

Fund	Department	Description	Cost
30	20/21	Additional Position (Distribution Operator)	\$ 44,025.00

**Additional Detail**  
**Reoccurring Expense**

Chapter 290 of the Texas Administrative Code, Subchapter D, (d) (5) states: *The system shall be provided with sufficient valves and blowoffs so that necessary repairs can be made without undue interruption of service over any considerable area and for flushing the system when required. The engineering report shall establish criteria for this design.*

Over the past 24 months Richwood has experienced several occasions when major water main repairs were required resulting in the interruption of water service to an excessive amount of customers to perform the necessary repairs. The reasoning for this is due to :

**1. Lack of knowledge of existing water distribution valves**

**2. Lack of knowledge regarding the operational status of existing water distribution valves**

The Texas Commission on Environmental Quality requires that a water systems valves are noted and in good working order which ultimately serves in the interest of Public Health and Safety. Richwood's Public Works staff is not sufficient enough to provide a valve exercising program which will include the noting of valve locations as well as their operational status. TCEQ informs me that I am responsible at minimum to provide Council with the status of distribution valves so that Council possesses necessary information for to consider repair, replacement, or addition of water distribution valves to effectively provide and protect quality water distribution services to their customers.

Council has already provided Public Works with the necessary tools to track water system repairs, changes, valve/hydrant locations, etc. with the implementation of GIS mapping. Public Works requires additional labor to provide necessary data for the updating of maps in real-time to serve Richwood's water customers into the future. Additional labor is intended for valve and hydrant location/exercising/repairs, lift station pump preventative maintenance, water distribution repairs, new water/sewer service installs, etc.

Additional evidence of understaffing exists in the comparison of Richwood Public Works' staffing to other local municipalities. Data was acquired while performing secondary comparisons to Texas A&M's study of salaries for the compensation plan conducted in 2016. Average Operator/Connection ratios for other municipalities average 1 Operator per 280 connections. These are municipalities with dedicated water departments. In the City of Richwood that ratio is 1 Operator per 500 connections. Richwood does not have a dedicated water department and Operators must perform tasks to maintain and repair water, wastewater, streets, drainage, and facility's infrastructure.

Fund	Department	Description	Cost	Additional Detail Reoccurring Expense
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25	40	Contract Labor (Tradesmen International)	\$65,000.00
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With the recent reconstruction of Roads resulting from available bond funding, Richwood Public Works has attempted to make annual maintenance in the form of asphalt crack sealing a priority. Recent drought has accelerated asphalt cracking to a point in which Public Works cannot keep up with the required maintenance.

In the past Public Works has hired contractors to perform such maintenance, but costs generally exceed \$100,000. An opportunity to approach the need for labor specifically for crack sealing has presented itself in a company called Tradesmen International

Tradesmen International is a company providing contract labor nationwide for anything from mowing and grounds work to specialized trades such as HVAC, electrical, and pipe fitting. Public Works would like to use the company as a more economical way of providing needed labor to perform a task that is impossible for the Public Works department to perform while keeping up with daily required responsibilities.

Fund	Department	Description	Cost	Additional Detail
				<b>One-Time Expense</b>
10	2	Shipping containers for Richwood Service Center	\$ 26,000.00	Richwood Public Works is in serious need of additional space for storage of inventory such as water and sewer line repair materials, water meters, meter boxes, etc. This initiative is to allow for Richwood's north shop to be modified so it is more conducive to storing fleet equipment and vehicles.

Council has expressed interest in possibly allowing funds to be dedicated to additional storage space as long as that space comes in the form of auxiliary buildings and does not discontinue use of the existing community building or expand upon existing construction.

\$26,000 allows Public Works a budget to fund 2 weather tight shipping containers (\$3000 each including delivery) and an additional \$20,000 to modify existing structures in the north shop that currently serve as a tool room and break room/restroom/storage. Along with this modification will be demo of existing structures and the reframing of an existing restroom area in the north shop that Public Works wishes to retain. \$20,000 is an estimate to fund demo costs, framing lumber, and any other specialty skills such as plumbing and electrical that will be necessary to create a functional restroom space.



