

COUNCIL ACTION FORM

SUBJECT: WATER TREATMENT PLANT LIME POND UNDERDRAIN IMPROVEMENTS

BACKGROUND:

The Water Treatment Plant is a lime softening plant. Lime residuals from the water softening process are stored and dewatered in large storage ponds. The material is removed annually and recycled by applying it to farm fields as an agricultural liming agent. The cost of the annual removal is based on the weight of the lime as removed including any remaining water. For FY 2020/21, the cost for lime removal is budgeted at \$381,900.

In 1997, a project was undertaken to the three oldest ponds to improve the dewatering and thus reduce the cost of disposal. Over time, these improvements have been damaged due to the excavation of lime from the cells and are no longer operating as intended.

This project will consist of installing two additional underdrains down the mid-line of one pond. These drains aid in the dewatering process. Staff plans to monitor the water content and removal costs after this project is completed to confirm that dewatering has improved. If improvement is not realized, we won't proceed with repairing the other two ponds.

The total estimated construction project cost is \$110,000. The work was designed in-house, so there are no engineering fees. This project was included in the 2020/2021 Lime Lagoon Improvements CIP Project in the amount of \$125,000.

ALTERNATIVES:

1. Approve the preliminary plans and specifications for the Water Treatment Plant Lime Pond Underdrain Improvements Project, and issue a Notice to Bidders setting February 10, 2021, as the bid due date and February 23, 2021, as the date of public hearing.
2. Do not approve plans and specifications and a notice to bidders at this time.

CITY MANAGER'S RECOMMENDED ACTION:

The lime pond underdrains are critical to the lime sludge dewatering process. Replacing the damaged underdrain and adding additional underdrains will improve the overall dewatering of the lime sludge. These drainage improvements are anticipated to result in cost savings associated with annual removal and hauling cost.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as described above.