

## CITY OF NORMAN, OK CITY COUNCIL SPECIAL MEETING

Municipal Building, Executive Conference Room, 201 West Gray, Norman, OK 73069

Tuesday, June 28, 2022 at 5:00 PM

### AGENDA

It is the policy of the City of Norman that no person or groups of persons shall on the grounds of race, color, religion, ancestry, national origin, age, place of birth, sex, sexual orientation, gender identity or expression, familial status, marital status, including marriage to a person of the same sex, disability, retaliation, or genetic information, be excluded from participation in, be denied the benefits of, or otherwise subjected to discrimination in employment activities or in all programs, services, or activities administered by the City, its recipients, sub-recipients, and contractors. In the event of any comments, complaints, modifications, accommodations, alternative formats, and auxiliary aids and services regarding accessibility or inclusion, please contact the ADA Technician at 405-366-5424, Relay Service: 711. To better serve you, five (5) business days' advance notice is preferred.

### CALL TO ORDER

### AGENDA ITEMS

- 1. DISCUSSION REGARDING SUBMITTING AN APPLICATION FOR A HAZARD MITIGATION GRANT TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR PHASE I IMPROVEMENTS PLANNED TO LOWER IMHOFF CREEK AND THE USE OF AMERICAN RESCUE PLAN ACT FUNDS FOR PHASE 2 OF THE PROJECT.
- 2. CONSIDERATION OF ADJOURNING INTO AN EXECUTIVE SESSION AS AUTHORIZED BY OKLAHOMA STATUTES, UNDER TITLE 25 § 307(B)(4) TO DISCUSS PENDING LITIGATION ASSOCIATED WITH CITY OF NORMAN V. RON ASHLEY, CLEVELAND COUNTY DISTRICT COURT CASE CJ-2021-337, IN THE AMOUNT OF \$210,000.

### ADJOURNMENT



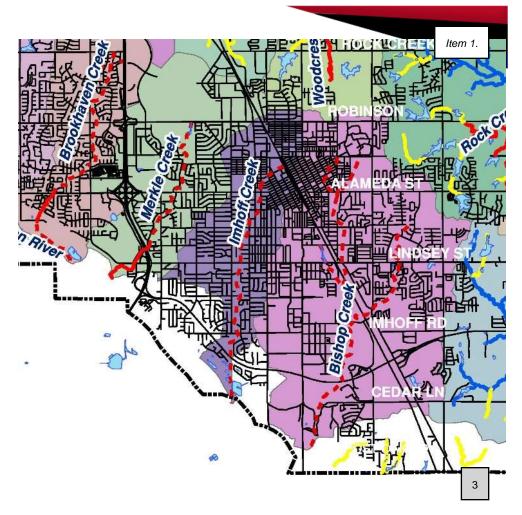
## Lower Imhoff Creek **Stream Bank Rehabilitation Project** (Council Agenda Items 18 & 19) **City Council Study Session** June 28, 2022





## Imhoff Creek

- Begins at Robinson Underpass and continues to the Canadian River
- Approximately 4.3 miles through Norman
- Collects stormwater from older sections of Norman
- Runs through Andrews Park
- Portions are WPA constructed channels
- Multiple repetitive loss structures
- Has 1 mile of eroded stream banks



## Imhoff Creek Time Line



• 2009 - Stormwater Master Plan complete

Item 1

- 2015 Council approved contract to do hydraulics and hydrology for Imhoff Creek
- 2017 Lindsey Street bridge constructed
- 2017 Repairs to Imhoff Creek segment south of Lindsey Street completed
- 2021 Imhoff Road bridge closed due to damage. \$1.8 million
- 2021 City Council approved contract with Meshek and Associates for the design of Lower Imhoff Creek Phase1



# Stormwater Master Plan

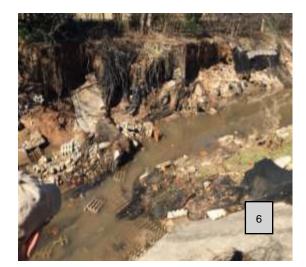
- Identified all streams in Norman
- Identified significant problems and solutions along the streams
- Top 5 identified projects
  - 1. McGee and Lindsey Flooding (Lake McGee): Completed
  - 2. Indian Hills Road and Little River Mobile Home Park in Floodplain purchased and Removed: Completed
  - 3. Main Street Bridge over Brookhaven Creek: Completed
  - 4. Sinclair Drive and Beaumont Drive add pipe to prevent flooding: Not Completed\*
  - 5. IC-1 and IC-2 Imhoff Creek North of Highway 9 Bank Stabilization: Not Completed



