



MEMORANDUM

P.O. Box 4100 ♦ FRISCO, COLORADO 80443

TO: MAYOR AND TOWN COUNCIL
FROM: ADDISON CANINO, ASSISTANT PUBLIC WORKS DIRECTOR
RE: RES 23-08: FRISCO BAY MARINA BOAT RAMP TURNAROUND DRAINAGE IMPROVEMENTS
DATE: FEBRUARY 28, 2023

Summary and Background:

In 2019, Phase 1 of the Big Dig Project included the installation of the of the new turnaround area, located at the top of the boat ramp. This was designed in a manner that directs all the drainage from storm events and vehicles/trailers that have just launched, away from Dillon Reservoir and into a storm sewer to the west. The inlet and drainage structure are part of a small storm system that is tied into a cistern that was intended to act as a dry well, which would allow all the sediment to settle in a contained area and let the water percolate into the soil(s).

Analysis:

Several years of operation have passed since its installation, and the original design has not worked. Since 2020, a high-water year, a ponding issue stemming from groundwater infiltrating into the cistern at a rate that causes it to surcharge/overflow. Due to this, a significant portion of the turnaround area floods where the reservoir level matches the rim elevation of the inlet (9,017.23ft), and when the reservoir is over full, the entire turnaround area will be submerged due to the mass amounts of groundwater penetrating the system.

Knowing that a solution needed to be created, the Town of Frisco has been working with its contracted civil engineer, JR Engineering, to find a solution to this problem. After on-site visits and a thorough analysis of data concerning groundwater levels and reservoir water levels, the Town and JR Engineering decided to rework the existing storm system by turning the dry well to a wet well and adding a sump pump to the system. It is worth noting that the design concept was discussed and approved by Denver Water as well. This will ensure that the entire system can be pumped into a detention pond, and the turnaround area can be kept free of major ponding in the future.

Town staff received 60% drawings from JR Engineering at the end of December 2022, and shortly after went out to bid at the beginning of January 2023. The bidding process resulted in two proposals received for the project from Columbine Hills Construction and NICX. Columbine Hills Construction, LLC. resulted in the low bid for the project and will work with Town staff and JR Engineering to produce a 100% construction set of drawings, after a contract is awarded. This method will be used to ensure the drainage issue is dealt with in a manner that can leave the Marina looking complete and aesthetically pleasing to all user groups.

Financial Impact:

Columbine Hills Construction's proposal has a financial impact of \$519,092.00. \$350,000.00 was originally budgeted for in 2023 for this project, which was based on the engineer's estimate that was received prior to bidding. Currently, the project is over the original budgeted amount by \$169,092, and staff has requested a budget amendment. With this amendment to the project budget, it will allow Town staff and the contractor to work in conjunction with the engineering firm to explore VE options and decrease the total project cost before its completion.

Alignment with Strategic Plan:

The repair to the boat ramp turnaround area would fulfill Council's strategic goal of Frisco Bay Marina Improvements in Vibrant Recreation. It would also fall into Quality Core Services because this was a major issue that was noted, studied to get the best data possible, and finally at a point where a plan has been developed for permanent repair. As this was an infrastructure problem with a difficult solution to find, staff understood that there was little room for error on this and errors in design like this are not up to the standards that have been set in the past by the Town of Frisco.

Environmental Sustainability:

While this design will use electrical power to operate the sump pump, the new design considers water quality measures to ensure that when drainage water is finally discharged back into Dillon Reservoir, it is at a level that is satisfactory to the state of Colorado and Denver Water.

Staff Recommendation:

It is the recommendation of staff that the Frisco Town Council approve Resolution 23-08 and enter into contract with Columbine Hills Construction for the Frisco Bay Marina Boat Ramp Turnaround Drainage Improvements project, at a cost not to exceed \$519,092.00. This repair can finally cure a long-standing issue from the Big Dig and Phase 1 and close a chapter of the Marina's history that began in 2019.

Reviews and Approvals:

Tom Fisher, Town Manager
Leslie Edwards, Finance Director
Jeff Goble, Public Works Director

Attachments:

Exhibit A – Bid Package
Exhibit B – Proposal
Exhibit C – Contract