



Environmental Programs Division

Office 405 521-3050

Automatic Categorical Exclusion (ACE)

Date	May 4, 2023	Project No.	J3-0637(004)PM
County	Oklahoma	State Job Piece No.	30637(04)
NEPA Project Manager	F. Guerrero	Phone Number	405-982-0898
ODOT Field District	4	Bridge NBI No. <i>(County & State Projects)</i> & Location No. <i>(County Projects Only)</i>	NBI 18769 & 18770
Project Description from JPINFO	BRIDGE REHABILITATION I-44: OVER THE UPRR, 0.7 MILES NORTH OF I-40		
Purpose & Need	To correct ‘at-risk of becoming structurally deficient’ bridges.		
Description of the Proposed Action	<p>The proposed improvement consists of repairing the bridge decks, abutments, parapets, beams and superstructure along with reconstructing the bridge approach slabs, roadway and median. Soil will be removed and a soil nail wall will be installed to allow room for future Union Pacific Railroad (UPRR) track. A crash wall will also be constructed within UPRR right-of -way. All work will remain within existing right of way and will be coordinated with the UPRR, the roadway will remain open during construction by utilizing crossovers.</p>		
This action falls within the following item identified in 23 CFR 771.117(c) as qualifying for ACE <i>(LIST THE 23 CFR 771.117(C) ITEM NUMBER):</i>			22
This project is included in: <i>(Check all applicable ones)</i>		<input checked="" type="checkbox"/>	State 8 Year Construction Program
			County 5 Year Construction Program
		<input checked="" type="checkbox"/>	State Transportation Improvement Program
This project has federal funds: <i>(Check applicable one.)</i>		<input checked="" type="checkbox"/>	Currently has Federal Funds
			Potential for Future Federal Funds
This project is in the Metropolitan Transportation Improvement Program (If applicable) <i>(Check applicable one)</i>			Yes
		<input checked="" type="checkbox"/>	Not Applicable
This project involves one or more items in Section IV.A.1.b. of the 2019 ODOT/FHWA Programmatic Agreement for CE Processing that would render this project ineligible for automatic certification apply to this action.			YES. If the answer is YES, an Individual CE will have to be prepared for this project.
		<input checked="" type="checkbox"/>	NO

This action is among those categorical exclusions listed in 23 CFR 771.117(c) that normally do not require any further NEPA approvals by FHWA. ODOT has determined that this project does not individually or cumulatively have a significant impact on the environment as defined by NEPA (23 CFR 771.117(a)), or involve unusual circumstances as defined in 23 CFR 771.117(b), and is therefore excluded from the requirements to prepare an environmental assessment (EA) or environmental impact statement (EIS).

Pre Construction Commitments:
<p>ODOT Commitment: All operators, employees, and contractors will be made aware of all environmental commitments, including the following Plan Notes.</p> <p>Tree Removal Minimization Commitment: In order to avoid impacts to USFWS Birds of Conservation Concern, the removal of trees and shrubs will be restricted to areas within the actual limits of construction, and all aspects of the project (e.g. temporary work areas, alignments) will be modified to avoid tree removal, if possible, during the design of the project. Tree removal will be limited to that specified in the project plans provided to contractors.</p>
Right-of-Way and Utility Commitments
The following Construction Commitments requiring avoidance, restrictions or minimization of natural and human resources during Right-of-Way clearance and Utility relocation activities will be discussed with the Right-of-Way and Utility Owners at the start of Right-of-Way and Utility Process.
Construction Commitments
<p>The following plan notes requiring avoidance, restrictions or minimization of natural and human resources in the project and off-site project areas will be added to the final project plans under “Environmental Mitigation Notes” per policy Directive C-201-2.</p> <p>Non-Compliance: Failure to implement the commitments specified in the Plan Notes can result in non-compliance issues on the project. Work activities may be suspended on the project, for an undetermined duration, while working with regulators to bring the project back into compliance. The contractor will not be compensated for time lost.</p> <p>Water Quality Conservation: Appropriate Best Management Practices to minimize impacts from storm water discharges and sedimentation in streams, as established by the Oklahoma Department of Environmental Quality, shall be conscientiously implemented throughout the proposed construction periods, in order to minimize any potential impacts to any listed species. The effectiveness of erosion controls shall be maintained for the duration of construction activities. Hazardous materials, chemicals, fuels, lubricating oils, and other such substances shall be stored at least 100 feet outside of the ordinary high water mark (OHWM). Refueling of construction equipment shall also be conducted at least 100 feet from the OHWMs. Sediment and erosion controls shall be installed around staging areas to prohibit discharge of materials from these sites. Construction waste materials and debris shall be stockpiled at least 25 feet outside of the OHWMs, and these materials shall be removed and disposed of properly following completion of the project. Preventative measure must be taken to prohibit the discharge of contaminants into any surface waters.</p> <p>Migratory Bird Note: Migratory birds are protected by the federal Migratory Bird Treaty Act. Many birds commonly use bridges and culverts for nesting. The nesting season for most migratory bird species extends from March 1 to August 31. Migratory bird nesting use of the I-44 UP RR bridge (NBI:18770) and an RCB 9STA.381+86.64) was observed. Painting, repair, retrofit, rehabilitation or demolition of the existing bridge and culvert shall be conducted between September 1, and February 28, when migratory</p>

bird nests are not occupied. If painting, repair, retrofit, rehabilitation or demolition cannot be completed between September 1 and February 28, the bridge and culvert shall be protected from new nest establishment prior to March 1, by means that do not result in bird death or injury. Options include the exclusion of adult birds from suitable nest sites on or within a structure by the placement of weather-resistant polypropylene netting with 0.25-inch or smaller openings, prior to March 1. Methods other than netting must be pre-approved by the ODOT Biologist.

Although no nests were observed on all other structures, the birds may occupy the structures in the future. The Resident Engineer shall contact the ODOT Biologist if any bird use of these structures is observed. If birds are observed then painting, repair, retrofit, rehabilitation or demolition of the existing bridges and culverts shall be conducted between September 1, and February 28 (when migratory bird nests are not occupied).

<u>Species (choose those that apply)</u>	<u>Seasonal Restriction Period</u>
Migratory Birds: Swallows and Phoebe (NESTS PRESENT)	March 1 – August 31

The mitigation measures should be discussed at all Pre-work conferences per Policy Directive C-201-2. The Environmental Programs Division shall provide **the final plan sheet with the mitigation notes** to the Designer for inclusion in Final Plans and keep a copy for the project records.

All documentation, analyses, and agency coordination regarding this Categorical Exclusion are contained in a Supporting Appendix maintained in the project file at the Oklahoma Department of Transportation, Environmental Programs Division.

Development of the project including coordination and assessment of potential social, economic and environmental impacts has been considered in accordance with DOT ORDER 5610.1C, and CEQ REGULATIONS 40 CFR 1500 -1508 as amended, 23 CFR 771.117 and the 2019 FHWA/ODOT Programmatic Agreement for processing of categorical exclusions. Implementation of this action as a “Categorical Exclusion” will satisfy the requirements of the National Environmental Policy Act.

Preparer/Reviewer Signatures

County Commissioner or City Manager (For Local Government Projects)	Date
<i>Frank Guerrero</i>	05/09/2023
ODOT Environmental Project Manager	Date
<i>Leslie Novotny</i>	5/9/2023
ODOT NEPA Program Supervisor	Date

Attachments:

1. Location Map
2. Current Plans and Study Footprint
3. Studies and Coordination
4. Other Section– Initiation and Inspection Reports

Distribution List (Check Applicable Ones)

<input checked="" type="checkbox"/>	Project Management Division (All State Projects)
<input type="checkbox"/>	Roadway Design Division (All State projects with the exception of projects from Traffic Division and Special Projects)
<input checked="" type="checkbox"/>	Bridge Division (All State Bridge Projects)
<input type="checkbox"/>	Traffic Division (For projects from Traffic Division)
<input type="checkbox"/>	Local Government Division (County or City Projects)
<input type="checkbox"/>	Rail Programs Division (Rail Safety Projects Only)
<input type="checkbox"/>	Special Projects (Special Projects Only)
<input type="checkbox"/>	Safe Routes to School Coordinator (SRTS Projects Only)
<input checked="" type="checkbox"/>	Field Division Engineer (All Projects)
<input checked="" type="checkbox"/>	Right-of-Way Division (All Projects)

STATE OF OKLAHOMA
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED
STATE HIGHWAY
FEDERAL AID PROJECT NO. XXXX-XXXX(XXX)
BRIDGE REHABILITATION
INTERSTATE HIGHWAY 44 OVER THE U.P.R.R.
OKLAHOMA COUNTY

CONTROL SECTION NO. 44-55-07
STATE JOB NO. 30637(04)
BRIDGE "A" LOCATION NO. 5507-0071EX
BRIDGE "B" LOCATION NO. 5507-0071WX
BRIDGE "A" EXISTING NBI NO. 18769
BRIDGE "B" EXISTING NBI NO. 18770

FOR SURVEY CONTROL DATA,
SEE SURVEY DATA SHEETS

OKLAHOMA DEPARTMENT OF TRANSPORTATION

THIS DOCUMENT IS PRELIMINARY
IN NATURE AND IS NOT A FINAL,
SIGNED AND SEALED DOCUMENT.
1/27/2023

OKLAHOMA DEPARTMENT OF TRANSPORTATION

DESCRIPTION REVISIONS DATE

OKLAHOMA DEPARTMENT OF TRANSPORTATION

R/W UTILITY
MEETING
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INDEX OF SHEETS

SHEET NO.	DESCRIPTION
0001	TITLE SHEET
0002-0007	TYPICAL SECTIONS
AB01-AB02	GENERAL NOTES
B001-B004	BRIDGE "A" DETAILS
B005-B006	BRIDGE "B" DETAILS
R001	DRAINAGE AREA MAP
R002	GEOMETRIC DETAIL
R003-R009	ROADWAY PLAN & PROFILES
R010-R011	CROSSOVER DETAIL SHEETS
R012	TEMPORARY RAMP PLAN & PROFILE
R013-R014	GUARDRAIL DETAILS
RW01-RW02	SOIL NAIL WALL DETAILS
T001-T021	SUGGESTED SEQUENCE OF CONSTRUCTION
*	SIGNING AND MARKING PLANS
*	OVERHEAD SIGN DETAIL
S001-S006	SURVEY DATA SHEETS
X001-X076	CROSS SECTIONS

* = SHEETS NOT INCLUDED IN THIS SUBMITTAL

STANDARDS

DESIGN DATA

AADT 2020	= 158,570
AADT 2040	= 188,210
K (EASTBOUND)	= 9.4%
K (WESTBOUND)	= 9.5%
D	= 50%
T (% DHV)	= 6%
T (% AADT)	= 8%
T (% ADT)	= 3%
V	= 60 MPH
20YR FLEX ESALS	= XXX

SCALES 1" = 50'

PLAN 1" = 50'

PROFILE HOR. 1" = 50'

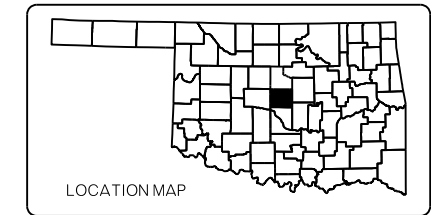
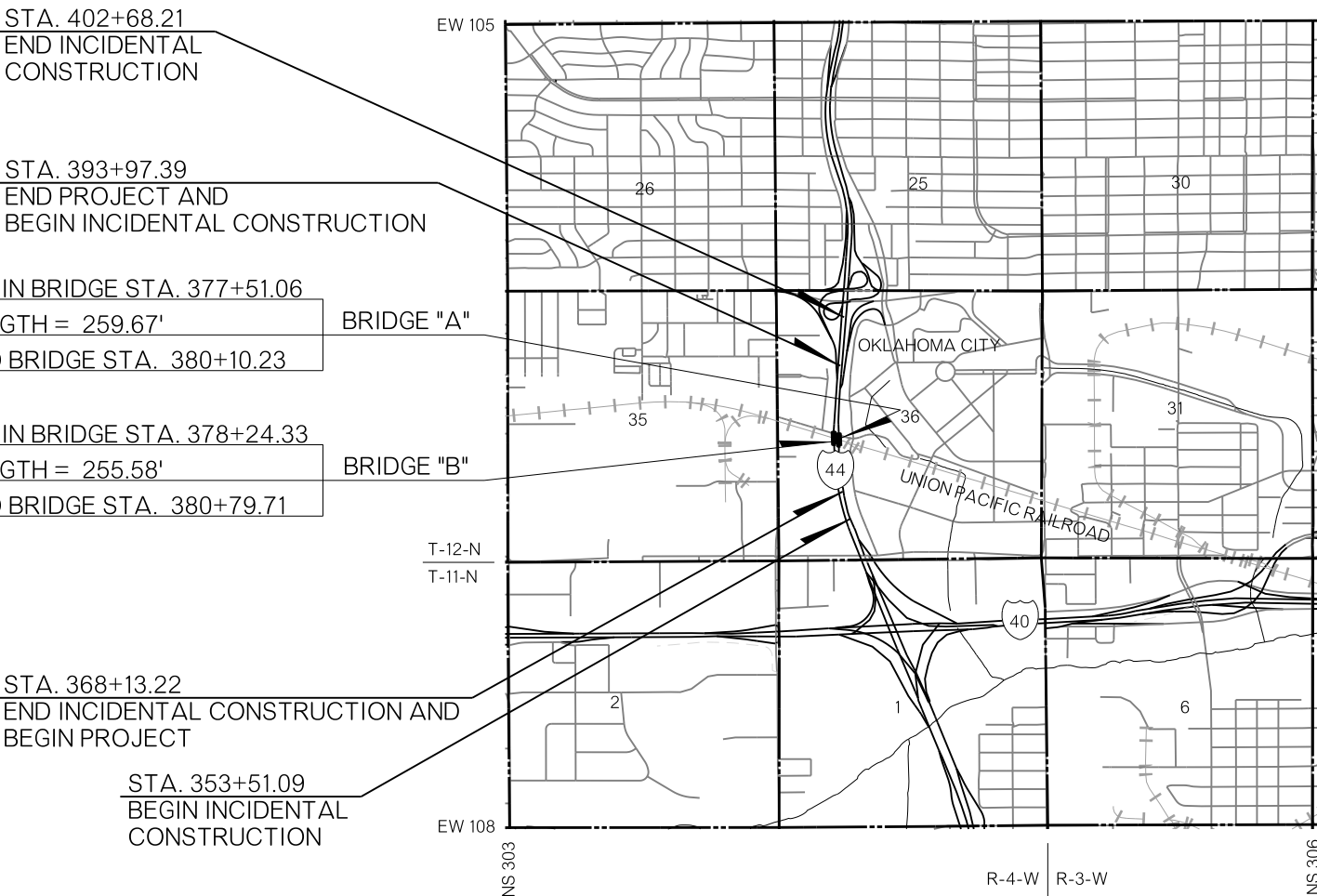
VER. 1" = 5'

LAYOUT MAP 1" = 1,760'

CONVENTIONAL SYMBOLS

	PROPOSED ROAD
	RAILROADS
	RANGE & TOWNSHIP
	SECTION LINES
	QUARTER SECTION LINES
	FENCES
	GROUND LINE
	EXISTING ROADS
	BASE LINE
	GRADE LINES
	TELEPHONE & TELEGRAPH
	POWER LINES
	BUILDINGS
	OIL WELL
	DRAINAGE STRUCTURES - IN PLACE
	DRAINAGE STRUCTURES - NEW
	RIGHT-OF-WAY LINES - EXISTING
	RIGHT-OF-WAY LINES - NEW
	CONTROLLED ACCESS
	RIGHT-OF-WAY FENCE

2019 OKLAHOMA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION GOVERN, APPROVED BY
THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, DECEMBER 18, 2019.



NOTE: BRIDGE LENGTH MEASURED FOR BRIDGE "A".

ROADWAY LENGTH	2324.50 FT.	0.440 MI.
BRIDGE LENGTH	259.67 FT.	0.049 MI.
PROJECT LENGTH		0.489 MI.

EQUATIONS : NONE
EXCEPTIONS : NONE

HNTB

HNTB Corporation
101 N. Robinson Ave.,
Suite 1130
Oklahoma City, OK 73102
www.hntb.com

PREPARED BY:
HNTB

KENSEY W. RUSSELL, P.E.
OKLA. REG. NO. 30130



DATE

OKLAHOMA
DEPARTMENT OF TRANSPORTATION

DATE APPROVED

BY

CHIEF ENGINEER

SWO 5440

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

DATE APPROVED

BY

DIVISION ADMINISTRATOR

SHEET NO. 0001

OKLAHOMA COUNTY I-44 OVER U.P.R.R.

P.E. NO : XXXXX(01)

1/27/2023

30637(04)_Title Sheet

**RIGHT-OF-WAY PLANS OR FINAL PLANS
AND
NEPA STUDY FOOTPRINT OR STUDY
PLANS**

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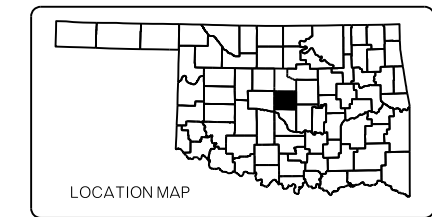
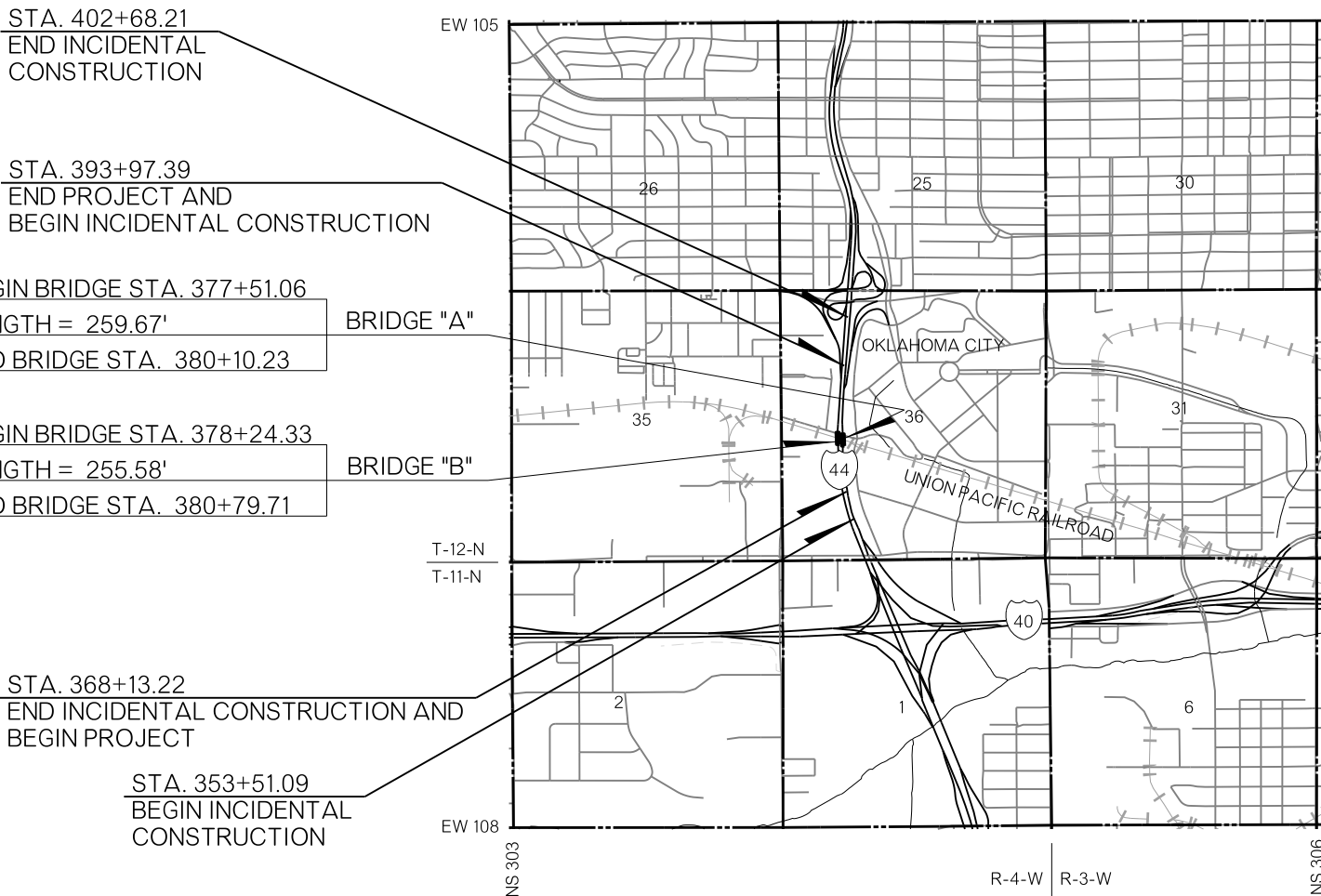
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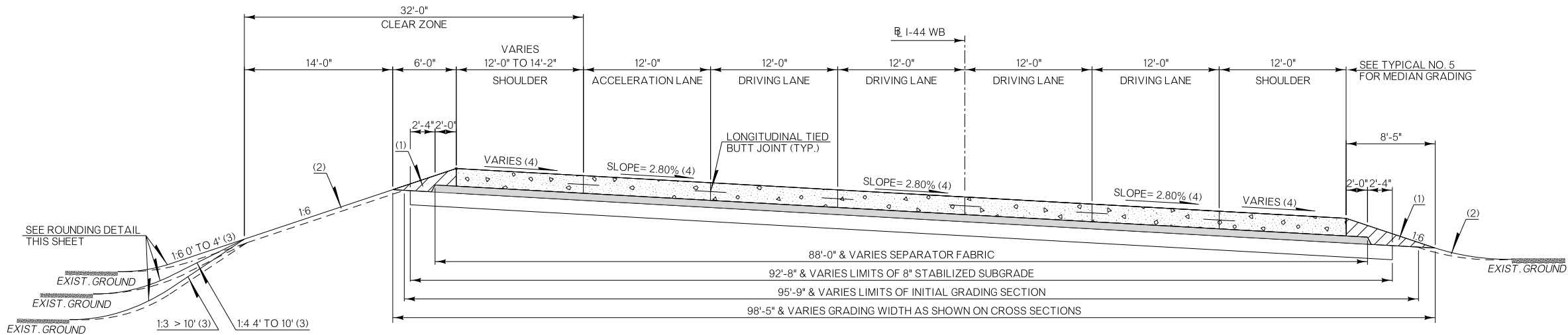
SHEET NO. 0001

OKLAHOMA COUNTY I-44 OVER U.P.R.R.

P.E. NO : XXXXX(01)

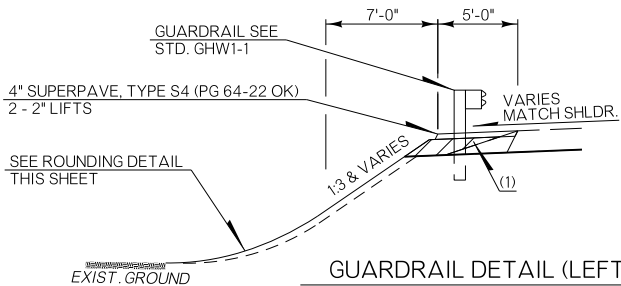
1/27/2023

30637(04)_Title Sheet



PAVEMENT REQUIREMENT		
PAVT. STRUCTURE	12'-0" DRIVING LANES	12'-0" PAVED SHOULDERS
SURFACE COURSE	10" DOWEL JOINTED P.C. CONC. P.V.M.T.	10" DOWEL JOINTED P.C. CONC. P.V.M.T.
BASE COURSE	4" SUPERPAVE TYPE S3 (PG 64-22 OK)	4" SUPERPAVE TYPE S3 (PG 64-22 OK)

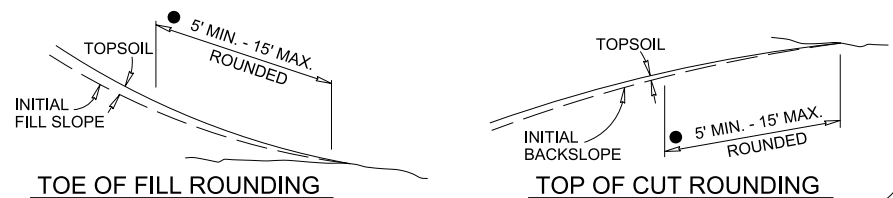
I-44 WESTBOUND (FULL RECONSTRUCTION) TYPICAL NO. 1
STA. 372+04.00 TO STA. 377+82.86
STA. 381+23.09 TO STA. 383+72.00



GUARDRAIL DETAIL (LEFT)		
ALIGNMENT	WIDTH	STATION EXTENTS
I-44 WB	0'-0" TO 5'-0"	STA. 373+78.29 TO STA. 374+47.65
I-44 WB	5'-0"	STA. 374+47.65 TO STA. 377+82.86
I-44 WB	5'-0"	STA. 381+23.14 TO STA. 393+55.87
I-44 WB	5'-0" TO 0'-0"	STA. 393+55.84 TO STA. 394+25.93
I-44 EB	0'-0" TO 5'-0"	STA. 374+34.46 TO STA. 375+04.25
I-44 EB	5'-0"	STA. 375+04.25 TO STA. 376+88.82

ROUNDING DETAIL

- INTERSECTION OF CUT AND/OR FILL SLOPES WITH GROUND LINE TO BE ROUNDED AS PART OF FINISHING OPERATIONS. ROUNDED SHALL BE 5' MINIMUM FOR SMALLER CUTS AND FILLS TO 15' MAXIMUM FOR LARGER CUTS AND FILLS OR AS DESIGNATED BY THE ENGINEER. COST OF ROUNDED TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS OF WORK.



