	14,000	14,000	14,000	
4613	Miscellaneous Revenue	18,200	18,200	6,000	6,000	6,000	
--	Federal Transitional Grant		50,000	60,000	60,000	60,000	
	Total Operating Revenue	1,403,000	1,448,000	1,629,219	1,629,219	1,629,219	
	<u>Non-Operating Revenue</u>						
4231	Interest Revenue	4,000	4,000	-0-	-0-	-0-	
	Total Revenue	1,407,000	1,452,000	1,629,219	1,629,219	1,629,219	
	<u>Operating Expenses</u>						
4701	<u>Source and Supply</u>						
.11	Salaries	55,335	55,035	56,325	56,325	56,325	
.12	Overtime			1,150	1,150	1,150	
.21	Advertising			500	500	500	
.22	Contracted Services	16,476	16,876	17,200	17,200	17,200	
.23	Electricity and Water	40,880	39,880	41,900	41,900	41,900	
.25	City Equipment Rental	2,100	1,900	2,050	2,050	2,050	
.27	Repairs	4,000	4,500	6,400	6,400	6,400	
.29	Travel, Dues and Publications			400	400	400	
.31	Building Materials	1,420	1,200	2,000	1,500	1,500	
.33	Gas, oil, grease & motor fuels	360	360	460	460	460	
.34	Heating Fuel	5,000	5,000	5,000	5,000	5,000	
.36	Office Supplies and Chemicals	12,652	13,122	13,100	13,100	13,100	
.38	Printed Forms	300	300	300	300	300	
	Total Source and Supply	138,523	138,173	146,785	146,285	146,285	

DEPARTMENT		DIVISION		Operating Accounts		DETAIL		
Public Works		Water				DEPARTMENT REQUEST 1965	MANAGER RECOMMENDS 1965	COUNCIL APPROVED 1965
CODE	CLASSIFICATION	ORIGINAL BUDGET 1964	ADJUSTED BUDGET 1964					
4730	<u>Maintenance and Repair</u>							
.11	Salaries	60,889	57,556			62,000	62,000	62,000
.12	Overtime					3,000	3,000	3,000
.22	Dontracted Services	1,000	1,000			1,000	1,000	1,000
.25	City Equipment Rental	12,000	10,000			13,000	12,000	12,000
.29	Travel, Dues and Publications	100	750			600	600	600
.31	Building Materials	2,500	2,500			3,000	3,000	3,000
.34	Heating Fuel					1,500	1,500	1,500
.35	Household and Janitorial					500	500	500
.36	Office Supplies	500	600			500	500	500
.39	Small Tools	1,000	1,000			1,000	1,000	1,000
	Total Maintenance and Repair	77,989	73,406			86,100	85,100	85,100
4740	<u>Hydrants</u>							
.11	Salaries	32,488	31,000			32,275	32,275	32,275
.12	Overtime					2,500	2,500	2,500
.25	City Equipment Rental	9,000	8,700			10,000	10,000	10,000
.27	Repairs	2,500	3,000			3,500	3,500	3,500
.31	Building Materials					200	200	200
.33	Gas, oil, grease and motor fuel	500	500			550	550	550
.36	Office Supplies					150	150	150
.38	Printed Forms					50	50	50
	Total Hydrants	44,488	43,200			49,225	49,225	49,225
4750	<u>Administration & Customer Service</u>							
.11	Salaries	51,761	60,461			114,594	108,186	108,186
.12	Overtime					3,500	2,000	2,000
.21	Advertising					1,650	1,000	1,000
.22	Contracted Services	136,577	128,077			122,999	121,760	121,760
.24	Insurance and Employee Benefits	21,650	26,650			26,650	26,650	26,650
.25	City Equipment Rental	4,500	5,000			5,000	5,000	5,000
.27	Repairs					3,000	3,000	3,000
.28	Telephone, Telegraph and Tolls	1,500	4,000			4,500	4,500	4,500
.29	Travel Dues and Publications					500	500	500
.32	Food, Clothing and Medical					250	250	250
.36	Office Supplies	1,000	1,000			1,300	1,000	1,000
.37	Postage					400	300	300
.38	Printed Forms					850	700	700

