

City of Fayetteville

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Legislation Details (With Text)

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Title: Shawcroft Road Hurricane Matthew Repair - Culvert or Bridge

Sponsors:

Indexes:

Code sections:

Attachments: 1. Shawcroft design recommendation .pdf, 2. Shawcroft Culvert or bridge.pdf

Date Ver. Action By Action Result

TO: Mayor and Members of City Council

THRU: Kristoff Bauer, Deputy City Manager

FROM: Rob Stone, P.E., Public Services Director

DATE: August 6, 2018

RE:

Shawcroft Road Hurricane Matthew Repair - Culvert or Bridge

COUNCIL DISTRICT(S):

1

Relationship To Strategic Plan:

Goal 3: High Quality Built Environment

Goal 4: Desirable Place to Live, Work and Recreate

Executive Summary:

Hurricane Matthew destroyed a culvert and washed away a portion of Shawcroft Road in October 2016. The Federal Emergency Management Agency (FEMA) approved funding for the final cost of replacement of the culvert and repair of the road, however citizens in the Kings Grant community requested that a bridge be considered in place of the culvert. FEMA has indicated that they will only fund the full cost of a culvert and the City will need to pay any additional cost associated with the construction of a bridge. The current estimate for the culvert is \$829,589 and the estimate for a bridge is \$1,340,000, which means that the City will be responsible for the difference. City staff is requesting guidance from Council to determine if the construction of a bridge should be pursued. If so, staff will coordinate with the Budget and Evaluation Department to prepare a budget ordinance

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amendment in order to appropriate general funds for the bridge construction.

Background:

Hurricane Matthew destroyed a culvert and washed away a portion of Shawcroft Road in October 2016. A temporary road was constructed through private property as an emergency measure and a temporary culvert was later installed to allow access to the neighborhood. The temporary culvert remains in place but is not designed to be a long-term measure.

FEMA approved funding for the final cost to build a permanent replacement of the culvert and replace the road at an estimated cost of \$829,589. Citizens from the Kings Grant community have requested that a bridge be considered in place of the recommended culvert, primarily due to an interest in influencing the classification of a private dam located upstream of Shawcroft Road and owned by the Kings Grant Golf Course. The owner of the golf course has argued that construction of a bridge on Shawcroft Road would remove the "high hazard" classification from the golf course dam allowing it to remain in place without costly improvements. The City has put the project on hold providing the engineer working for the golf course to research this belief. The opinion provided by the engineer working for the golf course is that the construction of a bridge "may" have a beneficial impact on the classification of the golf course dam. Staff has spoken with DEQ Dam Safety staff and they have declined to comment on the issue.

FEMA indicated the City will need to pay any additional cost associated with the construction of a bridge. Specifically, FEMA will only pay \$727,659 if a bridge option is selected by the City. This amount is based on the original estimate for the culvert minus the funds already spent on the design effort for the repair. This would leave the City responsible for an estimated \$500,000 to \$600,000 in additional funds from the General Fund to construct a bridge.

City staff is requesting that Council provide guidance to determine if the construction of a bridge should be pursued. If so, staff will coordinate with the Budget and Evaluation Department to prepare a budget ordinance amendment in order to appropriate general funds for the bridge construction.

Issues/Analysis:

If the City moves forward with the culvert option, FEMA will reimburse the City for the final cost of the project, even if it is in excess of the estimate. If the City chooses the bridge alternative, FEMA reimbursement will be capped at \$727,659, leaving the City to pay any additional costs.

It should be noted that the estimated bridge cost of \$1,340,000 is a preliminary figure and is likely to increase based on the trends being seen with bid prices, economic growth, construction industry availability, etc.

A memorandum reviewing the merits and risks associated with the alternative project designs and scopes is attached.

Budget Impact:

The culvert repair option, while estimated at \$829,589, will be fully reimbursed by FEMA and State funds even if the eventual cost is higher.

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FEMA will only provide \$727,659 toward the cost of a bridge repair option. This will require an estimated additional appropriation of \$500,000 to \$600,000 from the General Fund.

Options:

Culvert Bridge Questions

Recommended Action:

Discussion regarding which final design should be pursued; culvert or bridge?

Attachments:

Shawcroft Design Recommendation Memorandum