

MINUTES  
SPECIAL COUNCIL MEETING  
BROOKINGS COMMON COUNCIL  
CITY OF BROOKINGS  
AUGUST 7, 1974

The meeting was called to order at 8:05 by Mayor Wilma M. Kemp. Councilman present were Rush Long, William Guthrie, and Robert Earle. Councilman Jack Ross was absent.

THIS SPECIAL COUNCIL MEETING WAS CALLED FOR THE PURPOSE OF HAVING PUBLIC DISCUSSION FOR A LOCATION OF THE WATER FILTRATION PLANT.

Gary Dyer, Project Engineer, gave a resume of the water system up to date and reviewed three preliminary cost estimates for the Brookings Water System.

The City purchased the water system from the Brookings Utilities Co. in the year 1973. Then H.G.E., Inc., engineering firm, were retained by the City to design a water system. Up to this date this project has been broken down into four contracts; first being the water transmission lines, second the one and one-half million gallon distribution reservoir upon the hill in the city limits, third project is the filtration plant equipment and fourth being the location for the water filtration plant. Bids were advertised for on the filtration plant equipment and the bid of Neptune Microfloc was accepted. The reason for first obtaining the equipment is so that the plant can be designed around it. There has been considerable opposition against the location to locate the filtration plant on, and this is primarily the reason for this special council meeting, to discuss with interested citizens their views on where the filtration plant is to be located. H.G.E., Inc. first took a look at the City owned property up the North Bank of the Chetco River. This property had been purchased for the purpose of locating the intake pump to bring water to the City. But since that time of purchase of this property, and before the City of Brookings had purchased the water system from Mr. Bankus, an intake pump had been installed closer to the City. It was the recommendation of engineer that possibly it would be less expensive if property could be purchased closer to the now installed intake. Mayor and Council then gave them authorization to try and locate other property. After looking over the area and find three acres plus of vacate property for sale in the Tiderock Meadows area, they then proceeded with the necessary procedure of obtaining a conditional use permit from the Curry County Planning Commission. After considerable opposition of residents in this a



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this area the Planning Commission narrowly granted the conditional use permit to the City. Shortly after this decision there was an appeal by Frank & Leona Conta to the County Commissioners asking not to allow this conditional use permit. Mr. Dyer attended these meetings and was with the feeling the only concrete opposition presented was that this would be putting a non-residential facility in a residential area and this is what zoning is about. Mr. Dyer then inquired from Frank and Leona Conta if they would object to a piece of property to locate the filtration plant on a short distance from the opposed site and no objections were submitted. Engineers then proceeded with the possibility of being given a conditional permit for this piece of property now owned by Richard and Marie Frances.

Plan A: This is property that is now owned by the City and has been since 1969. It is up the North Bank of the Chetco approximately three and one-half miles. Approximately two and one-half acres. The engineer's preliminary cost estimate to locate the filtration plant on this property and the other three contracts mentioned above would be \$1,111,100.

Plan B: This is property now owned by Richard and Marie Frances. The request for a conditional use permit on this property will be before the Curry County Planning Commission on August 15, 1974. Preliminary cost estimate to locate the filtration plant on this is the amount of \$1,025,800.

Plan C: This is unimproved property adjacent to Azalea Park within the City of Brookings. Now owned by the State Parks Division. Preliminary cost estimate to locate the plant here is \$1,125,600.

The engineer's recommendation for the location due to cost factor and etcetera was Plan B.

Discussion followed between Mayor, Council, Engineer, Fire Chief Bob Kerr, Lynn Colebank with Oregon State Health Division, and Cy Zeigler, Chairman of the Curry County Planning Commission. Also property owners located in general area of the proposed Plan B who were Mary McCourt, Pat Harround, and Mrs. Harry Hall.



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Some of those in attendance were in favor of Plan A, engineer in favor of Plan B, and others in favor of Plan C. No decisions were made at this meeting but it is possible that a decision might be made at the next regular council meeting of August 13, 1974. Preliminary cost estimates of above plans are made a part of these minutes.

This special council meeting was recorder on tape and is filed in the Recorder's Office.

The Mayor then declared the meeting adjourned at 10:10 p.m.

Wilma M Kemp  
MAYOR

ATTEST:

Margaret G. McHerman  
RECORDER-TREASURER



VOUCHERS PAYABLE  
CITY OF BROOKINGS  
JULY 31, 1974

<u>Name</u>	<u>Amount</u>
Airdraulic Ind. Prod. Inc.	\$ 26.89
Akin Motor Co.	53.20
Allard	3.48
American Library Association	9.10
American Linen Supply	86.15
Atlantic Richfield	359.89
Auto & Marine Electric	5.32
Baker & Taylor	89.07
Blue Jay Chemical Corp.	173.04
Brookings Fire Department	200.00
Brookings Florist & Nursery	15.00
Brookings-Harbor Pilot	193.50
Brookings Office Supplies	47.00
Barco Coastal Supply	47.15
Brookings Supply, Inc.	750.00
Brookings Supply, Inc.	22.15
Brookings Tire Service	209.92
Brookside Construction Co.	445.50
James L. Brown Plumbing	10.00
Budge-McHugh Supply Co.	423.50
C & E Auto Repair	162.30
Chetco Gas	20.00
City Water Operation & Maintenance Fund	262.55
Coast to Coast Stores	25.42
Consolidated Freightways	12.82
Cora C. Cooley	10.00
Coos-Curry Electric	1,654.81
C. M. Cross	110.00
Curry County Communications	28.00
Curry County Crushers	647.00
Curry County	5,533.99
Curry County Feed	10.98
Curtin Matheson Scientific, Inc.	95.28
Da-Tone Construction	108.00
Del Chemical Corp.	13.12
Del-Cur Supply Co-op	7.74
Sam Dotson	45.60
Ed & Mendy Chevron	10.35
Entenman-Rovin Co.	23.50
Frank's Office Equipment	24.00
Gail's Place	8.00
Gaylor Bros., Inc.	136.55
General Learning Corp.	8.60
General Telephone Co.	438.51
H.G.E., Inc.	5,929.00



