



City of Norman, OK

Municipal Building
Council Chambers
201 West Gray
Norman, OK 73069

Master

File Number: K-2021-39

File ID: K-2021-39

Type: Contract

Status: Consent Item

Version: 1

Reference: Item 28

In Control: City Council

Department: Public Works
Department

Cost: \$207,160.00

File Created: 09/17/2020

File Name: TMDL Monitoring Data Analysis and Compliance &
Monitoring Plan Update

Final Action:

Title: CONTRACT K-2021-39: A CONTRACT BY AND BETWEEN THE CITY OF NORMAN, OKLAHOMA, AND FREESE AND NICHOLS, INC., IN THE AMOUNT OF \$207,160 FOR THE LAKE THUNDERBIRD TOTAL MAXIMUM DAILY LOAD (TMDL) MONITORING DATA ANALYSIS, COMPLIANCE AND MONITORING PLAN UPDATE.

Notes: ACTION NEEDED: Motion to approve or reject Contract K-2021-39 with Freese and Nichols, Inc., in the amount of \$207,160; and, if approved, authorize the execution thereof.

ACTION TAKEN: _____

Agenda Date: 10/13/2020

Agenda Number: 28

Attachments: K-2021-39

Project Manager: Carrie Evenson, Stormwater Program

Entered by: amy.shepard@normanok.gov

Effective Date:

History of Legislative File

Version:	Acting Body:	Date:	Action:	Sent To:	Due Date:	Return Date:	Result:
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Text of Legislative File K-2021-39

Body

BACKGROUND: Lake Thunderbird was constructed by the U.S. Bureau of Reclamation (BOR) in 1965 to impound the upper reaches of Little River and several tributaries east of Norman, Oklahoma north of State Highway 9. The watershed drains 256 square miles in Oklahoma and Cleveland Counties including parts of Norman, Oklahoma City and Moore, as well as small parts of unincorporated Oklahoma and Cleveland Counties. The Lake is operated by the Central Oklahoma Master Conservancy District on behalf of the U.S. Bureau of Reclamation. In addition, the U.S. Army Corps of Engineers manages the flood control

elements of Lake Thunderbird. Finally, the Oklahoma Department of Tourism and Recreation manages the parks and recreation services at the Lake.

The Lake provides drinking water for the cities of Norman, Midwest City, and Del City. It also provides a myriad of recreational opportunities for citizens of Norman and of the State of Oklahoma as a warm water aquatic community affording quality fishing for a variety of species and as a primary body contact water body providing recreational boating and water sports activities. In order to continuing to provide these recreational opportunities and providing quality drinking water, the Lake must meet certain Water Quality Standards. These Standards are set by the Oklahoma Water Resources Board in compliance with guidelines of the U.S. Environmental Protection Agency for the purpose of maintaining the beneficial uses of water bodies in the State, including lakes and streams.

Stormwater runoff to Lake Thunderbird has increased in both quantity and velocity as the populations of the nearby cities that deliver the vast majority of the stormwater runoff to the Lake have grown. Unintended consequences of this growth include pollution in the water that runs off of streets, buildings and lawns. This water flow carries sediment which clouds the water in the Lake and reduces its capacity and depth while also carrying other pollutants such as nutrients like nitrogen and phosphorus. All three of these pollutants are causing degradation to the water quality in the streams and, in turn to the Lake.

In August 2010, the Environmental Protection Agency placed Lake Thunderbird on its 303(d) List of Impaired Waterbodies. This led to the establishment of a Total Maximum Daily Load (TMDL) by ODEQ in November of 2013.