### Conex Depot

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**Billing address**  
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 City of Richwood  
 1800 North Brazosport  
 Blvd. Richwood, TX 77531  
 Clute, TX 77531  
 9792652082  
 ccuster@richwoodtx.gov

**Shipping address**  
 Clif Custer  
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 1800 North Brazosport  
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 Clute, TX 77531

**Invoice #70083780**

April 10, 2024



Item	Quantity	Unit price	Subtotal
40FT Standard Wind and Water Tight (WWT) Shipping Container - Houston TX	1	\$2,399.00	\$2,399.00
Delivery : Ground Delivery to 77531			\$499.00
<b>Total</b>			<b>\$2,898.00</b>

Fund	Department	Description	Cost	Additional Detail
25	40	Reconstruction of Cypress and Misty Ct.	\$700,000	One-Time Expense

Utilize Fund Balance to reconstruct Cypress and Misty Ct. due to failing subgrade. Use Transportation Fund Revenue to contend with other streets in the Davidson Slater area. Costs include an additional \$49,000 to serve for additional contingency.



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CITY OF RICHWOOD, TEXAS  
 FY 2025 RICHWOOD STREET IMPROVEMENTS  
 CYPRESS DRIVE AND MISTY COURT ASPHALTIC RECONSTRUCTION  
 ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST  
 March 12, 2024

ITEM NO	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL PRICE
<b>CONSTRUCTION</b>				
1.	Mobilization	1 LS	\$ 45,000.00	\$ 45,000.00
2	Stormwater Pollution Prevention Plan (SWPPP)	1 LS	\$ 7,500.00	\$ 7,500.00
3	Traffic Control	1 LS	\$ 7,500.00	\$ 7,500.00
4	Remove Existing Concrete Driveway	3,800 SF	\$ 4.00	\$ 15,200.00
5	Remove Concrete Curb	190 LF	\$ 12.00	\$ 2,280.00
6	Remove 12" by 12" Foot Concrete Pad	1 LS	\$ 3,000.00	\$ 3,000.00
7	Adjust the Manhole	3 EA	\$ 1,200.00	\$ 3,600.00
8.	Excavation and Site Grading	1 LS	\$ 14,000.00	\$ 14,000.00
9.	Lime Stabilization of Materials, In Place (8 Inches) <sup>1</sup>	1,400 SY	\$ 7.50	\$ 10,500.00
10	Lime Stabilization of Materials, In Place (10 Inches) <sup>1</sup>	3,100 SY	\$ 8.50	\$ 26,350.00
11.	Lime Treatment (Road Mixed); 10 Percent by Dry Weight Assumed for Quantity Estimating Purposes <sup>1</sup>	150 TON	\$ 325.00	\$ 48,750.00
12	Flexible Base (8 Inches) <sup>1</sup>	1,410 SY	\$ 48.00	\$ 67,200.00
13	Hot Mix Asphalt (HMA) Pavement (1 Type D)(2.5 inches) <sup>1</sup>	570 TON	\$ 220.00	\$ 125,400.00
14	Reinforced Concrete Driveway (6 Inches)	430 SY	\$ 110.00	\$ 47,300.00
15.	FEMA Pavement (Driveways)	33 TON	\$ 225.00	\$ 7,875.00
16	Move and Relocate Sign	2 EA	\$ 1,000.00	\$ 2,000.00
17	Remove and Replace Existing Storm Sewer Pipe	516 LF	\$ 165.00	\$ 85,140.00
18	Restoration and Seeding	1 LS	\$ 18,000.00	\$ 18,000.00
Construction Subtotal (Rounded)				\$ 536,600.00
10% Construction Contingency (Rounded)				\$ 53,700.00
<b>CONSTRUCTION TOTAL (ROUNDED):</b>				<b>\$ 590,300.00</b>
<b>ENGINEERING</b>				
1	Basic Services: Design, Bidding, and Construction-Related Services.			\$ 46,500.00
2	Topographic Survey			\$ 7,500.00
3	Part-Time Resident Project Representative			\$ 7,500.00
4	Construction Materials Testing (By Contractor)			\$ -
Total Engineering Fees				\$ 61,500.00
<b>TOTAL ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST:</b>				<b>\$ 651,800.00</b>