- (1) BACKFILL NOTE:
TO BE BACKFILLED AND COMPACTED AS PART OF THE FINISHING OPERATIONS.
QUANTITY IS MEASURED IN TBSC TYPE E.

- (2) TOPSOIL NOTE:
THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL, STOCKPILE IT, AND PLACE IT BACK ON THE SECTION IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECIFICATIONS. RESERVED TOPSOIL SHALL BE SPREAD FIRST ON THE COMPLETED SLOPES OF THE CUT SECTIONS AND THE REMAINDER ON COMPLETED FILL SLOPES OR OTHER PRIORITY AREAS LOCATED BY THE ENGINEER. ALL ADDITIONAL COSTS ASSOCIATED WITH OPERATIONS SHALL BE INCLUDED IN THE PAY ITEM FOR SALVAGED TOPSOIL, LUMP SUM.

THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASS LINE BALANCE.

- (3) DISTANCE MEASURED VERTICALLY FROM EDGE OF FINISHED GRADE SHOULDER.

- (4) CROSS SLOPES SHOWN ARE NOMINAL FOR FULL SUPERELEVATION, SEE PROFILES FOR CROSS SLOPE TRANSITIONS AND ADDITIONAL SUPERELEVATION INFORMATION.

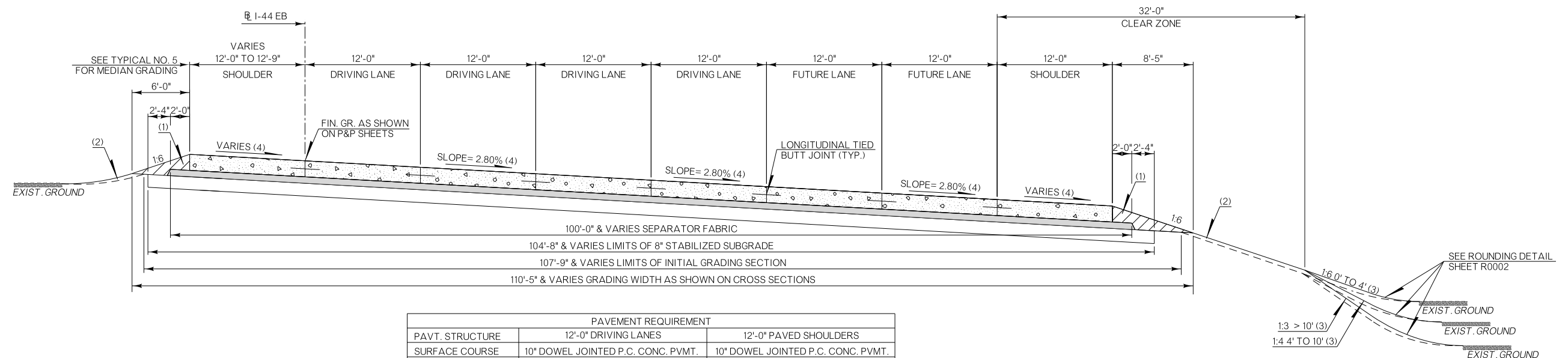
DESIGN	RBH		OKLAHOMA DEPARTMENT OF TRANSPORTATION	
DRAWN	TGG		TYPICAL SECTION	
CHECKED	MJC			
APPROVED				
SQUAD	HNTB			
COUNTY	OKLAHOMA	HIGHWAY	I-44	STATE JOB NO. 30637(04) SHEET NO. 0002

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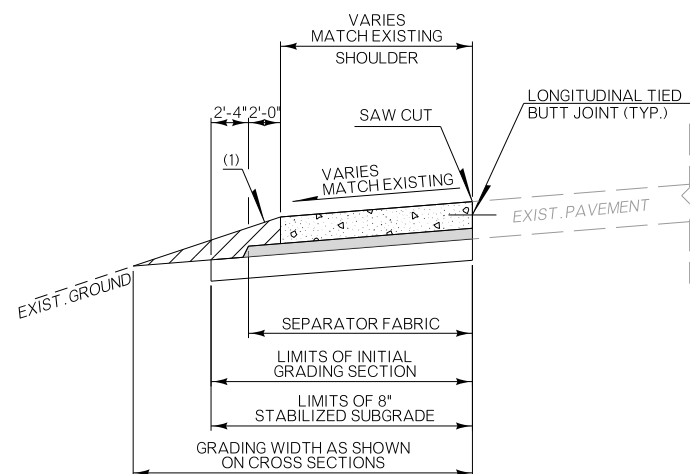
R/W UTILITY MEETING

1/27/2023



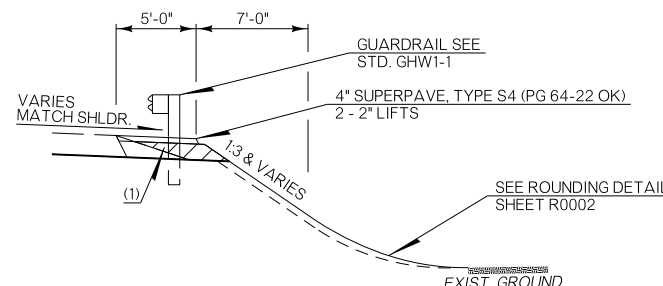
PAVEMENT REQUIREMENT		
PAVT. STRUCTURE	12'-0" DRIVING LANES	12'-0" PAVED SHOULDERS
SURFACE COURSE	10" DOWEL JOINTED P.C. CONC. PVMT.	10" DOWEL JOINTED P.C. CONC. PVMT.
BASE COURSE	4" SUPERPAVE TYPE S3 (PG 64-22 OK)	4" SUPERPAVE TYPE S3 (PG 64-22 OK)

I-44 EASTBOUND (FULL RECONSTRUCTION) TYPICAL NO. 2
STA. 372+38.00 TO STA. 376+88.80
STA. 380+44.35 TO STA. 386+58.00



PAVEMENT REQUIREMENT	
PAVT. STRUCTURE	SHOULDER RECONSTRUCTION
SURFACE COURSE	10" DOWEL JOINTED P.C. CONC. PVMT.
BASE COURSE	4" SUPERPAVE TYPE S3 (PG 64-22 OK)

I-44 WESTBOUND SHOULDER RECONSTRUCTION TYPICAL NO. 1
STA. 362+60.74 TO STA. 378+18.62
STA. 381+07.31 TO STA. 388+52.79



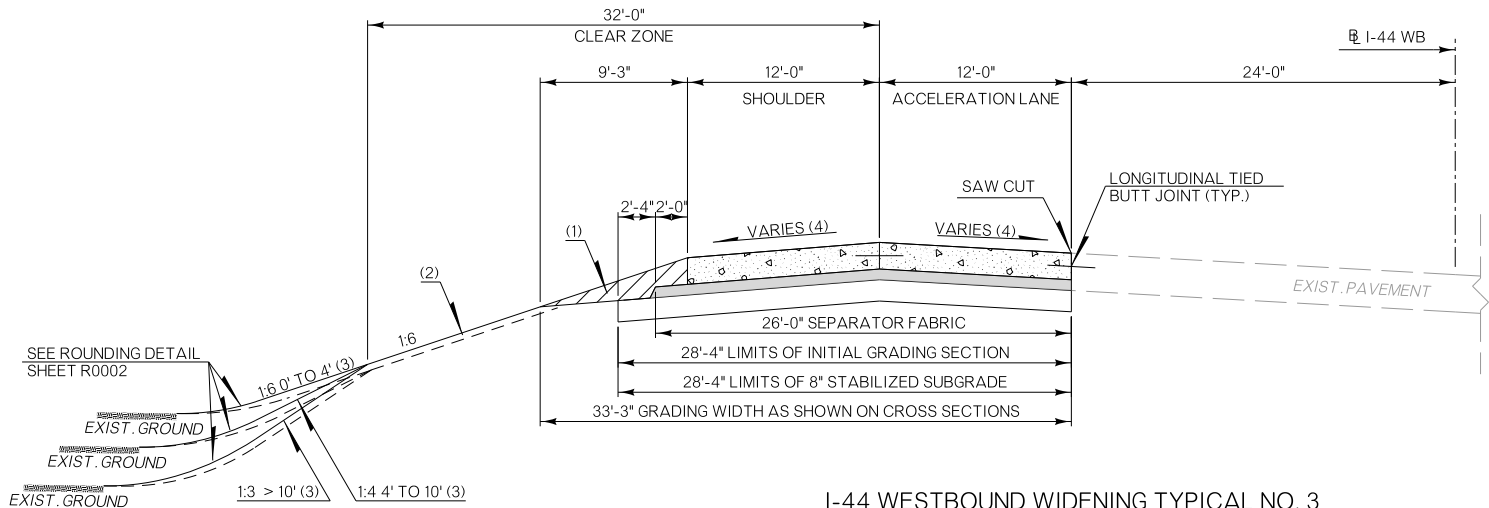
GUARDRAIL DETAIL (RIGHT)
SEE TABLE FOR STATION RANGES

GUARDRAIL DETAIL (RIGHT)		
ALIGNMENT	WIDTH	STATION EXTENTS
R 1-44 EB	0'-0" TO 5'-0"	STA. 373+53.75 TO STA. 374+24.85
R 1-44 EB	5'-0"	STA. 374+25.85 TO STA. 376+90.02
R 1-44 EB	5'-0"	STA. 380+44.31 TO STA. 390+38.96
R 1-44 FR	5'-0" TO 0'-0"	STA. 390+38.96 TO STA. 391+09.13

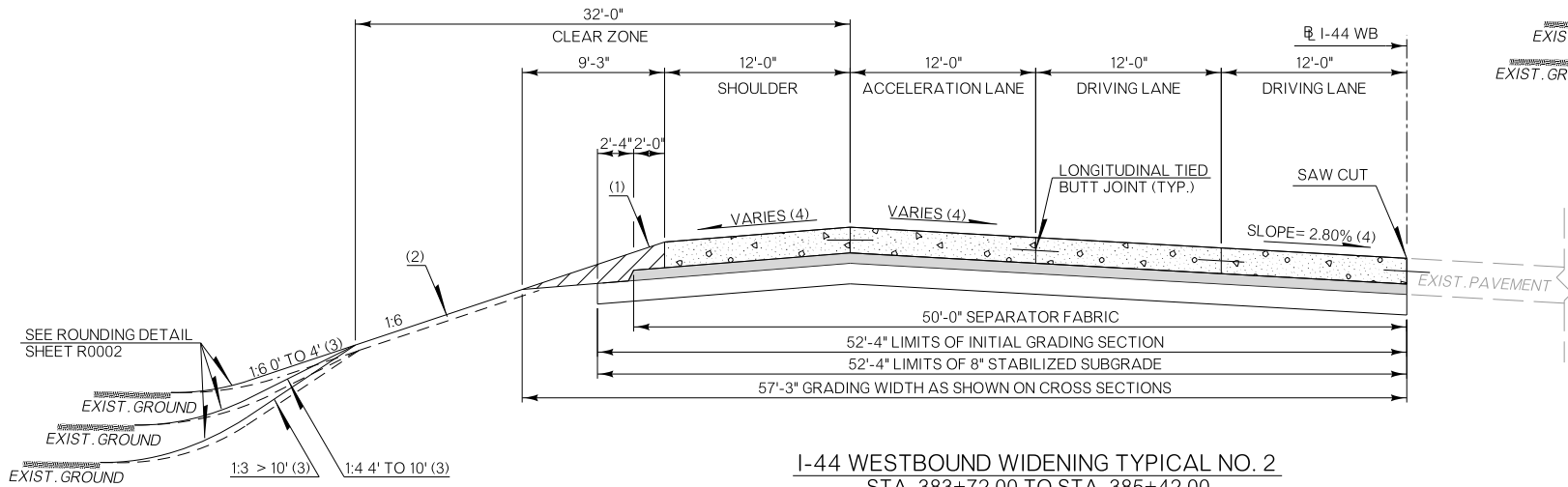
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QUANTITY IS MEASURED IN TBSC TYPE E.
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- (3) DISTANCE MEASURED VERTICALLY FROM EDGE OF FINISHED GRADE SHOULDER.
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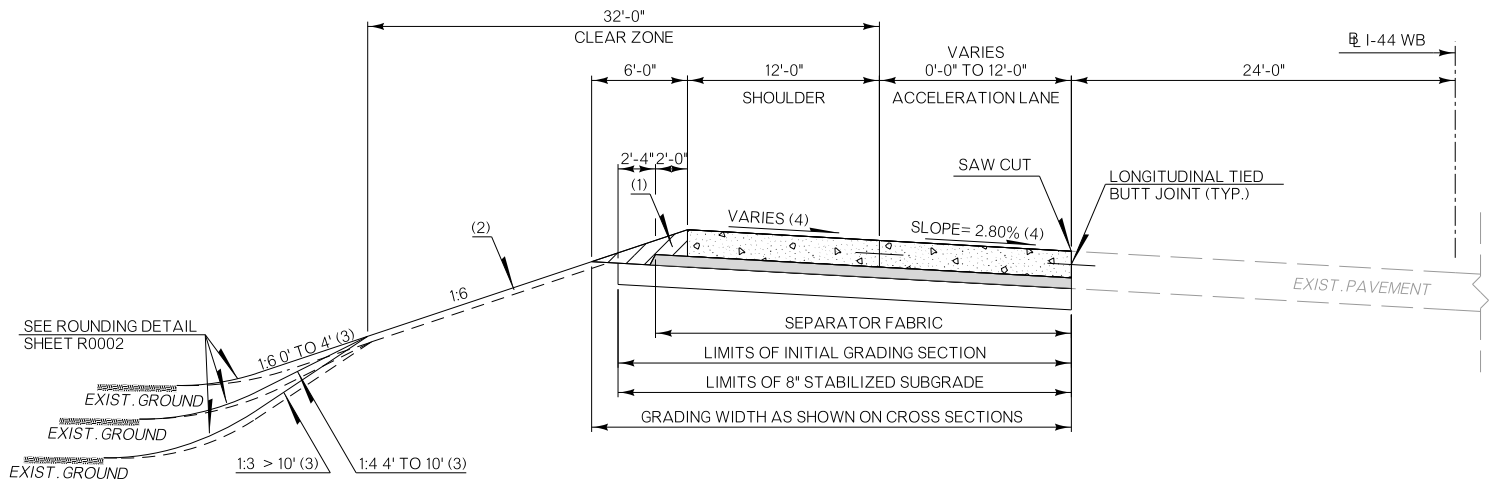
DESIGN	RBH	OKLAHOMA DEPARTMENT OF TRANSPORTATION					
DRAWN	TGG						
CHECKED	MJG	TYPICAL SECTION					
APPROVED							
SQUAD	HNTB						
COUNTY	OKLAHOMA	HIGHWAY	I-44	STATE JOB NO.	30637(04)	SHEET NO.	0003



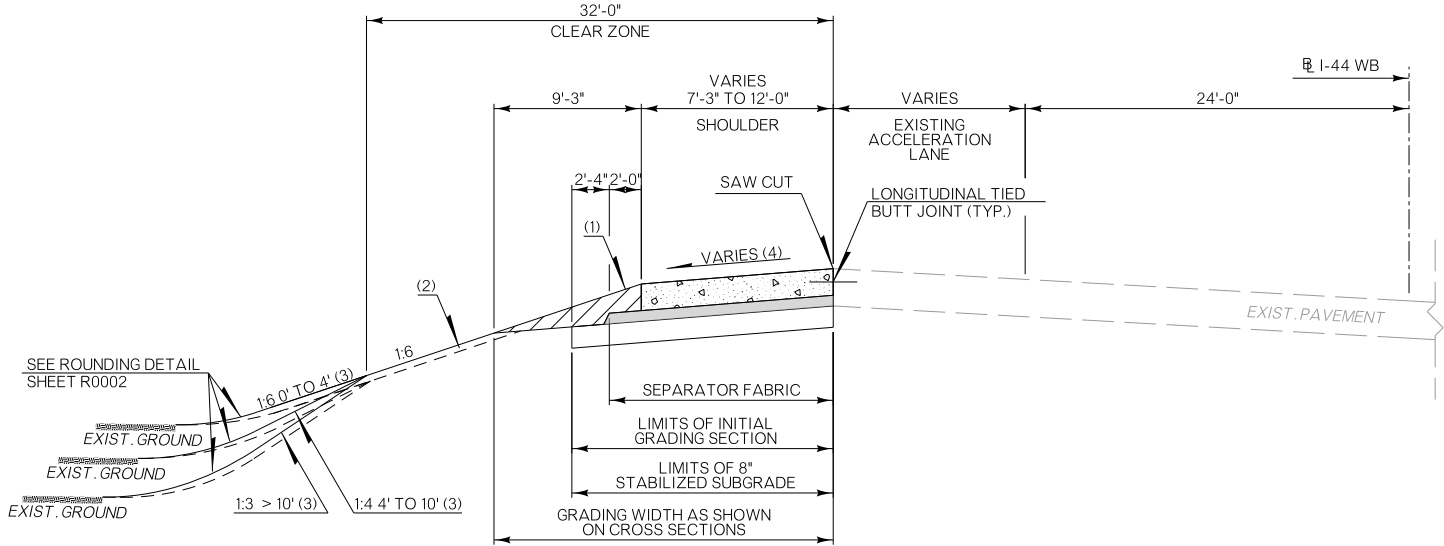
I-44 WESTBOUND WIDENING TYPICAL NO. 3
STA. 385+42.00 TO STA. 390+91.64



I-44 WESTBOUND WIDENING TYPICAL NO. 2
STA. 383+72.00 TO STA. 385+42.00



I-44 WESTBOUND WIDENING TYPICAL NO. 1
STA. 369+15.00 TO STA. 372+04.00



I-44 WESTBOUND WIDENING TYPICAL NO. 4
STA. 390+91.64 TO STA. 393+30.89

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QUANTITY IS MEASURED IN TBSC TYPE E.

(2) TOPSOIL NOTE:
THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL, STOCKPILE IT,
AND PLACE IT BACK ON THE SECTION IN ACCORDANCE WITH SECTION 205 OF THE
STANDARD SPECIFICATIONS. RESERVED TOPSOIL SHALL BE SPREAD FIRST ON
THE COMPLETED SLOPES OF THE CUT SECTIONS AND THE REMAINDER ON
COMPLETED FILL SLOPES OR OTHER PRIORITY AREAS LOCATED BY THE
ENGINEER. ALL ADDITIONAL COSTS ASSOCIATED WITH OPERATIONS SHALL BE
INCLUDED IN THE PAY ITEM FOR SALVAGED TOPSOIL, LUMP SUM.

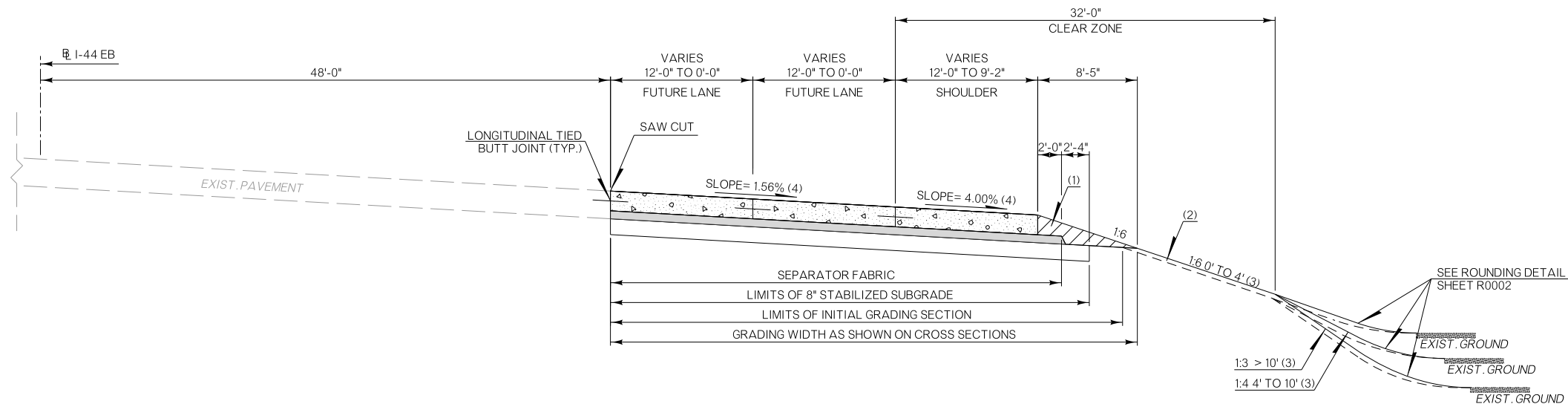
THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE
TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR
SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASS LINE BALANCE.

(3) DISTANCE MEASURED VERTICALLY FROM EDGE OF FINISHED GRADE SHOULDER.

(4) CROSS SLOPES SHOWN ARE NOMINAL FOR FULL SUPERELEVATION. SEE
PROFILES FOR CROSS SLOPE TRANSITIONS AND ADDITIONAL
SUPERELEVATION INFORMATION.

PAVEMENT REQUIREMENT		
PAVT. STRUCTURE	12'-0" DRIVING LANES	12'-0" PAVED OUTSIDE SHOULDER
SURFACE COURSE	10" DOWEL JOINTED P.C. CONC. PVMT.	10" DOWEL JOINTED P.C. CONC. PVMT.
BASE COURSE	4" SUPERPAVE TYPE S3 (PG 64-22 OK)	4" SUPERPAVE TYPE S3 (PG 64-22 OK)

DESIGN	RBH		OKLAHOMA DEPARTMENT OF TRANSPORTATION	
DRAWN	TGG			
CHECKED	M/J		TYPICAL SECTION	
APPROVED				
SQUAD	HNTB			
COUNTY	OKLAHOMA	HIGHWAY	I-44	STATE JOB NO. 30637(04) SHEET NO. 0004



I-44 EASTBOUND WIDENING TYPICAL NO. 1

STA. 368+00.00 TO STA. 372+38.00
STA. 386+58.00 TO STA. 389+07.20

PAVEMENT REQUIREMENT		
PAVT. STRUCTURE	12'-0" DRIVING LANES	12'-0" PAVED OUTSIDE SHOULDER
SURFACE COURSE	10" DOWEL JOINTED P.C. CONC. PVMT.	10" DOWEL JOINTED P.C. CONC. PVMT.
BASE COURSE	4" SUPERPAVE TYPE S3 (PG 64-22 OK)	4" SUPERPAVE TYPE S3 (PG 64-22 OK)

(1) BACKFILL NOTE:
TO BE BACKFILLED AND COMPACTED AS PART OF THE FINISHING OPERATIONS.
QUANTITY IS MEASURED IN TBSC TYPE E.

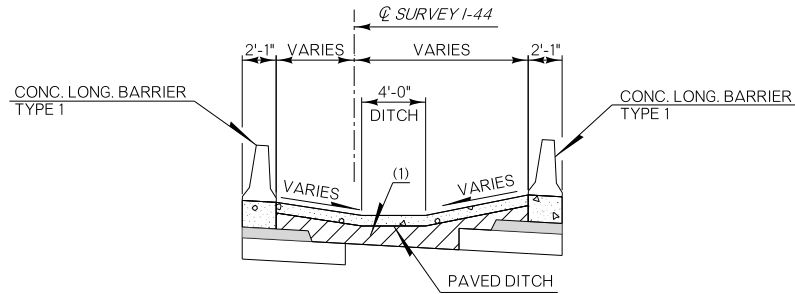
(2) TOPSOIL NOTE:
THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL, STOCKPILE IT,
AND PLACE IT BACK ON THE SECTION IN ACCORDANCE WITH SECTION 205 OF THE
STANDARD SPECIFICATIONS. RESERVED TOPSOIL SHALL BE SPREAD FIRST ON
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COMPLETED FILL SLOPES OR OTHER PRIORITY AREAS LOCATED BY THE
ENGINEER. ALL ADDITIONAL COSTS ASSOCIATED WITH OPERATIONS SHALL BE
INCLUDED IN THE PAY ITEM FOR SALVAGED TOPSOIL, LUMP SUM.

THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE
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SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASS LINE BALANCE.