DEPARTMENT Public Works		DIVISION Water	Operating Accounts		DETAIL		
CODE	CLASSIFICATION	ORIGINAL BUDGET 1964	ADJUSTED BUDGET 1964	DEPARTMENT REQUEST 1965	MANAGER RECOMMENDS 1965	COUNCIL APPROVED 1965	
4750	<u>Administration & Customer Service</u> (cont)						
.39	Small Tools			200	200	200	
.43	Uncollectable Accounts	3,000	3,000	2,000	2,000	2,000	
	Total Administration & Customer Service	219,988	230,188	287,393	277,046	277,046	
4755	<u>Depreciation</u>	266,000	286,000	330,070	330,070	330,070	
4757	<u>Payment in Lieu of Tax</u>	159,513	159,513	152,360	170,340	170,340	
	<u>Total Operating Expense</u>	906,501	930,480	1,051,933	1,058,066	1,058,066	
	<u>Non Operating Expense</u>						
4759	Interest Expense	197,816	197,816	183,842	183,842	183,842	
	Total Expense	1,104,317	1,128,296	1,235,775	1,241,908	1,241,908	
	<u>Net Income</u>	302,683	323,704	393,444	387,311	387,311	

DEPARTMENT		DIVISION		ACCOUNT TITLE		ACCOUNT NUMBER		PERSONNEL SCHEDULE		
Public Works		Water								
POSITION TITLE	GRADE	PAY RANGE	ORIGINAL BUDGET 1964	ADJUSTED BUDGET 1964	DEPARTMENT REQUEST 1965		MANAGER RECOMMENDS 1965		COUNCIL APPROVED 1965	
Utility Manager	31	1081-1265	1	1	1	13,060	1	13,060	1	13,060
Civil Engineer II	26	889-1040	0	1	1	10,668	1	10,668	1	10,668
General Foreman	27	925-1081	1	1	1	12,120	1	12,120	1	12,120
Water Treatment Foreman	24	821-962	1	1	1	11,433	1	11,433	1	11,433
P. W. Foreman	23	790-925	1-1/2	2	2	22,182	2	22,182	2	22,182
Customer Service Super.	23	790-925	1	1	1	10,166	1	10,166	1	10,166
Customer Service Reps.	19	674-790	3	5	5	44,061	5	44,061	5	44,061
Maintenance Man IV	20	702-821	6	4	5	46,978	5	46,978	5	46,978
Maintenance Man III	19	674-790	4	4	4	34,725	4	34,725	4	34,725
Maintenance Man I	16	600-702	1	0	0	--	0	--	0	--
Water Treat. Plant Oper.	21	730-854	4-1/2	5	5	44,892	5	44,892	5	44,892
Clerk Steno II	11	494-577	1	1	1	6,061	1	6,061	1	6,061
Clerk III	13	534,624	0	1	2	13,562	1	7,154	1	7,154
Heavy Equip. Operator	21	730-854	0	1	1	10,248	1	10,248	1	10,248
Salesman (Meter)	20	702-821	0	0	1	8,424	1	8,424	1	8,424
Engineering Tech. III	20	702-821	0	0	1	8,424	1	8,424	1	8,424
			25	28	32	297,004	31	290,596	31	290,596
Less: Charges to Reimbursable Projects						(31,810)		(31,810)		(31,810)
						265,194		258,786		258,786

Note: Positions over last year approved by Council during 1964 are: (1) 2 Customer Service Representatives and 1 Cler II for Utility survey and updating records. (2) Civil Engineer II for engineering and administration back-up. (3) Heavy equipment operator was included in 1964 budget in error as a MM-IV