Page 2 - Vouchers Payable  
 City of Brookings  
 July 31, 1974

<u>Name</u>	<u>Amount</u>	
Hach Chemical Co., Inc.	\$ 58.29	
Hagen's Cleaners	5.75	
Halprin Supply Co.	31.76	
Hanscam's Center, Ore. Ltd.	57.97	
Harbor Cycle, Inc.	19.75	
Ralph Dearth - Har-Brook Welders	28.50	
Hatch Bros. Chemical Co.	288.00	
Hinds Supply Co.	3,982.62	
Jostens Catalog Card Corp.	47.61	
Kerr Ace Hardware	91.61	
Littrell Parts of Brookings	71.23	
Local Gov't. Personnel Institute	100.00	
Christina Lucas	80.00	
Mobil Oil Corp.	501.67	
Motorola Inc.	45.25	
McInturff, Thom, Collver & Rossi	325.52	
Marjorie B. McKernan	17.20	
Neptune Meter Co.	190.34	
O K Tire Store	61.26	
Pacific Pumping Co.	81.87	
Pacific Water Works Supply Co.	239.70	
Paramount Pest Control	5.00	
Pennwalt Corp.	34.77	
Publishers Central Bureau	6.04	
Ray's Sentry Market	33.12	
Sam's A & W	10.90	
Shell Oil Co.	4.29	
South Coast Stationery	14.60	
Southern Oregon Library Association	4.54	
Square Deal Lumber Yard, Inc.	29.95	
Texas Refinery Corp.	244.25	
Strand Book Store, Inc.	3.50	
V. L. Strutton	32.40	
Touchstone Press	12.14	
Traffic Safety Supply Co.	39.97	
U. S. Post Office	100.00	
Utilities Cupply Co.	83.47	
West Coast Truck Lines, Inc.	344.28	
Charles C. Williams	25.00	
Sam Williams	45.00	
World Book Encyclopedia, Inc.	5.95	
	<hr/>	
Add:	Total	\$25,901.05
H.U.D.		3,900.00
American Water Works Association		100.00
	Total	<hr/> \$29,901.05



## FINANCIAL EVALUATION OF PROJECTS

### 1. MEMORY LANE PUMP STATION STANDBY POWER, ADDITIONS

\$ 21,870 PROJECT COST  
 - 16,400 75% EPA GRANT  
 \$ 5,470 FUND FROM CITY  
 SEWER FUND

### 2. HARBOR INTERCEPTOR SEWER

\$ 168,960 PROJECT COST  
 - 150,000 FROM HARBOR  
 18,960 FROM CITY  
 SEWER FUND

### 3. WHARF STREET STORM DRAIN

\$ 92,500 (LIMIT) PROJECT COST  
 - 70,500 FROM CURRY COUNTY  
 - 22,000 REVENUE SHARING  
 \$

### 4. EASY MANOR SEWER REPLACEMENT

\$ 17,610 PROJECT COST  
 \$ OTHER AID  
 17,610 FROM CITY  
 SEWER FUND

### 5. MILL BEACH PRESSURE MAIN REPLACEMENT

\$ 33,100 PROJECT COST

ESTIMATE EPA GRANT TO COVER \$ 13,000 ±  
 REMAINING \$ 20,000 TO COME FROM  
 BROOKINGS PLYWOOD & CITY SEWER FUND

### 6. SPRUCE ST. SEWER RELOCATION

\$ 8,500 PROJECT COST  
 100% FROM CITY SEWER FUND

HGE INC./ENGINEERS & PLANNERS  
COOS BAY, OREGON / 5th AND HIGHLAND 97420 / (503) 269-1166

September 26, 1974

Farmers Home Administration  
1218 S.W. Washington  
Portland, OR 97205

Atten: Mr. Larry Spindler, P.E.

Re: Brookings Water System Improvements  
Project Nos. 1356, 1357, 1358 and 1359

Dear Larry:

Enclosed is the following relative to our telephone conversation on September 26, 1974.

- (1) Bid Tabulations for bids received on September 24, 1974 for Phase I Water System Improvements.
- (2) Preliminary Cost Estimate for Phase I.
- (3) Cost comparisons on the two development plans presently under consideration.

I will be meeting with the Brookings City Council on September 27, at which time I will recommend that they delay an award on Schedule "A", but that they award contracts on Schedules "B" and "C" to Ferry Creek and U.S. Tank, respectively. I will also recommend that these two contract awards be made, subject to FHA approval. We would appreciate your early approval of these awards so that construction can proceed on the reservoir as soon as possible. I feel that the apparent low bids on all three schedules are reasonable and are represented by qualified contractors. We are obligated to award Schedule "A" within 30 days, and we would appreciate your comments on this award also, assuming that a plant site will be selected and that there are sufficient funds to construct the facilities.

In addition please advise me regarding additional requirements of FHA, such as preconstruction conference and inspection needs. We anticipate the need for a minimum of one full-time, qualified inspector on the project throughout the course of pipeline, reservoir, and plant construction. At certain times, especially next summer, there will likely be a need for a second inspector during concurrent operations. We recognize our legal obligation to adequately supervise the inspection of this project and hope to place one of our more experienced inspectors on this job. During concurrent operations we would like to use the Brookings Director of Public Works for supplemental inspection needs. We would appreciate your comments and approval of this proposal.

The enclosed cost comparison pertains to two alternate plant sites under consideration by the Council at this time. As you will note, the projected costs exceed the budget for this work, and it appears that additional funds will be necessary if the planned facilities are to be constructed. The following options appear to be facing the City at this time:

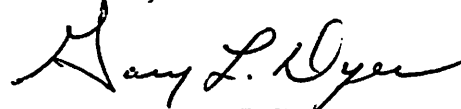
- (1) Obtain a \$250,000 grant from Farmers Home Administration. In accordance with our earlier conversation we realize the limitations on the grant funds; however, it should be noted that the City has been confronted with numerous obstacles in reaching this point in their water development program, and that even with the initial construction their distribution system will remain extremely deficient.
- (2) Obtain voter authorization for additional bonds. This should be for at least \$250,000 to cover critical construction presently planned, and if possible larger to enable distribution system improvements.
- (3) Delete the in-city supply line construction (for which bids have been received) and delete service on North Bank Road.

