

MEMORANDUM

TO: Programs, Projects, and Operations Subcommittee
FROM: Eric Williams, Natural Resources Planner
SUBJECT: Urban Drainageway Program Application
Douglas County, Ponca Creek at 36th Street
DATE: May 6, 2021

The Urban Drainageway Program (UDP) cost shares with units of government to rehabilitate major urban drainageways within their jurisdiction. The cost share rate varies depending on the level of rehabilitation. This program was redefined by the Board in 2011. Board approval is required on all applications.

In January 2021, a sudden catastrophic failure occurred at a culvert along Ponca Creek at 36th Street. This location is the responsibility of Douglas County, and designs for a new bridge to replace the culvert have been completed. Channel stabilization work, including grade control, will help to protect the public infrastructure in this location.

This project was originally submitted during the annual cost share program application cycle. District staff requested that Douglas County resubmit additional documentation and the project was considered under various potential programs. Given the type of work being conducted, and the updates to the plans according to comments from District staff, it has been determined that the Urban Drainageway Program is appropriate for this project. Douglas County has requested cost share assistance for the portion of this project which meets the program guidelines.

- **It is recommended that the Subcommittee recommend to the Board of Directors that the Urban Drainageway Program application from Douglas County for \$ 66,968 be approved, subject to funding in the FY 2022 Budget.**

Urban Drainageway Program – Application Form

Project name 36th Street over Ponca Creek

Project location (attach location map) 36th Street, 0.05 miles South of Ponca Road

Sponsor organization Douglas County

Sponsor address 15505 West Maple Road

City Omaha State NE ZIP 68116

Contact person Dan Kutilek

Title Engineering and Planning Manager

Email address dan.kutilek@douglascounty-ne.gov Daytime phone 402-444-6460

Description of problem (attach additional sheets as needed)

Existing steel plate culvert collapsed. Structure will be replaced with a single span concrete beam bridge. Previous concrete apron controlled approximately 7' of channel grade, 80' downstream.

Proposed solution (attach additional sheets as needed)

Construct a steel sheet pile weir, grade control structure. Line channel and channel banks with riprap. (Plans Attached)

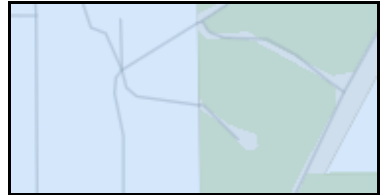
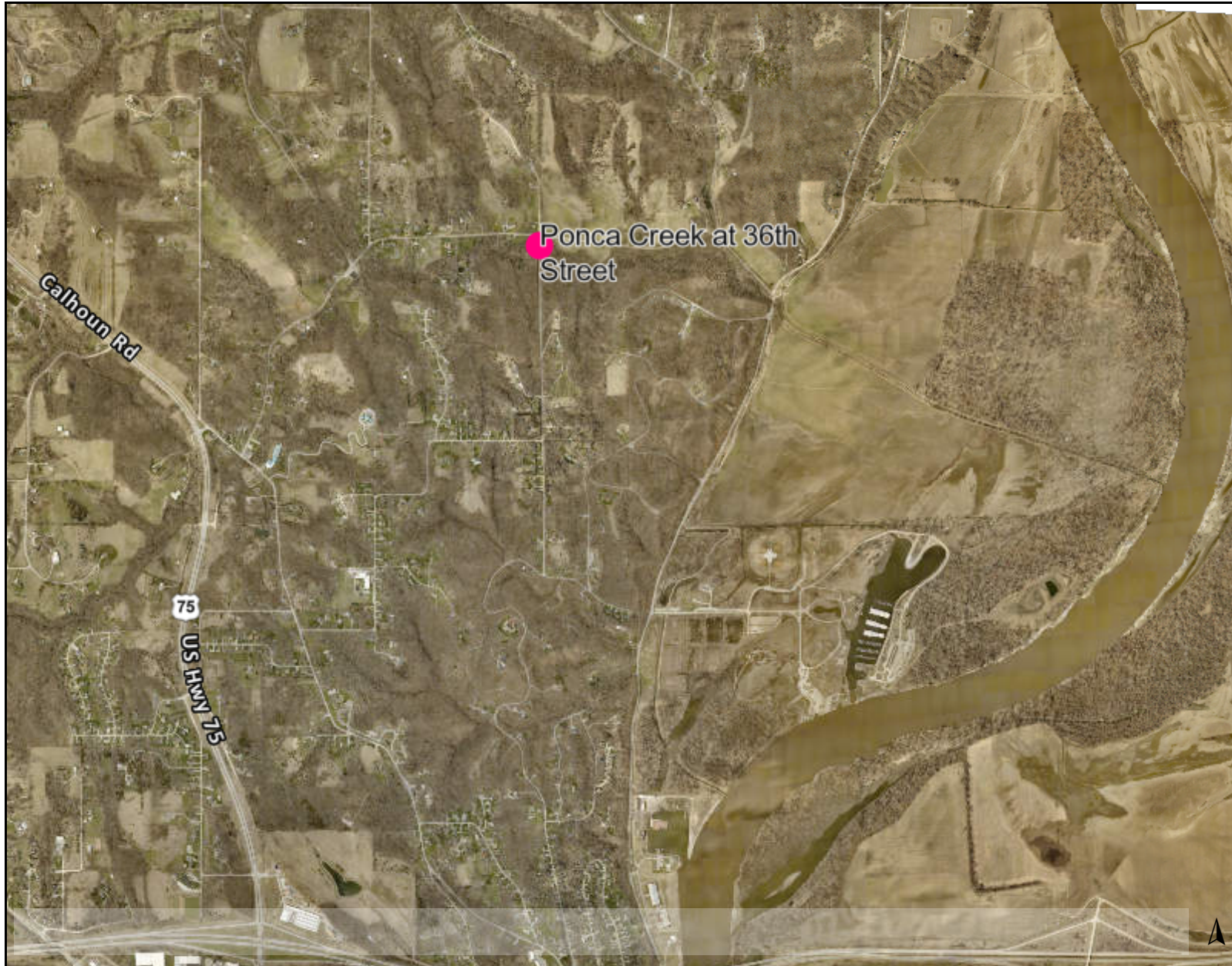
Level of Design Level 1 ☐ Level 2 ☐ Level 3 ☒