New positions requested include: (1) 1 Engineering Technician III to assist in design work plus keeping Utility maps up to date thus allowing for more effective use of personnel. (2) 1 Salesman (Meter) is needed to continue a sales program particularly in areas already served. (3) 1 MM-IV - More help will be needed this winter and year around because of expanding systems and expected earthquake problems showing up this winter. (4) 1 Clerk III required because of redistribution of workload of Utility Section resulting from interdepartmental reviews for improvement

DISTRIBUTION OF SALARIES BY ACCOUNT

<u>Account No.</u>	<u>Dept. Request</u>	<u>City Manager</u>
4701	56,325	56,325
4730	62,000	62,000
4740	32,375	32,275
4750	114,594	108,186
	<u>265,194</u>	<u>258,786</u>

WATER UTILITY INCOME INFORMATION

The format of the 1965 budget year has been designed to conform with Utility financial statements and therefore is set forth on a net income approach. It should be noted that the depreciation has been funded to enable the City to replace existing plant facilities as needed or to construct new plant without the issuance of water bonds.

At present, the monthly income from consumer sales is \$114,000 per month, which when projected at the same rate through 1964 is \$1,368,000. We anticipate 800 connections in 1965 for \$40,000 income during the year. We also anticipate about \$40,000 from presently unbilled accounts. We anticipate revenue gains over those presently billed of \$62,000 by having lost customers back in service and \$60,000 from the transitional grant to replace revenue lost due to non-return of earthquake accounts in 1965. These are primarily those in the 4th Street slide area.

We are presently working on proposals for early presentation to Council to encourage connection by properties served but not using City water. We also intend to initiate a sales program to encourage connections.

Contribution in aid of construction is presently 4 cents per square foot of lot area. In order to maintain a return of 2/3, the cost of main installation a change in the formula will be presented, shortly, to Council to reflect the shallower lots that are presently being platted, as well as the increased costs of construction.

	<u>1963</u>	<u>1964</u>
Number of Consumers	9,930	10,860
Daily Average Consumption	7,500,000 (gal)	8,200,000 (gal)
Plant Capacity (Daily)	17,500,000	17,500,000
Miles of Water Main	130.4	139.5
Number of Fire Hydrants	890	957

WATER UTILITY OPERATING EXPENSE INFORMATIONAccount 4701 Source of Supply

The City obtains water from two basic sources to supply the distribution system. The primary source is the surface supply from Ship Creek which has a capability of delivering to the Water Treatment Plant 11 million gallons per day. The secondary source is the deep well system which is supplied by the four wells constructed by the City, one additional well purchased from the Spenard Utility System in 1960 and one well constructed by the Corps of Engineers replacing two smaller wells lost in Turnagain during the Quake. The six wells have a total combined capacity estimated to be approximately 10 million gallons per day. However, it is somewhat questionable whether the full supply could be obtained due to the effect on the underground water table with all six wells in operation simultaneously and continuously.

The Well system is used to supplement the primary source when necessary at periods of high demand, or in the event of a break in the main supply line. It will be used also in supplementary basis during the winter months at periods when the surface supply is extremely cold, since injecting the slightly warmer underground water in the distribution system has prevented many freeze-ups, both in mains and individual services. During the winter, the wells are operated on a rotating basis with the exception of the well at 30th and Arctic which is operated automatically through the use of a hydro-pneumatic system at the well-house. The remaining wells are manually controlled and are cut into the system as required.

This account also provides for the operation and maintenance of the wells as described above.

This account also provides for the operation and maintenance of the Water Treatment Plant on a two shift, seven day per week basis. Chemical treatment is applied only as necessary and usually in the spring during periods of turbid water. Water is processed through the filters at all times. Both chlorine and fluoride are introduced into the system at the Water Treatment Plant and the wells. Fluoride was introduced at the wells for the first time in 1962. The Chief operator now lives at the plant site.

Account .21 provides the estimate of \$500 required to construct signs showing public where the Water Treatment Plant is, and some watershed signs warning the public not to contaminate it.

