# Memorandum

Date:

April 13, 2023

To:

**Urban Subcommittee** 

From:

Mark Lindemann, District Engineer

Subject:

Urban Subcommittee Meeting Minutes – April 2023

The Urban Subcommittee met on Thursday, April 13, at the NRD Office, at 5:00 pm. Subcommittee members participating included John Yoakum- committee chair, Gary Aldridge, Melissa Baker, Stacie Sinclair, Susan Seacrest, and Ray Stevens. Ray Stevens had to leave the meeting early and was not present to vote on items 12b through 12d. Others participating included NRD staff Paul Zillig, David Potter, Al Langdale, Bryce Jensen, Logan Hutt, Drew Ratkovec, and Mark Lindemann. Director Yoakum called the meeting to order at 5:02pm. There were four (4) items the Subcommittee took action on, and several reports. A quorum was present for the meeting.

12a. Consideration of the Annual Workplan for the Stormwater Interlocal Agreement with the City of Lincoln [ACTION] — Lindemann described how the City of Lincoln and NRD have an Interlocal Agreement on Stormwater Management in place that is updated annually. The agreement lists the activities the two agencies work together on and who is the lead for the activity. Lindemann stated that much of the agreement is the same as past years and he and other staff provided details of new or updated activities in more detail:

The following activities which are new or updated were mentioned:

- Construction of South Salt Creek Stream Stability Project SSC#6 in Wilderness Park. Total construction and observation costs estimated at \$850,000. [#7]
- Lynn Creek Stream Stability Project Master Plan #9 Project, located near N. 9<sup>th</sup> Street. Total construction and observation costs estimated at \$175,000. [#7]
- Costs for Dead Man's Run Section 205 Flood Reduction Project were recently updated by the U.S.
   Army Corps of Engineers (USACE). [#7.1] A separate report on the Deadman's Run project was discussed later.
- The Upper Salt Creek Watershed study was added to Item #9, "Watershed Master Planning".
- Under "Salt Creek Floodplain Resiliency" (Item #10), a workplan for guidance on future measures for flood mitigation has been added.
- The annual maintenance for the City of Lincoln Wetland Bank has been updated to include additional responsibilities for maintenance and operation of the wetland and improvements to the outlet structure. [#16]

Questions and comments were shared by the Subcommittee members with staff responding. The Subcommittee reviewed and discussed the Work Plan (attached).

It was moved by Stevens, seconded by Baker, and unanimously approved by the Subcommittee to recommend that the Board of Directors approve the Fiscal Year 2023 – 2024 Work Plan for the Interlocal Agreement on Stormwater Management with the City of Lincoln.

12b. Consideration of an Agreement with Lincoln Youth Complex for Oak Creek Drainage Replacement Structures [ACTION] — Lindemann mentioned the previous report from the February Subcommittee meeting where staff updated Directors on the proposed Lincoln Youth Complex (LYC) north of Oak Lake and adjacent to Oak Creek. There are currently three non-functioning drainage structures on Oak Creek that the NRD operates and maintains that will require replacement. The replacement was on hold until the past couple of years until more was known about the LYC project. With the LYC project planning and design commencing, the NRD has worked with the LYC to draft an agreement to include the replacement of the Oak Creek drainage structures as part of the LYC project. In the agreement the NRD will reimburse for costs for permitting and construction associated with the portion of pipes from top of bank to the channel outlet. The cost for the replacement structures will be determined during design (see item 12c). Questions were asked by the Subcommittee members on the LYC project and the proposed agreement with staff providing further details. The proposed agreement is attached.

It was moved by Seacrest, seconded by Baker, and unanimously approved by the Subcommittee to recommend that the Board of Directors approve the Agreement between the Lincoln Youth Complex and the NRD, for the replacement of the Oak Creek drainage structures.

12c. Consideration of a Professional Services Agreement with Olsson for the design of Oak Creek Drainage Replacement Structures for the Lincoln Youth Complex Project [ACTION] — Lindemann stated that as part of the agreement with the LYC for the Oak Creek Drainage Structure replacement in item 12b, the NRD would retain Olsson for the design of the Oak Creek drainage structures to be constructed as part of the LYC Project. Olsson is also the designer engineer for the LYC project and very familiar with the project site details. NRD staff contacted Olsson to provide a proposal and fee for the design, permitting, and plan preparation for inclusion into the LYC project. Olsson's proposal is at a cost not to exceed \$38,879. See attached professional services agreement, scope, and fee from Olsson. Questions were asked about the Olsson proposal as well as the LYC project, with staff responding.

It was moved by Seacrest, seconded by Baker, and unanimously approved by the Subcommittee to recommend that the Board of Directors approve the Professional Services Agreement with Olsson, in an amount not to exceed \$38,879 for the design of the Oak Creek Drainage Structures along the Lincoln Youth Complex, pending legal counsel review.

12d. Consideration of Bids for Deadman's Run Drainage Pipe Replacement Project near Cotner Boulevard [ACTION]— Jensen explained that staff inspections of Deadman's Run observed a drainage structure in need of repair. The existing pipe consists of a 36-inch Reinforced Concrete Pipe (RCP) to a 17-foot length of 42-inch section of corrugated metal pipe(CMP) that outlets into Deadman's Run near Cotner Boulevard. The pipe drains stormwater from Cotner Boulevard roadway into the Deadman's Run channel. The 17-foot portion of 42-inch CMP will require replacement and connection to the existing 36-inch RCP. Jensen has contacted contractors to review the location and provide bid proposals. Jensen received three proposals (attached) from General Excavating, Nebraska Digging, and Yost Excavating. General Excavating's bid of \$17,050 was the lowest bid. Staff has reviewed the bids and recommends the low bid from General Excavating of \$17,050. Directors asked staff about bidding process requirements with Zillig

describing NRD operating policy requirements based on project size and cost. Jensen replied to questions on contractor qualifications and access. Jensen also noted no permits and additional access will be required. Construction is expected to start in mid-May and completed in about 1 month.