Total estimated cost \$ 167,420 Cost share request \$ 66,968


Signature

5 / 3 / 21
Date

Eng. Manager
Title



Legend

2020 Imagery



Red: Red

Green: Green

Blue: Blue

0 1 2 mi

Please contact Douglas County GIS for map questions (gis@douglascounty-ne.gov)

Printed from dogis.org:
05/06/2021 00:00:00

This map is a user generated static output from an Internet mapping site and is for reference only. Data on this map may or may not be accurate, current, or otherwise reliable. It is for informational purposes only, and may not be suitable for legal, engineering, or surveying purposes. Do NOT use property lines from this website for plan submissions.

Douglas County - Grade Control Structure

36th Street over Ponca Creek

Douglas County Project No. SP-2021(02)

Steel Sheet Pile Weir

HGM Project #760021

Projected Letting Date: TBD

Engineers Opinion of Probable Cost

Prepared by HGM Associates Inc., April 13, 2021

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	COST/UNIT	ITEM COST
1	GENERAL CLEARING AND GRUBBING	LS	1	\$ 5,000	\$ 5,000
2	SEEDING, TYPE B	AC	0.2	\$ 2,000	\$ 400
3	MULCH	TON	0.2	\$ 500	\$ 100
4	TEMPORARY SILT FENCE	LF	200	\$ 5.00	\$ 1,000
5	TEMPORARY SILT CHECK	LF	20	\$ 5.00	\$ 100
6	MOBILIZATION	LS	1	\$ 25,000	\$ 25,000
7	EXCAVATION (ESTABLISHED QUANTITY)	CY	200	\$ 20	\$ 4,000
8	STEEL SHEET PILING	SF	1,580	\$ 30	\$ 47,400
9	ROCK RIPRAP, TYPE B	TON	605	\$ 100	\$ 60,500
10	RIPRAP FILTER FABRIC	SY	480	\$ 4	\$ 1,920
Total Estimated Cost =					\$ 145,420

ITEM NO.	ITEM DESCRIPTION	ITEM COST
1	DESIGN ENGINEERING	\$ 12,000
2	CONSTRUCTION OBSERVATION	\$ 10,000
Total Estimated Cost =		\$ 22,000