Account .22 \$5,976 is for annual maintenance contract for Minneapolis-Honeywell for Treatment Plant and well controls, also for contracted electrical maintenance work plus some for extra, over and above contract work. This account also continues programs now undertaken to gather information by U.S.G.S. and correlate this information. Funds are matched by U.S.G.S. \$3,500 for the City's share of the matching program of data collection for investigating water sources in the Greater Anchorage Area. \$5,000 for City's share of an expanded source to determine possible future sources. This program is not expected to continue after 1965, however, additional source development will be necessary next year.

Account .23 is increased due to A. M. U. having low water pressures, and the requirement to maintain pumping from 1 or 2 wells to raise pressure.

WATER UTILITY OPERATING EXPENSE INFORMATIONAccount 4701 Source of Supply (con't)

Account .27 The City Maintenance Engineer has recommended \$6,500 in maintenance work on Water Utility structures.

This work includes painting, minor structural repairs, common locks, paneling, etc. These costs were estimated on a contract basis. Much of this work can be accomplished by force account crews, whose labor is included in other portions of the budget. Therefore, this figure has been reduced to \$3,900. This does not include normal wear and tear on pumps, etc. which usually requires approximately \$1,000 and miscellaneous repair around the Treatment Plant including tightening fence, painting, replacement of test equipment, etc. plus improve well sites to public eye by seeding. (\$1,500)

Account .29 is to allow at least one and perhaps two Treatment Plant employees to attend an annual short course school. Such a school may be held in Alaska in 1965, either at Fairbanks or Anchorage.

Account .31 provides materials for some building rehabilitation which is accomplished by regular Water Treatment Plant employees. This includes paint, cleaning materials, etc. required to maintain preventative maintenance of mechanical equipment in the wells plus any materials necessary for repair of mechanical equipment.

Account. 36 Chemicals to treat the water.

Account 4730 Maintenance and Repair

The distribution system consists of 124 miles of water mains. This provides for general maintenance of the entire transmission and distribution system. It includes checking all main line valves prior to winter, summertime flushing of water mains, disconnects of old water services at the main, repair of service keyboxes, and thaw wires, wintertime steaming of shallow mains and dead end lines, and repair of water main breaks.

Account .11 includes an additional Maintenance Man. Utility expects additional work load during winter months because of earthquake caused undetected troubles plus distribution system expansion.

Account .25 The water system is expanding rapidly, we now maintain the Wonder Park complex. Frost will penetrate the ground deeper in recently disturbed ground. This increases the possibility of frozen mains in not only "normal" construction, but also the earthquake rehabilitation areas.

Account .29 Utility dues and publications are paid by this account. Also, it is requested that General Foreman, Andy Lahti, be permitted to attend the National meeting of American Water Works Association in Portland, Oregon in 1965. This is the best way for water works personnel to learn new operating shortcuts and methods.

Account .31 is to cover cost of repair material. Anticipate increase because of enlarging system; covers repair sleeves, fittings and pipe.

Account 4730 Maintenance and Repair (con't)

Account .34 covers the amount the maintenance section is required to contribute toward the heating of crew building, meter room, etc. It was not included in the 1964 budget.

Account .35 Same as Account .34.

Account 4740 Hydrants

We presently maintain 957 hydrants -- (769 inside the City limits and 188 outside the City limits). Our annual maintenance cost is about \$49 per hydrant. The total cost of hydrant maintenance is charged against the Fire Department, excluding those hydrants outside the City. Maintenance consists of regular pumping of the barrels in high water tables, steaming of hydrants as necessary and periodic checks to make sure they are operational. We plan an extensive painting program of hydrants in 1965 to uniform color and to clean up their appearance; at a cost of \$2,300. We have a program of salting the ground around hydrants in an attempt to reduce steaming costs. This program recommended by Pacific Fire Rating Bureau.

Account .27 The City hydrant system is increasing each year, about 70 in 1964.

Account .31 Covers paint.

Account .36 The Pacific Wire Rating Board has requested better records be kept of hydrant maintenance.

Account .38 Will cover the same as Account .36.