It was moved by Baker, seconded by Seacrest, and unanimously approved by the Subcommittee to recommend that the Board of Directors approve the low bid from General Excavating, in an amount not to exceed \$17,050 for the Dead Man's Run Drainage Pipe Replacement Project near Cotner Blvd.

### **Reports**

#1

## Dead Man's Run Flood Reduction Project Update-

Lindemann explained that after the City and NRD reviewed the 65% design plans from USACE, a plan review meeting was held March 16 with USACE, City, and NRD teammates. The review meeting dove into many details of the design that included alignment, ROW, the flume, drainage structures, the new access road for the grain elevators and businesses, and an updated schedule. Several follow-up action items were developed post-meeting for the USACE, City, and NRD. In the next few months there will be meetings to discuss coordinating details with the design teams of the Flood Reduction Project and the 48<sup>th</sup> and 38<sup>th</sup> Street bridge projects as well as with the 33<sup>rd</sup> and Cornhusker project teams. ROW acquisition processes will also be starting soon. The NRD and City will also need to hold a public information meeting this summer to provide an update to the community. The current project schedule has a planned award date of July 2024 and project completion of July 2025.

On March 31, the USACE provided a cost estimate for the Deadman's Run Flood Reduction Project (FRP). The current estimate has increased from \$14.5M to \$23.7M. The estimate includes construction, engineering and design, construction supervision and administration, and a contingency of 15%. The USACE is funding \$10M for the FRP, and the City and NRD will split the remaining portion at 50/50 percent.

Major components of the "Local Project" of Deadman's Run includes the design and construction of 48<sup>th</sup>, 38<sup>th</sup>, and 33<sup>rd</sup> Street bridges, landrights, and utility relocation. It was noted that the detention basin at Fleming fields was determined to not be necessary and will be removed from the project. RTSD's 33<sup>rd</sup> and Cornhusker Railroad Overpass project is planned to occur after the Deadman's Run project, at a date yet to be determined. The current estimate for the Local Project is \$10M. The local project is eligible for reimbursement from a \$5.8M Water Sustainability Fund grant, with the remaining portion split 50/50 between the City and NRD.

The increase in project estimates has been attributed to the refining of designs, addition of new elements, and general inflation in material and construction costs. Engineering firms the NRD works with have confirmed the 50% increase in construction projects over the last couple of years.

## Deadman's Run Flood Reduction Project Stream Stability Design Review-

Lindemann mentioned that the City and NRD had a summary meeting for Intuition and Logic's review of the FRP stream stability design and maintenance requirements of the 65% plans provided by the USACE. Intuition and Logic's review determined that the overall design is acceptable and also provided recommendations for inclusion of riparian vegetation within the channel. Intuition and Logic gave three options (see options attached on document pages 31 & 32) that included planting woody riparian vegetation within the riprap (option1), within the riprap and on the low flow benches (option 2), and riparian vegetation within riprap, low flow benches and on the channel slopes (option 3). The intent of the vegetation is to protect the channel naturally with no maintenance, reducing NRD staff time and resource

needs. Although having a robust riparian vegetated channel is desirable, it would require USACE to revise modeling and analysis at several iterations. Lindemann explained that the addition of riparian vegetation adds more "roughness" to the channel, which results in decreasing the channel conveyance (flow) as it is currently designed and would require additional channel widening to keep the base flood elevations to acceptable levels to keep properties out of the floodplain. This channel widening increases with each option presented (i.e., the more riparian vegetation, the more the channel would require widening). NRD staff feels the rework and additional analysis required by the USACE to look at these options would slow the progress of the project and the additional excavation required to widen the channel would increase project costs significantly. It is also unclear how the project would be inspected by USACE in the future, as there are currently no formal standards that utilize the type of vegetation as suggested by Intuition and Logic. It was noted that the USACE has modified the project to avoid tree removal on the left bank in the UNL East Campus property and has a dedicated test plot within the channel to plant riparian vegetation. Directors also mentioned the importance of the project and that previous staff tours of the project site were very helpful in understanding the project. Zillig noted that Directors interested in visiting the project should contact staff, who would be happy to give a tour.

#### #2

#### Flood Alert Preparations-

Zillig addressed the group and explained that at this time of the year the NRD prepares for flood season. As part of preparations the NRD held a Flood Alert Meeting with staff to go over procedures and the roles and responsibilities of staff. Zillig gave an overview of the Salt Creek Watershed, flood alert procedures and history of flooding on Salt Creek. Also discussed were the USGS stream gauges used to monitor and serve as a Flood Warning System for the Salt Creek Levee Project. A map was used to show the Salt Creek Levee Project and the operation of drainage structure sluice gates. Zillig describes staff roles and responsibilities and the tools used to monitor during a flood event. The District also has contractors on call to provide materials and assistance if the need arises.

#### #3

Antelope Creek 40th to Scott Project Update-

Lindemann described the progress of the channel repair project and provided pictures taken that day. The Contractor has placed the first row of retaining wall blocks on both sides of the channel up to about half the project length. The contractor is also preparing the channel bed for the channel liner material. Lindemann described the size of blocks used for the retaining wall and explained the material requirements for the wall backfill.

The Subcommittee then briefly discussed the Salt Creek Resiliency Subcommittee.

Meeting adjourned at 6:26 pm.

cc: Dave Landis Steve Seglin Corey Wasserburger