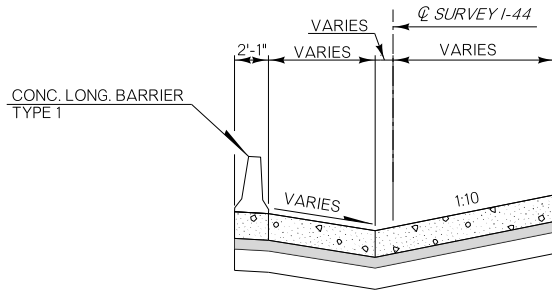
(3) DISTANCE MEASURED VERTICALLY FROM EDGE OF FINISHED GRADE SHOULDER.

(4) CROSS SLOPES SHOWN ARE NOMINAL FOR FULL SUPERELEVATION. SEE
PROFILES FOR CROSS SLOPE TRANSITIONS AND ADDITIONAL
SUPERELEVATION INFORMATION.

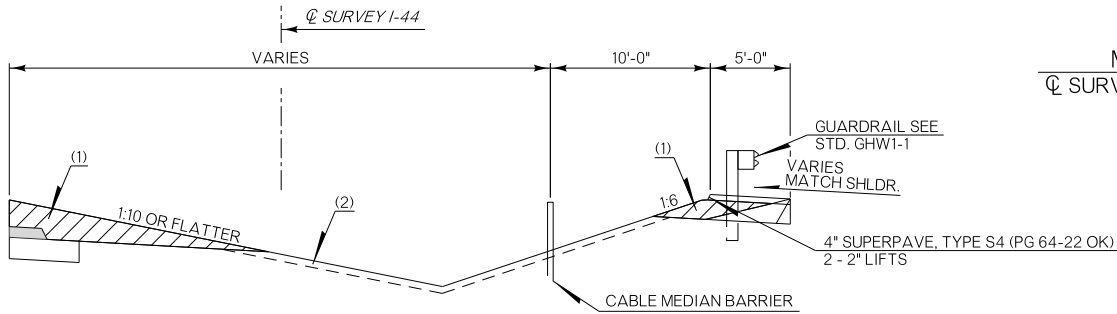
DESIGN	RBH		OKLAHOMA DEPARTMENT OF TRANSPORTATION	
DRAWN	TGG			
CHECKED	MJC		TYPICAL SECTION	
APPROVED				
SQUAD	HNTB			
COUNTY	OKLAHOMA	HIGHWAY	I-44	STATE JOB NO. 30637(04) SHEET NO. 0005



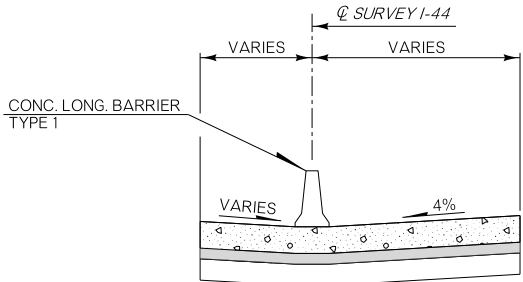
MEDIAN GRADING TYPICAL NO. 3
CL SURVEY I-44 STA. 380+60.00 TO STA. 382+00.00
SEE MEDIAN DETAIL SHEET R###



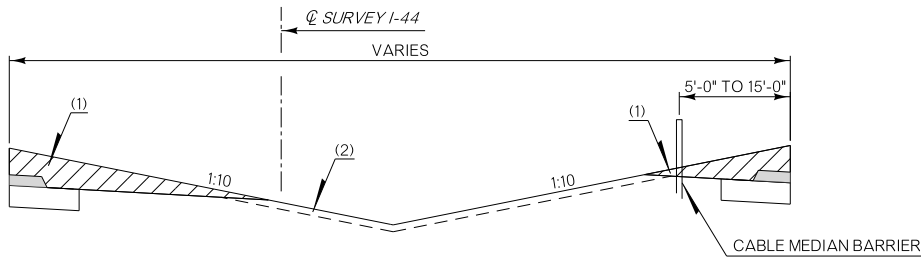
MEDIAN GRADING TYPICAL NO. 4
CL SURVEY I-44 STA. 382+00.00 TO STA. 383+12.75



MEDIAN GRADING TYPICAL NO. 2
CL SURVEY I-44 STA. 375+50.00 TO STA. 377+60.00



MEDIAN GRADING TYPICAL NO. 5
CL SURVEY I-44 STA. 383+12.75 TO STA. 386+81.00



MEDIAN GRADING TYPICAL NO. 1
CL SURVEY I-44 STA. 372+54.00 TO STA. 375+50.00

PAVEMENT REQUIREMENT	
PAVT. STRUCTURE	PAVED MEDIAN
SURFACE COURSE	10" DOWEL JOINTED P.C. CONC. PVMT.
BASE COURSE	4" SUPERPAVE TYPE S3 (PG 64-22 OK)

CABLE MEDIAN BARRIER OFFSET	
OFFSET	STATION EXTENTS
5'-0" TO 15'-0"	STA. 372+00.00 TO STA. 374+75.00
15'-0"	STA. 374+75.00 TO STA. 377+60.00

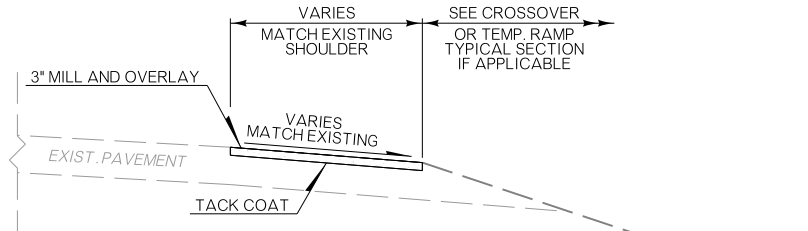
(1) BACKFILL NOTE:
TO BE BACKFILLED AND COMPACTED AS PART OF THE FINISHING OPERATIONS.
QUANTITY IS MEASURED IN TBSC TYPE E.

(2) TOPSOIL NOTE:
THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL, STOCKPILE IT,
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INCLUDED IN THE PAY ITEM FOR SALVAGED TOPSOIL, LUMP SUM.

THE GRADING LINE AS SHOWN ON THE TYPICAL AND CROSS SECTIONS IS TO THE
TOP OF THE TOPSOIL. EARTHWORK QUANTITIES WERE NOT ADJUSTED FOR
SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASS LINE BALANCE.

DESIGN	RBH		OKLAHOMA DEPARTMENT OF TRANSPORTATION	
DRAWN	TGG			
CHECKED	MJC			
APPROVED				
SQUAD	HNTH			
COUNTY	OKLAHOMA	HIGHWAY	I-44	STATE JOB NO. 30637(04) SHEET NO. 0006

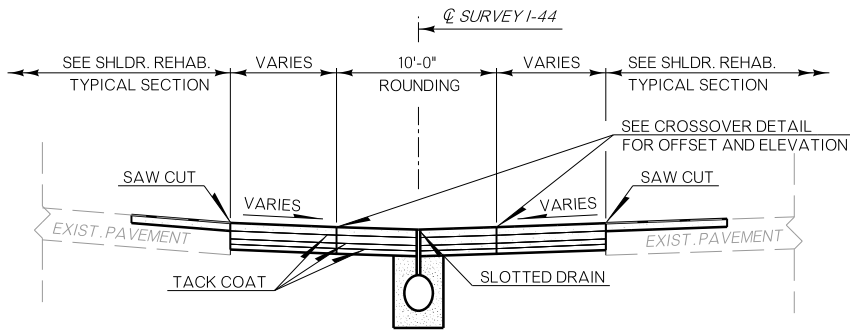
TYPICAL SECTION



SHOULDER REHABILITATION TYPICAL NO. 1

- 1-44 WB STA. 362+60.74 TO STA. 378+18.62, OUTSIDE SHLDR.
1-44 WB STA. 381+07.31 TO STA. 388+52.79, OUTSIDE SHLDR.
1-44 WB STA. 395+41.18 TO STA. 396+86.00, OUTSIDE SHLDR.
1-44 WB STA. 362+60.74 TO STA. 377+97.91, INSIDE SHLDR.
1-44 WB STA. 380+85.00 TO STA. 390+84.32, INSIDE SHLDR.
1-44 EB STA. 364+82.35 TO STA. 377+37.97, INSIDE SHLDR.
1-44 EB STA. 380+30.40 TO STA. 390+53.00, INSIDE SHLDR.

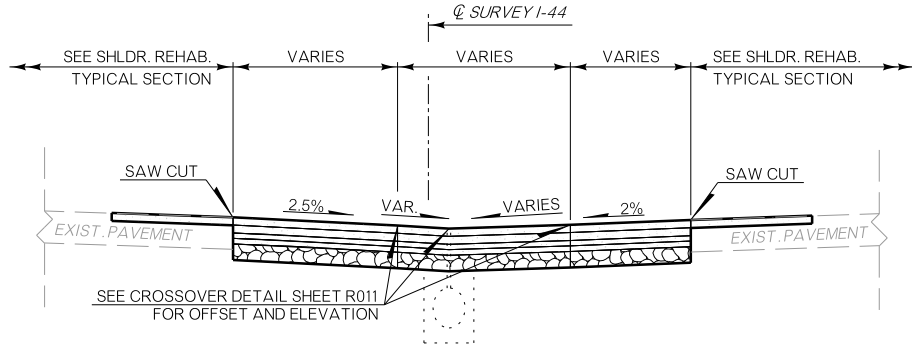
PAVEMENT REQUIREMENT	
PAVT. STRUCTURE	SHOULDER
SURFACE COURSE	3" SUPERPAVE TYPE S4 (PG 64-22 OK)



NORTH CROSSOVER TYPICAL NO. 1

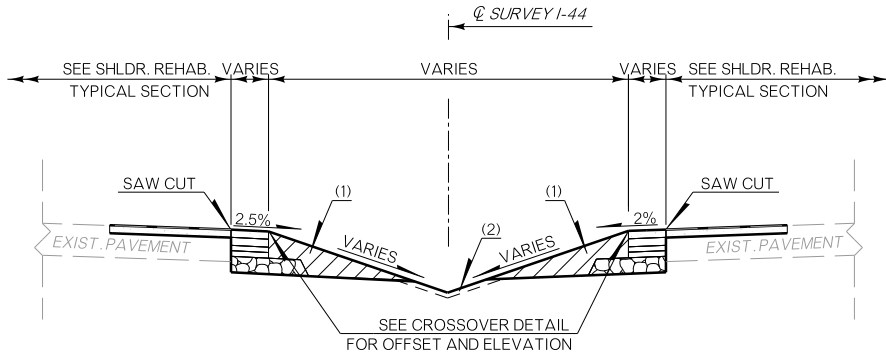
1-44 STA. 385+11.22 TO STA. 389+19.06

PAVEMENT REQUIREMENT	
PAVT. STRUCTURE	CROSSOVER
SURFACE COURSE	3" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
	2" SUPERPAVE TYPE S3 (PG 64-22 OK)
	2" SUPERPAVE TYPE S3 (PG 64-22 OK)



SOUTH CROSSOVER TYPICAL NO. 2

1-44 STA. 367+75.00 TO STA. 369+66.00

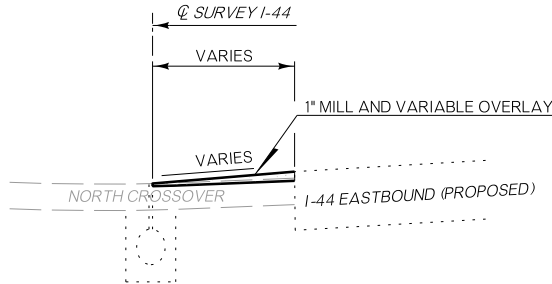


SOUTH CROSSOVER TYPICAL NO. 1

1-44 STA. 365+21.30 TO STA. 367+75.00
1-44 STA. 369+66.00 TO STA. 372+35.48

PAVEMENT REQUIREMENT	
PAVT. STRUCTURE	CROSSOVER
SURFACE COURSE	3" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
	2" SUPERPAVE TYPE S3 (PG 64-22 OK)
	2" SUPERPAVE TYPE S3 (PG 64-22 OK)
	6" AGGREGATE BASE, TYPE A

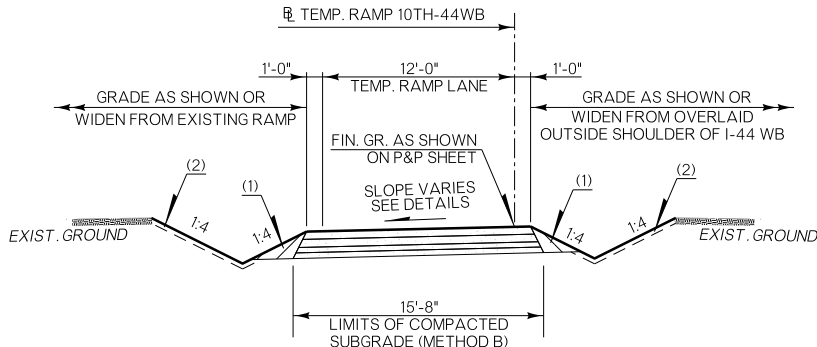
CROSSOVER INTERIOR GRADING SLOPES	
SLOPE	STATION EXTENTS
1:10	BEGIN TO STA. 367+75.00
1:6	STA. 369+66.00 TO STA. 370+45.00
1:6 TO 1:10	STA. 370+45.00 TO STA. 370+95.00
1:10	STA. 370+95.00 TO END



NORTH CROSSOVER TYPICAL NO. 2
(PHASE 3B MODIFICATION)

1-44 EB STA. 384+88.45 TO STA. 386+58.00

PAVEMENT REQUIREMENT	
PAVT. STRUCTURE	OVERLAY
SURFACE COURSE	3" SUPERPAVE TYPE S3 (PG 64-22 OK)



TYPICAL NO. 1
TEMPORARY RAMP 10TH-44WB

TEMP. RAMP 10TH-44WB STA. 396+17.76 TO STA. 399+29.59

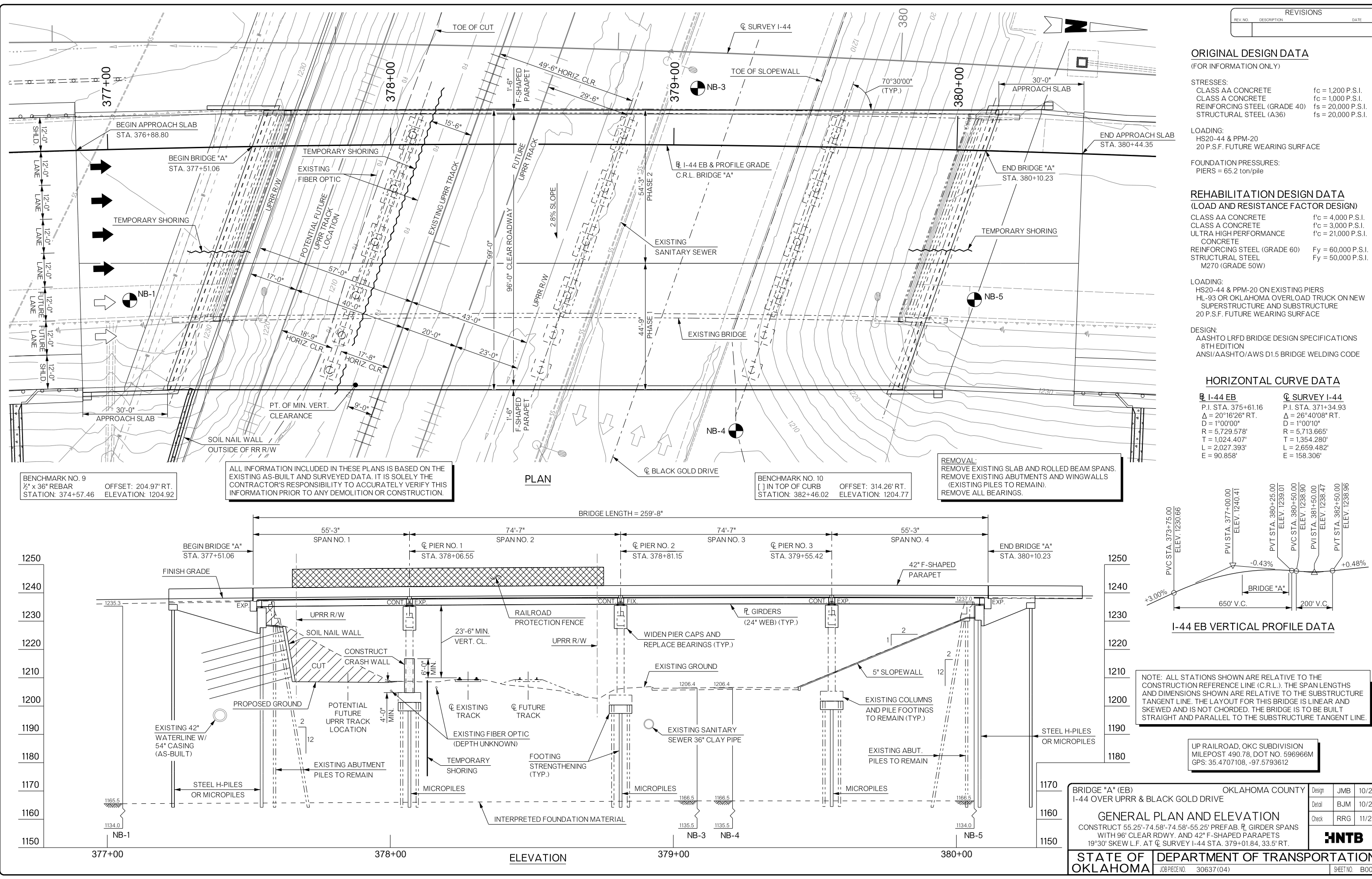
PAVEMENT REQUIREMENT	
PAVT. STRUCTURE	CROSSOVER
SURFACE COURSE	3" SUPERPAVE TYPE S4 (PG 64-22 OK)
BASE COURSE	3" SUPERPAVE TYPE S3 (PG 64-22 OK)
	2" SUPERPAVE TYPE S3 (PG 64-22 OK)
	2" SUPERPAVE TYPE S3 (PG 64-22 OK)

(1) BACKFILL NOTE:
TO BE BACKFILLED AND COMPACTED AS PART OF THE FINISHING OPERATIONS.
QUANTITY IS MEASURED IN TBSC TYPE E.

(2) TOPSOIL NOTE:
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SALVAGE AND THE TOPSOIL QUANTITY IS INCLUDED IN THE MASS LINE BALANCE.

DESIGN	RBH		OKLAHOMA DEPARTMENT OF TRANSPORTATION	
DRAWN	TGG			
CHECKED	M/JG		TYPICAL SECTION	
APPROVED				
SQUAD	HNTB			
COUNTY	OKLAHOMA	HIGHWAY	I-44	STATE JOB NO. 30637(04) SHEET NO. 0007



REVISIONS		
REV. NO.	DESCRIPTION	DATE

ORIGINAL DESIGN DATA
(FOR INFORMATION ONLY)

STRESSES:
CLASS AA CONCRETE $f'_c = 1,200$ P.S.I.
CLASS A CONCRETE $f'_c = 1,000$ P.S.I.
REINFORCING STEEL (GRADE 40) $f_s = 20,000$ P.S.I.
STRUCTURAL STEEL (A36) $f_s = 20,000$ P.S.I.

LOADING:
HS20-44 & PPM-20
20 P.S.F. FUTURE WEARING SURFACE

FOUNDATION PRESSURES:
PIERS = 65.2 ton/pile

REHABILITATION DESIGN DATA
(LOAD AND RESISTANCE FACTOR DESIGN)

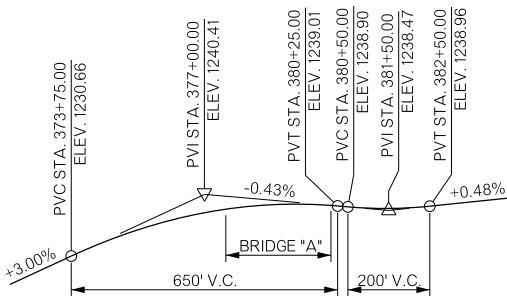
CLASS AA CONCRETE $f'_c = 4,000$ P.S.I.
CLASS A CONCRETE $f'_c = 3,000$ P.S.I.
ULTRA HIGH PERFORMANCE CONCRETE $f'_c = 21,000$ P.S.I.
REINFORCING STEEL (GRADE 60) $F_y = 60,000$ P.S.I.
STRUCTURAL STEEL $F_y = 50,000$ P.S.I.
M270 (GRADE 50W)

LOADING:
HS20-44 & PPM-20 ON EXISTING PIERS
HL-93 OR OKLAHOMA OVERLOAD TRUCK ON NEW
SUPERSTRUCTURE AND SUBSTRUCTURE
20 P.S.F. FUTURE WEARING SURFACE

DESIGN:
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
8TH EDITION
ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE

HORIZONTAL CURVE DATA

B I-44 EB	CL SURVEY I-44
P.I. STA. 375+61.16	P.I. STA. 371+34.93
$\Delta = 20^\circ 16' 26''$ RT.	$\Delta = 26^\circ 40' 08''$ RT.
$D = 1^\circ 00' 00''$	$D = 1^\circ 00' 10''$
$R = 5,729.578'$	$R = 5,713.665'$
$T = 1,024.407'$	$T = 1,354.280'$
$L = 2,027.393'$	$L = 2,659.482'$
$E = 90.858'$	$E = 158.306'$

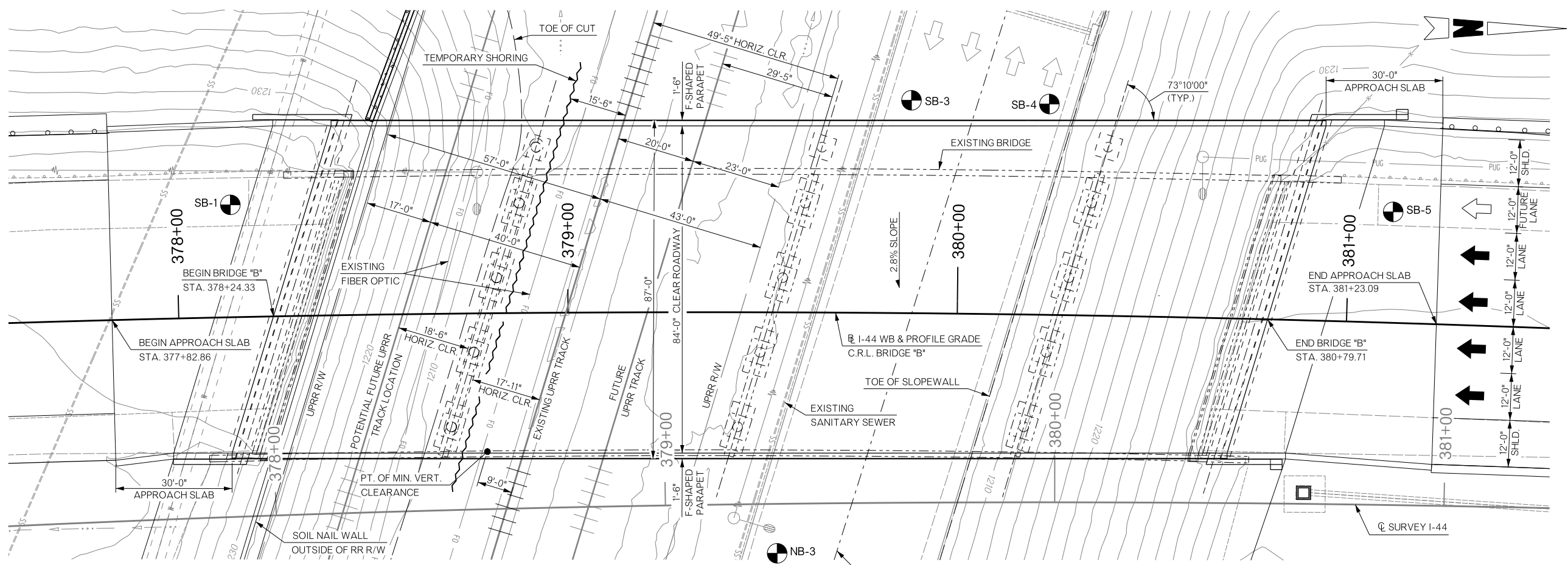


I-44 EB VERTICAL PROFILE DATA

NOTE: ALL STATIONS SHOWN ARE RELATIVE TO THE CONSTRUCTION REFERENCE LINE (C.R.L.). THE SPAN LENGTHS AND DIMENSIONS SHOWN ARE RELATIVE TO THE SUBSTRUCTURE TANGENT LINE. THE LAYOUT FOR THIS BRIDGE IS LINEAR AND SKEWED AND IS NOT CHORDED. THE BRIDGE IS TO BE BUILT STRAIGHT AND PARALLEL TO THE SUBSTRUCTURE TANGENT LINE.