With regard to the two alternative plant sites, it appears that the Joe Hall site is the most economically feasible if the North Bank Road is to be served immediately or in the future. If service to the North Bank Road is not considered, both proposals are rather comparable. The cost evaluation does not consider operation and maintenance expenses nor the police and fire protection benefits that would be favorable advantages for the Azalea Park site. We have received a verbal commitment relative to purchase of the Joe Hall site, but have not yet received a definite commitment on the Azalea site. However, we are relatively confident that both sites are obtainable.

In summary, your approval of contract award on Schedules "B" and "C", and your contacting Washington regarding grant assistance will be greatly appreciated by the City of Brookings.

Very truly yours,

H. G. E., INC.



Gary L. Dyer, P.E.  
Project Engineer

GLD/ks

Enclosure

cc: City of Brookings



BROOKINGS WATER SYSTEM  
PLAN C - AZALEA SITE

A. PHASE I -- BIDS RECEIVED

1.5 M.G. Storage Reservoir . . . . . \$ 282,540  
16" and 12" Distribution, Pacific & Easy Streets . . . \$ 165,120  
14" Transmission, North Bank Road. . . . . \$ 78,100

B. PHASE II -- UNDER DESIGN

Intake Renovation. . . . . \$ 9,800  
1.5 M.G.D. Plant (2.2 M.G.D. Hydraulic Capacity;  
includes \$143,968 Contract awarded to Neptune  
Microfloc). . . . . \$ 584,350  
14" Transmission, Lundeen Lane . . . . . \$ 83,800  
SUBTOTAL . . . . . \$1,203,710

C. SITE ACQUISITION

Azalea Park Site (Finance by Deletion of  
Water and Sewer Use Fees) . . . . . \$ 0  
SUBTOTAL (Minimum Projects). \$1,203,710  
=====

D. PROJECTS REQUIRED TO CONTINUE SERVICE ON NORTH BANK

10" Distribution on North Bank Road  
6,060 Lineal Feet . . . . . \$ 151,050

TOTAL TO MAINTAIN SERVICE AREA . . \$1,354,760  
=====



BROOKINGS WATER SYSTEM  
PLAN D - JOE HALL SITE

A. PHASE I -- BIDS RECEIVED

1.5 M.G. Storage Reservoir . . . . . \$ 282,540  
16" and 12" Distribution, Pacific & East Streets . . . \$ 165,120  
Delete 10" Distribution Replacement on Marine Drive. . (\$ 9,500)  
14" Transmission, North Bank Road. . . . . \$ 78,100

B. PHASE II - UNDER DESIGN

Intake Renovation. . . . . \$ 9,800  
1.5 M.G.D. Plant (2.2 M.G.D. Hydraulic Capacity;  
includes \$143,968 Contract awarded to Neptune  
Microfloc). . . . . \$ 584,350  
14" Transmission, North Bank Road to Marine Drive. . . \$ 60,590  
SUBTOTAL . . . . . \$1,171,000

C. SITE ACQUISITION

Joe Hall Site (Purchase from Robert Alsup,  
Est. 2 Acres) . . . . . \$ 15,000  
SUBTOTAL (Minimum Projects). \$1,186,000  
=====

D. PROJECTS REQUIRED TO CONTINUE SERVICE ON NORTH BANK

10" Distribution on North Bank Road  
2,300 Lineal Feet . . . . . \$ 57,330

TOTAL TO MAINTAIN SERVICE AREA . . \$1,243,330  
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Water System Improvements - Phase I  
 City of Brookings, Project #1658-A-73 & #1659-A-73  
 Bid Tabulation, Page 6

ITEM	Industrial Pipeline P.O. Box 46 Springfield, OR	Riverside Construction 6924 S.E. Jack Road Milwaukie, OR 97222	Frontier Construc. 7845 S.W. Capitol Hw. Portland, OR	Ferry Creek Rock & Concrete P.O. Box K Brookings, OR 97415	
7.38 14" Butterfly Valves, 5 Each	\$ 1,100.00 \$ 5,500.00	\$ 1,225.00 \$ 6,125.00	\$ 1,000.00 \$ 5,000.00	\$ 798.00 \$ 3,990.00	\$ \$
7.39 12" Butterfly Valves, 7 Each	\$ 700.00 \$ 4,900.00	\$ 485.00 \$ 3,395.00	\$ 700.00 \$ 4,900.00	\$ 385.00 \$ 2,695.00	\$ \$
7.40 10" Butterfly Valves, 1 Each	\$ 575.00	\$ 450.00	\$ 600.00	\$ 355.00	\$
7.41 8" Gate Valves, 5 Each	\$ 250.00 \$ 1,250.00	\$ 350.00 \$ 1,750.00	\$ 400.00 \$ 2,000.00	\$ 200.00 \$ 1,000.00	\$ \$
7.42 6" Gate Valves, 8 Each	\$ 210.00 \$ 1,680.00	\$ 240.00 \$ 1,920.00	\$ 350.00 \$ 2,800.00	\$ 173.00 \$ 1,384.00	\$ \$
7.43 6" End Plugs, 1 Each	\$ 90.00	\$ 30.00	\$ 25.00	\$ 32.00	\$
7.44 4" End Plugs, 1 Each	\$ 85.00	\$ 25.00	\$ 20.00	\$ 30.00	\$
7.45 2" Compression Couplings, 2 Each	\$ 50.00 \$ 100.00	\$ 15.00 \$ 30.00	\$ 20.00 \$ 40.00	\$ 25.00 \$ 50.00	\$ \$
7.46 Fire Hydrants, 7 Each	\$ 600.00 \$ 4,200.00	\$ 650.00 \$ 4,550.00	\$ 700.00 \$ 4,900.00	\$ 460.00 \$ 3,220.00	\$ \$
7.47 Air Vacuum Release Valves, 2 Each	\$ 250.00 \$ 500.00	\$ 600.00 \$ 1,200.00	\$ 350.00 \$ 700.00	\$ 274.00 \$ 548.00	\$ \$
7.48 Blowoff Valves, 2 Each	\$ 75.00 \$ 150.00	\$ 300.00 \$ 600.00	\$ 400.00 \$ 800.00	\$ 137.00 \$ 274.00	\$ \$
7.49 2 Inch PVC Service Laterals, 100 Lineal Feet	\$ 6.00 \$ 600.00	\$ 10.00 \$ 1,000.00	\$ 2.50 \$ 250.00	\$ 20.00 \$ 2,000.00	\$ \$
7.50 3/4 Inch Polyethelene Service Laterals - Open Cut Type, 900 Lineal Feet	\$ 4.75 \$ 4,275.00	\$ 6.00 \$ 5,400.00	\$ 2.50 \$ 2,250.00	\$ 11.00 \$ 9,900.00	\$ \$