# Imhoff Creek Channel Liner Repair

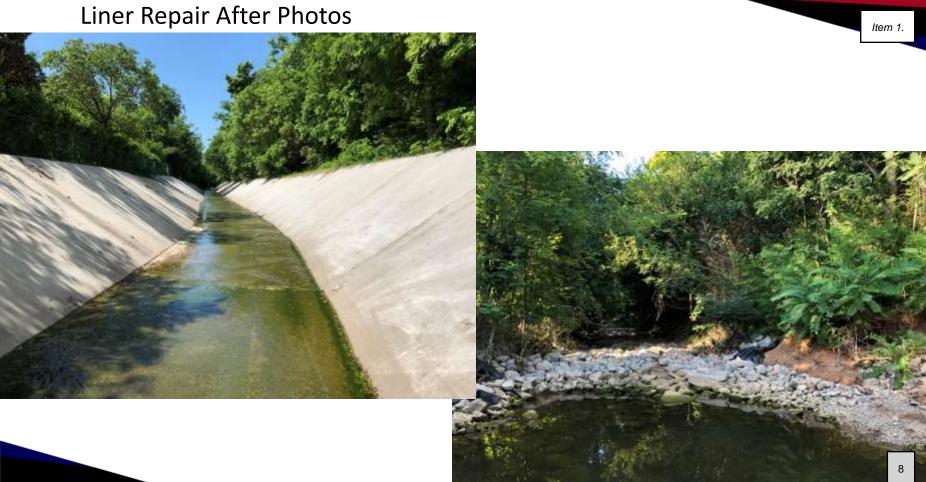
- Not identified in SWMP
  - Considered stable in 2009
- Previously lined with articulated concrete block
- Liner failed during 2015 flood
- FEMA-funded project (disaster relief funds)
- Council approved Contract No. K-1617-127 with A-Tech Paving for \$451,245 on July 25, 2017, to complete repairs
- Benefits:
  - Reduced erosion potential
  - Protected adjacent properties
  - Federally funded





# Liner Repair Project Location





# Lower Imhoff Creek Project

### Phase I

- From Imhoff Rd Bridge downstream to SH-9E
- Approximately 2200 feet
- Estimated cost \$3.8 million

### **SWMP Ranking**

- Number 5 ranked project in City
- Number 1 ranked project in Ward
- Number 2 ranked project in Watershed



### Phase II

- From Imhoff Road Bridge
- Approximately 2000 feet north
- Estimated cost \$4.4 million

# Example of Current Issues



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# Example of Current Issues





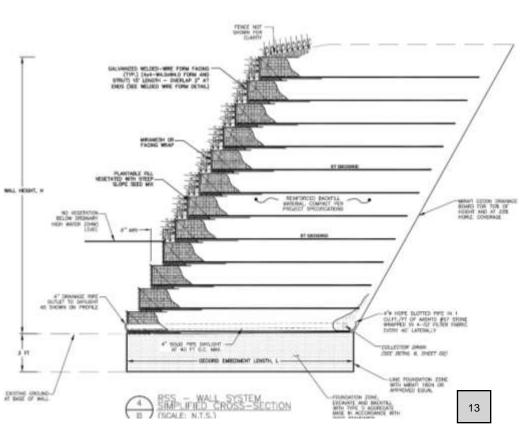
# Example of Current Issues



# **Proposed Project**

- Design minimizes the amount of adjacent property necessary to complete the project
- Stream stabilization using natural products to maintain habitats
  - Walls that allow vegetation coverage
  - Stone drop structures/cross vane
  - Native vegetation





## Lower Imhoff Creek Project Phase 1 (Council Agenda Item 18)

Phase I

- From Imhoff Road Bridge downstream to Highway
  9
- Approximately 2200 feet
- Estimated cost \$3.7 million
- Seeking FEMA Hazard Mitigation Grant Program (HGMP) funding at 90% Federal funds