UP RAILROAD, OKC SUBDIVISION
MILEPOST 490.78, DOT NO. 596966M
GPS: 35.4707108, -97.5793612

BRIDGE "A" (EB) I-44 OVER UPRR & BLACK GOLD DRIVE		OKLAHOMA COUNTY		Design	JMB	10/20	
GENERAL PLAN AND ELEVATION CONSTRUCT 55.25'-74.58'-74.58'-55.25' PREFAB. R GIRDER SPANS WITH 96" CLEAR RDWY. AND 42" F-SHAPED PARAPETS 19°30' SKEW L.F. AT CL SURVEY I-44 STA. 379+01.84, 33.5' RT.				Detail	BJM	10/20	
				Check	RRG	11/20	
				HNTB			
STATE OF OKLAHOMA		DEPARTMENT OF TRANSPORTATION					
JOB/PIECE NO.		30637(04)			SHEET NO.		B001



BENCHMARK NO. 9
1/2" x 36" REBAR
STATION: 374+57.46
OFFSET: 204.97' RT.
ELEVATION: 1204.92

ALL INFORMATION INCLUDED IN THESE PLANS IS BASED ON THE
EXISTING AS-BUILT AND SURVEYED DATA. IT IS SOLELY THE
CONTRACTOR'S RESPONSIBILITY TO ACCURATELY VERIFY THIS
INFORMATION PRIOR TO ANY DEMOLITION OR CONSTRUCTION.

PLAN

REMOVAL:
REMOVE EXISTING SLAB AND ROLLED BEAM SPANS.
REMOVE EXISTING ABUTMENTS AND WINGWALLS
(EXISTING PILES TO REMAIN).
REMOVE ALL BEARINGS.

BENCHMARK NO. 10
[] IN TOP OF CURB
STATION: 382+46.02
OFFSET: 314.26' RT.
ELEVATION: 1204.77

REV. NO. DESCRIPTION DATE

ORIGINAL DESIGN DATA
(FOR INFORMATION ONLY)

STRESSES:
CLASS AA CONCRETE f_c = 1,200 P.S.I.
CLASS A CONCRETE f_c = 1,000 P.S.I.
REINFORCING STEEL (GRADE 40) f_s = 20,000 P.S.I.
STRUCTURAL STEEL (A36) f_s = 20,000 P.S.I.

LOADING:
HS20-44 & PPM-20
20 P.S.F. FUTURE WEARING SURFACE

FOUNDATION PRESSURES:
PIERS = 65.2 ton/pile

REHABILITATION DESIGN DATA
(LOAD AND RESISTANCE FACTOR DESIGN)

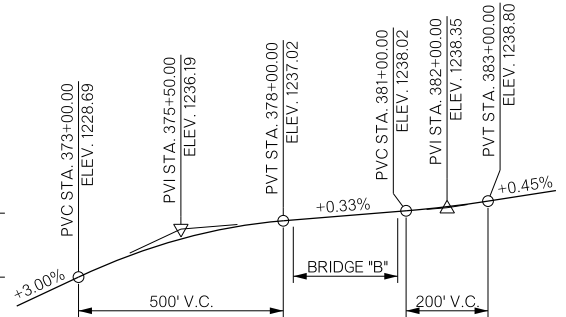
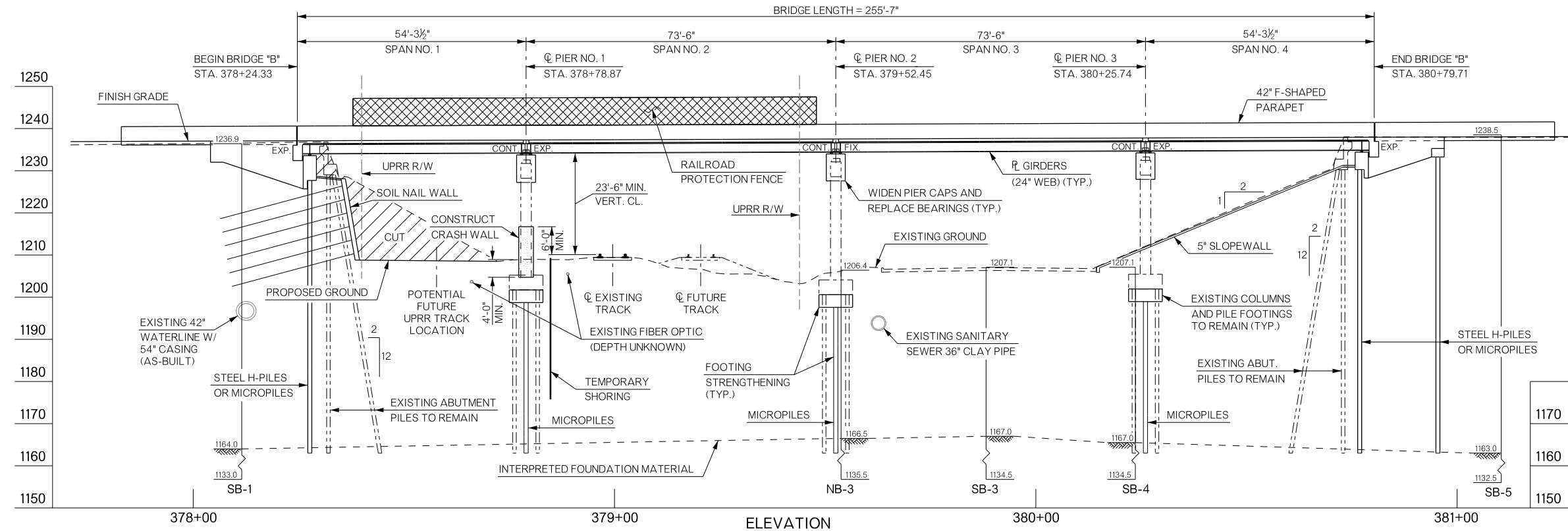
CLASS AA CONCRETE f'c = 4,000 P.S.I.
CLASS A CONCRETE f'c = 3,000 P.S.I.
ULTRA HIGH PERFORMANCE CONCRETE f'c = 21,000 P.S.I.
REINFORCING STEEL (GRADE 60) F_y = 60,000 P.S.I.
STRUCTURAL STEEL F_y = 50,000 P.S.I.
M270 (GRADE 50W)

LOADING:
HS20-44 & PPM-20 ON EXISTING PIERS
HL-93 OR OKLAHOMA OVERLOAD TRUCK ON NEW
SUPERSTRUCTURE AND SUBSTRUCTURE
20 P.S.F. FUTURE WEARING SURFACE

DESIGN:
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
8TH EDITION
ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE

HORIZONTAL CURVE DATA

I-44 WB	Q SURVEY I-44
P.I. STA. 370+71.22	P.I. STA. 371+34.93
Δ = 26°40'08" RT.	Δ = 26°40'08" RT.
D = 1°00'00"	D = 1°00'10"
R = 5,729.578'	R = 5,713.665'
T = 1,358.052'	T = 1,354.280'
E = 2,666.889'	L = 2,659.482'
E = 158.747'	E = 158.306'



I-44 WB VERTICAL PROFILE DATA

NOTE: ALL STATIONS SHOWN ARE RELATIVE TO THE
CONSTRUCTION REFERENCE LINE (C.R.L.). THE SPAN LENGTHS
AND DIMENSIONS SHOWN ARE RELATIVE TO THE SUBSTRUCTURE
TANGENT LINE. THE LAYOUT FOR THIS BRIDGE IS LINEAR AND
SKEWED AND IS NOT CHORDED. THE BRIDGE IS TO BE BUILT
STRAIGHT AND PARALLEL TO THE SUBSTRUCTURE TANGENT LINE.

UP RAILROAD, OKC SUBDIVISION
MILEPOST 490.78, DOT NO. 596966M
GPS: 35.4707108, -97.5793612

BRIDGE "B" (WB)
I-44 OVER UPRR & BLACK GOLD DRIVE

OKLAHOMA COUNTY

Design JMB 10/20
Detail BJM 10/20
Check RRG 11/20

GENERAL PLAN AND ELEVATION
CONSTRUCT 54.29'-73.5'-73.5'-54.29' PREFAB. R GIRDER SPANS
WITH 84" CLEAR RDWY. AND 42" F-SHAPED PARAPETS
16°50' SKEW L.F. AT Q SURVEY I-44 STA. 379+28.01, 49.2' LT.

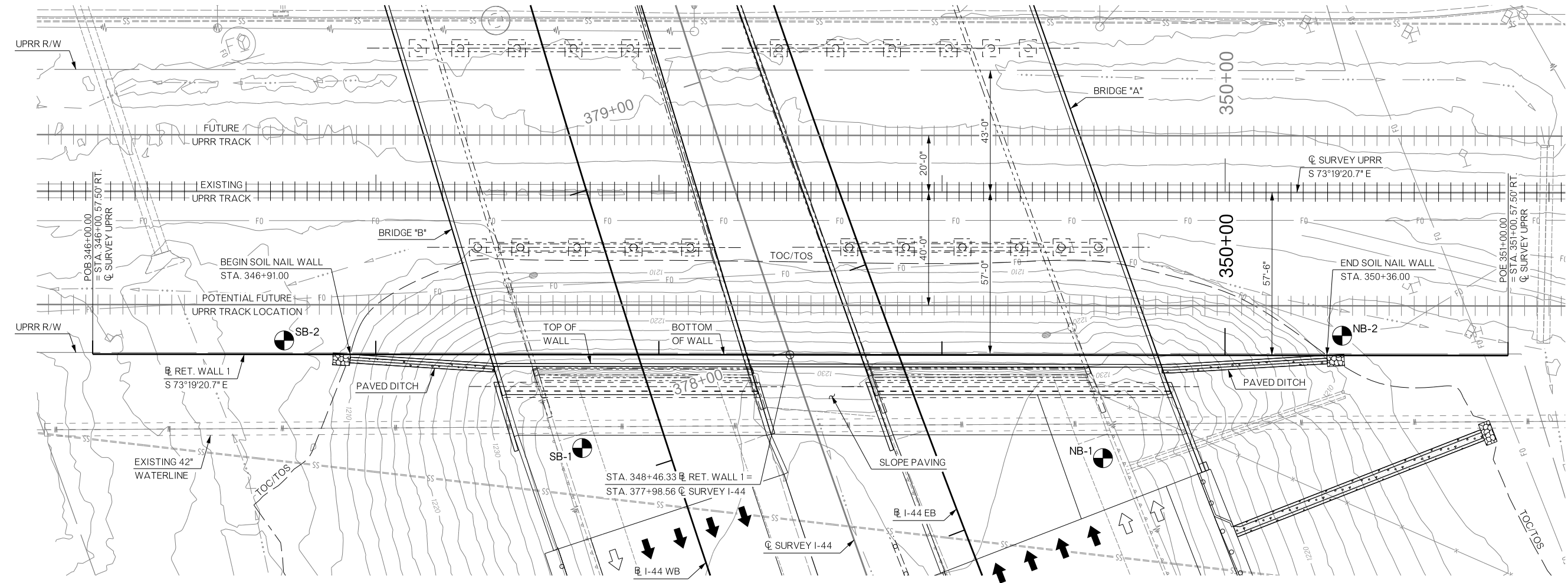
STATE OF OKLAHOMA

DEPARTMENT OF TRANSPORTATION

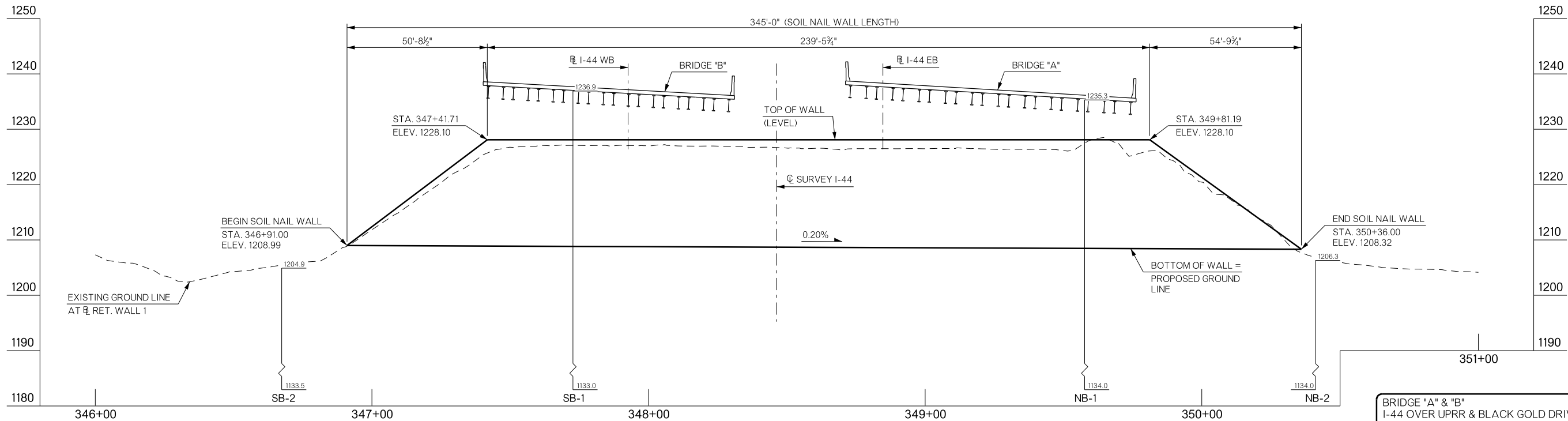
JOB/PIECE NO. 30637(04)

SHEET NO. B005

REVISIONS		
REV. NO.	DESCRIPTION	DATE



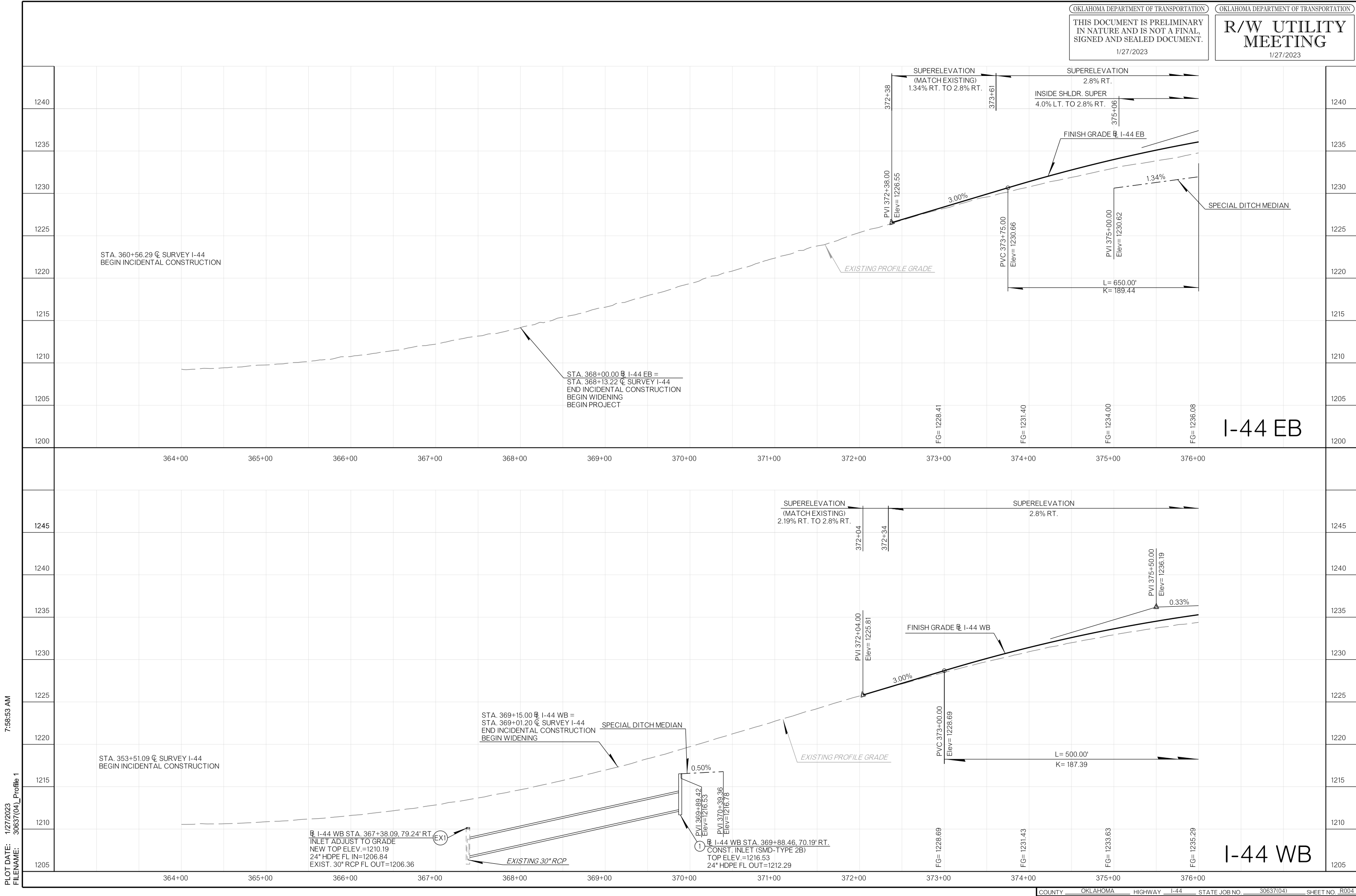
PLAN
SCALE: 1" = 20'



ELEVATION
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 10'

BRIDGE "A" & "B"		OKLAHOMA COUNTY		Design	EEB	12/22
I-44 OVER UPRR & BLACK GOLD DRIVE				Detail	JMB	12/22
				Check	ASB	1/23
				HNTB		
STATE OF OKLAHOMA		DEPARTMENT OF TRANSPORTATION				
JOB/PROJECT NO. 30637(04)				SHEET NO. RW01		

PLOT DATE: 1/27/2023
FILENAME: 30637(04)_Profile 1



I-44 WESTBOUND

CURVE - 1
PI STA= 370+71.22
N= 170755.3332
E= 2093617.4253
 Δ = 26°40'08.00" RT
D= 01°00'00.00"
T= 1358.05'
L= 2666.89'
R= 5729.58'
E= 158.75'
EMAX = 6.0%
S= 2.8%
V= 60 mph

I-44 EASTBOUND

COMPOUND CURVE
PCC STA = 365+36.75
N=170333.7722
E=2094001.9667

CURVE - 1

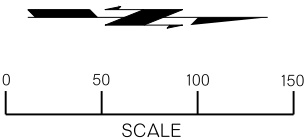
PI STA= 361+10.87
N= 169923.5073
E= 2094119.5206
 Δ = 6°23'41.87" RT
D= 0°45'00.00"
T= 426.77'
L= 852.66'
R= 7639.44'
E= 11.91'
S= EXIST.

CURVE - 2

PI STA= 375+61.16
N= 171318.5514
E= 2093719.7962
 Δ = 20°16'26.13" RT
D= 1°00'00.00"
T= 1024.41'
L= 2027.39'
R= 5729.58'
E= 90.86'
EMAX = 6.0%
S= 2.8%
V= 60 mph

@ SURVEY I-44

CURVE - 1
PI STA= 371+34.93
N= 170844.3275
E= 2093666.2115
 Δ = 26°40'08.00" RT
D= 1°00'10.03"
T= 1354.28'
L= 2659.48'
R= 5713.66'
E= 158.31'
S= EXIST.



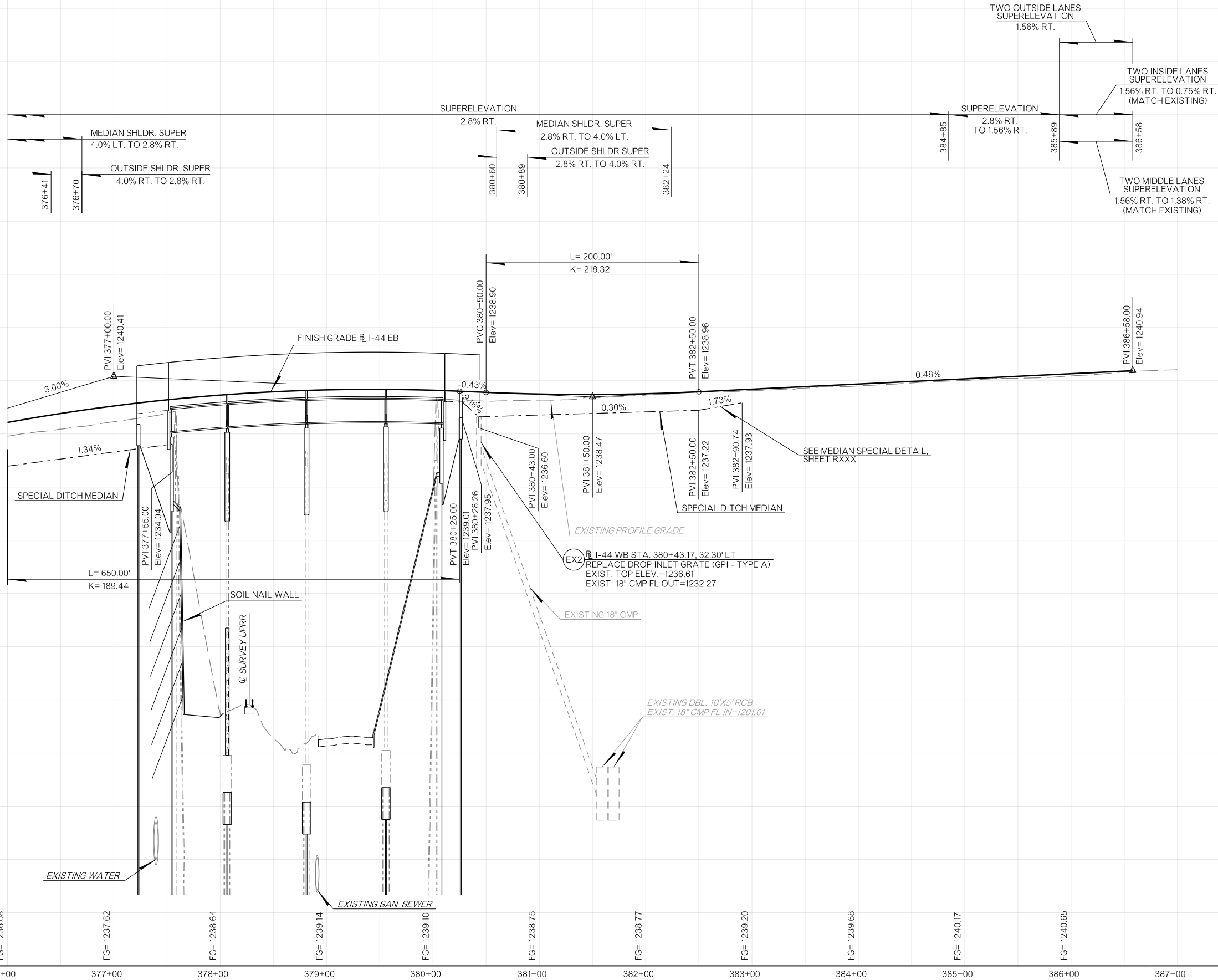
SECTION 36
T-12-N, R-4-W

DESIGN	RBH	
DRAWN	TGG	
CHECKED	MJC	
APPROVED		
SQUAD	HNTB	
COUNTY	OKLAHOMA	

OKLAHOMA DEPARTMENT OF TRANSPORTATION

PLAN
I-44 WESTBOUND
I-44 EASTBOUND

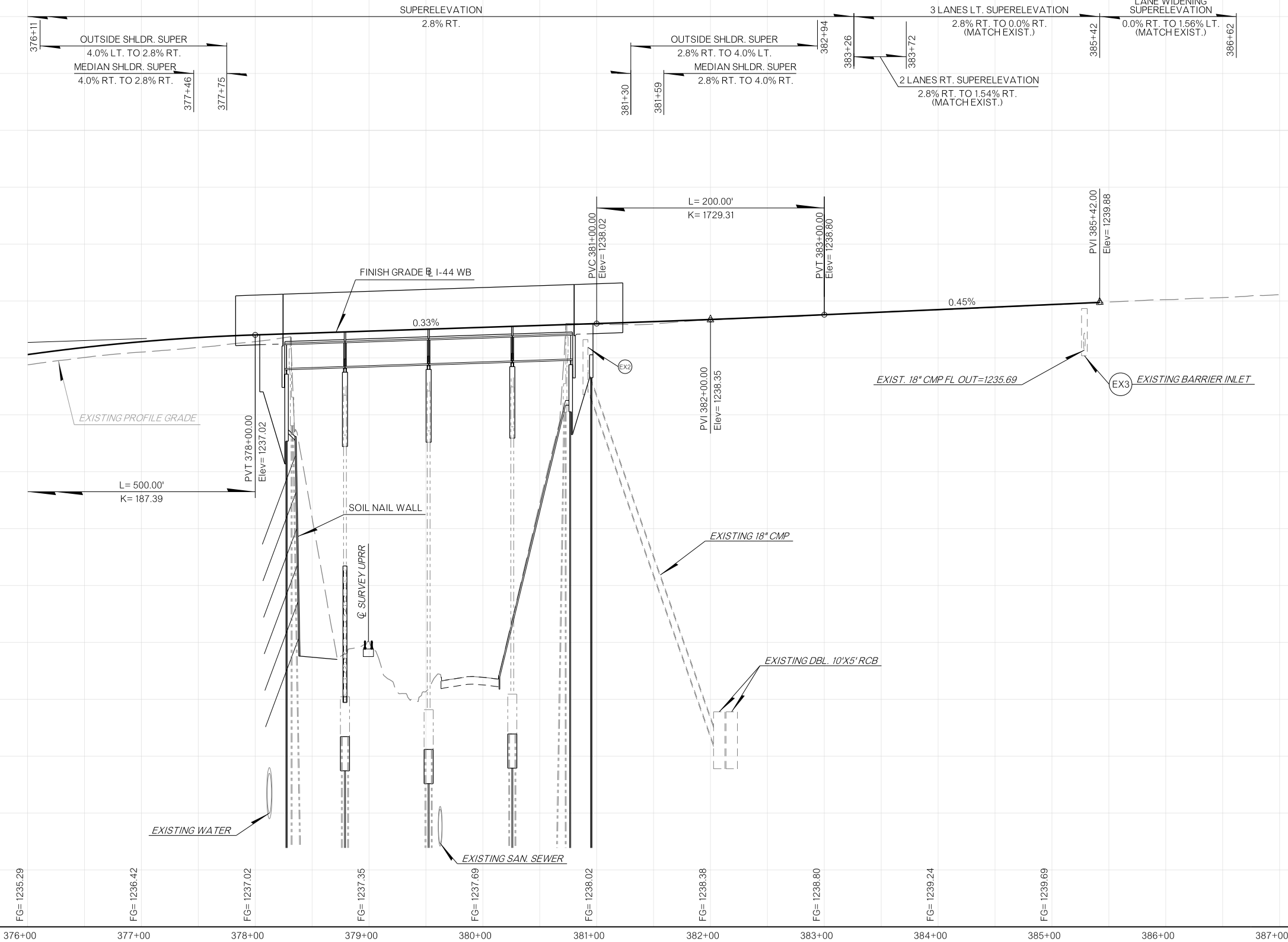
HIGHWAY - I-44 STATE JOB NO. 30637(04) SHEET NO. R005