Water System Improvements - Phase I  
 City of Brookings, Project #1658-A-73 & #1659-A-73  
 Bid Tabulation, Page 7

ITEM	Industrial Pipeline P.O. Box 46 Springfield, OR	Riverside Construction 6924 S.E. Jack Road Milwaukie, OR 97222	Frontier Construc. 7845 S.W. Capitol Hw. Portland, OR	Ferry Creek Rock & Concrete P.O. Box K Brookings, OR 97415
7.51 3/4 Inch Polyethelene Service Laterals - Pull Type, 700 Lineal Feet	\$ 6.25 \$ 4,375.00	\$ 11.00 \$ 7,700.00	\$ 2.00 \$ 1,400.00	\$ 13.00 \$ 9,100.00
7.52 Reconnect Existing Booster Pump to New Line, Lump Sum	\$ 1,500.00	\$ 300.00	\$ 5,000.00	\$ 150.00
(08) Asphaltic Concrete Pavement Replacement, 540 Tons	\$ 30.00 \$ 16,200.00	\$ 45.00 \$ 24,300.00	\$ 45.00 \$ 24,300.00	\$ 25.00 \$ 13,500.00
TOTAL SCHEDULE "A" . . . . .	\$213,876.25	\$ 269,725.25	\$ 273,535.00	\$ 211,502.00
ITEM	Crom Prestressing 2100 Arrowhead Dr. Incline Village, NV	Kovtynovich, Inc. 395 Skyline Loop Eugene, OR 97405	R.N. Thomas & Sons P.O. Box 1487 Roseburg, OR 97470	Ferry Creek Rock & C. P.O. Box K Brookings, OR 97415
SCHEDULE "B" - <u>Reservoir Site Preparation</u>				
TOTAL SCHEDULE "B" . . . . .	\$ 53,765.00	\$ 117,820.00	\$ 97,795.00	\$ 54,541.00 ✓
ITEM	Crom Prestressing 2100 Arrowhead Dr. Incline, Village, NV	U.S. Tank & Const. P.O. Box 434 Tualatin, OR 97062	Pittsburgh-Des Moines 14042 N.E. 8th St. Bellevue, WA 98007	Pacific Tank & Construction 10100 S.W. North Dakota Portland, OR
SCHEDULE "C" - <u>1.5 M.G. Distribution Reservoir</u>				
TOTAL SCHEDULE "C". . . . .	\$ 208,460.00	\$ 191,142.00	\$ 204,600.00	\$ 211,200.00



ITEM	Industrial Pipeline P.O. Box 46 Springfield, OR	Riverside Construction 6924 S.E. Jack Road Milwaukie, OR 97222	Frontier Construc. 7845 S.W. Capitol Hw. Portland, OR	Ferry Creek Rock & Concrete P.O. Box K Brookings, OR 97415
<u>(07) Pipeline Appurtenances</u>				
7.1 16", 90° Cast Iron Bends, 1 Each	\$ 425.00	\$ 390.00	\$ 450.00	\$ 488.00
7.2 16", 45° Cast Iron Bends, 2 Each	\$ 365.00 \$ 730.00	\$ 360.00 \$ 720.00	\$ 495.00 \$ 990.00	\$ 495.00 \$ 990.00
7.3 16" 22 1/2° Cast Iron Bends, 1 Each	\$ 365.00	\$ 340.00	\$ 440.00	\$ 495.00
7.4 12", 90° Cast Iron Bends, 1 Each	\$ 200.00	\$ 150.00	\$ 250.00	\$ 256.00
7.5 12", 45° Cast Iron Bends, 1 Each	\$ 190.00	\$ 150.00	\$ 250.00	\$ 256.00
7.6 10", 45° Cast Iron Bends, 1 Each	\$ 150.00	\$ 110.00	\$ 230.00	\$ 200.00
7.7 10", 22 1/2° Cast Iron Bends, 2 Each	\$ 150.00 \$ 300.00	\$ 105.00 \$ 210.00	\$ 275.00 \$ 550.00	\$ 220.00 \$ 440.00
7.8 10", 11 1/4° Cast Iron Bends, 1 Each	\$ 140.00	\$ 95.00	\$ 240.00	\$ 225.00
7.9 4", 90° Cast Iron Bends, 1 Each	\$ 100.00	\$ 50.00	\$ 60.00	\$ 83.00
7.10 14" to 8", 90° Cast Iron Reducing Bends, 1 Each	\$ 475.00	\$ 440.00	\$ 420.00	\$ 713.00
7.11 16" x 16" x 8" x 8" Cast Iron Crosses, 1 Each	\$ 565.00	\$ 1,160.00	\$ 770.00	\$ 720.00
7.12 16" x 16"x14" x 14" Cast Iron Crosses, 1 Each	\$ 675.00	\$ 1,200.00	\$ 590.00	\$ 760.00
7.13 16" x 12" x 16" Cast Iron Bullhead Tees, 1 Each	\$ 775.00	\$ 750.00	\$ 700.00	\$ 703.00



