

ITEM: Floodplain Permit application is for maintenance activities on up to 21 bridges within the City of Norman that are deemed a priority for general maintenance. The bridges are located in various floodplains across the City of Norman.

BACKGROUND:

APPLICANT: City of Norman – Department of Public Works

ENGINEER: City of Norman – Engineering Division

CONTRACTOR: Cimarron Construction

The Oklahoma Department of Transportation (ODOT) is tasked by the Federal Highway Administration (FHWA) to perform Bridge Safety Inspections for all publicly owned structures greater than 20 feet in length. Inspections are performed at least once every two years to identify any critical findings, document the bridge condition and make repair recommendations if necessary. The City of Norman currently has 80 bridges requiring inspection per FHWA criteria.

On October 26, 2021, City Council approved Resolution R-2122-45, selecting H.W. Lochner, Inc. as the City of Norman's appointed Bridge Inspection Consultant to the Oklahoma Department of Transportation for compliance with the National Bridge Inspection Standards.

H.W. Lochner completed the required Bridge Safety Inspections in December 2021, and provided the inspection reports to city staff. Data obtained from the Bridge Safety Inspections were used to identify bridges that are in need of rehabilitation, maintenance, and/or replacement. The 2021 Bridge Safety Inspection results identified 4 structurally deficient bridges, 8 functionally obsolete bridges, and 14 bridges at risk of becoming structurally deficient. Based on this data, city staff identified and ranked bridges in need of maintenance activities. This project will perform the maintenance activities on various bridges within the city limits that are deemed to be priorities for maintenance.

Maintenance activities include repairing erosion and scour, removing debris, crack repair, joint sealing and placement of rip-rap. Such maintenance activities are necessary to prolong the life of the City's bridges and the investment they represent, and are vital to insure the safety of the traveling public.

STAFF ANALYSIS:

Site located in Little River Basin or its Tributaries? yes✓ no__

In previous years, staff has bid out an annual project for maintenance on specific locations. Because of the success of the annual bridge maintenance program to-date, the average sufficiency rating of the City's bridge inventory has improved. As a result, staff has seen a proportional reduction in the scale of maintenance required at each individual location on most bridges in the City's inventory. In response, and with the intention to provide staff adequate flexibility to address maintenance issues city-wide, the FYE 2024 Bridge Maintenance Program bid was let as unit price contract modeled after other municipal bridge maintenance programs.

This means that bridge maintenance will proceed on up to 20 locations listed in the below table (1) until all of the available funds have been spent for this fiscal year. Pending contractor performance assessment and approval of funding by City Council, any remaining sites on this list will be completed in the following fiscal year. This will allow City staff more flexibility in administering the Bridge Maintenance Program.

Bid documents and specifications for the FYE 2024 Bridge Maintenance Program were advertised on June 1, 2023 and June 8, 2023 in accordance with State Law. In addition to advertising bids, staff sends bid documents to forty-three (43) contractors directly, including all known contractors specializing in bridge maintenance and repair. These contractors are located in Norman and around the state of Oklahoma. Bridge maintenance of this kind is specialized work. It is not uncommon for the City to receive one or two bids for this annual project. One (1) bid was received on June 22, 2023. The low bidder and selected contractor for this program is Cimarron Construction Company of Oklahoma City, Oklahoma. Cimarron Construction Company is a capable and qualified contractor with previous experience completing this type of work.

General maintenance activities include but are not limited to repairing erosion and scour, removing debris, crack repair, joint sealing, placement of rip-rap, guardrail repairs, handrail repairs, and concrete repair or patching. These general maintenance activities are necessary to prolong the life of the City's bridges and the investment they represent, and are vital to insure the safety of the traveling public.