**Proposed Schedule** 

- June 2022 HMGP application submittal
- August 2022 Council accepts HMGP grant (\$3.4M)
- September 2022 Bid project
- December 2022 Begin construction
- December 2023 Complete construction

## Lower Imhoff Creek Project Phase IF (Council Agenda Item 19)



### Phase II

- From Imhoff Road Bridge approximately 2000 feet north
- Estimated cost \$4.4 million



**Proposed Schedule** 

- June 2022 Appropriate ARPA grant funds (\$3M)
- July 2022 Engr contract amendment with Meshek to Council
- July 2023 Bid project
- September 2023 Begin construction
- September 2024 Complete construction

## **Previous Funding Approach**

- FYE 2023 CIP Budget includes \$550,000 per year for 7 years to pay for design and construction of Lower Imhoff Creek Project
  - Following years to be approved by Council in CIP budget
  - Total funding \$3,850,000
- Applied for FEMA Building Resilient Infrastructure and Communities (BRIC) Grant for Phase I
  - 75% Federal funds
- Meshek recommended FEMA HMGP Grant application in place of BRIC Grant for Phase I
  - 90% Federal funds
  - HMGP a better fit for this project
- American Rescue Plan Act of 2021 (ARPA) funds
  - September 21, 2021 Council Study Session Staff presented Stormwater Projects that may be considered for ARPA funds – Lower Imhoff Creek number one project
  - City Council programmed \$3,000,000 for Stormwater Capital Projects





## Current Funding Proposal

### Funding with HMGP Grant and ARPA and CIP Funds

Grant & ARPA	Phase I		Phase II		Total	
Project Total	\$	3,775,000	\$	4,400,000	\$	8,175,000
HMGP Grant Award	\$	3,402,000	\$	-		
ARPA	\$	-	\$	3,000,000		
Sub Total	\$	3,402,000	\$	3,000,000	\$	6,402,000
City CIP Budget Funds						
HMGP Match	\$	373,000	\$	-		
CIP Funding	\$	-	\$	1,400,000		
Sub Total	\$	373,000	\$	1,400,000	\$	1,773,000
TOTAL	\$	3,775,000	\$	4,400,000	\$	8,175,000
Project Funded	Yes		Yes			
	When Grant is					
Timeline to fund	approved		In FYE 25			



# **Council Direction?**

- Item 18: Submit revised FEMA HMGP Grant application?
  - \$3.4 million (90/10 federal-local funding)
- Item 19: Appropriate ARPA grant to Imhoff Creek Project?
  - \$3.0 million (80/20 federal-local funding)





### CITY OF NORMAN, OK STAFF REPORT

MEETING DATE: 06/28/2022

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

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

TITLE: CONSIDERATION OF APPROVAL, ACCEPTANCE, REJECTION, AMENDMENT, AND/OR POSTPONEMENT OF RESOLUTION NO. R-2122-134 AUTHORIZING THE CHAIRMAN TO SUBMIT A HAZARD MITIGATION **APPLICATION** GRANT PROGRAM GRANT ΤO THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA).

#### **BACKGROUND:**

A Storm Water Master Plan (SWMP) was developed for the City of Norman by PBS&J and accepted by City Council in November 2009. Among other things, this plan delineated the various watersheds in the City, identified stream segments which needed restoration and improvement, and identified projects to provide this restoration including concept designs. As stated in the SWMP, solutions for problems in the Imhoff Creek watershed are by far the most significant compared to solutions in other watersheds. One such stream segment is the Lower Imhoff Creek between Lindsey Street and Imhoff Creek's confluence with the Canadian River.

In the Storm Water Master Plan, Lower Imhoff Creek is divided into two problem areas, or reaches: IC-1 and IC-2. IC-1 is that portion of Imhoff Creek between State Highway 9 and its confluence with the Canadian River. IC-2 is that portion of Imhoff Creek between State Highway 9 and a point some 2,000 linear feet north of Imhoff Road. IC-2 is the focus of the current project (see attached map).

The SWMP recommends design and installation of stream bank stabilization techniques along stream segment IC-2. The identified problem in the SWMP for IC-2 is "4,200 LF of severe bank erosion along both banks beginning at the upstream face of Highway 9 to approximately 2,000 LF upstream of Imhoff Rd. The erosion along the banks has caused property fences and trees to fall into the creek."