Water System Improvements - Phase I  
 City of Brookings, Project #1658-A-73 & #1659-A-73  
 Bid Tabulation, Page 4

ITEM	Industrial Pipeline P.O. Box 46 Springfield, OR	Riverside Construction 6924 S.E. Jack Road Milwaukie, OR 97222	Frontier Construc. 7845 S.W. Capitol Hw. Portland, OR	Ferry Creek Rock & Concrete P.O. Box K Brookings, OR 97415	
<u>7.14 12" x 8" x 12" Cast Iron Bullhead Tees, 1 Each</u>	\$ 375.00	\$ 487.00	\$ 320.00	\$ 345.00	\$
<u>7.15 16" x 16" x 6" Cast Iron Tees, 4 Each</u>	\$ 550.00 \$ 2,200.00	\$ 370.00 \$ 1,480.00	\$ 800.00 \$ 3,200.00	\$ 446.00 \$ 1,784.00	\$
<u>7.16 14" x 14" x 12" Cast Iron Tees, 2 Each</u>	\$ 395.00 \$ 790.00	\$ 500.00 \$ 1,000.00	\$ 600.00 \$ 1,200.00	\$ 503.00 \$ 1,006.00	\$
<u>7.17 12" x 12" x 8" Cast Iron Tees, 1 Each</u>	\$ 235.00	\$ 310.00	\$ 320.00	\$ 339.00	\$
<u>7.18 12" x 12" x 6" Cast Iron Tees, 3 Each</u>	\$ 250.00 \$ 750.00	\$ 305.00 \$ 915.00	\$ 390.00 \$ 1,170.00	\$ 333.00 \$ 999.00	\$
<u>7.19 10" x 10" x 8" Cast Iron Tees, 1 Each</u>	\$ 200.00	\$ 250.00	\$ 290.00	\$ 261.00	\$
<u>7.20 10" x 10" x 6" Cast Iron Tees, 1 Each</u>	\$ 210.00	\$ 240.00	\$ 290.00	\$ 217.00	\$
<u>7.21 12" Cast Iron Tees, 2 Each</u>	\$ 250.00 \$ 500.00	\$ 260.00 \$ 520.00	\$ 350.00 \$ 700.00	\$ 309.00 \$ 618.00	\$
<u>7.22 8" Cast Iron Tees, 2 Each</u>	\$ 140.00 \$ 280.00	\$ 110.00 \$ 220.00	\$ 220.00 \$ 440.00	\$ 156.00 \$ 312.00	\$
<u>7.23 16" Coupling Adaptors, 5 Each</u>	\$ 225.00 \$ 1,125.00	\$ 150.00 \$ 750.00	\$ 470.00 \$ 2,350.00	\$ 228.00 \$ 1,140.00	\$
<u>7.24 14" Coupling Adaptors, 2 Each</u>	\$ 195.00 \$ 390.00	\$ 120.00 \$ 240.00	\$ 400.00 \$ 800.00	\$ 146.00 \$ 292.00	\$



Water System Improvements - Phase I  
 City of Brookings, Project #1658-A-73 & #1659-A-73  
 Bidding Tabulation, Page 5

ITEM	Industrial Pipeline P.O. Box 46 Springfield, OR	Riverside Construction 6924 S.E. Jack Road Milwaukie, OR 97222	Frontier Construc. 7845 S.W. Capitol Hw. Portland, OR	Ferry Creek Rock & Concrete P.O. Box K Brookings, OR 97415	
<u>7.25 12" Coupling Adaptors, 8 Each</u>	\$ 150.00	\$ 100.00	\$ 360.00	\$ 118.00	\$
	\$ 1,200.00	\$ 800.00	\$ 2,880.00	\$ 944.00	\$
<u>7.26 10" Coupling Adaptors, 1 Each</u>	\$ 125.00	\$ 80.00	\$ 320.00	\$ 106.00	\$
<u>7.27 8" Coupling Adaptors, 7 Each</u>	\$ 120.00	\$ 66.00	\$ 250.00	\$ 99.00	\$
	\$ 840.00	\$ 462.00	\$ 1,750.00	\$ 693.00	\$
<u>7.28 6" Coupling Adaptors, 1 Each</u>	\$ 115.00	\$ 58.50	\$ 200.00	\$ 88.00	\$
<u>7.29 4" Coupling Adaptors, 1 Each</u>	\$ 100.00	\$ 43.00	\$ 160.00	\$ 60.00	\$
<u>7.30 14" to 8" Reducing Coupling Adaptor, 1 Each</u>	\$ 575.00	\$ 120.00	\$ 350.00	\$ 162.00	\$
<u>7.31 14" to 8" Cast Iron Reducer, 1 Each</u>	\$ 270.00	\$ 330.00	\$ 390.00	\$ 420.00	\$
<u>7.32 8" to 2" Reducing Flange, 1 Each</u>	\$ 90.00	\$ 60.00	\$ 60.00	\$ 36.00	\$
<u>7.33 16" Blind Flanges, 1 Each</u>	\$ 210.00	\$ 165.00	\$ 200.00	\$ 155.00	\$
<u>7.34 14" Blind Flanges, 2 Each</u>	\$ 175.00	\$ 120.00	\$ 130.00	\$ 113.00	\$
	\$ 350.00	\$ 240.00	\$ 260.00	\$ 226.00	\$
<u>7.35 12" Blind Flanges, 1 Each</u>	\$ 100.00	\$ 75.00	\$ 100.00	\$ 72.00	\$
<u>7.36 10" Blind Flanges, 1 Each</u>	\$ 90.00	\$ 60.00	\$ 90.00	\$ 59.00	\$
<u>7.37 16" Butterfly Valves, 5 Each</u>	\$ 1,525.00	\$ 1,425.00	\$ 1,300.00	\$ 1,084.00	\$
	\$ 7,625.00	\$ 7,125.00	\$ 6,500.00	\$ 5,420.00	\$



Water System Improvements - Phase I  
 City of Brookings  
 Hall  
 Brookings, OR 97415

Project #1658-A-73 & #1659-A-73

H. G. E., INC.  
 Engineers - Planners  
 405 North Fifth  
 Coos Bay, OR 97420

September 24, 1974

. . . B I D T A B U L A T I O N . . .