The TMDL established waste load allocations (WLAs) for each of the cities. These WLAs established the maximum amount of each of the key pollutants of concern which each city can discharge to the Lake Thunderbird watershed: total suspended solids; total nitrogen; and total phosphorus. The TMDL also requires the cities of Norman, Oklahoma City, and Moore to develop and implement Compliance and Monitoring Plans describing how each city will comply with the TMDL requirements. The Compliance Plan defines the steps to be taken by the City of Norman (City) in order to reduce stormwater pollution in the watershed and meet the load reduction requirements set out in the TMDL. The Monitoring Plan defines steps the City will take to establish a baseline quantifying the amounts of pollutants in the runoff, and it also establishes a mechanism to monitor the effectiveness of Best Management Practices (BMPs) put into effect by the City as a result of its compliance efforts. ODEQ approved the City's TMDL Compliance and Monitoring Plans on September 21, 2016, and required that the Monitoring Plan be fully implemented by November 12, 2016.

Implementation of the Plans is based on a 5 year permit cycle. The City began the first 5-year cycle by implementing a Monitoring Plan to establish a baseline for flow and pollutant loading of streams flowing from or through the City to Lake Thunderbird. BMPs were also implemented as part of the City's Compliance Plan beginning with education campaigns and enhancing programs already in place, progressing to increasing cleaning efforts. The efforts during the first 5 years were aimed at reducing pollutants in stormwater runoff at the source. The Plans and the results of the first 5 years of monitoring must be reviewed at the end of this initial 5 year

cycle to determine where best to establish structural BMPs during the next 5 year cycle.

When the MS4 permit is renewed or every 5 years, whichever comes first, the City must submit a compliance evaluation report for ODEQ review and approval. If this report does not show "significant progress" towards meeting the load reduction goals, the City will need to submit an updated Compliance Plan and Implementation Plan within 6 months of that report.

DISCUSSION: The Public Works Department, Stormwater Division prepared a Request for Proposals (RFP) to solicit the services of a qualified firm to review and analyze monitoring data generated during Years 1-5 of the City of Norman's Lake Thunderbird TMDL monitoring program, determine compliance with TMDL's load reduction requirements, identify potential changes to the City of Norman's TMDL Compliance and Monitoring Plans, and update both plans and the associated Quality Assurance Project Plan (QAPP) as necessary.

Five (5) proposals were received for this project. The Selection Committee included three (3) staff members consisting of Michele Loudenback, Stormwater Program Specialist, Public Works Department; Carrie Evenson, Stormwater Program Manager, Public Works Department; and Scott Sturtz, City Engineer, Public Works Department; and two (2) private citizens including Amanda Nairn, Vice Chair of the Environmental Control Advisory Board; and Courtney Dekalb-Myers, Horticulture Educator, Cleveland County OSU Extension Services. The Selection Committee members independently scored each statement of qualifications on a point scale as defined in the RFP. Based on these scores, three (3) firms were selected to be interviewed by the Selection Committee. The three (3) firms were ranked based on their interviews, and Freese and Nichols, Inc., was selected for this project. Freese and Nichols, Inc., was selected based upon their experience working with other municipalities on similar projects and the proposed methods and procedures for completing the project.

Required services will include the following:

1. Review and analyze all available water quality monitoring data;
2. Calculate waste load allocations using maximum daily load;
3. Determine compliance with TMDL's load reduction requirements;
4. Identify potential changes to the City of Norman's TMDL Compliance and Monitoring Plans, and update both plans and the associated QAPP;
5. Recommend location and type of potential structural water quality control measures; and
6. Evaluate and draft report for ODEQ summarizing progress toward compliance with the TMDL and progress toward achieving the WLAs and load reduction goals.

Staff began negotiations with Freese and Nichols, Inc. in August 2020. Budgeted Capital Sales Tax funds in the amount of \$207,160 are available for this project in Drainage Projects, Design (Account 50599968-46201; Project DR0061). The project is scheduled to begin on October 15, 2020.

RECOMMENDATION: Staff recommends approval of Contract K-2021-39 with Freese and Nichols, Inc., for completion of the Lake Thunderbird Watershed TMDL Monitoring, Years 6-10, project.