As Imhoff Creek adjusted to changing upstream conditions, down cutting and widening resulted in extreme bank and bed erosion, which are characteristic in this portion of Imhoff Creek. Continued development along the length of the stream has exacerbated the runoff problems leading to trees and fences falling into the creek, loss of property and threats to infrastructure including the Imhoff Road bridge. In July of 2021, a critical failure of this bridge due to increasing erosion problems, led to this road being closed until April of 2022 and a repair bill for just under \$2 million dollars to the City. In the past, conventional wisdom directed efforts away from form and function toward armoring of stream channel bottoms and slopes to address in-stream erosion problems. This approach

increased water velocity and tended to take problems downstream, which eventually worked back upstream as erosion occurring at the interface of the natural stream and the hard armor surfaces. Utilizing more natural stream restoration techniques, which provide for form and function, has proven to be a more effective method of urban stream repair.

On June 9, 2015, Council approved Contract No. K-1415-134 by and between the City of Norman and Meshek & Associates, LLC, in the amount of \$143,000.00. The contract services included:

- Kickoff Meeting and Channel Walk
- Data Collection and Processing
- Easement and Right-of-Way Evaluation
- Hydrology and Hydraulic Modeling
- Ecological Inventory
- Development of Stream Restoration Alternatives and Recommendations
- Council and Public Meetings
- Surveying and Geotechnical Investigations

On June 30, 2017, Meshek and Associates submitted the Lower Imhoff Creek Study Final Report. On July 11, 2017, City staff and Brandon Claborn, Principal Engineer for Meshek and Associates, presented the findings of this report to City Council. The conceptual designs and priority recommendations presented in the report will be used to perform engineering design and construction plans for the Phase I stream improvements through this amendment.

On August 8, 2017, Council approved Resolution No R-1718-21 accepting the Lower Imhoff Creek Study Final Report. The Lower Imhoff Creek Study Final Report recommended several preventative and mitigation recommendations based on the data gathered during this study as follows:

- Implementation of a 5-year Monitoring Plan to evaluate the rate of degradation to channel;
- Provide training to City maintenance staff to learn new techniques for maintaining more natural stream restoration devices such as gabion walls, cross vanes, and others;
- Design and construct stream mitigation improvements in two phases:
  - Phase 1 will begin at Imhoff Road and end approximately 1200 feet downstream of Imhoff Road. This section should be addressed first due to the risk to existing infrastructure. Estimated cost is \$3,150,300.00.
  - Phase 2 will begin upstream of Imhoff Road and end at the end of the improved channel. Estimated cost is \$4,347,950.00

Construction of the stream mitigation improvements were divided into two phases due to the cost to construct the entire project at one time. Meshek and Associates recommended that Phase I of the improvements be addressed first because the greatest impact to existing infrastructure can be found in this area, including potential impacts to Imhoff Road bridge and several sewer lines. Homes on the east side of the Phase I project area are also located closer to the streambank than those in the Phase II project area.

On April 27, 2021, City Council approved Amendment No. 1 to Contract No. K-1415-134 with Meshek and Associates to insure that all three recommendations were undertaken. The first two

recommendations have since been completed and the third phase will be addressed through the completion of the following tasks:

- Federal Emergency Management Agency (FEMA) Grant Application and Preparation Services for construction costs and project coordination
- Detailed Topographic Survey
- Environmental (404 permitting)
- Hydrology & Hydraulic Modeling
- Preparation of a Conditional Letter of Map Revision (CLOMR)
- Geotechnical Report
- Preliminary Plans
- Final Construction Plans and Bid Documents
- Erosion Control Workshop
- Bank Erosion Monitoring Site Installation
- Project Management

### DISCUSSION:

Due to the importance of this project, Council appropriated \$550,000 per year for seven years beginning with the 21/22 budget. With these allocations, design for Phase I is already underway with 90% plans completed and paid for through amended Contract No. K-1415-134. Given the estimated costs of construction for each phase of this project and the limited funds available for stormwater projects in the City's Capital Fund, City staff has been pursuing alternate sources of funding beginning with Phase I. FEMA has a long-term hazard mitigation planning and projects following a Presidential major disaster declaration Hazard Mitigation Grant Program (HMGP). One of the goals of HMGP is to support communities by enabling large projects such as this one. As part of the amendment, City staff worked with Meshek and Associates to complete an application for HMGP program funding for Phase I construction costs and reimbursement of design costs as part of the Pre-Award services listed above.