Account 4750 Administration Customer Service

This account covers the Utility Customer Service function which includes field investigations, formation of plant records, turn-on and turn-off duties, water sales program, meter sales program and other general customer service needs. Also covers the cost of the Utility Manager and Utility Engineering needs as well as all miscellaneous charges made by other departments against the Utility.

Account .11 includes a request for a Utility Salesman/Meterman to assist the Utility in selling water meters, water to customers where mains are installed and formation of new improvement districts. This position works in well with the present program of updating Utility records which show properties where water is available but not being used. Also, a request for an Engineers Technician III to update Utility maps, assist in design work, and assist the Utility Engineer in preparing reports regarding planning and improving the water works. A request has been indicated for an additional Clerk III to accomplish the functions transferred from the Utility Billing Section to the Utility. This is primarily paperwork and filing in coordinating the field inspectors work with Utility Billing.

Account 4750 Administration Customer Service

Account .21 covers requirements to notify the public of water problems, to assist in sales program and use as necessary to educate the public of water problems.

Account .22 includes the following:

	Adjusted Budget 1964	Department Request 1965	Manager Recommends 1965	Council Approved 1965
Treasury	22,084	22,600	22,300	22,300
Utility Billing	42,810	31,819	31,170	31,170
Accounting	21,815	24,400	24,110	24,110
Data Processing	11,294	14,600	14,600	14,600
Legal	7,914	12,420	12,420	12,420
City Manager	5,000	6,000	6,000	6,000
City Council & Mayor	2,000	2,000	2,000	2,000
City Hall Rental	2,160	2,160	2,160	2,160
Audit	2,000	2,000	2,000	2,000
Public Works Administration & Engineering	11,000	5,000	5,000	5,000
	<u>128,077</u>	<u>122,999</u>	<u>121,760</u>	<u>121,760</u>

Account .27 is for radio maintenance and repair, repair of service keyboxes consisting of raising or lowering to meet required yard grades. This would include materials and labor. Past practices have included a maintenance crew (usually two men) called out to raise and lower service key boxes. Utility organization this past year permits the field inspectors to accomplish much of this work (a one man crew).

Account .28 includes all Utility telephone, etc. costs. It includes telephone service, special telephone service required to permit Water Treatment Plant remote control of the wells, warning alarm circuits, etc.. All this was not included in the original 1964 budget.

Account .29 as far as publications are concerned this covers the 3 or 4 national organizations the Utility belongs to. The American Water Works Association is the best possible organization to belong to -- we do. The National meeting is to be held in Portland, Oregon in 1965; the best possible place for the Utility Manager to gather information on upgrading the Utility and lower costs. Request budget to include this travel, etc.

Account .32 is for uniforms for Field Service men.

Account 4750 Administration Customer Service (con't)

Account .36 is to cover Administration and Customer Service increased need for records. Original budget was established to provide minimum supplies for records, files, etc. Present property surveys require additional office supplies for recording and filing purposes.

Account .37 was left off the 1964 budget -- the Utility has a lot of correspondence.

Account .38 covers anticipated need for printed forms for recording locations and customer information and is for the same as Account .36. These forms are required printed by outside firms.

Account .39 is for some hand tools required for field men in operating key boxes, raising and lowering keyboxes, etc. This was overlooked in the 1964 budget.