I-44 EB

PLOT DATE: 1/27/2023
FILENAME: 30637(04)_Profile 2-2

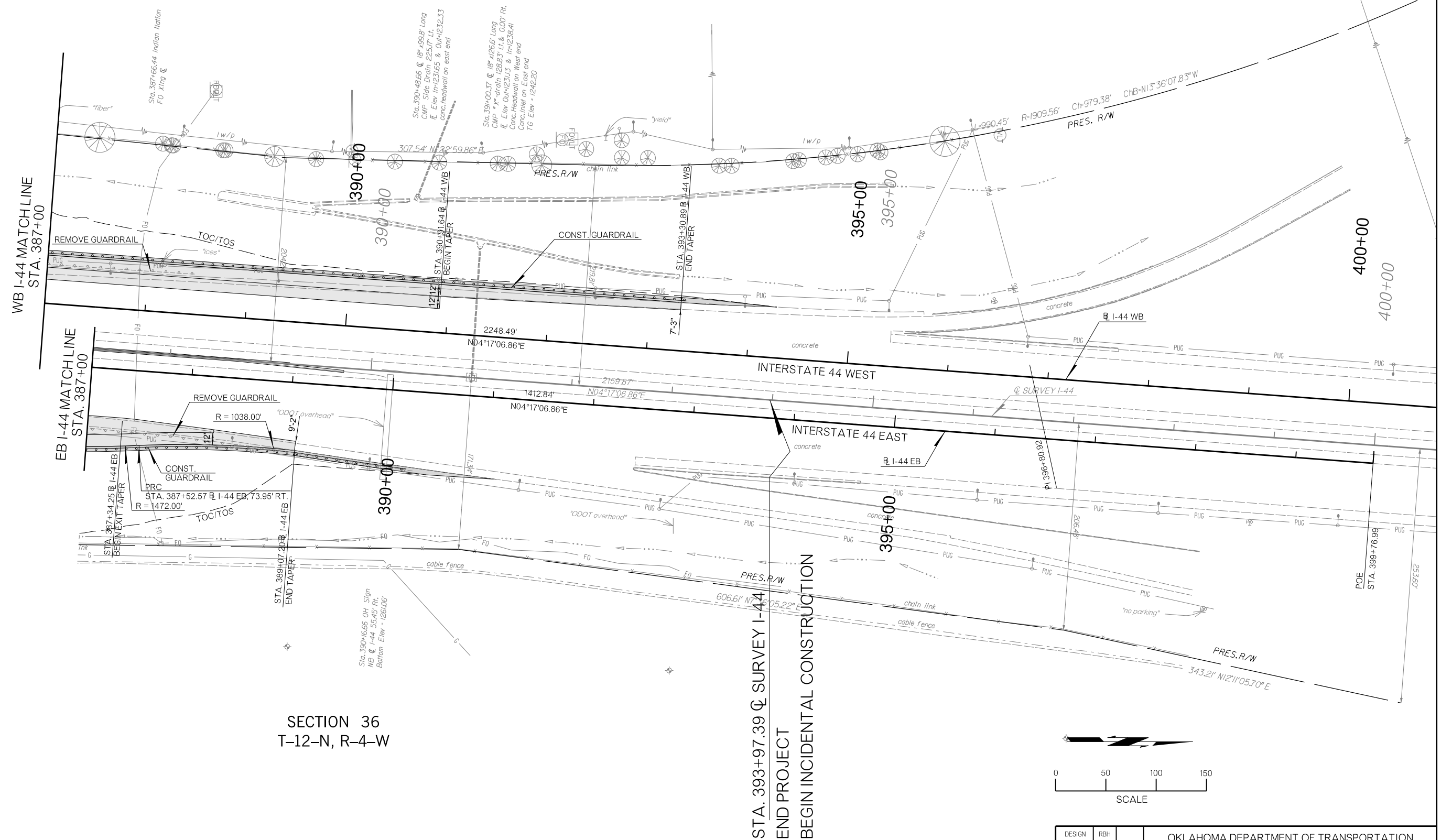
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I-44 WB

THIS DOCUMENT IS PRELIMINARY
IN NATURE AND IS NOT A FINAL,
SIGNED AND SEALED DOCUMENT.

R/W UTILITY MEETING



THIS DOCUMENT IS PRELIMINARY
IN NATURE AND IS NOT A FINAL,
SIGNED AND SEALED DOCUMENT.

1/27/2023

R/W UTILITY
MEETING

1/27/2023

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PLOT DATE: 1/27/2023
FILENAME: 30637(04)_Profile 3

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391+00

392+00

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400+00

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389+07

OUTSIDE SHLDR SUPERELEVATION
4.0% RT. TO 1.8% RT. (MATCH EXIST.)

STA. 391+09.12 @ I-44 EB =
STA. 391+32.14 @ SURVEY I-44
END WIDENING
BEGIN INCIDENTAL CONSTRUCTION

EXISTING PROFILE GRADE

STA. 392+75.65 @ SURVEY I-44
END INCIDENTAL CONSTRUCTION

I-44 EB

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EXISTING PROFILE GRADE

STA. 394+25.93 @ I-44 WB =
STA. 393+97.39 @ SURVEY I-44
END WIDENING
END PROJECT
BEGIN INCIDENTAL CONSTRUCTION

STA. 402+68.21 @ SURVEY I-44
END INCIDENTAL
CONSTRUCTION

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SECTION 106
CULTURAL RESOURCES STUDIES

ODOT CULTURAL RESOURCES PROGRAM SCREENED EXEMPTION PROJECT REVIEW

County: Oklahoma
JP No: 30637(04)
Staff CRP Reviewer: Mike McKay

Request Date: 2/10/2021
Completion Date: 2/25/2021
NEPA Project Manager: Frank Guerrero
ODOT Division: Div. 4

1. PROJECT DESCRIPTION:

BRIDGE REHABILITATION – I-44: OVER THE UPAC RR, 0.7 MILES NORTH OF I-40.

Project specifications:

_____ existing pavement lines
XXX existing R/W
XXX previously disturbed soil
_____ other, describe:

2. CULTURAL RESOURCES REVIEW FOR PREVIOUSLY RECORDED HISTORIC PROPERTIES:

Archival Review:

XXX National Register of Historic Places (NRHP) List (Property has been listed on the NRHP)
XXX State Historic Preservation Office's (SHPO) Determination of Eligibility (DOE) List for the NRHP
(Property has been determined eligible for listing on the NRHP)
XXX Oklahoma Archeological Survey (OAS) Archeological site files
_____ Program Comment bridge
_____ Depression-era Bridges Programmatic Agreement
XXX Interstate Highway Exception
XXX Tribal Coordination Database
_____ Other: describe

Comments: In accordance with the March 2005 ACHP Section 106 Exemption regarding effects to the Interstate Highway System, these bridges do not require documenting and review.

Results:

XXX No historic properties in the area of potential effect (APE)
_____ Historic properties in or adjacent to the APE

Project subjected to field review:

XXX No
_____ Yes

3. RECOMMENDATIONS:

XXX Project has no potential to affect historic properties

The ODOT Cultural Resources Program has completed a review of the Preliminary Plans dated November 11, 2020 for this project and has examined the SHPO's online DOE and NRHP files as well as the archaeological site files at the OAS. The proposed project was reviewed by an archaeologist who meets the Secretary of Interior Qualifications. Additionally, the project was reviewed during COVID-19 response and was conducted with the best available information. The proposed undertaking is, by nature, a project that has no potential to cause effects to historic properties as defined in 36 CFR 800.3(a)(1). Since there is no apparent potential to affect historic properties then no further work regarding cultural resources is recommended.

_____ Project requires review of final plans to ensure no affect to historic properties
_____ Project requires field investigations and consultation with reviewing agencies.
_____ Off-project avoidance notes

BIOLOGICAL STUDIES

BIOLOGICAL STUDIES TRACKING FORM

NEPA Project Manager	Frank Guerrero
State or Local Government Project	State
USFWS TAILS #	02EKOK00-2021-SLI-1399
Original IPaC List	4/16/2021
Email used to request IpaC official species list	ptcrawford@ou.edu
Last Updated Species List Date	Click here to enter a date.
ROW	Click here to enter a date.
Let Date	FFY 2026
90 Day Prior to Let IpaC List	Click here to enter a date.
Duration expected	Click here to enter text.
Original Biological Assessment and Waters and Wetlands Report Prepared By:	Phillip Crawford
Most Recent Field Date:	4/8/2021
Original Report Date:	4/16/2021
USFWS Consultation Submittal:	No Effect All Species
USFWS Concurrence:	None required
Original Tracking Form Prepared by:	Phillip Crawford & Elizabeth Nichols
Original Tracking Form date:	4/21/2021
Update Reason	Click here to enter text.
Updated By Whom:	Click here to enter text.
Amended USFWS Consultation Submittal:	Click here to enter a date.
Amended USFWS Concurrence:	Click here to enter a date.
Tracking Form Updated By Whom:	Click here to enter text.
Tracking Form Updated Date:	Click here to enter a date.
<i>ADD MORE LINES AS NEEDED FOR EACH TIME PROJECT IS UPDATED</i>	

Form Date: February 2021

Project Name from Oracle

I-44 Bridge rehabilitation over the U.P. Railroad and Black Gold Drive, approximately 0.7 mile north of I-40, in Oklahoma City, OK

Project Description

Bridge Rehabilitation

Check if any of the following is expected as part of the proposed action

- Work within the OHWM is expected ☐
- Project is OFF-SET alignment ☐
- Project is NEW alignment ☐
- Project involves **NO OFF EXISTING PAVEMENT** work ☐
- Project requires new ROW (permanent &/or temporary) ☐

2. FEDERALLY LISTED SPECIES AND DESIGNATED CRITICAL HABITAT

Species	Listing Status	IPaC	Effect Determination for IPaC listed species
		Check if Yes	
Red-cockaded Woodpecker	Endangered	<input type="checkbox"/>	Choose an item.
Whooping Crane	Endangered	<input checked="" type="checkbox"/>	No Effect
Gray Bat	Endangered	<input type="checkbox"/>	Choose an item.
Indiana Bat	Endangered	<input type="checkbox"/>	Choose an item.
Ozark Big-eared Bat	Endangered	<input type="checkbox"/>	Choose an item.
Neosho Mucket	Endangered	<input type="checkbox"/>	Choose an item.
Ouachita Rock Pocketbook	Endangered	<input type="checkbox"/>	Choose an item.
Scaleshell Mussel	Endangered	<input type="checkbox"/>	Choose an item.
Winged Mapleleaf	Endangered	<input type="checkbox"/>	Choose an item.
Harperella	Endangered	<input type="checkbox"/>	Choose an item.
American Burying Beetle	Threatened	<input type="checkbox"/>	Choose an item.
Eastern Black Rail	Threatened	<input type="checkbox"/>	Choose an item.
Piping Plover	Threatened	<input checked="" type="checkbox"/>	No Effect
Red Knot	Threatened	<input checked="" type="checkbox"/>	No Effect
Northern Long-eared Bat	Threatened	<input type="checkbox"/>	Choose an item
Arkansas River Shiner	Threatened	<input type="checkbox"/>	Choose an item.
Leopard Darter	Threatened	<input type="checkbox"/>	Choose an item.
Neosho Madtom	Threatened	<input type="checkbox"/>	Choose an item.
Ozark Cavefish	Threatened	<input type="checkbox"/>	Choose an item.
American Alligator	Threatened	<input type="checkbox"/>	Choose an item.
Rabbitsfoot Mussel	Threatened	<input type="checkbox"/>	Choose an item.
Rattlesnake-master Borer Moth	Candidate	<input type="checkbox"/>	Choose an item.
Whooping Crane Critical Habitat	Designated	<input type="checkbox"/>	Choose an item.
Arkansas River Shiner Critical Habitat	Designated	<input type="checkbox"/>	Choose an item.
Leopard Darter Critical Habitat	Designated	<input type="checkbox"/>	Choose an item.
Neosho Mucket Critical Habitat	Designated	<input type="checkbox"/>	Choose an item.
Rabbitsfoot Critical Habitat	Designated	<input type="checkbox"/>	Choose an item.

	NEPA Footprint	Construction Footprint
Number of acres within the NEPA Study Footprint & Construction Footprint (if known)	24.56	Click here to enter text.

Bald Eagle Assessment	Not expected to impact
Migratory Bird Assessment of Transportation Structures	Migratory birds found nesting on transportation structures
Assessment	nesting habitat for migratory birds will be impacted
Birds of Conservation Concern	Listed BCC may be impacted
Interior Least Tern (MBTA)	not expected to impact

<u>Species (choose those that apply)</u>	<u>Seasonal Restriction Period</u>
Migratory Birds: Swallows and Phoebe (NESTS PRESENT)	March 1 – August 31

Conservation Commitments

ODOT Commitment: All operators, employees, and contractors will be made aware of all environmental commitments, including the following Plan Notes.

Tree Removal Minimization Commitment: In order to avoid impacts to USFWS Birds of Conservation Concern, the removal of trees and shrubs will be restricted to areas within the actual limits of construction, and all aspects of the project (e.g. temporary work areas, alignments) will be modified to avoid tree removal, if possible, during the design of the project. Tree removal will be limited to that specified in the project plans provided to contractors.

Species Plan Notes

Non-Compliance: Failure to implement the commitments specified in the Plan Notes can result in non-compliance issues on the project. Work activities may be suspended on the project, for an undetermined duration, while working with regulators to bring the project back into compliance. The contractor will not be compensated for time lost.

Water Quality Conservation: Appropriate Best Management Practices to minimize impacts from storm water discharges and sedimentation in streams, as established by the Oklahoma Department of Environmental Quality, shall be conscientiously implemented throughout the proposed construction periods, in order to minimize any potential impacts to any listed species. The effectiveness of erosion controls shall be maintained for the duration of construction activities. Hazardous materials, chemicals, fuels, lubricating oils, and other such substances shall be stored at least 100 feet outside of the ordinary high water mark (OHWM). Refueling of construction equipment shall also be conducted at least 100 feet from the OHWMs. Sediment and erosion controls shall be installed around staging areas to prohibit discharge of materials from these sites. Construction waste materials and debris shall be stockpiled at least 25 feet outside of the OHWMs, and these materials shall be removed and disposed of properly following completion of the project. Preventative measure must be taken to prohibit the discharge of contaminants into any surface waters.

Migratory Bird Note: Migratory birds are protected by the federal Migratory Bird Treaty Act. Many birds commonly use bridges and culverts for nesting. The nesting season for most migratory bird species extends from March 1 to August 31. Migratory bird nesting use of the I-44 UP RR bridge (NBI:18770) and an RCB 9STA.381+86.64) was observed. Painting, repair, retrofit, rehabilitation or demolition of the existing bridge and culvert shall be conducted between September 1, and February 28, when migratory bird nests are not occupied. If painting, repair, retrofit, rehabilitation or demolition cannot be completed between September 1 and February 28, the bridge and culvert shall be protected from new nest establishment prior to March 1, by means that do not result in bird death or injury. Options include the exclusion of adult birds from suitable nest sites on or within a structure by the placement of weather-resistant polypropylene netting with 0.25-inch or smaller openings, prior to March 1. Methods other than netting must be pre-approved by the ODOT Biologist.

Although no nests were observed on all other structures, the birds may occupy the structures in the future. The Resident Engineer shall contact the ODOT Biologist if any bird use of these structures is observed. If birds are observed then painting, repair, retrofit, rehabilitation or demolition of the existing bridges and culverts shall be conducted between September 1, and February 28 (when migratory bird nests are not occupied).

Waters and Wetlands Delineation Status

Original delineation.

Wetlands and Ponds

Total Number of Sites	Water Body Type	Potential Jurisdiction Status	Acres within the NEPA Footprint
None	Choose an item.	Choose an item.	0

Streams and Drainages

Total Number of sites	Water body name	USGS Designation	Potential Jurisdictional Status	Acres within the NEPA Footprint	Liner Feet within the NEPA Footprint
2	Unnamed drainage features	unmapped ephemeral drainages	Unlikely Jurisdictional	0.247	1866.9

**ENDANGERED, THREATENED AND CANDIDATE SPECIES, DESIGNATED
CRITICAL HABITAT, BALD EAGLE AND MIGRATORY BIRD ASSESSMENTS**

For

USFWS TAILS #		02EKOK00-2021-SLI-1399			
Email used to request IPaC official species list				ptcrawford@ou.edu	
County	Oklahoma	JP Number	30637(04)	Project Number	Not Provided
Road Number	I-44	Water Body Name		N/A	
ROW Date	N/A	Let Date	FFY 2026	Project Length	0.472 mile
Project General Location		Approximately 0.7 mile north of I-40, in Oklahoma City, OK			
Project Statement From Oracle		I-44 Bridge rehabilitation over the U.P. Railroad and Black Gold Drive			

Prepared for:
Oklahoma Department of Transportation
Environmental Programs Division
200 NE 21st Street
Oklahoma City, OK 73105

Prepared by:

Biologist Name	Phillip Crawford
Company/Agency Name	ODOT Biological Studies Program at OU
Address	111 E. Chesapeake Street
City, State Zip	Norman, OK 73019

Report Date:	April 16, 2021
Field Survey Date	April 8, 2021
Field Survey Biologist(s)	Phillip Crawford

Form Date: February 2021

1. PROJECT OVERVIEW

1.1 Federal Nexus

This biological assessment, prepared by the above named Company/Agency for the Oklahoma Department of Transportation (ODOT), addresses the above named project in compliance with Section 7(c) of the Endangered Species Act (ESA) of 1973, as amended. Section 7 of the ESA requires that, through consultation with the U.S. Fish and Wildlife Service (Service), federal actions do not jeopardize the continued existence of any threatened, endangered, or proposed species or result in the destruction or adverse modification of critical habitat. This assessment evaluates the potential effects of the proposed transportation project on species that are federally listed under the ESA. Specific project design elements are identified that avoid or minimize adverse effects of the proposed project on listed species and designated critical habitat.

1.2. Project Description Bridge Rehabilitation

Description of the **existing** bridge/roadway facility and reason for proposed project

The existing I-44 northbound and southbound bridges over the U.P. Railroad and Black Gold Drive (NBI 18769 and NBI 19770) are 246.0 foot continuous steel stringer/girder span bridges with 73.7 foot wide decks and 68.0 foot wide approach roadways consisting of four 12 foot driving lanes and 10 foot paved shoulders. Recent inspections of the existing bridges (built in 1974) indicate that they are in need of repair; the bridges are “at risk” of becoming structurally deficient. The current Average Annual Daily Traffic (AADT) is 158570 vehicles per day (vpd) with a future 20 year AADT of 188210 vpd. The proposed construction will extend the useful life of the bridges.

Description of **proposed** improvements

The proposed construction will include the removal and replacement of portions of the concrete bridge deck and parapet, bearings, expansion joints, pier caps, abutments, approach slabs and slope drains. Concrete and epoxy resin repairs will be made to spalled areas and cracks in the abutments and piers, an elastomeric coating will be applied to the abutments, pier caps and the ends of beams, and a water repellant will be applied to the remaining areas of the abutments, wing walls and pier caps. Portions of the approach roadway will be reconstructed, and the existing guardrail will be replaced on widened (to 12 feet) shoulders. The existing facility will remain open to through traffic during the proposed construction, with crossovers constructed in the median. No new rights-of-way will be required to make the proposed improvements.

Check if any of the following is expected as part of the proposed action

- | | |
|--|--------------------------|
| Work within OHWM is expected | <input type="checkbox"/> |
| Project is OFF-SET alignment <input type="checkbox"/> or NEW alignment | <input type="checkbox"/> |
| Project involves NO OFF EXISTING PAVEMENT work | <input type="checkbox"/> |
| Project requires new ROW (permanent &/or temporary) | <input type="checkbox"/> |

1.3. Project Area and Setting

Project Location		Environmental Study Footprint		Ecoregion & Game Type	
<u>Section Range & Township</u>	<u>Lat/Long NAD 83)</u>	<u>Dimensions</u>	<u>Acreage</u>	<u>Level IV Ecoregion (Woods et al. 2005)</u>	<u>Game Type (Duck and Fletcher 1943)</u>
S36 T12N R04W	35.4709°N 97.5794°W	Encompasses the occupied I-44 R/W for 0.472 mile	24.56	Cross Timbers Transition	Tallgrass Prairie

Action Area:

The project action area includes those areas directly affected by construction activities within the project construction footprint.

2. FEDERALLY LISTED SPECIES AND DESIGNATED CRITICAL HABITAT

Species Range and Occurrence Evaluation (Check ☒ all that apply)

Species	IPaC ¹	Watershed ²	Water Body ³	Records ⁴
	Check if Yes	Check if YES	Check if Yes	Check if Yes
Red-cockaded Woodpecker	<input type="checkbox"/>			<input type="checkbox"/>
Whooping Crane	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Gray Bat	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Indiana Bat	<input type="checkbox"/>			<input type="checkbox"/>
Ozark Big-eared Bat	<input type="checkbox"/>			<input type="checkbox"/>
Neosho Mucket	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ouachita Rock Pocketbook	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scaleshell Mussel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Winged Mapleleaf	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Harperella	<input type="checkbox"/>			<input type="checkbox"/>
American Burying Beetle	<input type="checkbox"/>			<input type="checkbox"/>
Eastern Black Rail	<input type="checkbox"/>			<input type="checkbox"/>
Piping Plover	<input checked="" type="checkbox"/>			<input type="checkbox"/>
Red Knot	<input checked="" type="checkbox"/>			<input type="checkbox"/>
Northern Long-eared Bat	<input type="checkbox"/>			<input type="checkbox"/>
Arkansas River Shiner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leopard Darter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neosho Madtom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ozark Cavefish	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>

Species	IPaC ¹	Watershed ²	Water Body ³	Records ⁴
	Check if Yes	Check if YES	Check if Yes	Check if Yes
American Alligator	<input type="checkbox"/>			<input type="checkbox"/>
Rabbitsfoot Mussel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rattlesnake-master Borer Moth	<input type="checkbox"/>			<input type="checkbox"/>

¹Species is on the Proposed Project's IPaC List

²Action Area is within a watershed associated with occupied water bodies

³Action Area includes an occupied water body

⁴Project site within 5 miles of known records

Designated or Proposed Critical Habitat	Action Area includes Designated Critical Habitat (Check <input checked="" type="checkbox"/> if Yes)
Whooping Crane	<input type="checkbox"/>
Arkansas River Shiner	<input type="checkbox"/>
Leopard Darter	<input type="checkbox"/>
Neosho Mucket	<input type="checkbox"/>
Rabbitsfoot	<input type="checkbox"/>

Action area is adjacent to McAlester Army Ammunition Plant or Camp Gruber/Cherokee WMA ☐

All of part of the action area is within the 10 mile **gray bat** priority area (ODOT will check) ☐

All of part of the action area is within the 2 mile **gray bat** priority area (ODOT will check) ☐

Action area is within what percentage **Whooping Crane** migratory corridor **95%**

Action area is within 15 miles of Salt Plains NWR, Hackberry Flat, or Foss Reservoir. ☐

Action area is within the historic range of the **Red-cockaded Woodpecker** ☐

Action area is within 10 miles of the McCurtain County Wilderness Area ☐

Action area is within 10 miles of the Pushmataha Wildlife Management Area ☐

3. ENVIRONMENTAL BASELINE

3.1. Ecological Processes and Conditions

Soils (Use Soil Map of Oklahoma by Carter and Gregory 2008)

Soil Class	CENTRAL ROLLING RED PRAIRIES
Soil Name	Port-Dale-Yahola-Gaddy-Gracemore-McClain-Reinach
Soil Type	Mollisols and Entisols
Soil Characteristics	Very deep soils on nearly level slopes (1%)

Soil Class	SAND HILLS
Soil Name	Eufaula-Dougherty-Konawa
Soil Type	Alfisols
Soil Characteristics	Very deep loamy sandy well drained and slightly acid soils on moderately steep slopes (11%)

Climate (Use Woods et al. 2005)

Precipitation	Mean annual inches	29-38
Growing Season	Number of days	205-225
Mean Temperatures	Summer min/max	70/94
	Winter min/max	20/46 (north and west) to 26/49 (south)

River System

No aquatic features are mapped within the action area on the Oklahoma City (3509745) 7.5 minute topographic quad map.

