

**I. Project Segment Description**

- A. Location: This project’s segments are located on Beacon Street from Junius Street to Worth Street and in the alley between Junius Street and Worth Street from August Street to Fulton Street.

Location Information	
Description	Data
Water ID	59
MAPSCO	46C
DWU W/S Map	34-29
Council District	2

- B. Existing Conditions

Description	Water Main	Wastewater Main
DWU As-built	F.B. 4 P.52	411Q 1970 Sh. 2
Length (ft)	1,150	1,150
Diameter (in)	1 ½”, 2” & 8”	8” & 6”
Year Built	Unknown	1938
Material	C.I.	VCT

**II. Field Observations**

- A. Easements and Right-of-Way

The water main being replaced is within the dedicated street and alley R.O.W. No additional easements are required.

- B. Surface\Pavement

Beacon Street is an asphalt street with concrete curb and gutter. The pavement is in fair condition within the project limit. The alley between Junius Street and Worth Street is unpaved.

- C. Trees and Landscaping

There are existing trees and landscaping in the street and alley, but these should not be adversely affected because the line to be replaced is under the existing street and alley.

D. Adjacent Structures

There are existing overhead electrical lines, street lighting and sanitary sewer located within the street R.O.W.

**III. Recommendation**

A. Water Main Improvement

It is recommended that the existing 8", 2" , and 1 ½" water mains be replaced with 8" PVC Class 200 water pipe.

B. Wastewater Improvement

It is recommended that the existing 6" wastewater line in the alley be relocated and replaced with 8" PVC SDR26 pressure rated wastewater pipe to meet the applicable TNRCC standards. It is further recommended that the 8" wastewater line in Beacon Street, which was built in 1938, undergo a condition assessment to determine the structural integrity of the 63-year old infrastructure.

C. Construction/Surface Improvement

Open cut method is recommended for the water line replacement due to the following factors: (1) Beacon Street is a residential street which is easily accessible with dedicated R.O.W. and flexible pavement, (2) The alley is unpaved, and (3) The water main has numerous service connections that will require open cut to make the connection to the proposed main. The existing pavement should be sawcut and replaced with the same type of pavement removed, and the alley should be restored to its original condition per City of Dallas standards.

D. Traffic Control

Beacon Street is a two-way, two-lane residential street that will have to be limited to one lane only during construction. Both Junius and Worth Streets are also two-way, two-lane residential streets with medium residential traffic. A short section of the northeast bound traffic on Junius and southwest traffic on Worth Street will need to be closed to facilitate the water line construction.

**IV. Opinion of Probable Cost**

<b>Opinion of Probable Cost</b>				
<b>Qty</b>	<b>Unit</b>	<b>Description</b>	<b>Unit Cost \$</b>	<b>Total \$</b>
1,150	LF	8" PVC Class 200 Water Pipe	60.00	69,000.00
4	EA	8" Gate Valve	800.00	3,200.00
1	EA	6" Gate Valve	600.00	600.00
28	EA	Water Service Connection	600.00	16,800.00
1,935	LF	Trench Safety System	1.50	2,902.50
20	TN	Asphalt Pavement	80.00	1,600.00
20	LF	6" PVC C900 Water Line	50.00	1,000.00
10	CY	Temp Paving Flex Base	30.00	300.00
20	TN	Temp Asphalt Paving	55.00	1,100.00
1	EA	Fire Hydrant	2,000.00	2,000.00
0.5	TN	Cast Iron Fittings	1,500.00	750.00
785	LF	8" PVC SDR26 Wastewater Pipe	70.00	54,950.00
28	EA	Wastewater Service Connection	650.00	18,200.00
4	EA	Wastewater Manhole	2,500.00	10,000.00
2	EA	Wastewater Access Device	1,500.00	3,000.00
		<b>TOTAL</b>		<b>185,402.50</b>