ITEM	Industrial Pipeline P.O. Box 46 Springfield, OR	Riverside Construction 6924 S.E. Jack Road Milwaukie, OR 97222	Frontier Construc. 7845 S.W. Capitol Hw Portland, OR	Ferry Creek Rock & Concrete P.O. Box K Brookings, OR 97415	
SCHEDULE "A" -- TRANSMISSION AND DISTRIBUTION IMPROVEMENTS					
(01) <u>Clearing &amp; Grubbing, Lump Sum</u>	\$ 7,900.00	\$ 15,000.00	\$ 10,000.00	\$ 5,000.00	\$
(02) <u>Trench Excavation</u>					
2.1 <u>Unclassified Excavation, 7,060 Lineal Feet</u>	\$ 1.50 \$ 10,590.00	\$ 6.00 \$ 42,360.00	\$ 6.00 \$ 42,360.00	\$ 2.25 \$ 15,885.00	\$
2.2 <u>Rock Excavation, 735 Cubic Yards</u>	\$ 15.00 \$ 11,025.00	\$ 20.00 \$ 14,700.00	\$ 50.00 \$ 36,750.00	\$ 10.00 \$ 7,350.00	\$
(03) <u>Trench Backfill</u>					
3.1 <u>Class 1 Backfill, 1,860 Lineal Feet</u>	\$ 1.70 \$ 3,162.00	\$ 2.00 \$ 3,720.00	\$ 1.25 \$ 2,325.00	\$ 1.25 \$ 2,325.00	\$
3.2 <u>Class 2 Backfill, 850 Lineal Feet</u>	\$ 2.00 \$ 1,700.00	\$ .90 \$ 765.00	\$ 1.00 \$ 850.00	\$ .30 \$ 255.00	\$
3.3 <u>Class 3 Backfill, 2,680 Cubic Yards</u>	\$ 6.00 \$ 16,080.00	\$ 5.50 \$ 14,740.00	\$ 5.00 \$ 13,400.00	\$ 7.75 \$ 20,770.00	\$
(04) <u>Gravel for Pipe Zone and Pipe Base</u>					
4.1 <u>Foundation Stabilization Materials, 200 Cubic Yards</u>	\$ 6.00 \$ 1,200.00	\$ 12.00 \$ 2,400.00	\$ 5.00 \$ 1,000.00	\$ 9.00 \$ 1,800.00	\$
4.2 <u>Bedding Material, 930 Cubic Yards</u>	\$ 6.00 \$ 5,580.00	\$ 7.00 \$ 6,510.00	\$ 6.00 \$ 5,580.00	\$ 9.00 \$ 8,370.00	\$



Water System Improvements - Phase I  
 City of Brookings, Project #1658-A-73 & #1659-A-73  
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ITEM	Industrial Pipeline P.O. Box 46 Springfield, OR	Riverside Construction 6924 S.E. Jack Road Milwaukie, OR 97222	Frontier Construc. 7845 S.W. Capitol Hw. Portland, OR	Ferry Creek Rock & Concrete P.O. Box K Brookings, OR 97415
<b>(05) Gravel Surfacing</b>				
5.1 1 1/2" - 0 Gravel Base, 1,540 Cubic Yards	\$ 6.00 \$ 9,240.00	\$ 8.50 \$ 13,090.00	\$ 6.00 \$ 9,240.00	\$ 9.00 \$ 13,860.00
5.2 3/4" - 0 Gravel Surfacing and Binder Course, 530 Cubic Yards	\$ 6.00 \$ 3,180.00	\$ 9.00 \$ 4,770.00	\$ 7.00 \$ 3,710.00	\$ 10.00 \$ 5,300.00
<b>(06) Water Pipe Installation</b>				
6.1 16", Class 150, Asbestos Cement Pressure Pipe, 2,240 Lineal Feet	\$ 12.80 \$ 28,672.00	\$ 12.40 \$ 27,776.00	\$ 11.00 \$ 24,640.00	\$ 10.75 \$ 24,080.00
6.2 14", Class 150, Asbestos Cement Pressure Pipe, 2,305 Lineal Feet	\$ 10.85 \$ 25,009.25	\$ 10.35 \$ 23,856.75	\$ 9.00 \$ 20,745.00	\$ 8.71 \$ 20,076.55
6.3 12", Class 150, Asbestos Cement Pressure Pipe, 1,880 Lineal Feet	\$ 8.90 \$ 16,372.00	\$ 8.50 \$ 15,980.00	\$ 7.50 \$ 14,100.00	\$ 6.99 \$ 13,141.20
6.4 10", Class 150, Asbestos Cement Pressure Pipe, 370 Lineal Feet	\$ 7.50 \$ 2,775.00	\$ 5.50 \$ 2,035.00	\$ 6.00 \$ 2,220.00	\$ 5.60 \$ 2,072.00
6.5 8", Class 150, Asbestos Cement Pressure Pipe, 40 Lineal Feet	\$ 6.15 \$ 246.00	\$ 4.20 \$ 168.00	\$ 5.00 \$ 200.00	\$ 4.15 \$ 166.00
6.6 6", Class 150, Asbestos Cement Pressure Pipe, 200 Lineal Feet	\$ 5.00 \$ 1,000.00	\$ 3.90 \$ 780.00	\$ 4.00 \$ 800.00	\$ 2.05 \$ 410.00
6.7 12" Cast Iron Pipe, 15 Lineal Feet	\$ 16.00 \$ 240.00	\$ 25.00 \$ 375.00	\$ 18.00 \$ 270.00	\$ 18.45 \$ 276.75
6.8 4" Cast Iron Pipe, 10 Lineal Feet	\$ 9.00 \$ 90.00	\$ 12.90 \$ 129.00	\$ 8.00 \$ 80.00	\$ 5.35 \$ 53.50