Fund	Department	Description	Cost	Additional Detail One-Time Expense
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10	1	Master Planning for Streets and Parks (Engineering)	\$ 200,000.00	
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## Engineering Master Plans

Richwood owns multiple types of aging infrastructure in which the city is not in the financial position to provide sufficient funding to replace. Historically Richwood Council has been able and willing to provide funding via General Fund Balance, Enterprise Fund Balance, or Contingency Fund for the repair or replacement of certain infrastructure generally within a cost range of \$30,000 - \$350,000. Most of these repair or replacement initiatives were brought before Council on a "Needed" basis due to catastrophic failure.

Master Plans maintained by the city are an efficient and effective way to identify and prioritize infrastructure projects including preventative maintenance, repair, improvement, or new construction. Richwood has been fortunate enough to have already established such plans as a Water and Wastewater Capital Improvement Plan and Drainage Master Plan. But again, these plans were born out of necessity after it had already been determined that General Obligation Bonds would be required to repair failed infrastructure.

In the recent past, conversations regarding park improvements as well as the need for additional funds for street maintenance and improvements have been at the forefront. With regards to changing Richwood's existing culture from reactive to preventative, it is my desire to provide further master plans to:

- Identify and prioritize maintenance needs, improvements, and new construction opportunities.
- Promote public buy-in when additional funds for infrastructure improvements are needed or requested.
- Provide opinions to Council from a 3<sup>rd</sup> party unbiased group regarding the existing condition of infrastructure.
- Improve chances of receiving grant funds for infrastructure improvement/replacement.
- Assist Council in the decision-making process of the best way to expend funds whether private or public funding.
- Provide planning in which relevant completed projects promote community and economic development sustainability.
- Provide planning in which relevant completed projects will have a positive effect on residential and commercial property values.

### Parks Master Plan

The City of Richwood has 5 designated parkland areas. These areas include:

1. Ellis Park
2. Bobby Ford Park
3. Larry Johnson Park
4. Dorothy Torrence Park
5. Reserved parkland located at the intersection of Cardinal Dr. and Bluejay Ct.

### Recommended Plan Components

Include all designated parkland with prioritized emphasis on city parks that are significantly developed (Bobby Ford Park & Ellis Park).

An emphasis on physical and emotional health by focusing on walking trails, landscaping and areas to congregate.

Review existing equipment/implements and suggest modification or replacement to any with low usage.

Include recommendations for construction quality, processes, engineered design regarding future equipment.

A comprehensive survey of the public regarding preferred equipment or improvements to existing parks.

**Cost = \$85,000.00 - \$150,000.00**

#### **Streets Master Plan**

The City of Richwood owns a total of 21 miles of street. Approximately 13 miles of streets consist of an asphalt surface with the remainder consisting of concrete. With funds from the 2018 Series A General Obligation Bond Richwood was able to reconstruct roughly 8 miles of asphalt street and .25 miles of concrete streets. Another .6 miles of concrete streets will be reconstructed with funds from the CDBG MIT MOD Grant.

The remainder of streets, primarily asphalt streets, exist in a certain level of disrepair. A Streets Master Plan will rank all existing streets in Richwood on a scale of 1 – 10 with 1 – 5 representing poorer conditions than a ranking of 6 - 10. The plan may also include construction best practices, possible traffic studies, and site any further infrastructure repair that would be beneficial such as water/waster infrastructure replacement, or drainage rehabilitation when reconstructing certain streets.

A Streets Master Plan is the best way for Staff to present a comprehensive overview of street conditions within Richwood. The data presented in the plan is based on scientific methods as well as engineering and construction experience.

**Cost = \$85,000.00 - \$150,000.00**

#### **Conclusion**

Growing pains for the City of Richwood have been a dominant force in recent years when it comes to determining the best use of city finances. I believe that the Council is at a crossroads where decisions to either disregard or improve upon, or at least sustain existing infrastructure is crucial. Although master plans cannot directly supply funding for necessary infrastructure improvements, the plans do provide direction for Council based on identified and prioritized improvement needs that are backed up by sound data.