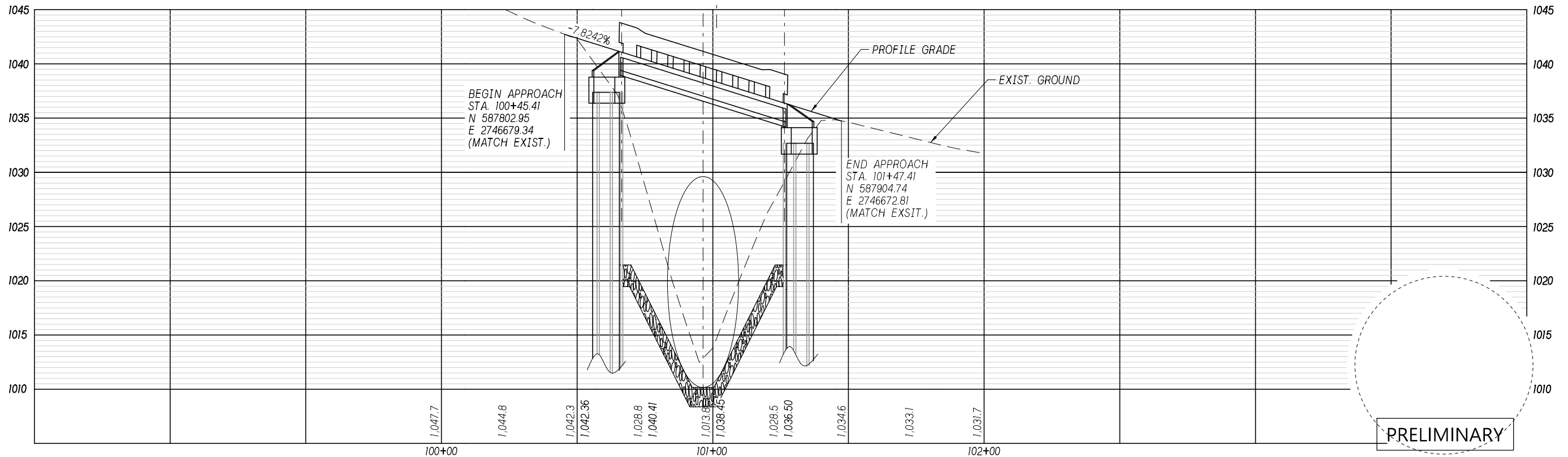
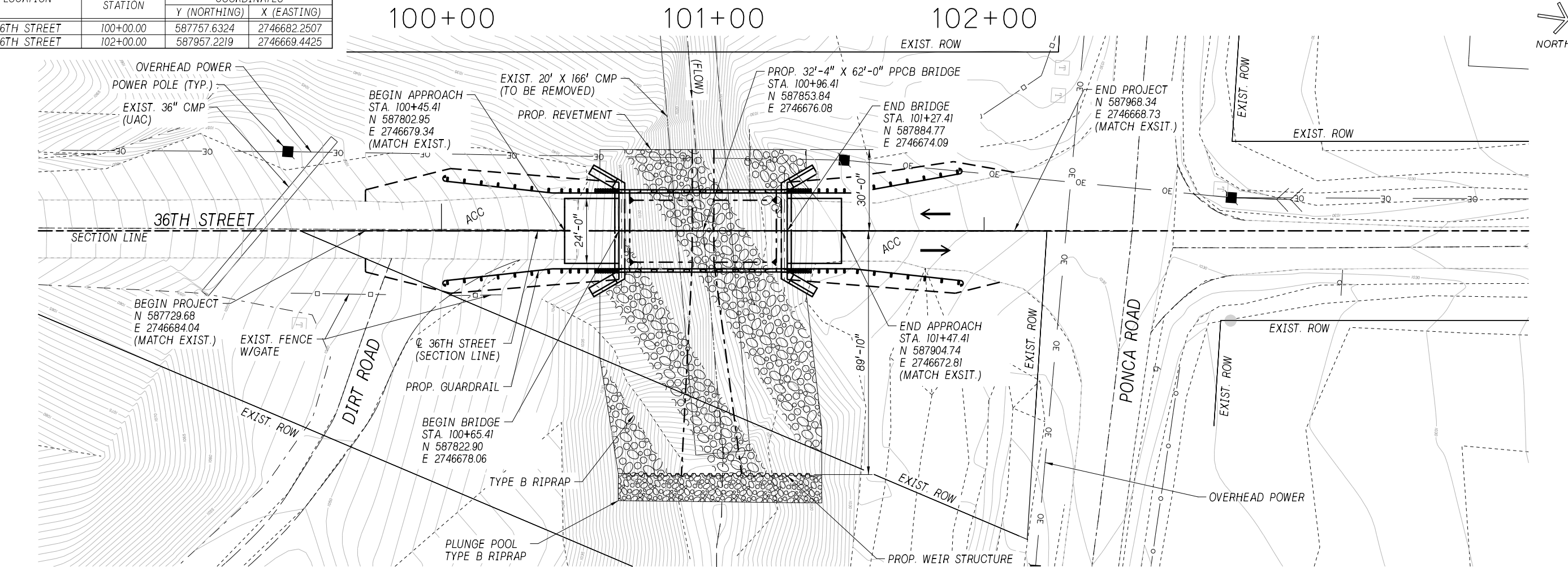
Total Project Cost = \$ 167,420

COMPUTER\$\$\$\$

jlk

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ALIGNMENT COORDINATES			
LOCATION	STATION	POINT ON TANGENT	
		COORDINATES	
		Y (NORTHING)	X (EASTING)
36TH STREET	100+00.00	587757.6324	2746682.2507
36TH STREET	102+00.00	587957.2219	2746669.4425



PRELIMINARY

PLAN / PROFILE
36TH STREET
SCALE 1"=40'H. SCALE 1"=5'V.

DOUGLAS COUNTY ENGINEER'S OFFICE
15505 WEST MAPLE ROAD
OMAHA, NEBRASKA 68116
PH. 444-6372

DESIGNED BY:
J. PETERSON
DRAWN BY:
J. KOCH
REVIEWED BY:
S. MOFFITT
REVISIONS:



hgm

2
2

PROJECT NO.: SP-2021(02)
LOCATION: 36TH STREET
150' SOUTH OF PONCA ROAD
OVER PONCA CREEK
DESCRIPTION: CULVERT REPLACEMENT