BROOKINGS WATER SYSTEM PLAN EVALUATION

PRELIMINARY COST ESTIMATE  
PLAN A

*Site owned  
Property*

A. 1.5 M.G. STORAGE RESERVOIR

(1)	Site Preparation & Foundation . . . . .	\$ 34,500
(2)	Prestressed Concrete Tank . . . . .	<u>\$142,400</u>
	Construction Cost. . . . .	\$176,900
	TOTAL COST. . . . .	\$221,100

B. TRANSMISSION & DISTRIBUTION

(1)	14 Inch A.C. Transmission 5335 Feet (North Bank Road) @ \$17.00 . . . . .	\$ 90,695
(2)	14 Inch A.C. Transmission 1235 Feet (To Reservoir) @ \$17.00. . . . .	\$ 20,995
(3)	14 Inch D.I. Transmission 820 Feet (To Reservoir) @ \$18.00 . . . . .	\$ 14,760
(4)	16 Inch A.C. Distribution 2390 Feet @ \$20.00 . . . . .	\$ 47,800
(5)	12 Inch A.C. Distribution 1895 Feet @ \$15.00 . . . . .	<u>\$ 28,425</u>
	Construction Cost. . . . .	\$202,675
	TOTAL COST. . . . .	\$253,400

C. INTAKE RENOVATION

(1)	Pump Modification . . . . .	\$ 4,000
(2)	Miscellaneous Renovation. . . . .	\$ 750
(3)	Electrical. . . . .	<u>\$ 3,000</u>
	Construction Cost. . . . .	\$ 7,750
	TOTAL COST. . . . .	\$ 9,700

D. PLANT SITE ACQUISITION

TOTAL COST. . . . . \$ 0



E. PLANT SITE DEVELOPMENT

(1)	Site Fill . . . . .	\$ 17,500
(2)	Site Grading. . . . .	\$ 1,500
(3)	Sub-Surface Disposal. . . . .	\$ 1,000
(4)	Site Clearing . . . . .	\$ 5,000
(5)	Erosion Protection. . . . .	<u>\$ 12,000</u>
	Construction Cost. . . . .	\$ 37,000
	TOTAL COST. . . . .	\$ 46,300

F. 1.5 M.G.D. FILTRATION PLANT

(1)	Excavation, Grading, Backfill & Backwash Facilities . .	\$ 30,000
(2)	Basic Process Equipment . . . . .	\$143,968
(3)	Pumps . . . . .	\$ 12,000
(4)	Chlorination, Lab & Miscellaneous Equipment . . . . .	\$ 9,500
(5)	Equipment Installation. . . . .	\$125,000
(6)	Plant Piping. . . . .	\$ 15,000
(7)	Electrical & Controls . . . . .	\$ 35,000
(8)	Filter Building . . . . .	\$ 72,000
(9)	Clearwell . . . . .	\$ 12,000
(10)	Fencing, Landscaping, etc.. . . . .	\$ 4,500
(11)	Intake & Reservoir Controls . . . . .	<u>\$ 4,000</u>
	Construction Cost. . . . .	\$462,968
	TOTAL COST. . . . .	\$578,700

G. OTHER COSTS

(1)	Drainage Development for Backwash Effluent. . . . .	<u>\$ 1,500</u>
	Construction Cost. . . . .	\$ 1,500
	TOTAL COST. . . . .	\$ 1,900

BROOKINGS WATER SYSTEM PLAN EVALUATION

PRELIMINARY COST ESTIMATE  
PLAN B

*2 1/2 River  
Property -  
Not City Property*

A. 1.5 M.G. STORAGE RESERVOIR

(1) Site Preparation & Foundation . . . . .	\$ 34,500
(2) Prestressed Concrete Tank . . . . .	<u>\$142,400</u>
Construction Cost. . . . .	\$176,900
TOTAL COST. . . . .	\$221,100

B. TRANSMISSION & DISTRIBUTION

(1) 14 Inch A.C. Transmission 2285 Feet (North Bank Road) @ \$17.00 . . . . .	\$ 38,845
(2) 14 Inch A.C. Transmission 1235 Feet (To Reservoir) @ \$17.00. . . . .	\$ 20,995
(3) 14 Inch D.I. Transmission 820 (To Reservoir) @ \$18.00. . . . .	\$ 14,760
(4) 16 Inch A.C. Distribution 2390 Feet @ \$20.00 . . . . .	\$ 47,800
(5) 12 Inch A.C. Distribution 1895 Feet @ \$15.00 . . . . .	<u>\$ 28,425</u>
Construction Cost. . . . .	\$150,825
TOTAL COST. . . . .	\$188,500

C. INTAKE RENOVATION

(1) Pump Modification . . . . .	\$ 4,000
(2) Miscellaneous Renovation. . . . .	\$ 750
(3) Electrical. . . . .	<u>\$ 3,000</u>
Construction Cost. . . . .	\$ 7,750
TOTAL COST. . . . .	\$ 9,750

D. PLANT SITE ACQUISITION

(1) Site Purchase . . . . .	\$ 20,000
(2) Resale Value of City-Owned Property . . . . .	(\$ 7,000)
(3) Legal Expenses. . . . .	<u>\$ 500</u>
TOTAL COST. . . . .	\$ 13,500



E. PLANT SITE DEVELOPMENT

(1)	Site Fill . . . . .	\$ 7,500
(2)	Site Grading. . . . .	\$ 1,000
(3)	Sub-Surface Disposal. . . . .	\$ 500
(4)	Site Clearing . . . . .	\$ 600
(5)	Erosion Protection. . . . .	<u>\$ 1,000</u>
	Construction Cost. . . . .	\$ 10,600
	TOTAL COST. . . . .	\$ 13,300

