



DATE: October 3, 2019

TO: City/County Subdivision Storm Drainage Board

FROM: Erin Powers, Senior Technical Engineer

SUBJECT: 2020 FEE STUDY

Following is a summary of research on drainage construction costs with a recommendation regarding the annual review of the Drainage, Bridge and Detention Pond fees in 2019 to adjust for inflationary costs for fees to be collected in 2020.

Background. The City's Drainage Code includes the following paragraph about annual fee adjustments:

City Code:

7.7.902: STUDIES OF DRAINAGE BASINS:

Prior to January 1 of each year the unit drainage fee and the unit detention reservoir land fee shall be reviewed by the Drainage Board who shall make a recommendation to the City Council as to any adjustment to the fees. *Upon such recommendation the City Council shall establish by resolution the unit drainage fee and the unit detention reservoir land fee in each drainage basin to be effective January 1 of each year.* Said fees will be reestablished in accord with changes in construction and other costs or revisions suggested by additional studies or other information obtained. (Ord. 96-44; Ord. 01-42; Ord. 02-130; Ord. 08-44) (Emphasis added)

Drainage Basin fees shall be reviewed and adjusted annually in order to comply with City Code and to stay current with reimbursement costs. The purpose is to ensure consistent, fair, and equitable reimbursements for the costs of constructing public stormwater infrastructure.

The drainage basin fees were increased by 3.5% in February of 2017, 5.7% in January of 2018, and 6.7% effective January 1, 2019 with the adoption by City Council at the recommendation of the City/County Drainage Board. There was no adjustment based upon a forecast for 2019.

Data Sources:

As was done in past years, this analysis looks back at actual construction cost increases for the past year.

The research for this year's survey includes data from:

- Colorado Department of Transportation (CDOT) Colorado Construction cost index data;
- Denver-Aurora-Lakewood consumer price index (CPI-U);
- Cost data per Engineering News Record (ENR); and
- Local developers, contractors, consultants, and providers of construction materials.
- UCCS Economic Form data for the local economy

Colorado Department of Transportation (CDOT) Colorado Construction Index Report (“CCI”):

For specific construction items (Earthwork, Structural Concrete, and Reinforcing Steel) the average cost increased by 2.63% from the first quarter of 2018 to the first quarter of 2019. The CCI is difficult to rely on as the projects that CDOT completes vary widely in location, size, scope, and CDOT’s own materials availability. As is evidenced below, the costs of earthwork indicate the highest increase, which is consistent with what we have seen with the local construction industry.

<u>Item</u>	<u>1st Quarter. 2018 Index</u>	<u>1st Quarter. 2019 Index</u>	<u>% Change (averaged over year)</u>
Earthwork (Price (\$/CY)	14.81	13.94	-5.87%
Structural Concrete Price (\$/CY)	681.91	758.62	11.25%
Reinforcing Steel Price (\$/LB)	1.19	1.22	2.52%
			2.63%

Consumer Price Index (CPI-U): The nationwide CPI-U information provided in the UCCS Economic Forum data for July 2019 indicates all items less food and energy index advanced 2.1%. The Denver-Aurora-Lakewood CPI-U indicates all items less food and energy index advanced close to 1%.

Engineering News Record (ENR):

Calculations were based upon the following commodities for the Denver area: Concrete, 4000 psi; Reinforced Concrete Pipe (average of 24”, 36” and 48”); Rebar, Grade 60, #4; Common Labor and Skilled Labor, comparing July 2018 to July 2019.

<u>Materials & Labor (ENR, July. 2018 to July 2019, for</u>				
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<u>Denver)</u>				
<u>Item</u>	<u>July 2018 Index</u>	<u>July 2019 Index</u>		<u>% Change (averaged over year)</u>
Concrete, 4000psi	126.37	132.25		4.65%
Pipe (avg. of 3 sizes)	69	72.44		4.99%
Rebar, Grade 60, #4	54.36	54.32		-0.07%
Common Labor	818.18	818.18		0.00%
Skilled Labor	762.06	847.28		11.18%
				4.15%

Based on these ENR statistics for the Denver area of a normal mix of labor and materials, a typical drainage project likely saw an average increase of approximately 4.15%.

Local Construction Costs (compiled by contacting local drainage construction contractors, consultants, materials providers, and developers):

City staff studied local project costs including concrete, rock, pipe and labor from 2018 to 2019, as well as developer constructed in place costs, and reported an average increase of approximately 4.75% in industries that support drainage projects.

Summary:

2019 Overall: Using weighted averages based on the impact of local contractor and consultant data for the past year, CCI, ENR (Denver), CDOT and the CPI, for the same time period, it is estimated that overall drainage construction costs have increased an average of 4.0% from the second quarter of 2018 to the second quarter of 2019.

2020 Forecast: The Governor’s Office of State Planning and Budgeting has forecast an increase to the Consumer Price Index of 2% for 2019 and an increase of 2.2% for 2020.

Recommendation:

Staff recommends an increase of 4.0% over the 2019 drainage, bridge and detention pond facility fees, to include the Miscellaneous Basin fee, and approval of the attached fee schedule effective upon City Council approval.

There has been no adjustment to the Park Land Dedication Fee (\$76,602 per acre); therefore the Detention Pond Land fee will remain the same as 2019.