



## CITY OF NORMAN, OK STAFF REPORT

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**MEETING DATE:** 09/26/2023

**REQUESTER:** Jason Murphy, Stormwater Program Manager

**PRESENTER:** Shawn O'Leary, Public Works Director

**ITEM TITLE:** CONSIDERATION OF APPROVAL, ACCEPTANCE, REJECTION, AMENDMENT, AND/OR POSTPONEMENT OF CHANGE ORDER ONE TO CONTRACT K-2223-47: BY AND BETWEEN THE CITY OF NORMAN, OKLAHOMA, AND NASH CONSTRUCTION, INCREASING THE CONTRACT BY \$204,442 FOR THE VINEYARDS DRAINAGE IMPROVEMENT PROJECT AND FUND TRANSFER AS DETAILED IN THE STAFF REPORT.

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### **BACKGROUND:**

For several years, residents of The Vineyard Addition have experienced property damage due to flooding. The Vineyard Addition is a residential subdivision located east of Porter Avenue and South of Tecumseh Road. In July 2015, the City hired Meshek and Associates to perform an analysis of flooding issues reported by the residents of The Vineyard Addition. This included a review of the previous drainage reports and studies that were available. Additional detailed modeling was done to determine if any structural changes could be made that would reduce the risk of flooding in this area.

Meshek and Associates provided preliminary and final project plans for this project. These plans proposed to reduce the flood risk by expanding and re-grading the existing detention pond to increase the storm water storage. The existing sidewalk would be shifted several feet to the north to allow for the pond to be expanded. The dam on the eastern boundary of the pond will be raised approximately five feet above existing grade to provide additional storm water storage. Any water from the spillway will be conveyed across a new 7.5-foot-wide flume into Woodcrest Creek east of the new pond. The vertical wall on either side of the flume will vary in height along the length of the channel but will provide at least two feet of depth for stormwater storage and conveyance. This flume would also serve as a sidewalk for residents in the area during periods of dry weather. The existing discharge pipe will be upsized to address the modified flow. The detention pond and channel design will provide protection to residents from flooding caused by pond overtopping for storm events up to the 1 percent (1%, or "100-Year") frequency storm.

The Oklahoma Department of Emergency Management and Homeland Security (ODEMHS) and Federal Emergency Management Agency (FEMA) provide disaster response and recovery assistance and pre-disaster mitigation grant funding for mitigation projects designed to prevent or reduce future loss of lives and property and/or minimize the costs of future disaster response and recovery. The Hazard Mitigation Grant Program provides federal funds up to 75% of the costs associated with hazard mitigation projects. The required 25% local match can be in the form of cash funding or “in kind” services.

Based on discussions with staff at Meshek and ODEMHS, the Vineyard Drainage Improvement Project was submitted in the summer of 2019 for consideration, with City Manager approval, of a Hazard Mitigation Grant Program grant at an estimated cost of \$753,600. In anticipation of approval, Meshek and Associates were consulted for an update of project costs in the summer of 2021. The estimated cost of the project was increased to \$893,590.45, based on increases of materials and other costs that occurred since the original application in 2019. The grant application was amended to reflect these new costs.

On January 19, 2022 the City was notified that the Vineyard Drainage Improvement Project was selected and approved by ODEMHS for \$893,590.45. FEMA grants require the City to pay all costs up front and then receive reimbursement. The grant provides 75% of the project funds with a federal share in the amount of \$670,192.84 and a 25% local match of \$223,397.61. Reimbursed funds will be placed in the Special Grants Fund, Other Revenue-FEMA Stormwater (Account 225-333322).

On March 8, 2022, City Council accepted the Hazard Mitigation Grant Program grant in the amount of \$893,590.45 and approved Contract K-2122-104 between the City of Norman and the Oklahoma Department of Emergency Management and Homeland Security entering in to a State and Local Agreement agreeing to comply with the rules of grant administration and the federal regulations regarding purchasing and expending federal funds. Details of the grant are shown below:

<b>DR-4438-0012-OK</b>	<b>Federal Share</b>	<b>Non-Federal Share</b>	<b>Total</b>
Project Costs	\$670,192.84 (75%)	\$223,397.61 (25%)	\$893,590.45 (100%)
Management Costs	\$0.00 (0%)	\$0.00 (0%)	\$0.00 (0%)
Total Obligation	\$670,192.84	\$223,397.61	\$893,590.45

Bids were opened on March 20, 2023, and Nash Construction of Oklahoma City was the low bidder.

On April 25, 2023, City Council approved Contract K-2223-47 with Nash Construction for the Vineyards Drainage Improvement Project for \$728,216.25.

**DISCUSSION:**

Construction projects are awarded to the lowest responsible bidder. Contractor bids are determined using estimated plan quantities multiplied by the contractor's unit prices for all bid items of the contract. The total of all of these costs represents the contractor's bid. During construction, each quantity is verified in the field and the contractor is to be reimbursed based on the actual quantity of materials and/or labor used.

Of the thirty one (31) bid items, eleven (11) items had a quantity change. Two (2) quantity changes resulted in decreased costs, while nine (9) quantity changes resulted in increased costs, for an overall increase of \$204,442 or 28.07%. The overall contract increased from \$728,216.25 to \$932,658.25. Please see the attached Change Order No. 1 for a complete list of bid item cost increases and decreases.

During the early stages of construction of this project, a calculation error was discovered regarding the volume of excavation required, resulting in an increase in excavation quantity by 33%. Around the same time, the contractor finished removing the trees in conflict with this project. The final tree count increased for all categories of trees on the bid item list. During discussions with the design engineer, the initial tree count was completed by utilizing an industry standard method of counting canopies; given the dense nature of the tree growth in the project area, the number of trees to be removed resulted in a miscount. These errors and omissions by the City's private engineering consultant, Meshek, have been well documented. City staff has notified Meshek officials that the City may pursue a claim for reimbursement.

Currently, Vineyards Drainage Improvement Project, Construction (Account. 50595528-46101; Project DR0020) has an available balance in the Capital Fund of \$162,374.20. Funds for the remaining \$42,067.80 exist for Change Order 1 in the Capital Fund, Fiscal Year 2022-2023 (FYE 2023) Butler Drive Project, Construction account (50599968-46101; Project DR0026) which was completed January 24, 2023.

**RECOMMENDATION 1:**

Staff recommends that Change Order 1, increasing Contract K-2223-47 for the Vineyards Drainage Improvement Project with Nash Construction by \$204,442, be approved.

**RECOMMENDATION 2:**

Staff recommends that \$42,068 be transferred from the FYE 2023 Butler Drive Drainage Project to the Vineyards Drainage Improvement Project.