Land Use and Land Ownership

From Woods et al. 2005	The most common use of land is for the production of livestock, alfalfa, small grains and soybeans
From Field investigation	The study area is confined to the existing rights-of-way of I-44, which are owned by the State of Oklahoma.

Terrestrial and Aquatic Community Descriptions (based on field site visit)

The study area occurs in a commercially-developed area in west Oklahoma City and is occupied by the existing paved facilities and maintained rights-of-way. The maintained right-of-way bordering the study area appears to be frequently mowed, and is vegetated with native and introduced grasses and forbs, including bermuda grass (<i>Cynodon dactylon</i>), silver bluestem (<i>Bothriochloa saccharoides</i>), Johnsongrass (<i>Sorghum halepense</i>), hairy crabgrass (<i>Digitaria sanguinalis</i>), downy brome (<i>Bromus tectorum</i>), rescuegrass (<i>Bromus catharticus</i>), green bristlegrass (<i>Setaria viridis</i>), dallisgrass (<i>Paspalum dilatatum</i>), white clover (<i>Trifolium repens</i>), corn gromwell (<i>Buglossoides arvensis</i>), garden vetch (<i>Vicia sativa</i>), spiny sow thistle (<i>Sonchus asper</i>), southern pepperwort (<i>Lepidium austrinum</i>), blue fieldmadder (<i>Sherardia arvensis</i>), henbit deadnettle (<i>Lamium amplexicaule</i>), redstem stork's bill (<i>Erodium cicutarium</i>), Carolina geranium (<i>Geranium carolinianum</i>), curly dock (<i>Rumex crispus</i>), common dandelion (<i>Taraxacum officinale</i>), thymeleaf sandwort (<i>Arenaria serpyllifolia</i>) and tuberous desert-chicory

(*Pyrrhopappus grandiflorus*). Saplings and small trees of American elm (*Ulmus americana*), sugarberry (*Celtis laevigata*), eastern redcedar (*Juniperus virginiana*), white mulberry (*Morus alba*), eastern redbud (*Cercis canadensis*) and eastern cottonwood (*Populus deltoides*) occur in the fence rows on the west side of the study area. A small area of brushy woodland on the southwest corner of the existing bridges appears to have been recently cleared and graded (sometime after January 2019 per GoggleEarth Streetview imagery). No aquatic features are mapped within the study area. An ephemeral stream crosses under I-44 via a twin reinforced concrete box (RCB) just north of the existing I-44 bridges over the railroad, and a second ephemeral drainage feature crosses under the railroad and Black Gold Drive via a reinforced concrete pipe (RCP) just west of I-44. The study area is bordered by commercial and State Fair Park development and a small golf course.

3.2 Species Habitat Analysis

Pedestrian survey of entire NEPA study footprint (including 300-foot work zone buffer in karst areas) ☒
Bridge/Structure inspected for bat use (Complete the Bridge Inspection Form) ☐

SPECIES	HABITAT	
Whooping Crane	Shallowly-submerged sandbars in large river channels occur within the 0.25 miles of the NEPA Environmental Study Footprint.	<input type="checkbox"/>
	If within the 75% migration corridor, provide the number of acres of emergent wetlands that occur within the NEPA Environmental Study Footprint.	enter acres.
	Croplands suitable for foraging occur within the 0.25 miles of the NEPA Environmental Study Footprint and is within the 95% migration corridor.	<input type="checkbox"/>
Piping Plover	Sparsely vegetated sandy or gravelly shorelines and islands associated with the major river systems occur within the 0.25 miles of the NEPA Environmental Study Footprint.	<input type="checkbox"/>
	Salt flats or mudflats associated with reservoirs occur within the 0.25 miles of the NEPA Environmental Study Footprint.	<input type="checkbox"/>
Red Knot	Mudflats associated with reservoirs occur within the 0.25 miles of the NEPA Environmental Study Footprint.	<input type="checkbox"/>

4. ANALYSIS OF EFFECTS

4.1 Direct Effects

Species/ Resource	Habitat impacts expected from project activities	<u>Describe specific ACTIONS of the project and the results of those actions on species habitats, including indirect impacts to prey or drinking water, as well as improvements to habitat as a result of specific actions.</u> <u>If habitat within the action area identified above will not be impacted, describe why.</u>
None	<input type="checkbox"/>	

4.2 Indirect Effects

Long-term habitat alterations

Species/ Resource	<u>Identify long-term, permanent changes in habitat</u>
None	

Indirect land use impacts

None.

4.3 Interrelated and Interdependent Actions and Activities

None.

USFWS TAILS Number:	02EKOK00-2021-SLI-1399
ODOT Project JP Number:	30637(04)

SPECIES / DESIGNATED CRITICAL HABIT	CONCLUSION		ESA SECTION 7			NOTES AND DOCUMENTATION Check <input checked="" type="checkbox"/> all that apply			
	Species Habitat present within the action area	Project Activities expected to impact habitat	No Effect	May affect, not likely to adversely affect	May affect, Likely to adversely affect	Field Studies	ONHI database / ABB	USFWS occupied waterbodies & watersheds	Whooping Crane Migration Corridor
Whooping Crane	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Piping Plover	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Red Knot	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CONCLUSIONS

No Effect	Whooping Crane, Piping Plover, Red Knot
May affect, not likely to adversely affect	
May affect, likely to adversely affect	

RECOMMENDED AVOIDANCE AND MINIMIZATION MEASURES

None required

5. BALD AND GOLDEN EAGLE PROTECTION ACT ASSESSMENT

5.1. Bald Eagle Assessment

The Bald Eagle (*Haliaeetus leucocephalus*) is a large predatory bird protected by the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Activities that would disturb eagles are prohibited under the Bald and Golden Eagle Protection Act. "Disturb" means to agitate an eagle to the degree that causes or is likely to (1) cause injury, (2) interfere with breeding, feeding or sheltering behavior, or (3) nest abandonment.

Potential Bald Eagle Habitat Present	w/in NEPA Footprint	w/in 660 ft Buffer of NEPA Footprint	DO NOT LEAVE BLANK
Presence of Cottonwood, Sycamore, Pecan or Pine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Few small cottonwoods and pines in golf course within the buffer.
Open foraging areas with large trees	<input type="checkbox"/>	<input type="checkbox"/>	Open large parking lots and graded areas but no large trees.
Distance to closest perennial water body	River or Lake Stream or Pond	1 mile; 5 miles NA	Oklahoma River 1 mile south; Lake Overholser 5 miles east.
Potential Bald Eagle Nests Observed	<input type="checkbox"/>	<input type="checkbox"/>	None observed
Bald Eagles Observed in the general vicinity	<input type="checkbox"/>	<input type="checkbox"/>	None observed
General Description of Bald Eagle Nesting Habitat and Impact Determination, within the NEPA Footprint and within 660-ft of the NEPA Footprint	No large trees suitable for nesting by Bald Eagles occur within the study area or buffer; no good aquatic foraging habitat occurs in the vicinity of the project site, although a few small ponds occur on a nearby golf course.		
Station #s for Buffered Bald Eagle Habitat	NA		

6. MIGRATORY BIRD TREATY ACT (MBTA) ASSESSMENT

6.1 Structure Assessment

Cliff Swallows (*Petrochelidon pyrrhonota*) and Barn Swallows (*Hirundo rustica*) are small colonial and semi-colonial nesting birds protected by the federal Migratory Bird Treaty Act. Barn Swallows use man-made structures for nesting and live in close association with humans. Both species commonly use bridges and culverts in Oklahoma for nesting. Other migratory birds can also nest on transportation structures.

Identify <u>ALL</u> structures including pipe culverts and whether positive or negative for migratory birds (identify named streams where possible rather than just FS#). Provide shapefiles and map of structures identifying pos/neg swallow structures.	Approx. Number of Cliff Swallow Nests	Approx. Number of Barn Swallow Nests	Approx. Number of Eastern Phoebe Nests
I-44 U.P. Railroad bridge NBI 18769	0	0	0
I-44 U.P. Railroad bridge NBI 18770	0	2 remnants	0
I-44 RCB at Sta. 381+86.64	0	4	0
Black Gold Drive RCP side drain at Sta. 379+73.78	0	0	0
Other MB and Nests Observed	None.		
Based on existing plans, no work on suitable drainage structures will occur			<input type="checkbox"/>
In order to avoid impacts to migratory birds, if structures are being used by these birds, any activities that may destroy active nests, eggs or birds shall be completed between September 1, and February 28, when nests are not occupied. If seasonal avoidance cannot be accomplished, structures shall be protected from new nest establishment prior to March 1, by means that do not result in death or injury to these birds.			

6.2 Birds of Conservation Concern

<u>Species Identified on IPaC list</u>	<u>Breeding Season</u>
American Golden-plover <i>Pluvialis dominica</i>	Breeds elsewhere
Harris's Sparrow <i>Zonotrichia querula</i>	Breeds elsewhere
Hudsonian Godwit <i>Limosa haemastica</i>	Breeds Apr 1 to Jul 31
Lesser Yellowlegs <i>Tringa flavipes</i>	Breeds elsewhere
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i>	Breeds May 10 to Sep 10
Semipalmated Sandpiper <i>Calidris pusilla</i>	Breeds Apr 1 to Jul 31
Willet <i>Tringa semipalmata</i>	Breeds Apr 20 to Aug 5
The existing right-of-way and adjacent areas of very heavily disturbed graded land and commercial development would provide (at best) very poor habitat for any of these species. Very little woody vegetation remains within the study area, but a few small trees occur within the footprint to the west of the existing I-44 bridges; these small trees might provide perching and nesting habitat for the Red-headed Woodpecker. No impacts to any other of the cited species are likely to occur.	
In order to avoid impacts to USFWS Birds of Conservation Concern, the removal of trees and shrubs will be restricted to areas within the actual limits of construction, and all aspects of the project (e.g. temporary work areas, alignments) will be modified to avoid tree removal, if possible.	

6.3 Interior Least Tern

Sparsely vegetated islands or sandbars along large rivers, with nearby areas of shallow water, occur within the 0.25 miles of the NEPA Environmental Study Footprint.	<input type="checkbox"/>
No suitable loafing, foraging or nesting habitat for this species occurs within 0.25 mile of the study area. There are no ONHI records of Interior Least Terns in the project vicinity.	

7. REFERENCES:

Carter, B. J. and M. S. Gregory. 2002. General soil map of Oklahoma. In: Geology and Earth Resources of Oklahoma. K.S. Johnson et al. (eds.) Educational Publication No. 1. Oklahoma Geological Survey. Norman, OK.

Duck, L. G., and J. B. Fletcher. 1943. A game type map of Oklahoma. A Survey of the Game and Furbearing Animals of Oklahoma. Oklahoma Department of Wildlife Conservation, Oklahoma City, Oklahoma.

Oklahoma Natural Heritage Inventory. 2021. Element Database. Oklahoma Natural Heritage Inventory, Oklahoma Biological Survey, Norman OK.

U.S. Fish and Wildlife Service 2010. Federally-listed aquatic and aquatic dependent species watersheds of Oklahoma. USFWS Oklahoma Ecological Services Field Office, April 2010.

Woods, A. J., J. M. Omernik, D. R. Butler, J. G. Ford, J. E. Henley, B. W. Hoagland, D. S. Arndt and B. C. Moran. 2005. Ecoregions of Oklahoma. (2 sided color poster with map, descriptive text, summary tables, and photographs). U.S. Geological Survey, Reston, VA. Scale 1:1,250,000.

8. FIGURES

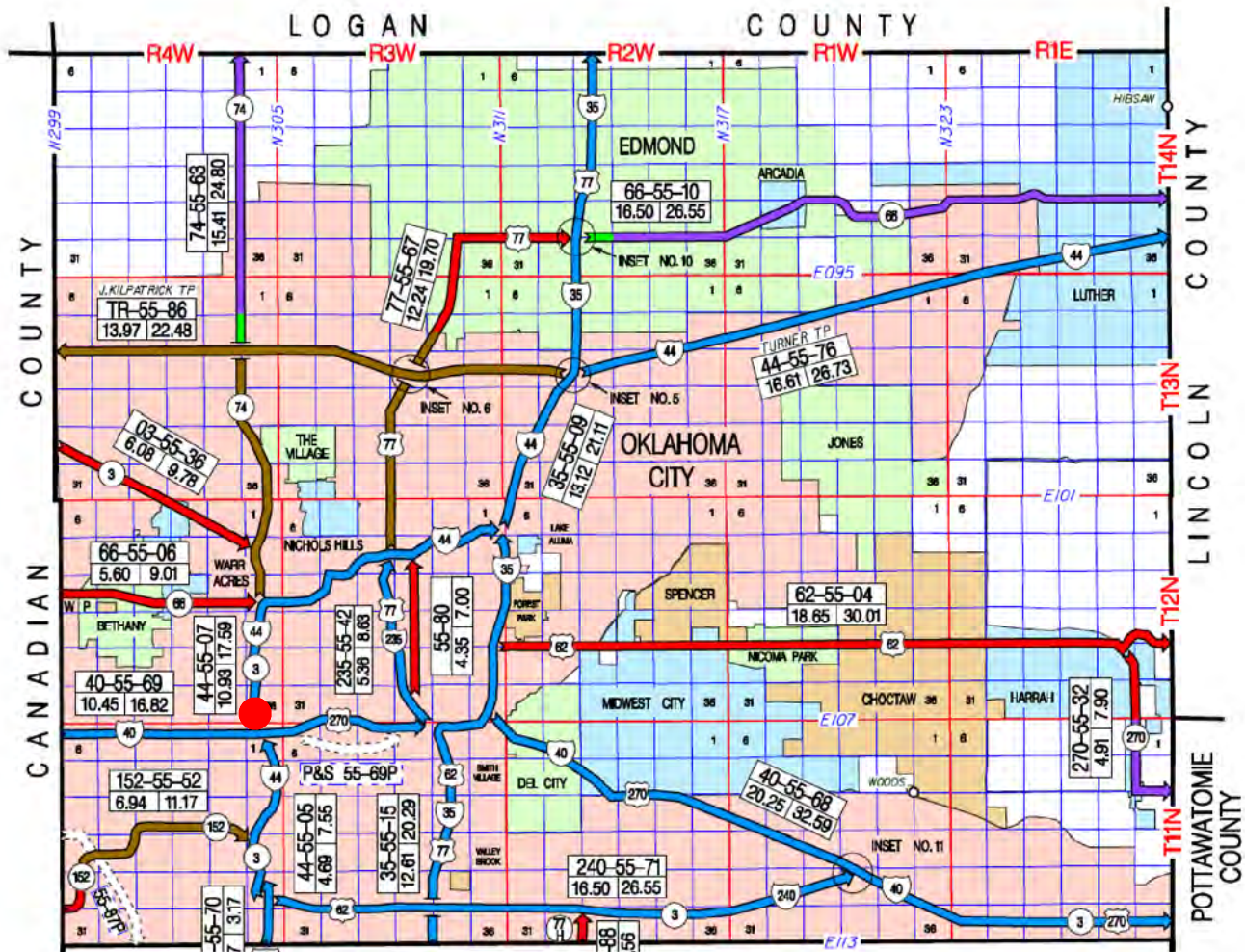


Figure 1. Control Section Map


 Project Site



Oklahoma County
J/P 30637(04)



Figure 2. Study Area and Action Area Map

 Study Area and Action Area



Oklahoma County
J/P 30637(04)

0 260 520 1,040
Feet

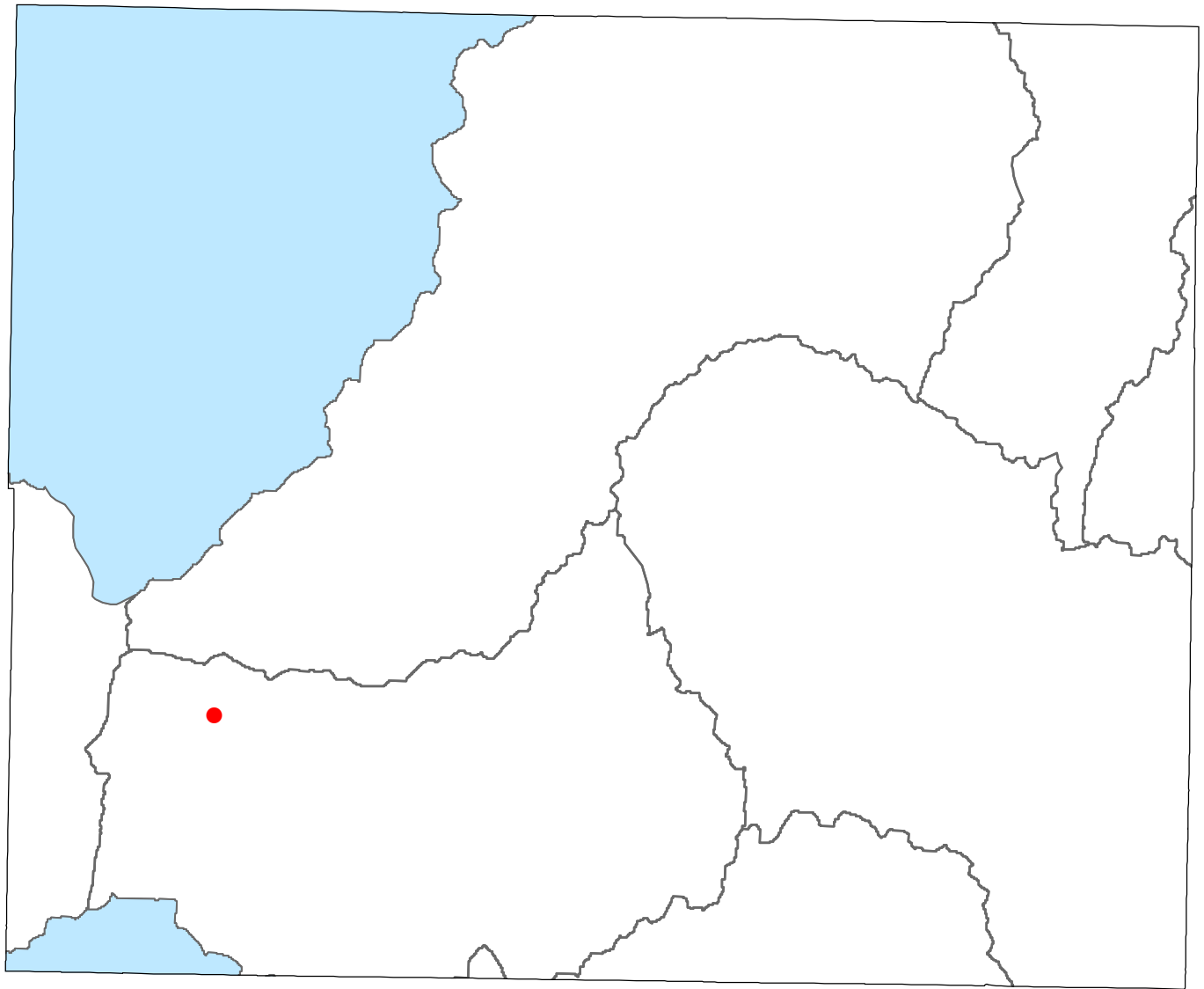




Figure 3. Critical Habitat, Occupied Waterbodies and Watersheds

-  Interior Least Tern Aquatic Dependent Species Watersheds
-  Project Location

Oklahoma County
J/P 30637(04)



Source: USFWS, Oklahoma Ecological Services Field Office, April 2010 (11 digit HUC watersheds)

0 2.5 5 10 Miles



Figure 4. Swallow nest locations

- Study Area
- Barn and/or Cliff Swallow nest location
- Suitable swallow nest site without swallow nests
- Structure not suitable for swallow nests



Oklahoma County
J/P 30637(04)

0 150 300 600
Feet



Figure 5. Photo Site Map

- Study Area
- Photo Site



Oklahoma County
J/P 30637(04)

0 245 490 980
Feet



Photo Site 1 (PS 1): Existing R/W, looking south from the I-44 median at the top of the south slope wall.



PS 1: Existing R/W, U.P. Railroad and Black Gold Drive, looking north from the I-44 median at the top of the south slope wall.



PS 2: Existing R/W, Black Gold Drive and U.P. Railroad, looking south from the I-44 median at the top of the north slope wall.



PS 2: Existing R/W, looking north from the I-44 median at the top of the north slope wall.



PS 3: Ephemeral drainage swale, looking south from the south side of the U.P. RR; vegetation has been recently (after January 2019) cleared from this area.



PS 4: Ephemeral drainage swale, looking north from the north side of Black Gold Drive.



PS 5: Ephemeral stream, looking NE from an RCB that carries the feature under a side road; the I-44 RCB that serves the stream is visible.



PS 6: Ephemeral stream, looking SW from the west end of the RCB that carries the feature under I-44.



PS 7: Ephemeral stream, looking east from the east end of the RCB that carries the feature under I-44.



PS 8: Ephemeral stream, looking west from an RCB that carries the feature under a side road; the I-44 RCB is visible in the center of the image.



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Oklahoma Ecological Services Field Office
9014 East 21st Street
Tulsa, OK 74129-1428
Phone: (918) 581-7458 Fax: (918) 581-7467
<http://www.fws.gov/southwest/es/Oklahoma/>

In Reply Refer To:
Consultation Code: 02EKOK00-2021-SLI-1399
Event Code: 02EKOK00-2021-E-03675
Project Name: OKLAHOMA COUNTY JP 30637(04)

April 16, 2021

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Non-federal entities conducting activities that may result in take of listed species should consider seeking coverage under section 10 of the ESA, either through development of a Habitat Conservation Plan (HCP) or, by becoming a signatory to the General Conservation Plan (GCP) currently under development for the American burying beetle. Each of these mechanisms provides the means for obtaining a permit and coverage for incidental take of listed species during otherwise lawful activities.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>;

<http://www.towerkill.com>; and

www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

[http://](http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html)

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit through our Project Review step-wise process <http://www.fws.gov/southwest/es/oklahoma/OKESFO%20Permit%20Home.htm>.