WATER UTILITYDETAIL OF 1965 CAPITAL IMPROVEMENTS

<u>DESCRIPTION</u>		Department Request 1965	City Manager Recommendation 1965	Council Approved 1965
1. Subdivision & Improvement District Extensions		130,000	130,000	130,000
(a) Albright Subdivision	6,000			
(b) Calais Subdivision	6,000			
(c) Northeast Corner, Debarr & Bragaw	15,000			
2. Government Hill Tie		70,000	70,000	70,000
3. Providence Avenue		20,000	20,000	20,000
4. Miscellaneous Loop Ties Within the City		20,000	20,000	20,000
(a) Debarr (Wintergreen to Valarian)	4,000			
(b) 16th (Valarian to Nichols)	4,000			
(c) Cordova (9/10 Alley to 12th)	8,000			
5. New Meter Installation		5,000	5,000	5,000
6. Rehabilitation & Repair		20,000	20,000	20,000
(a) C Street (5/6 Alley to 6/7 Alley)	5,000			
(b) B Street (4/5 Alley to 5/6 Alley)	6,000			
(c) Cook/Manor Alley (Boyd to Degan)	6,500			
(d) Degan (Cook/Manor Alley to Manor/ Harvard Alley)	2,500			
7. Lower Existing Mains Prior to Paving		30,000	30,000	30,000
(a) Valarian (Debarr to 16th)	15,000			
(b) Wintergreen (15th to 16th)	7,000			
8. Miscellaneous Loop Ties Outside the City		10,000	10,000	10,000
(a) East Turnagain Blvd. (29th to Northern Lights Blvd.)	4,000			
(b) Wisconsin (29th to Northern Lights Blvd.)	4,500			
9. Auxiliary Power for Wells		5,000	5,000	5,000

Description	Department Request 1965	City Manager Recommendation 1965	Council Approved 1965
10. Miscellaneous Requirements	20,000	20,000	20,000
(a) Fencing around Well Houses 6,000	6,000		
(b) Landscaping at Treatment Plant 2,000	2,000		
(c) Landscaping at Well Sites 1,600	1,600		
(d) Common Locks for Utility Building 400	400		
11. New Plant Service Building to be located at 30th and Arctic well site:			
	150,000	-0- *	-0-
	480,000	330,000	330,000

* City Manager believes that this and other potential bond programs should be delayed pending further analysis of system extension needs and debt service requirements.

1965-70 WATER UTILITY IMPROVEMENT PROGRAM

Project	1965	1966	1967	1968	1969	1970
1. Water Office & Maint. Bldg.	\$150,000**	\$	\$	\$	\$	\$
2. Subdiv. & Improvement Dist. Extn's & Subdiv. repayments	130,000	150,000	100,000	100,000	100,000	100,000
3. Government Hill	70,000	70,000 *				
4. Providence Avenue	20,000					
5. Misc. Loop Ties within City	20,000	20,000	20,000	10,000	10,000	10,000
6. New Meter Installations	5,000	5,000	5,000	5,000		
7. Rehabilitation	20,000	20,000				
8. Lower Existing Mains, Airport Heights	30,000	10,000				
9. Misc. Loop Ties Outside City	10,000	15,000	10,000	10,000	10,000	10,000
10. Auxiliary Power for Wells	5,000	10,000	5,000	10,000	5,000	10,000
11. Waterfront Area		20,000	70,000 *	70,000 *		
12. Divert Campbell Creek		10,000	40,000	20,000	20,000	
13. Intake & Treatment Plant Improvements			40,000	20,000		
14. Boniface (Northern Lights Boulevard to Tudor)			60,000			70,000
15. Boniface (S. to DeBarr)				60,000		
16. Chugach School Area Improvements					50,000	

** Bond Funds

1965-70 WATER UTILITY CAPITAL IMPROVEMENT PROGRAM

<u>Project</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>
17. DeBarr (Boniface to Existing)	\$	\$	\$	\$	\$110,000	\$
18. Tudor Road (Lake Otis to Seward Highway)					60,000	70,000
19. AMU Tie, Northern Lights to Bragaw						100,000
20. Miscellaneous Requirements	20,000					
TOTAL	\$480,000	\$330,000	\$350,000	\$305,000	\$365,000	\$370,000