F. 1.5 M.G.D. FILTRATION PLANT

(1)	Excavation, Grading, Backfill & Backwash Facilities . .	\$ 30,000
(2)	Basic Process Equipment . . . . .	\$143,968
(3)	Pumps . . . . .	\$ 12,000
(4)	Chlorination, Lab & Miscellaneous Equipment . . . . .	\$ 9,500
(5)	Equipment Installation. . . . .	\$125,000
(6)	Plant Piping. . . . .	\$ 15,000
(7)	Electrical & Controls . . . . .	\$ 35,000
(8)	Filter Building . . . . .	\$ 72,000
(9)	Clearwell . . . . .	\$ 12,000
(10)	Fencing, Landscaping, etc.. . . . .	\$ 4,500
(11)	Intake & Reservoir Controls . . . . .	<u>\$ 4,000</u>
	Construction Cost. . . . .	\$462,968
	TOTAL COST. . . . .	\$578,700

G. OTHER COSTS

(1)	Drainage Development for Backwash Effluent. . . . .	<u>\$ 800</u>
	Construction Cost. . . . .	\$ 800
	TOTAL COST. . . . .	\$ 1,000

*Undeveloped  
Property in  
Azalea Park*

BROOKINGS WATER SYSTEM PLAN EVALUATION

PRELIMINARY COST ESTIMATE  
PLAN C

A. 1.5 M.G. STORAGE RESERVOIR

(1)	Site Preparation & Foundation . . . . .	\$ 34,500
(2)	Prestressed Concrete Tank . . . . .	<u>\$142,400</u>
	Construction Cost. . . . .	\$176,900
	TOTAL COST. . . . .	\$221,100

B. TRANSMISSION & DISTRIBUTION

(1)	14 Inch A.C. Raw Water 2285 Feet (North Bank Road) @ \$17.00. . . . .	\$ 38,845
(2)	10 Inch A.C. Distribution 6060 Feet (North Bank Road) @ \$13.00. . . . .	\$ 78,780
(3)	14 Inch A.C. Raw Water 1250 Feet (Lundeen) @ \$17.00. . . . .	\$ 21,250
(4)	14 Inch A.C. Transmission 1200 Feet (Lundeen) @ \$17.00. . . . .	\$ 20,400
(5)	14 Inch A.C. Transmission 320 (Old County Road) @ \$17.00. . . . .	\$ 5,440
(6)	16 Inch A.C. Distribution 2390 Feet @ \$20.00. . . . .	\$ 47,800
(7)	12 Inch A.C. Distribution 1895 Feet @ \$15.00. . . . .	<u>\$ 28,425</u>
	Construction Cost. . . . .	\$240,940
	TOTAL COST. . . . .	\$301,200

C. INTAKE RENOVATION

(1)	Pump Modification . . . . .	\$ 4,000
(2)	Miscellaneous Renovation. . . . .	\$ 750
(3)	Electrical. . . . .	<u>\$ 3,000</u>
	Construction Cost. . . . .	\$ 7,750
	TOTAL COST. . . . .	\$ 9,750

D. PLANT SITE ACQUISITION

(1)	Azalea Park Site Purchase From State. . . . .	\$ 12,000
(2)	Resale Value of City-Owned Property . . . . .	(\$ 7,000)
(3)	Legal Expenses. . . . .	<u>\$ 500</u>
	TOTAL COST. . . . .	\$ 5,500



E. PLANT SITE DEVELOPMENT

(1) Site Fill . . . . .	\$	0
(2) Site Grading. . . . .	\$	1,000
(3) Sewer Connection. . . . .	\$	200
(4) Site Clearing . . . . .	\$	300
(5) Erosion Protection. . . . .	\$	<u>0</u>
Construction Cost. . . . .	\$	1,500
TOTAL COST. . . . .	\$	1,900

F. 1.5 M.G.D. FILTRATION PLANT

(1) Excavation, Grading, Backfill & Backwash Facilities . .	\$	30,000
(2) Basic Process Equipment . . . . .	\$	143,968
(3) Pumps . . . . .	\$	12,000
(4) Chlorination, Lab & Miscellaneous Equipment . . . . .	\$	9,500
(5) Equipment Installation. . . . .	\$	125,000
(6) Plant Piping. . . . .	\$	15,000
(7) Electrical & Controls . . . . .	\$	35,000
(8) Filter Building . . . . .	\$	72,000
(9) Clearwell . . . . .	\$	12,000
(10) Fencing, Landscaping, etc.. . . . .	\$	4,500
(11) Intake & Reservoir Controls . . . . .	\$	<u>4,000</u>
Construction Cost. . . . .	\$	462,968
TOTAL COST. . . . .	\$	578,700

G. OTHER COSTS

(1) Relocate Distribution Line on Marine Drive. . . . .	\$	3,000
(2) Drainage Development for Backwash Effluent. . . . .	\$	<u>3,000</u>
Construction Cost. . . . .	\$	6,000
TOTAL COST. . . . .	\$	7,500

BROOKINGS WATER SYSTEM PLAN EVALUATION

COST RECAP

	PLAN A	PLAN B	PLAN C
A. 1.5 M.G. Reservoir . . . . .	\$ 221,100	\$ 221,100	\$ 221,100
B. Transmission & Distribution. .	\$ 253,400	\$ 188,500	\$ 301,200
C. Intake Renovation. . . . .	\$ 9,700	\$ 9,700	\$ 9,700
D. Plant Site Acquisition . . . . .	\$ 0	\$ 13,500	\$ 5,500
E. Plant Site Development . . . . .	\$ 46,300	\$ 13,300	\$ 1,900
F. 1.5 M.G.D. Filtration Plant. .	\$ 578,700	\$ 578,700	\$ 578,700
G. Other Costs. . . . .	\$ 1,900	\$ 1,000	\$ 7,500
 TOTAL PROGRAM COST (Budget \$1,017,000)	 \$1,111,100	 \$1,025,800	 \$1,125,600