Attachment(s):

- Official Species List

- USFWS National Wildlife Refuges and Fish Hatcheries
 - Migratory Birds
 - Wetlands
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Oklahoma Ecological Services Field Office

9014 East 21st Street

Tulsa, OK 74129-1428

(918) 581-7458

Project Summary

Consultation Code: 02EKOK00-2021-SLI-1399

Event Code: 02EKOK00-2021-E-03675

Project Name: OKLAHOMA COUNTY JP 30637(04)

Project Type: BRIDGE CONSTRUCTION / MAINTENANCE

Project Description: I-44 Bridge rehabilitation over the U.P. Railroad and Black Gold Drive,
0.7 mile north of I-40, in Oklahoma City, OK

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@35.47125475,-97.57942456012137,14z>



Counties: Oklahoma County, Oklahoma

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Red Knot <i>Calidris canutus rufa</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened
Whooping Crane <i>Grus americana</i> Population: Wherever found, except where listed as an experimental population There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/758	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Golden-plover <i>Pluvialis dominica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Jul 31

NAME	BREEDING SEASON
Harris's Sparrow <i>Zonotrichia querula</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Hudsonian Godwit <i>Limosa haemastica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Semipalmated Sandpiper <i>Calidris pusilla</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Willet <i>Tringa semipalmata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 5

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (I)

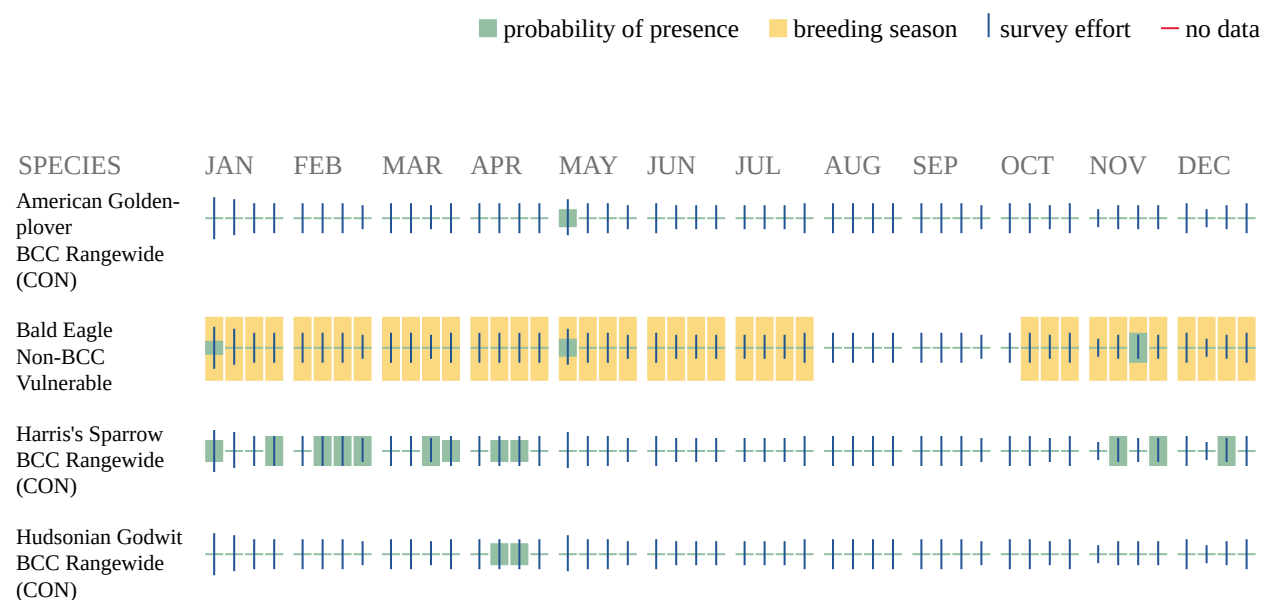
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

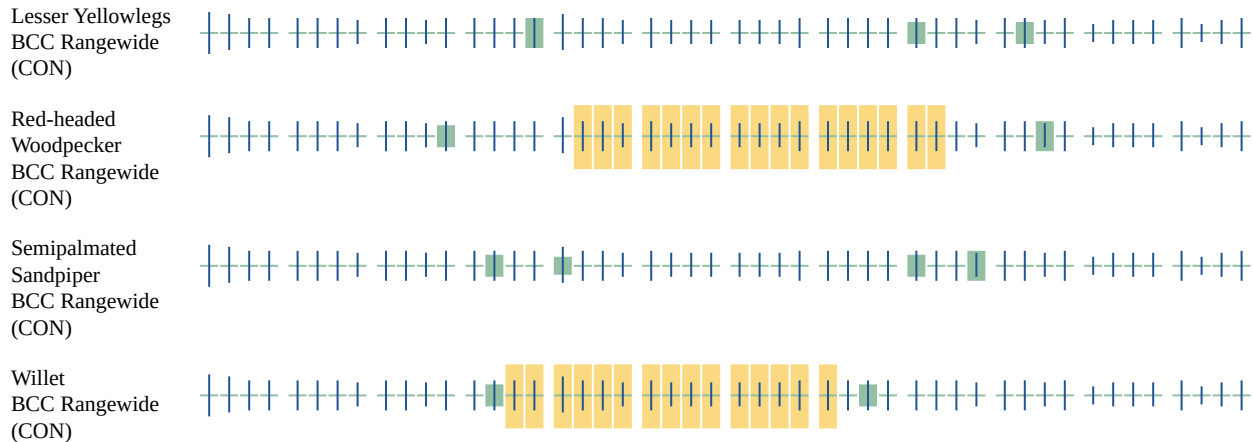
No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#)

requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- [R5UBF](#)
-

WATERS AND WETLANDS EVALUATION REPORT

For

County	Oklahoma	JP Number	30637(04)	Project Number	Not Provided
Road Number	I-44	Water Body Name		N/A	
ROW Date	N/A	Let Date	FFY 2026	Project Length	0.472 mile
Project General Location		Approximately 0.7 mile north of I-40, in Oklahoma City, OK			
Project Statement From Oracle		I-44 Bridge rehabilitation over the U.P. Railroad and Black Gold Drive			

Prepared for:
Oklahoma Department of Transportation
Environmental Programs Division
200 NE 21st Street
Oklahoma City, OK 73105

Prepared by:

Biologist Name	Phillip Crawford
Company/Agency Name	ODOT Biological Studies Program at OU
Address	111 E. Chesapeake Street
City, State Zip	Norman, OK 73019

Report Date:	April 16, 2021
Field Date:	April 8, 2021

PROJECT OVERVIEW

Project Type (Choose one)	Check ✓
Bridge and Approaches or bridge widening/structure extension	
Grade, Drain, Surface and Bridge	
Grade, Drain and Surface	
Asphalt Overlay Resurfacing	
Widen and Resurface existing lanes	
Pavement Reconstruction or rehabilitation	
Bridge Rehabilitation	✓
Safety Improvements (Cable Barrier, Guardrail, signage)	
Intersection Modifications	
Safe Routes to School (Describe)	
Enhancements (Describe)	
Other (Describe)	

Description of the **existing** bridge/roadway

The existing I-44 northbound and southbound bridges over the U.P. Railroad and Black Gold Drive (NBI 18769 and NBI 19770) are 246.0 foot continuous steel stringer/girder span bridges with 73.7 foot wide decks and 68.0 foot wide approach roadways consisting of four 12 foot driving lanes and 10 foot paved shoulders. Recent inspections of the existing bridges (built in 1974) indicate that they are in need of repair; the bridges are “at risk” of becoming structurally deficient. The current Average Annual Daily Traffic (AADT) is 158570 vehicles per day (vpd) with a future 20 year AADT of 188210 vpd. The proposed construction will extend the useful life of the bridges.

Description of **proposed** improvements **SPECIFIC TO THIS PROJECT**

The proposed construction will include the removal and replacement of portions of the concrete bridge deck and parapet, bearings, expansion joints, pier caps, abutments, approach slabs and slope drains. Concrete and epoxy resin repairs will be made to spalled areas and cracks in the abutments and piers, an elastomeric coating will be applied to the abutments, pier caps and the ends of beams, and a water repellant will be applied to the remaining areas of the abutments, wing walls and pier caps. Portions of the approach roadway will be reconstructed, and the existing guardrail will be replaced on widened (to 12 feet) shoulders. The existing facility will remain open to through traffic during the proposed construction, with crossovers constructed in the median. No new rights-of-way will be required to make the proposed improvements.

Project Environmental Study Footprint

Project Location		Environmental Study Footprint	
<u>Section Range & Township</u>	<u>Lat/Long (NAD 83)</u>	<u>Dimensions</u>	<u>Acreage</u>
S36 T12N R04W	35.4709°N 97.5794°W	Encompasses the occupied I-44 R/W for 0.472 mile	24.56

Environmental Study Footprint Soils (NRCS Soil Survey Map)

Map Unit Name	Percent Slope	Drainage Class	Hydric Rating		Description
			YES	NO	
Asher silty clay loam	0 to 1	Moderately well drained		X	Rarely flooded
Dale silt loam	0 to 1	Well drained		X	Rarely flooded
Dale-Urban land complex	0 to 1	Well drained		X	Rarely flooded
Urban Land	N/A	N/A		X	

Environmental Study Footprint General Description and Vegetation Present

The study area occurs in a commercially-developed area in west Oklahoma City and is occupied by the existing paved facilities and maintained rights-of-way. The maintained right-of-way bordering the study area appears to be frequently mowed, and is vegetated with native and introduced grasses and forbs, including bermuda grass (*Cynodon dactylon*), silver bluestem (*Bothriochloa saccharoides*), Johnsongrass (*Sorghum halepense*), hairy crabgrass (*Digitaria sanguinalis*), downy brome (*Bromus tectorum*), rescuegrass (*Bromus catharticus*), green bristlegrass (*Setaria viridis*), dallisgrass (*Paspalum dilatatum*), white clover (*Trifolium repens*), corn gromwell (*Buglossoides arvensis*), garden vetch (*Vicia sativa*), spiny sow thistle (*Sonchus asper*), southern pepperwort (*Lepidium austrinum*), blue fieldmadder (*Sherardia arvensis*), henbit deadnettle (*Lamium amplexicaule*), redstem stork's bill (*Erodium cicutarium*), Carolina geranium (*Geranium carolinianum*), curly dock (*Rumex crispus*), common dandelion (*Taraxacum officinale*), thymeleaf sandwort (*Arenaria serpyllifolia*) and tuberous desert-chicory (*Pyrrhopappus grandiflorus*). Saplings and small trees of American elm (*Ulmus americana*), sugarberry (*Celtis laevigata*), eastern redcedar (*Juniperus virginiana*), white mulberry (*Morus alba*), eastern redbud (*Cercis canadensis*) and eastern cottonwood (*Populus deltoides*) occur in the fence rows on the west side of the study area. A small area of brushy woodland on the southwest corner of the existing bridges appears to have been recently cleared and graded (sometime after January 2019 per GoggleEarth Streetview imagery). No aquatic features are mapped within the study area. An ephemeral stream crosses under I-44 via a twin reinforced concrete box (RCB) just north of the existing I-44 bridges over the railroad, and a second ephemeral drainage feature crosses under the railroad and Black Gold Drive via a reinforced concrete pipe (RCP) just west of I-44. The study area is bordered by commercial and State Fair Park development and a small golf course.

WATERS AND WETLANDS EVALUATION

Data Sources Reviewed (list)

USGS 7.5 minute Quad	NWI Map	USACE Wetland Regional Supplement	Additional Resources Reviewed
Oklahoma City (3509745)	US Fish and Wildlife Service 2014. CONUS_wet_poly.shp	Regional Supplements to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0)	Natural Resources Conservation Service. 2013. Major Land Resource Areas Explorer. U. S. Department of Agriculture Handbook 296, 2006. Available http://www.cei.psu.edu/mlra/ (Accessed: April 7, 2021).

Wetlands and Ponds Summary Table

Field Sites	Type of Wetland or Pond	Cowardin Classification	Potential Jurisdictional Status	Acres within Environmental Study Footprint
None				0

Streams and Drainages Summary Table

Field Sites	Stream Name	USGS Mapped Status	Potential Jurisdictional Status	Acres within Environmental Study Footprint	Linear Feet within Environmental Study Footprint
1	Unnamed stream	Unmapped ephemeral	Unlikely	0.247	462.3
1	Unnamed drainage swale	Unmapped ephemeral	Unlikely	N/A (no OHWM)	1404.6

Streams and other linear aquatic features

Field Site 1 is an unmapped ephemeral drainage feature (see images from Photo Sites 5, 6, 7 and 8). An estimated 462.3 linear feet (0.247 acre) of Field Site 1 occur within the study area. This feature originates in developed uplands a short distance east of I-44, crosses under the highway via a twin RCB culvert, and drains west through an excavated and maintained drainage swale. Standing water was observed in the stream bed on the survey date. Most of that reach of this feature within the study area is confined to a twin (10'x5') RCB. Otherwise, the shaped and maintained banks are vegetated with those grass and forb species common to the right-of-way, as well as a few scattered saplings of white mulberry (*Morus alba*). Although this stream exhibits an evident OHWM, it is not mapped on the Oklahoma City (3509745) 7.5 minute topographic quad map and

appears to have been excavated entirely in uplands; this stream is not likely to be subject to regulation by the USACE, which generally does not assert jurisdiction over such drainage swales (United States Army Corps of Engineers and United States Environmental Protection Agency 2007).

Field Site 2 is an unmapped ephemeral drainage feature (see images from Photo Sites 3 and 4). An estimated 1404.6 linear feet of Field Site 2 occur within the study area. This feature originates in the I-44 (west side) drainage ditch a short distance south of the study area, crosses under the railroad and Black Gold Drive via a reinforced concrete pipe (RCP) culvert, and drains into Field Site 1 just north of Black Gold Drive. This feature occupies an excavated and (largely) maintained drainage swale, although the bed is scoured and gullied in a few locations; a small area of brushy woodland bordering the feature on the southwest corner of the existing I-44 bridges appears to have been recently cleared and graded (sometime after January 2019 per GoggleEarth Streetview imagery). The shaped and maintained banks are vegetated with those grass and forb species common to the right-of-way. This feature was dry on the survey date. This feature does not exhibit a continuous evident OHWM, it is not mapped on the Oklahoma City (3509745) 7.5 minute topographic quad map and it appears to have been excavated entirely in uplands; this stream is not likely to be subject to regulation by the USACE, which generally does not assert jurisdiction over such drainage swales (United States Army Corps of Engineers and United States Environmental Protection Agency 2007).

Wetlands and ponds

No ponds or wetlands are mapped within the study area on the Oklahoma City (3509745) 7.5 minute topographic quad map or the U. S. Fish and Wildlife Services National Wetlands Inventory, respectively. No likely-jurisdictional ponds or wetlands were observed within the study area on the survey date.

FIGURES

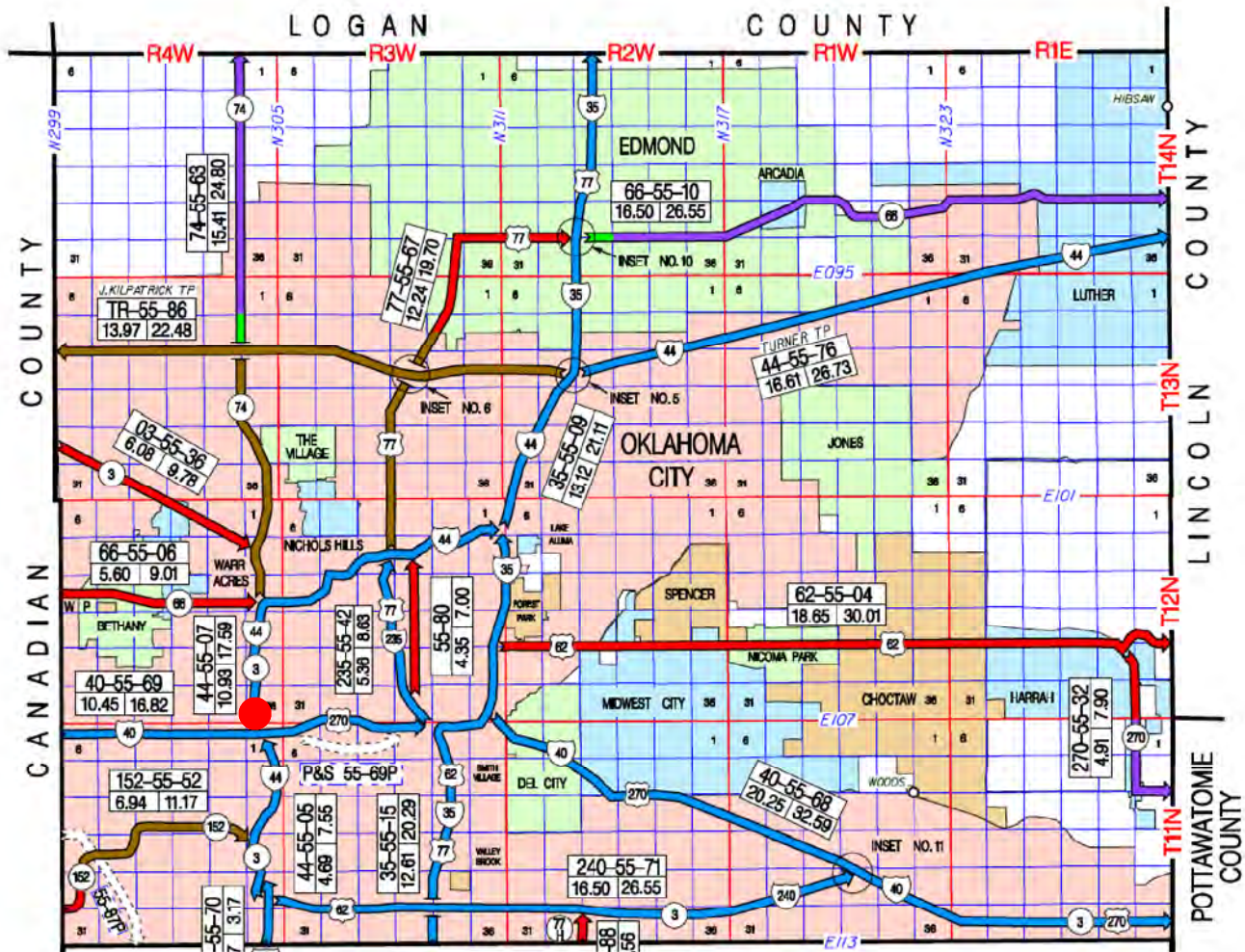


Figure 1. Control Section Map

● Project Site



Oklahoma County
J/P 30637(04)

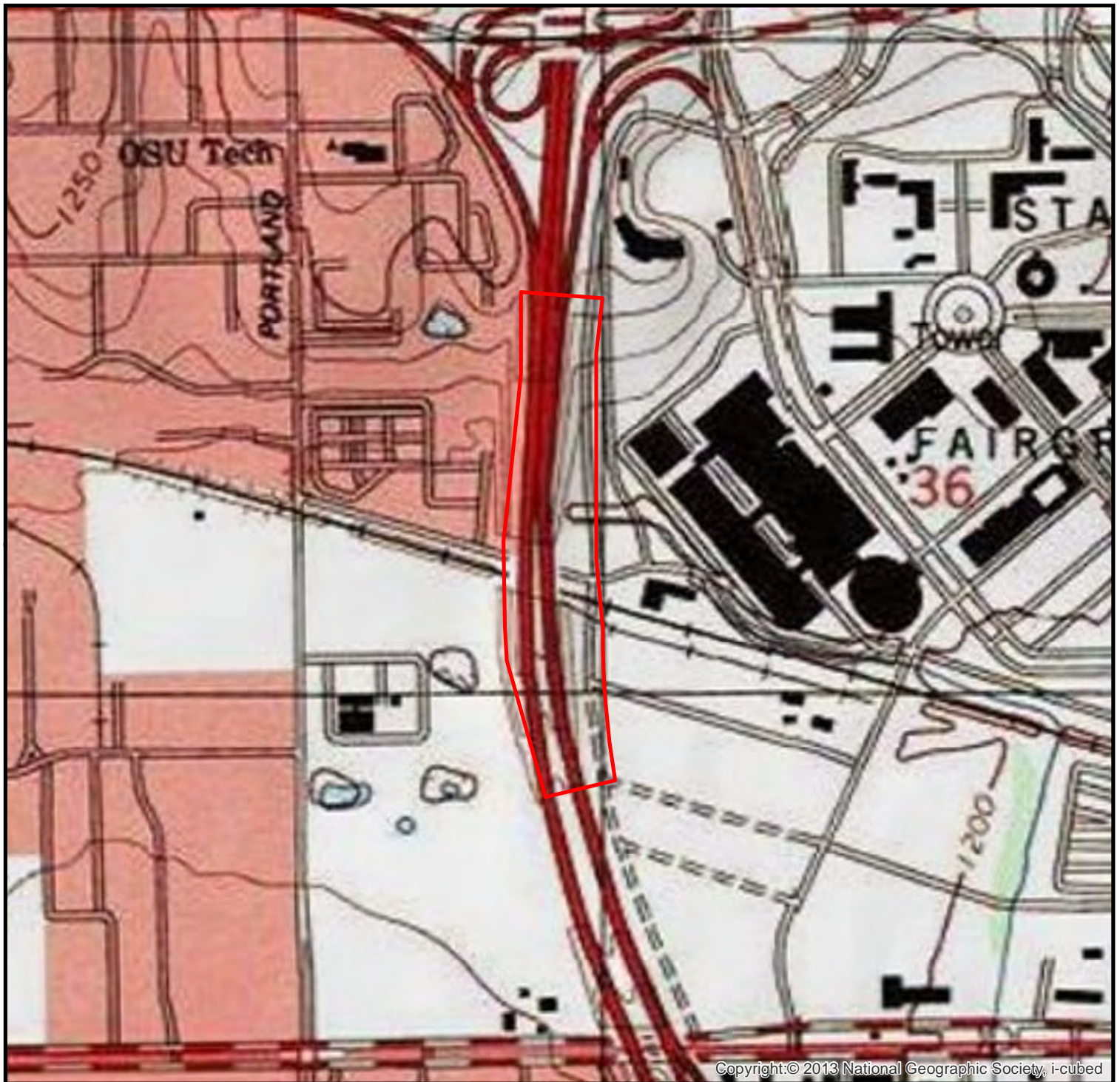


Figure 2. Topographic Map



Study Area



Oklahoma County
J/P 30637(04)

USGS 7.5 minute quadrangle at 1:24,000 scale

0 500 1,000 2,000
Feet

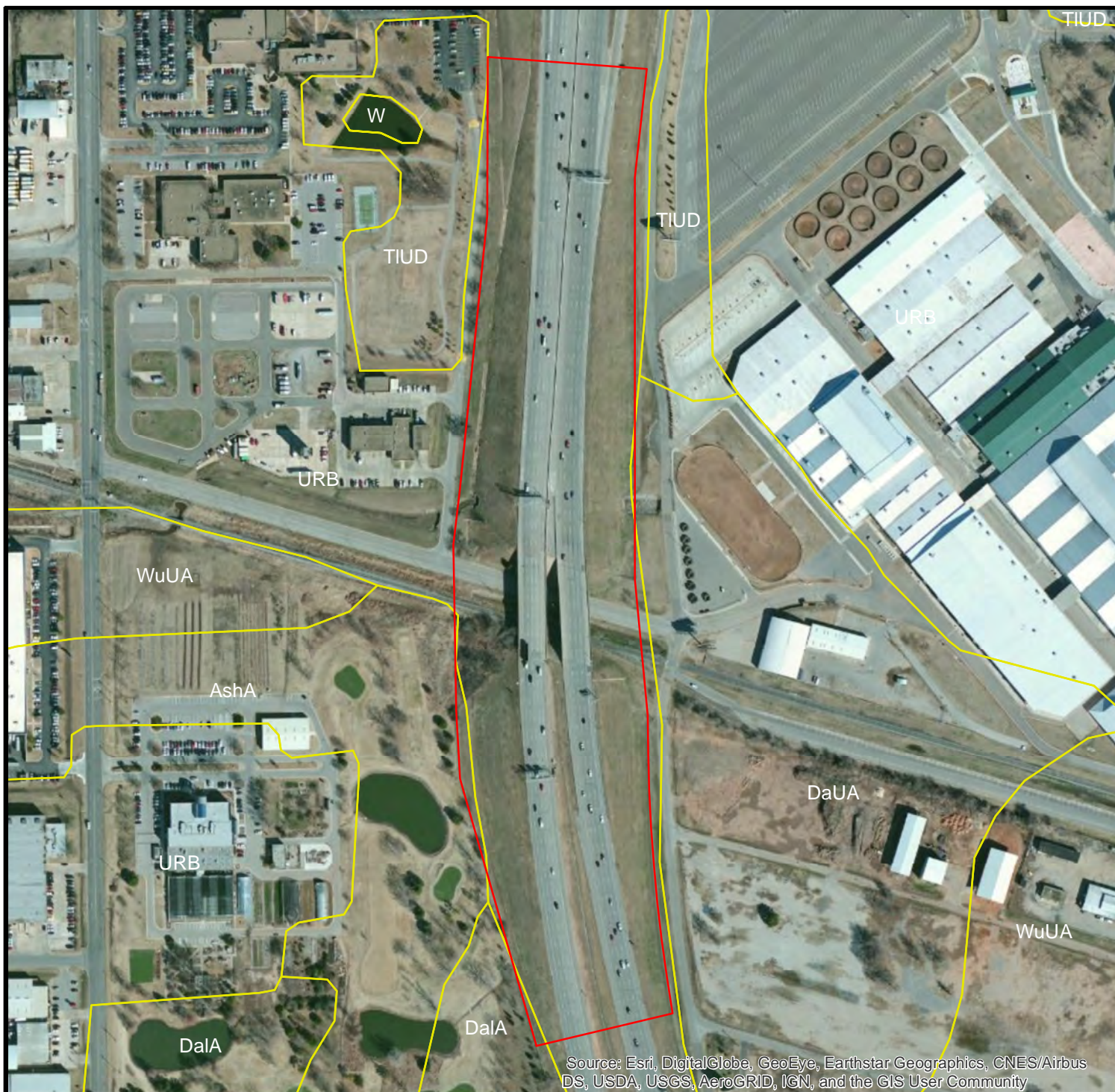


Figure 3. Soil Map



Study Area



Soil Boundaries



Oklahoma County
J/P 30637(04)

Soil Abbreviations

AshA - Asher silty clay loam, 0 to 1 percent slopes, rarely flooded
 DaIA - Dale silt loam, 0 to 1 percent slopes, rarely flooded
 DaUA - Dale-Urban land complex, 0 to 1 percent slopes, rarely flooded
 Urb - Urban land

USDA-NRCS 2014 Soil Survey Geographic (SSURGO) Data

0 260 520 1,040 Feet



Figure 4: National Wetlands Inventory

-  Study Area
-  NWI



Oklahoma County
J/P 30637(04)

NWI Source: US Fish and Wildlife Service 2014

0 260 520 1,040 Feet



Figure 5. Site Map

- Study Area
- Ephemeral drainage
- Concrete pipe
- Photo Site



Oklahoma County
J/P 30637(04)

0 240 480 960
Feet



Photo Site 1 (PS 1): Existing R/W, looking south from the I-44 median at the top of the south slope wall.