1965-70 CAPITAL IMPROVEMENT PROGRAM

WATER UTILITY PROJECT DESCRIPTION

1. Water Utility Office & Maintenance Building
\$150,000 for 1965. To (1) improve coordination between office and field crews, (2) provide needed room for maintenance crews, (3) provide needed meter repair shop, (4) afford adequate office space, (5) provide prefabrication room so that components may be prefabricated as much as possible, (6) get maximum value from rent costs.
2. Extension in Subdivision and Improvement Districts
\$130,000 for 1965, \$150,000 for 1966, \$100,000 annually 1967-70. Work to be performed as required as land is developed.
3. Completion of Government Hill Tie
\$140,000 for 1965-66 to join existing 16" mains at each end of Government Hill. Will provide fire protection in port, tank farm areas.
4. Providence Avenue Main
\$20,000 for 1965. To meet part of need for higher water pressures and volumes in institutional area. Loop tie, Northern Lights to Bragaw. Also needed, scheduled for 1970.
5. Miscellaneous Loop Ties Within City
\$20,000 annually 1965-67; \$10,000 annually 1968-70. To be constructed as greater pressure is needed for fire protection with increased domestic use.
6. New Meter Installations
\$5,000 each year 1965-68. To meter commercial users and large apartment houses. Will simplify billing, lower costs.
7. Rehabilitation
\$20,000 annually 1965-66. For general upgrading of system, particularly small projects downtown.
8. Lower Existing Mains, Airport Heights
\$30,000 for 1965, \$10,000 for 1966. Required with paving of streets.
9. Miscellaneous Loop Ties Outside City
\$10,000 for 1965, \$15,000 for 1966, \$10,000 annually 1967-70. Many small projects, to be constructed as pressure needed due to increased use.

1965-70 CAPITAL IMPROVEMENTS PROGRAM

WATER UTILITY PROJECT DISPOSITIONS

10. Auxiliary Power for Wells
\$5,000-\$10,000 annually 1965-70. Existing well pumps are electric powered, prone to failure in storms or disasters. Board of Fire Underwriters will not count such wells in fire rating. To provide gasoline driven auxiliary pumps for emergency use only.
11. Waterfront Area Improvements
\$20,000 for 1966, \$70,000 annually 1967-68. To provide critically needed fire protection in waterfront industrial area.
12. Divert Campbell Creek
\$90,000, 1966-69. To develop Campbell Creek as a water supply source, meet projected 1970 water needs.
13. Intake and Treatment Plant Improvements
\$40,000 for 1967, \$20,000 for 1968. To increase capacity through plant to meet projected water needs.
14. Boniface Main, Northern Lights to Tudor
\$60,000 for 1967, \$70,000 for 1970. Pressure in area already insufficient, further growth in demand anticipated.
15. Boniface Main, South to DeBarr
\$60,000 for 1968, \$70,000 after 1970. To meet anticipated water needs in area.
16. Chugach School Area Upgrading
\$50,000 for 1969. Consultant recommends main replacements and looping prior to 1970.
17. DeBarr Main, Boniface to Existing Main
\$110,000 for 1969. This major loop to be first of a series of mains off Boniface to DeBarr Avenue, Northern Lights Boulevard, and Tudor Road, to supply eastern parts of the City from the east as well as the north. This arrangement will greatly reduce head losses, increase capacity in these areas, as well as much of the balance of the system.
18. Tudor Road Main, Lake Otis Road to Seward Highway
\$60,000 for 1969, \$70,000 for 1970. Existing development in area would justify the main; more development anticipated.

1965-70 CAPITAL IMPROVEMENTS PROGRAM19. AMU Loop Tie, Northern Lights Boulevard to Bragaw Street

\$100,000 for 1970. To correct low pressure area in sys tem.

20. Miscellaneous 1965 Requirements \$20,000Note:

The following projects may prove feasible, depending upon experience with new rate schedule and future availability of APW funds and/or bond funds.

1. Completion of Boniface Street, DeBarr	\$ 70,000
2. 15th Avenue & DeBarr Tie and PRV Station	120,000
3. Northern Lights Boulevard, Boniface to Bragaw	120,000
4. Tudor Road, Boniface to Bragaw	130,000
5. Tudor Road, Bragaw Street to Lake Otis Road	130,000
6. Transmission Main, Plant to City	1,800,000
7. Water Storage	500,000