This is an opportunity to apply for Federal funding assistance, which if secured, would greatly improve the conditions of Imhoff Creek and protect vital infrastructure, including Imhoff Road bridge from future erosion and several sanitary sewer lines, as well as help prevent further loss of resident property as their backyards continue to erode.

The FY 2021 HMGP Program provides Federal funds only for reimbursement of project costs that have already been incurred as a result of work complete in accordance with the Scope of Work. Not all project costs will be reimbursed with HMGP funds because a non-Federal funding match is required.

This grant for Phase I (south of Imhoff Road) fell under the Consolidated Appropriations Act of 2022, which granted a minimum of 90% federal cost share for any emergency or major disaster declared during or having an incident period between January 1, 2020 and December 31, 2021. This grant is itself divided into two phases. The first, Phase A, is design. Phase A total cost of \$402,712, including 90% Federal funds in the amount of \$364,347.30 and 10% local match of \$38,364.70. The attached City of Norman Match Commitment Letter is for the local match of Phase A. The total cost of Phase A has already been paid for by the City and, if awarded the grant, would result in a reimbursement of up to \$364,347.30. The construction phase, Phase B, would award grant money in the amount of \$2,884,185, of which \$2,593,860 is the 90% federal funds and \$290,325 is the 10% local match. If

awarded, funds are available in project DR0062, 50595531-46101 for local match for both phases. While this is technically one grant, there are two separate applications and City of Norman Match Commitment Letters, one for Phase A (Design) and one for Phase B (Construction). The match commitment letter for Phase B will not be requested until Phase A is completed. Phase A should be completed by August 2022

If awarded, this grant along with funds already procured from council action, would allow Phase I of the Lower Imhoff rehabilitation to be completed. The remaining balance of funds could be applied to begin design of Phase II, the 2000-foot area above Imhoff Road bridge. The City will continue to search for alternative funding methods, or with currently available Federal ARPA funds that the city has procured, likely have the funding to complete the entirety of the project without a break in the project.

The application and resolution do not commit the City of Norman to accepting funds. Such a commitment will be required if the City of Norman enters into a grant agreement, a decision that would return to Council for approval if the grant is secured. If the City is awarded federal HMGP grants for Phases A and B, construction of improvements in Imhoff Creek will begin around December 2022.

### **RECOMMENDATION 1**:

Staff recommends approval of Resolution No. R-2122-134, authorizing the submittal of Hazard Mitigation Grant Program Grant Applications to FEMA and approval of financing commitment letters of agreement under the program.

Reviewed by: Jason Murphy, Stormwater Program Manager Shawn O'Leary, Director of Public Works Clint Mercer, Chief Accountant Anthony Francisco, Director of Finance Kathryn Walker, City Attorney Darrel Pyle, City Manager

#### **RESOLUTION R-2122-134**

A RESOLUTION OF THE CITY OF NORMAN AUTHORIZING THE MESHEK AND ASSOCIATES, L.L.C. TO SUBMIT, AS AN AGENT FOR THE CITY OF NORMAN, A HAZARD MITIGATION GRANT PROGRAM GRANT APPLICATION FOR TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FOR PHASE I IMPROVEMENTS PLANNED TO LOWER IMHOFF CREEK.

- 1. WHEREAS, the Federal Emergency Management Agency (FEMA) has a new pre-disaster hazard mitigation program, DR-4438, entitled "Hazard Mitigation Grant Program (HMGP)" and, pursuant to the Consolidated Appropriations Act of 2022, FEMA reimburses a minimum of 90% federal cost share for any emergency or major disaster declared during or having an incident period between January 1, 2020 and December 31, 2021; and
- 2. WHEREAS, in the City of Norman Storm Water Master Plan, Lower Imhoff Creek between Lindsey Street and Imhoff Creek's confluence with the Canadian River, was identified as a stream segment requiring restoration and improvement; and
- 3. WHEREAS, the City of Norman Storm Water Master Plan recommends design and installation of stream bank stabilization techniques along IC-2, that portion of Lower Imhoff Creek between State Highway 9 and a point some 2,000 linear feet North of Imhoff Road; and
- 4. WHEREAS, the City of Norman, pursuant to Contract K-1415-134 and its various amendments, has worked with Meshek and Associates, L.L.C., to design these solutions and to complete an application for BRIC program funding for construction costs and design costs relating to improvements planned for Lower Imhoff Creek, IC-2; and
- 5. WHEREAS, the City of Norman's improvements to Lower Imhoff Creek, IC-2, are within the bounds of the FEMA BRIC funding opportunity, and the City wishes to apply for reimbursement of funds to cover a portion of the design and construction cost for Phase I of the planned improvements; and
- 6. WHEREAS, FEMA directs that, upon award, applicants shall commit to an agreement wherein applicants agree to provide ten percent (10%) local share of the project costs, to oversee implementation of the project upon award, and to guarantee annual maintenance for the life of the project.