Table 1 provides the list of locations anticipated to be addressed in this year's program. In some cases, there may not be any anticipated maintenance in channel, rather just maintenance to structural components of bridge such as the bridge deck, beams or wing walls. A permit for these locations is being requested in case it is determined at the time that maintenance is performed, that channel clearing or stabilization activities are required. The channel flow line and banks will not be altered at any of the sites. Material (soil and rip rap) placed in the channel will be to replace what has been washed away by erosion and scour and is considered routine maintenance. There will not be any increase in the BFE at any of the locations. If it is determined that significant channel alteration or bridge replacement is necessary, a separate floodplain application for that specific location would be required. None are anticipated at this time. The complete list of locations associated with this application is expected to take 2 years to complete. The Vineyards location that does not have a NBI number is separate from the bridge maintenance program. It was included in this application because Stormwater Division Maintenance crews will be performing channel maintenance at this location that is similar in nature to work being completed by this program. Specifically, minor tree clearing, limb removal, sediment removal from the channel and replacement of a small amount of rip rap around a bridge wing wall will be completed.

Table 1: Locations of Work

NBI	LOCATION
30152	60 th Ave NW – 0.4 miles N of Tecumseh Rd
20663	W Robinson – 0.3 miles E of 60 th Ave NW
20182	Havenbrook St – 300' E 36 th Ave NW
19584	Willow Branch Rd – 0.1 miles N of W Main St
24966	Crestmont St – 150' E of Merkle Dr
12203	W Brooks St – 0.1 miles E of Berry Rd
28743	E. Rock Creek Rd – 0.4 miles E of Porter Ave
25221	E Constitution St – 0.2 miles W of US 77
25220	E Constitution St – 0.3 miles W of US 77
22628	24 th Ave NE – 0.1 miles S of Franklin Rd
20794	48 th Ave NE – 0.4 miles N of Franklin Rd
06203	E Rock Creek Rd – 0.2 miles E of 48 th Ave NE
26487	48 th Ave NE – 0.3 miles E of Rock Creek Rd
07921	E Robinson St – 0.3 miles E of 36 th Ave NE
19288	Franklin Rd – 0.1 miles W of 72 nd Ave NE
20167	60 th Ave SE – 0.4 miles S of SH9
20014	72 nd Ave SE – 0.6 miles N of SH9
21945	84 th Ave SE – 1 mile N of SH9
09930	E Alameda Dr – 0.3 miles W of 108 th Ave NE
21494	156 th Ave SE – 0.2 S of Alameda St
N/A	Nantucket Road Vineyards Addition*

Applicable Ordinance Sections:

36-533 (e)2(a)
(e)2(e)
(e)2(r)3.....
(f)3(a)(8)

Subject Area:

Fill Restrictions in the Floodplain
Compensatory Storage
City Council Approval of Streambank
or Flow Line Modifications
No Rise Considerations

(e)2(a) and (e)2(e) Fill Restrictions in the Floodplain and Compensatory Storage – The use of fill is restricted in the floodplain because storage capacity is removed, natural drainage patterns are adversely altered and erosion problems can develop. However, Sections (b) and (c) allow fill for the construction or repair of public roads and bridges, and river or stream bank stabilization or reinforcement projects. Material brought into the channel is only to replace what has been washed away. No net fill will be brought into the floodplain for this project; therefore, no compensatory storage is required, and this project meets these ordinance sections.

(e)2(r)3 City Council Approval of Streambank or Flow Line Modifications - The following floodplain modifications require approval by City Council: Any modifications of the streambanks or flow line within the area that would be regulatory floodway whether that channel has a regulatory floodplain, unless the work is being done by the City of Norman staff as part of a routine maintenance activity. Since there will be not be any channel alteration or net increase in fill at any of the sites and this project is considered routine maintenance, City Council approval is not required.

(f)3(a)8 No Rise Considerations – For proposed development within any flood hazard area (except for those designated as regulatory floodways), certification that a rise of no more than 0.05 ft. will occur in the BFE on any adjacent property as a result of the proposed work. The Applicant's Engineer has certified that the project will not cause a rise in the BFE, which meets the ordinance requirements.

RECOMMENDATION: Staff recommends that Floodplain Permit Application #683 be approved.

ACTION TAKEN: _____