

BROOKSHIRE-KATY DRAINAGE DISTRICT (DISTRICT)
CONSTRUCTION COST ESTIMATE OF THE DRAINAGE IMPROVEMENTS

(Last Revised on February 26, 2024)

The purpose of this document is to clarify the definition of "Drainage Improvements" and what items should be included in the cost calculation.

Per our existing Rules and Regulations, the Applicant shall be required to pay fees to the District related to the District's inspection of construction activity to verify that any improvements made are in accordance with the District's approved permit. *"The fee shall be based on the Applicant's engineer's signed and sealed construction cost estimate of the drainage improvements or the actual construction costs of the drainage improvements from the Applicant's contractor."*

The accuracy of the "Drainage Improvement Construction Cost" is crucial for fair and effective permit reviews and ensuring compliance with applicable standards and regulations. The cost estimate or bid should be comprehensive and include an **itemized cost breakdown** of all costs associated with the drainage-related items for the project.

DEFINITIONS:

- **Drainage Improvement** – This term encompasses modifying, enhancing, or expanding existing drainage networks and developing new systems to manage and control stormwater flow effectively. Drainage improvement components are strategically implemented to prevent or mitigate problems such as flooding, erosion, and infrastructure damage.

- **Drainage Improvement Construction Cost** – The construction cost of drainage improvement refers to the projected total expenditure for the materials, labor, equipment, and ancillary services required to complete the project's drainage improvements.



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Disclaimer for Applicants: Please be advised that the purpose of this document is to assist you in formulating a construction cost estimate for the drainage systems required for your project. While we aim to highlight key components that should be considered in your estimate, please **note that this list is not exhaustive. It should serve as a guide**, offering insights into potential items to include in your budget planning.

The District does not guarantee the completeness of this list, and we encourage you to conduct thorough research to ensure all relevant costs are accounted for in your estimate.

Item No.	Item Type	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Total in Figures (\$)
	GENERAL ITEMS	Move-in, Bonds & Insurance				
	GENERAL ITEMS	Stabilized construction road, parking area, entrance/exits, and truck washing area				
	GENERAL ITEMS	SWPPP Structures				
	GENERAL ITEMS	Disposal of Utility Excavation				
	GENERAL ITEMS	Trench safety system for trench excavations				
	GENERAL ITEMS	Groundwater Control/ Dewatering/Well Points for open-cut construction				
	GENERAL ITEMS	Construction Staking				
	GENERAL ITEMS	Construction Safety and Security Measures				
	SITE PREPARATION	Clearing and Grubbing				
	SITE PREPARATION	Excavation, Haul, Spread, & Compact on Site				
	SITE PREPARATION	Turf Establishment				
	SITE PREPARATION	Broadcast Seeding				
	SITE PREPARATION	Hydro mulch Seeding				
	SITE PREPARATION	Drainage Related Utility Relocation, Protection or Disposal				
	DRAINAGE	Excavation of Detention Pond and Overall Site, Including Uniform Shaping of Excavated Side Slopes to Lines and Grades as Shown on the Plans,				
	DRAINAGE	Spread and Compact Detention Pond Excavation Spoils Within Designated Area Shown in the Construction Plans, Including Proof Rolling, Interim Drainage (Including Cutting Swales to Provide Positive Drainage), Onsite Hauling, and Uniformly Spreading, Shaping, Grading, and Compacting Spoil Material				

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Item No.	Item Type	Item Description	Unit of Measure	Estimated Quantity	Unit Price (\$)	Total in Figures (\$)
	DRAINAGE	Backslope Interceptor Structure				
	DRAINAGE	Backslope Interceptor Swale				
	DRAINAGE	Over excavation for clay liner				
	DRAINAGE	Thick Clay Liner				
	DRAINAGE	Concrete channel lining				
	DRAINAGE	Reinforced concrete				
	DRAINAGE	Concrete interceptor structure				
	DRAINAGE	Concrete Rip Rap				
	DRAINAGE	Concrete Slope Paving				
	DRAINAGE	Concrete Slope Paving with Concrete Toe wall				
	DRAINAGE	Swale/ Ditch				
	DRAINAGE	Outfall Structures				
	DRAINAGE	Concrete Pilot Channel				
	DRAINAGE	Extreme Event Swale				
	DRAINAGE	Extreme Event Swale - Grading				
	DRAINAGE	Emergency Spillways				
	DRAINAGE	Safety end treatment				
	DRAINAGE	Manhole (i.e., Type "C")				
	DRAINAGE	Storm Sewer Leads (PVC, RCP, HDPE)				
	DRAINAGE	Storm Sewer & Outfall (PVC, RCP, HDPE, CMP)				
	DRAINAGE	Headwall including wing walls and apron				
	DRAINAGE	Inlets (i.e., Type BB, A, E, others)				
	DRAINAGE	Pump(s) Station Package (i.e., pumps, electrical control system, generator, etc.)				
	Others	Project Owner's Construction Inspection and Testing Costs				
	Contingencies	Construction Contingency Allowance - A percentage of the Total Cost set aside for unforeseen circumstances or changes in project scope. (Typ. 10% - 30%)				

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Application & Project Information:

Application No.: _____

Project/Development Name: _____

Project Address: _____

Drainage Improvement: Acknowledgement of Construction Cost Estimate:

Per our existing Rules and Regulations, please select the option which you are planning to provide for your Drainage Improvement Construction Cost Estimate:

Option 1: The Engineer's Signed & Sealed Drainage Improvement Construction Cost Estimate

Option 2: The Applicant's Contractor Actual (BID) Drainage Improvement Construction Cost

By signing this document, I affirm that I have reviewed the District's definitions, fully understand the expectations, and have incorporated all pertinent items into the Drainage Improvement Construction Cost Estimate. I further acknowledge that the accompanying cost estimate represents a fair, precise, and thorough evaluation of the anticipated costs for the proposed development. I recognize my professional duties and the critical role of this estimate in the project's planning and implementation phases.

Name (Please Print): _____

Signature: _____ Date: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone No.: _____