#### NOW, THEREFORE, BE IT RESOLVED BY THE NORMAN UTILITIES AUTHORITY:

<u>SECTION 1</u>. The City of Norman hereby finds that it is in the City of Norman's and public's interest in health, safety and welfare of the community to file the HMGP Grant Application with the FEMA to seek reimbursement of design and construction costs relating to improvements planned to the Lower Imhoff Creek, IC-2.

<u>SECTION 2</u>. The City of Norman understands and supports the application that will be submitted and finds:

- (a) The City of Norman has legal authority to enter into an agreement with FEMA to receive a grant; and
- (b) The City of Norman is able to provide the minimum 10% non-federal cost share specified in the HMGP Grant for this application.

<u>SECTION 3</u>. The City of Norman hereby authorizes and directs the City Manager or his designees, the Director of Public Works or his agents to work with Meshek and Associates, L.L.C., to:

- (a) file and sign, for, on behalf of, and as agent of the City of Norman, a HMGP Grant Application, DR-4438, to FEMA for reimbursement of design and construction costs associated with Phase I of the Lower Imhoff Creek project;
- (b) provide the assurances, certifications, and commitments required for the HMGP Grant Application; and
- (c) represent the City of Norman in carrying out the City of Norman's responsibilities under the assurances provided to FEMA.

<u>SECTION 4</u>. The City of Norman will work with FEMA to meet established deadlines required for entering into a grant agreement to obtain the aforementioned grant reimbursement funding.

PASSED AND ADOPTED this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

Mayor Pro Tem

ATTEST:

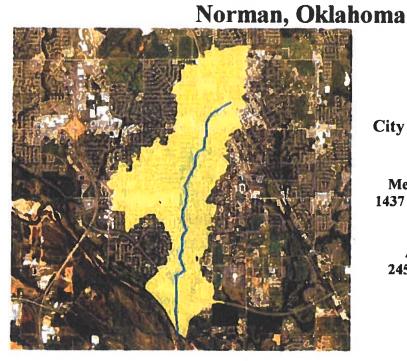
Brenda Hall, City Clerk







## LOWER IMHOFF CREEK HYDRAULIC & HYDROLOGIC STUDY PROJECT

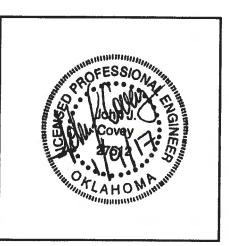


<u>Prepared For:</u> City of Norman, Oklahoma

<u>Prepared By:</u> Meshek & Associates, PLC 1437 S Boulder Ave, Suite 1550 Tulsa, OK 74119 & Amec Foster Wheeler 245 N Waco Ave, Suite 110 Wichita, KS 67202



Meshek & Associates, PLC



Amec Foster Wheeler

Lower Imhoff Creek Study January 2017

1







private landowners. Further discussion and details of this recommendation are provided in the Improvement Concepts section of this report.

- 6. A strong ammonia odor was observed at station 10+39 of the new survey profile established by Lemke. This is approximately 500 feet downstream of the pedestrian bridge.
- 7. During the field investigation it was noted that it will be difficult to address the problem immediately downstream of Imhoff Drive on the left descending bank without addressing at least 450 ft of channel. The proposed mitigation improvements discussed in later sections of this report include improvements for this whole stream reach to address this issue.

In addition to the field investigation Amec Foster Wheeler also performed a review of the topographic information to highlight potential problem areas. These areas were identified by developing slope grids of the available topography using GIS processes. Areas identified during the field investigation were used as reference points during the analysis. Multiple areas were flagged in which unstable vertical streambanks were present. The conceptual solutions developed as part of this project were then selected to address these locations. Figure 3 below depicts in yellow an example of some of the locations that were identified as problem areas in the analyses. The areas highlighted in yellow indicate locations in which excessive bank erosion and instability exist.

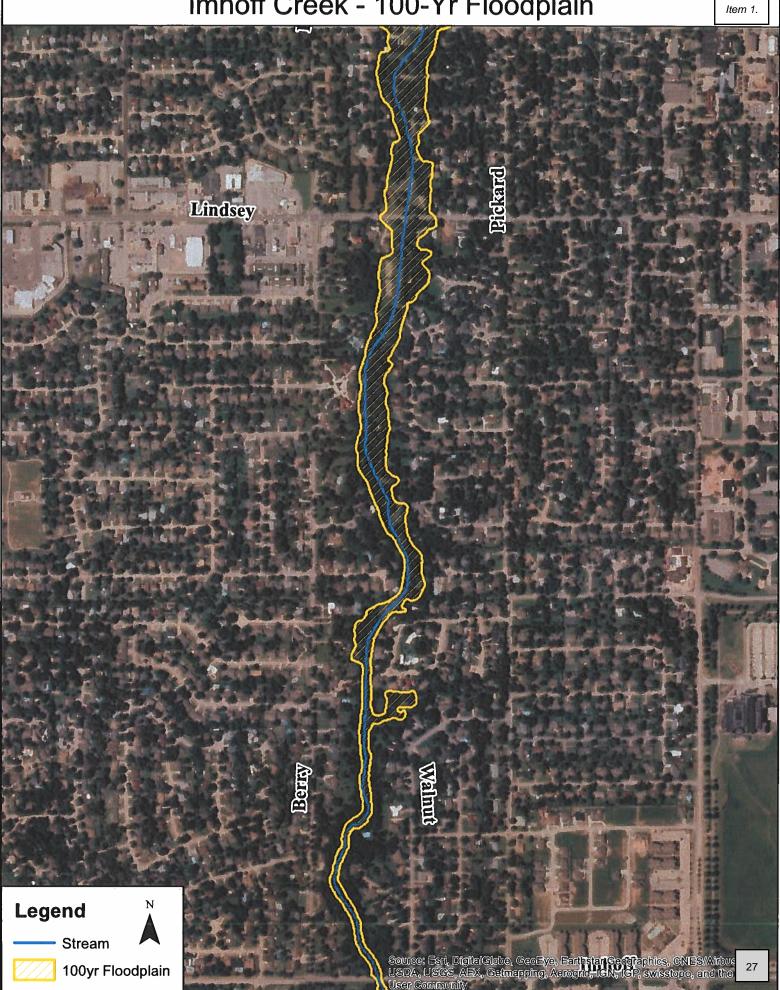
Figure 3: Example of Site Problem Area



Finally during the field investigation it was noted that Imhoff Creek has likely down cut over time. As part of this study in channel field survey was collected and coupled with detailed LiDAR data of the channel surface. This combination of data was used to evaluate the channel profile. Figure 4 below illustrates the stream bed profile from SH-9 through Imhoff Road to the end of the improved articulated block wall using sample points of the channel survey and LiDAR data.

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## Imhoff Creek - 100-Yr Floodplain



## Imhoff Creek - 100-Yr Floodplain





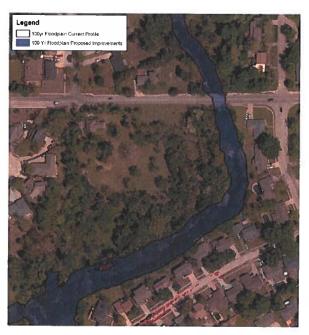




Figure 15: Floodplain Comparison - Upstream Imhoff Road



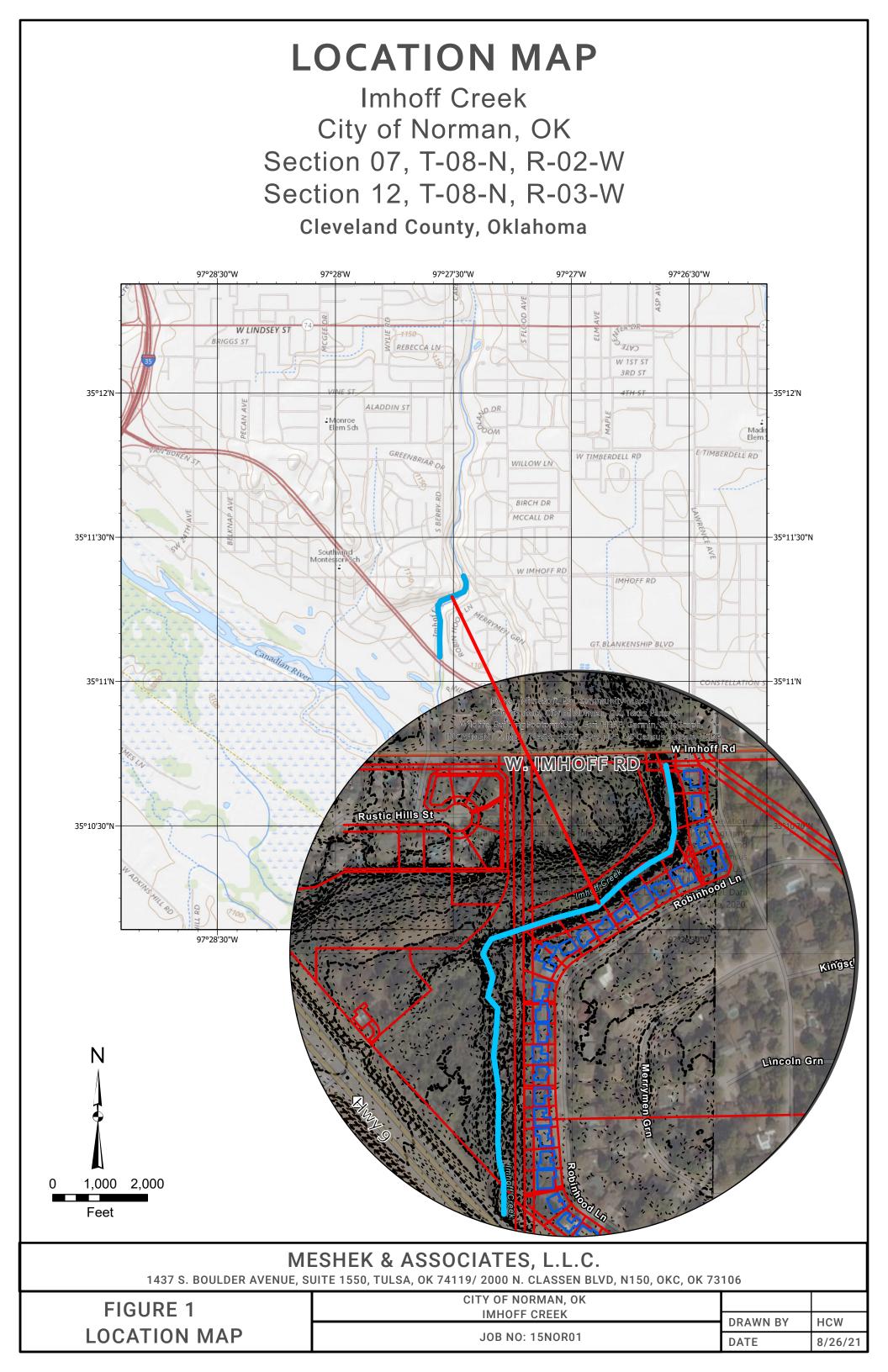
Figure 16: Floodplain Comparison - Downstream Imhoff Road



### **COST ESTIMATES**

The following provides "concept level" estimated costs for the recommendations and improvement options described previously.

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### CITY OF NORMAN, OK STAFF REPORT

#### **MEETING DATE:** 06/28/2022

- **REQUESTER:** Kathryn Walker, City Attorney
- **PRESENTER:** Beth Muckala, Assistant City Attorney
- ITEM TITLE: CONSIDERATION OF ADJOURNING INTO AN EXECUTIVE SESSION AS AUTHORIZED BY OKLAHOMA STATUTES, UNDER TITLE 25 § 307(B)(4) TO DISCUSS PENDING LITIGATION ASSOCIATED WITH CITY OF NORMAN V. RON ASHLEY, CLEVELAND COUNTY DISTRICT COURT CASE CJ-2021-337, IN THE AMOUNT OF \$210,000.