PS 1: Existing R/W, U.P. Railroad and Black Gold Drive, looking north from the I-44 median at the top of the south slope wall.



PS 2: Existing R/W, Black Gold Drive and U.P. Railroad, looking south from the I-44 median at the top of the north slope wall.



PS 2: Existing R/W, looking north from the I-44 median at the top of the north slope wall.



PS 3: Field Site 2 (FS 2, ephemeral drainage swale), looking south from the south side of the U.P. RR; the south end of a concrete pipe culvert is visible.



PS 4: FS 2, looking north from the north side of Black Gold Drive; the north end of a concrete pipe is visible, and FS 1 lies in the center background.



PS 5: FS 1 (ephemeral stream), looking NE from an RCB that carries the feature under a side road; the I-44 RCB is visible in the center of the image.



PS 6: FS 1, looking SW from the west end of the RCB that carries the feature under I-44; the confluence with FS 1 is visible at the lower left.



PS 7: FS 1, looking east from the east end of the RCB that carries the feature under I-44.



PS 8: FS 1, looking west from an RCB that carries the feature under a side road; the I-44 RCB is visible in the center of the image.

HAZARDOUS MATERIALS STUDIES

**OKLAHOMA DEPARTMENT OF TRANSPORTATION
INITIAL SITE SCREENING REPORT – HAZARDOUS WASTE**

Prepared By: David Edwards
Report Date: 04/27/2023

Project No.: J3-0637(004)PM
J/P Number: 30637(04)

County: Oklahoma

1. PROJECT DESCRIPTION: BRIDGE REHABILITATION: I-44: OVER THE UPRR, 0.7 MILES NORTH OF I-40

2. LAND USE AND CHARACTERISTICS: Urban land use within Oklahoma City city limits.

3. PROJECT METHODOLOGY:

A. Records Search:

- ☐ Electronic database search (vendor: ; report date:)
- ☒ Manual database search (LUST, CERCLA, VCP, Landfill), plus:
- | | | |
|--|--|--|
| <input type="checkbox"/> Sanborn Fire Insurance Maps | <input checked="" type="checkbox"/> UST | <input checked="" type="checkbox"/> Google Streetview |
| <input checked="" type="checkbox"/> Aerial photos | <input type="checkbox"/> Oil and Gas Wells | <input type="checkbox"/> Survey Report |
| <input checked="" type="checkbox"/> RCRA CORRACTS | <input type="checkbox"/> Agency files: | <input checked="" type="checkbox"/> Other: Enercon ISA 2019, 30% |

plans

B. Interviews/Contacts:

C. Field Investigation: ☐ Visit (date:) ☐ No Visit

4. RESULTS OF INVESTIGATION:

A. Physical Features in Immediate Project Area (USTs, AST, Others): A LUST site and some additional areas of environmental concern have been identified in the vicinity of the project.

B. Evidence of Contamination (Vegetation Damage, Staining, Sheen): None noted.

C. Summary: ☒ No concerns identified in project area.
☐ Potential sources of contamination identified in project area.
☐ Known sources of contamination identified in project area.

5. RECOMMENDATIONS:

- ☒ Approval to Proceed (No Further Action)
- ☐ Approval to Proceed, Pending:
- ☐ Avoidance of described site(s)
 - ☐ Plan Notes regarding described site(s) (See Section 6)
 - ☐ Additional investigation by ODOT
- ☐ Approval NOT Recommended

6. PLAN NOTES: Plan notes not needed.

This report is based solely upon the interpretation of the available information and documents reviewed, and when indicated, visual observations of the proposed project and its vicinity. This report is intended for the sole use of ODOT. It should be recognized that this report was not intended to be a definitive investigation of contamination on any proposed project. Given the scope of the limited services undertaken, it is possible that currently unrecognized contamination may exist at any property and that the levels of this potential contamination may vary. Opinions and recommendations presented therein apply to existing conditions and those reasonably foreseeable.

- 7. GENERAL COMMENTS:** An Enercon ISA conducted in 2019 identified some areas of environmental concern in the vicinity of this project. The 60% plans provided did not indicate that this bridge rehabilitation project was likely to encounter contamination but if the scope changes to include significant soil excavation, some additional investigation by ODOT will be necessary.

If impacted soil is encountered, ODOT Standard Hazardous Materials Specification 107.15 is in effect.

JP#30673(04)

OCC LUST Map

OCC Registered LUST Sites

064-2195

064-2909

Project Location

NBI 18770

NBI 18769

John E Kilpatrick

N Portland Ave

Will Rogers Expy

Eighty Ninth Dr

Ceremonial Dr

Black Mesa Dr

Black Mesa Dr

Chisholm Trail

Delmar Gardens Ave

Google Earth

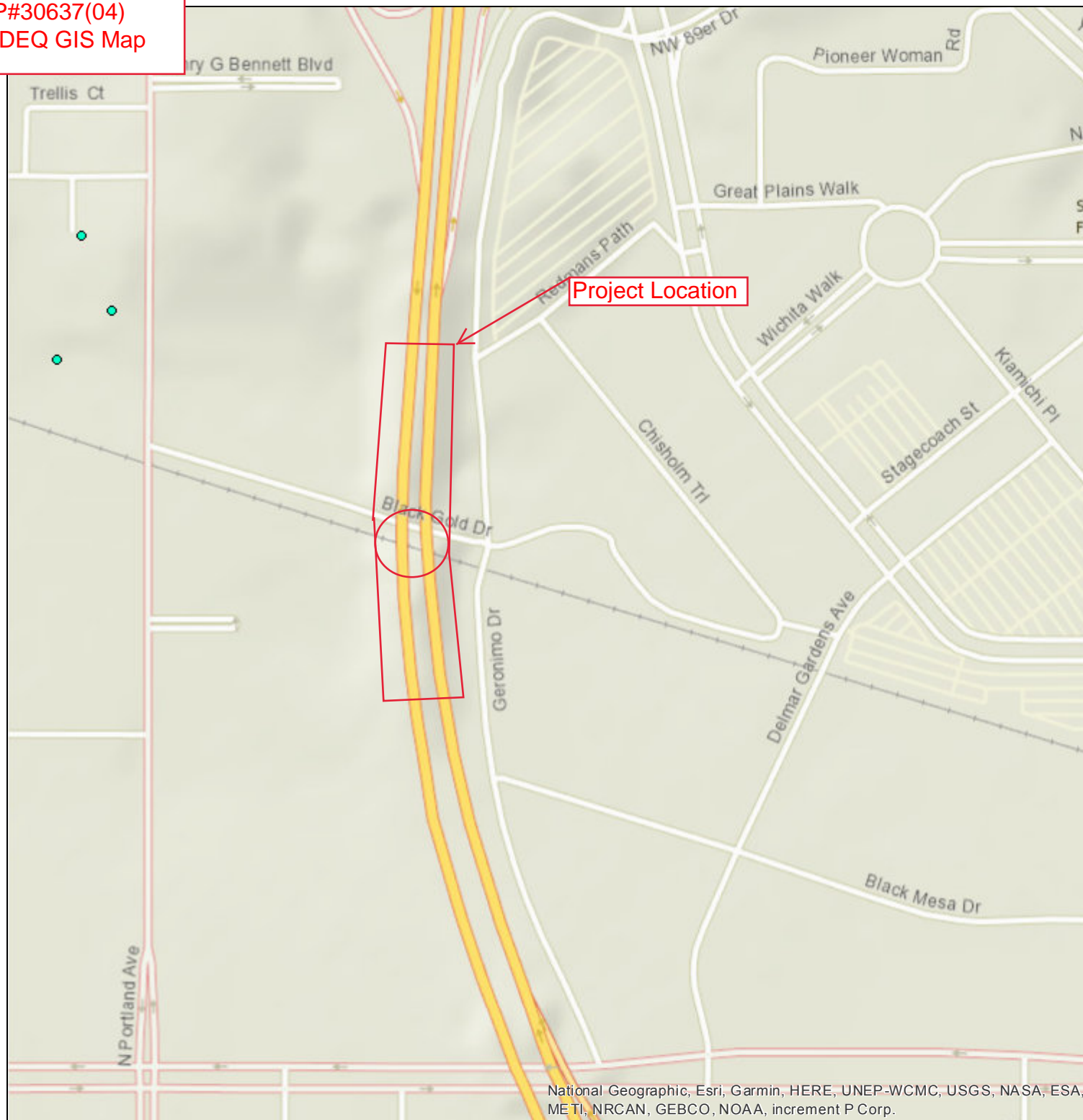
© 2021 Google

Legend

- City Arts Center
- City of Oklahoma City, Police and Fire Training Center
- Feature 1
- Feature 2
- Feature 3
- Feature 4
- NBI
- Smith Farm & Garden



1000 ft



Oklahoma Department of Environmental Quality

Legend

- RCRA
Corrective
Action
- Superfund Sites

Remediation Institutional Controls

- <all other
values>
- Brownfields
- RCRA
- SCAP
- Solid Waste
- Superfund
- VCP



0 0.07 0.14 0.21
Miles

Date: 7/14/2021

We make every effort to provide and maintain accurate, complete, usable, and timely information. However, some data and information on this map may be preliminary or out of date and is provided with the understanding that it is not guaranteed to be correct or complete. Conclusions drawn from, or actions undertaken on the basis of, such data and information are the sole responsibility of the user.



OTHER

Oklahoma Dept. of Transportation - Bridge Inspection Report

NBI No.: 18769	Structure No.: 5507 0071EX	Local ID: -1	Suff. Rating: 80.80	FO
--------------------------	--------------------------------------	------------------------	-------------------------------	-----------

Bridge Description: <div style="border: 1px solid black; padding: 2px;">47ft., 2-74ft., 47ft. CONT. I-BM. SPANS SK. 70 DEG. 30ft.</div> <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> 1. State: Oklahoma 2. Division: Division 4 3. County: OKLAHOMA 4. City: OKLA. CITY Admin Area: Unknown 5a. On/Under: Route On Structure 5b. Kind of Hwy: Interstate Hwy 5c. Lvl of Svc: Mainline 5d. Route No.: 00044 5e. Dir. Sufx: N/A (NBI) </div> <div style="width: 48%;"> 7. Facility Carried: I-44 NB 6. Feat. Intersect: U.P. R.R. & ST. UNDER 9. Location: 0.7 MI N I-40 11. Mile Post: 0.710 mi 13. LRS Inv. / Sub Rte: 5507 0000 / 01 16. Latitude: 35° 28' 13.50" 17. Longitude: 097° 34' 44.48" 98. Border Brdg: Not Applicable (P) % Responsible: 0.00 99. Border Brdg #: Unknown </div> </div>	INSPECTION <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Type</th> <th>Insp. Req.</th> <th>Insp. Done</th> <th>Freq.</th> <th>Insp. Date</th> <th>Next Insp.</th> </tr> <tr> <td>NBI:</td> <td></td> <td>1</td> <td>24 months</td> <td>11/27/2018</td> <td>11/27/2020</td> </tr> <tr> <td>FC:</td> <td>N</td> <td>0</td> <td></td> <td>NA</td> <td>NA</td> </tr> <tr> <td>UW:</td> <td>N</td> <td>0</td> <td></td> <td>NA</td> <td>NA</td> </tr> <tr> <td>OS:</td> <td>N</td> <td>0</td> <td></td> <td>NA</td> <td>NA</td> </tr> </table>	Type	Insp. Req.	Insp. Done	Freq.	Insp. Date	Next Insp.	NBI:		1	24 months	11/27/2018	11/27/2020	FC:	N	0		NA	NA	UW:	N	0		NA	NA	OS:	N	0		NA	NA
Type	Insp. Req.	Insp. Done	Freq.	Insp. Date	Next Insp.																										
NBI:		1	24 months	11/27/2018	11/27/2020																										
FC:	N	0		NA	NA																										
UW:	N	0		NA	NA																										
OS:	N	0		NA	NA																										

STRUCTURE TYPE AND MATERIALS <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> 43a/b. Main Span: Steel Cont. / Stringer/Girder 44a/b. Appr. Span: N/A / Not Applicable (P) 45. # of Main Spans: 4 46. # of Appr. Spans: 0 107. Deck Type: Concrete-Cast-in-Place 108a. Wearing Surface: Low Slump Concrete 108b. Membrane: None 108c. Deck protection: Other </div> <div style="width: 48%;"> 12. Base Hwy Net.: On Base Network 20. Toll Facility: On free road 21. Custodian: State 22. Owner: State 26. Function Class: 11 Urban Interstate 37. Historical Sig.: Not eligible for NRHP 100. Def. Hwy: On Interstate STRAHNE </div> </div>	CLASSIFICATION <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> 101. Parallel Str.: Right of bridge 102. Traffic Dir.: 1-way traffic 103. Temp. Str.: Not Applicable (P) 104. Hwy System: On the NHS 105. Fed Land Hwy: N/A (NBI) 110. Defense Hwy: On Interstate STRAHNE 112. NBIS Length: Long Enough </div> <div style="width: 48%;"> 58. Deck: 5 Fair 62. Culvert: N/A (NBI) Flowline Notes </div> </div>
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AGE AND SERVICE <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> 19. Detour Length: 0.1 mi 27. Year Built: 1974 28a/b. Lanes on/und: 4 / 4 29. ADT: 70,350 30. Year of ADT: 2016 42a/b. Type of Svc on/und: Highway / Hwy-R.R. </div> <div style="width: 48%;"> 106. Year Reconst.: 109. Truck ADT: 12% </div> </div>	LOAD RATING AND POSTING <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> 31. Design Load: MS 18 (HS 20) 41. Post. Status: A Open, no restriction 70. Posting: 5 At/Above Legal Loads 63. Op / 65. Inv. Rating Meth.: 1 LF Load Factor / 1 LF Load Factor </div> <div style="width: 48%;"> <div style="border: 1px solid black; padding: 2px; text-align: center;">Date Rated: 01/06/2011</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th></th> <th>H</th> <th>HS</th> <th>3-3</th> <th>EV3</th> <th>SHV</th> </tr> <tr> <td>64. Operating Rating (tons):</td> <td>44.60</td> <td>57.30</td> <td>91.10</td> <td>-1.00</td> <td>0.00</td> </tr> <tr> <td>66. Inventory Rating (tons):</td> <td>26.70</td> <td>34.40</td> <td>54.70</td> <td>-1.00</td> <td></td> </tr> </table> </div> </div>		H	HS	3-3	EV3	SHV	64. Operating Rating (tons):	44.60	57.30	91.10	-1.00	0.00	66. Inventory Rating (tons):	26.70	34.40	54.70	-1.00	
	H	HS	3-3	EV3	SHV														
64. Operating Rating (tons):	44.60	57.30	91.10	-1.00	0.00														
66. Inventory Rating (tons):	26.70	34.40	54.70	-1.00															

GEOMETRIC DATA <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> 10. Vert. Clearance: 99.99 ft 32. Appr Rwy Width: 70.70 ft 33. Median: No median 34. Skew: 20.00° 35. Struct. Flared: No flare 47. Horizontal Clr: 70.70 ft 48. Length Max Span: 74.00 ft 49. Struct. Length: 246.00 ft </div> <div style="width: 48%;"> 50a. Curb/Sdwk Width L: 0.00 ft 50b. Curb/Sdwk Width R: 0.00 ft 51. Width Curb to Curb: 70.70 ft 52. Width Out to Out: 73.70 ft Deck Area: 18,126.43 sq. ft 53. Min. Vert. Cl. Ovr Brg: 99.99 ft 54a. Min. Vt. Undclr. Ref.: H Hwy beneath stru 54b. Min. Vert. Undclr.: 26.17 ft 55a. Min. Lat. Undclr. Ref.: H Hwy beneath str 55. Min. Lat. Underclr. R: 2.00 ft 56. Min. Lat. Underclr. L: 0.00 ft </div> </div>	APPRAISAL <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> 36a. Brgd Rail: 1 Meets Standards 36b. Transition: 1 Meets Standards 36c. Appr. Rail: 1 Meets Standards 36d. Appr. Rail Ends: 1 Meets Standard 67. Str Evaluation: 5 Above Min Toler </div> <div style="width: 48%;"> 68. Deck Geom.: 7 Above Min Criteria 69. Vert./Horiz. Undclr: 2 Intolerable - Repl 71. Waterway Adeq: N Not applicable 72. Appr. Alignment: 8 Equal Desirable Crit 113. Scour Critical: N Not Over Waterway </div> </div>
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PROPOSED IMPROVEMENTS <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> 94. Bridge Cost: \$1,914,095 95. Roadway Cost: \$3,158,257 96. Total Cost: \$5,359,466 97. Yr. of Cost Est.: 2015 </div> <div style="width: 48%;"> 75. Type of Work: 31 Repl-Load Capacity 76. Lngth of Improvement: 288.0 ft 114. Future ADT: 112,560 115. Yr. of Future ADT: 2036 </div> </div>	NAVIGATION DATA <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> 38. Nav. Control: NA-no waterway 39. Vert. Clearance: 0.0 ft 40. Horiz. Clearance: 0.0 ft </div> <div style="width: 48%;"> 111. Pier Protect.: Not Applicable (P) 116. Lift Bridge Vert. Clr.: 0.0 ft </div> </div>
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OKLAHOMA ITEMS <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> 200c. Temperature: 38 200d. Weather: Clear 201. Struc. Stl. ASTM Desig.: -1 / -1 202. Waterprf. Membrane: -1 Date Installed: 01/01/1901 203. Type Exp. Device: Armored Joint Pourable 204. Type of Railing: SFP-1 205. Material Quantity: 2,061.00 208a. Type of Abutment: Skeleton b. Type of Found.: Steel Piling 209. Type of Pier/Found.: 4 / No Steel Piling 210. Foundation Elev.: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>-1.00</td> <td>-1.00</td> <td>-1.00</td> </tr> <tr> <td>-1.00</td> <td>-1.00</td> <td>-1.00</td> </tr> </table> 211. Wear. Surf. Prot. Sys: None Date Installed: 01/01/1901 213. Utilities Attached: Communication <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table> </div> <div style="width: 48%;"> 214a. Posted Weight Limit: NR b. Posted Speed Limit: 60 c. Narrow/1way Brgd Sign: No d. Vertical Clr. Sign: Yes Adv. Warning Sign: No e. Navigation Lights?: NA Working/Not Working: NA 215. Overpass: INTERSTATE 221. Substr. Cond. (U/W): 222. Fill Over RCB: 223. Appr. Slab/Rwy Cond.: 2 225. Paint Type/Ovrct: Red Lead 3 Coat System N/A 226. Date Painted: 1974 227. Paint Color: Silver 233. Deck Forming: Conventional Forming 238. School Bus Rte.: Current & Desired route 240. Appr. Rwy Type.: Concrete 243. Grdr Spacing/No.: / 9 </div> </div>	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00						
-1.00	-1.00	-1.00										
-1.00	-1.00	-1.00										

244. Span Lengths:

245. Girder Depth:
246a. Type of Overlay: High Density
b. Overlay Thickness: 1.50
c. Overlay Date: 10/11/2006
d. Ovl Depth Changed >1": N
247. Protective Systems:

248. # Field Splices w/ Corrosion:
249. Scour Crit. POA Exists?: -
250. Headwall:
254. Thru Truss Type:
257a. OkiePROS Truck Routing: Yes
258. Plans w/ Found. in ODOT File:
259. Scour Eval. in ODOT File:
263. Interchange at Intersection: No
264. Interstate Milepoint: 120.96

Oklahoma Dept. of Transportation - Bridge Inspection Report

NBI No.:
18769

Structure No.:
5507 0071EX

Local ID:
-1

Suff. Rating:
80.80

FO

Inspection Date: 11/27/18 Gary Hines

Invoice No.: GLH1118 Inspected With: Gary Richardson

BRIDGE NOTES:

Four span continuous steel beam structure with spans at 47'-74'-74'-47'.

INSPECTION NOTES: 11/27/18

G Hines inspection comments - 11/27/2018

The loose diaphragms in span #1 between the 7th & 8th beams have been repaired with new bolts since 2014 * Good side drains * FX - Slopewall settlement on the North from 2" to 5" & on the South from 1" to 3" with exposed piles each location * The total horizontal clearance for the railroad is 68' - the minimum R.H. clearance for the railroad is 18.4' * There is a drainage ditch under span #2 * FX - Erosion needs fill at SE slopewall area *

ELEMENT CONDITION STATE DATA

Elem. / Env	Description	Unit	Total Qty	% 1	Qty. 1	% 2	Qty. 2	% 3	Qty. 3	% 4	Qty. 4
12 / 4	Re Concrete Deck	sq.ft	17,392.00	0%	0.00	80%	13,889.00	20%	3,478.00	0%	25.00
PX - The deck was patched where there was spalling around the fixed joints (2006 photo). Heavy spalling - patches & potholes are present along the expansion joint at the North end of span #4 & along (6) construction joints (#1-2-4-5-6 & 9). Cavities from missing/removed pavement markers need to be filled. The North SECTION of span #4 has shifted sideways about 3 inches - (no shear studs are present in the end panels). Also see SF #859.											
510 / 4	Wearing Surfaces	sq.ft	17,392.00	0%	0.00	80%	13,889.00	20%	3,478.00	0%	25.00
PX - The deck was patched where there was spalling around the fixed joints (2006 photo). Heavy spalling - patches & potholes are present along the expansion joint at the North end of span #4 & along (6) construction joints (#1-2-4-5-6 & 9). Cavities from missing/removed pavement markers need to be filled. The North SECTION of span #4 has shifted sideways about 3 inches - (no shear studs are present in the end panels).											
107 / 4	Steel Opn Girder/Beam	ft	1,314.00	0%	0.00	100%	1,310.00	0%	4.00	0%	0.00
PX - There is some minor exfoliation on the bottom of the 8th beam near the North abutment. Lots of moderate to heavy rust on most beams in spans #5 thru #9. Needs painted in the near future.											
515 / 4	Steel Protective Coating	sq.ft	20,802.00	100%	0.00	0%	0.00	0%	0.00	0%	20,802.00
PX - There is some minor exfoliation on the bottom of the 8th beam near the North abutment. Lots of moderate to heavy surface rust on most beams in spans #5 thru #9. Needs painted in the near future.											
202 / 4	Steel Column	each	6.00	0%	0.00	0%	0.00	100%	6.00	0%	0.00
PX - There are (6) pilings visible 2 to 4 inches under the North abutment. All have some light to moderate exfoliation - will need treated soon.											
205 / 4	Re Conc Column	each	12.00	92%	11.00	8%	1.00	0%	0.00	0%	0.00
Superficial defects noted on some areas - minor imperfection noted on #4 in bent #1.											
215 / 4	Re Conc Abutment	ft	158.00	0%	0.00	62%	98.00	38%	60.00	0%	0.00
PX - Heavy horizontal cracking & spalling on the SE area near the seat edge. Light to heavy horizontal cracking on the South abutment on other scattered areas. Some light to heavy horizontal cracking on the North below #3 to #9 & the East end. Cracks with delaminations also present on the North on the 2nd- 4th- 5th & 7th pedestals. Needs attention soon.											
923 / 4	Conc Substr Prot Coa	(SF)	7,102.00	100%	0.00	0%	0.00	0%	7,102.00	0%	0.00
The coating on the abutments is peeling - cracked & stained in most areas. Minor defects on small areas of the caps. The columns are in good condition.											
234 / 4	Re Conc Pier Cap	ft	237.00	96%	227.00	3%	8.00	1%	2.00	0%	0.00
FX - One tiny spall on the South face of bent #2 below the 5th beam. Moderate delamination on the South face of the 1st cap below #4 beam. Some minor cracking on the bottom side of the 2nd cap. Water staining is present near the centerline of each cap with areas of rebar chairs visible on bottom surfaces.											
301 / 4	Pourable Joint Seal	ft	79.00	100%	0.00	0%	0.00	0%	0.00	0%	79.00
PX - The North joint was converted to pourable sometime in the past - it was previously covered so it was coded at a compression joint. Now visible it reveals failure in 70% of the area.											
302 / 4	Compressn Joint Seal	ft	79.00	0%	0.00	0%	0.00	0%	0.00	100%	79.00
PX - The gland in the South joints is severely ripped and torn with seepage & spalling below. The armor has sections damaged & gone with patches over each abutment. Needs converted to pourable style.											
311 / 4	Moveable Bearing	each	36.00	11%	2.00	56%	20.00	8%	5.00	25%	9.00
PX - Most roller bearings have heavy surface rust overall. Some have minor exfoliation present (5- 6- 7- 8 & 9 on S. abutment) - none serious at this time. Each roller on the North has the LH retaining ear being sheared off due to skew forces (2006 photo). Only 55% of the bearing is under each beam at this time (2012 photo).											
313 / 4	Fixed Bearing	each	9.00	44%	4.00	56%	5.00	0%	0.00	0%	0.00
Some light to moderate surface rust noted on outer bearings.											
321 / 4	Re Conc Approach Slab	sq.ft	2.00	0%	2.00	0%	0.00	100%	0.00	0%	0.00
Both have been repaired in the traffic lanes since 2016 - the SE shoulder is still 3 inches low.											
331 / 4	Re Conc Bridge Railing	ft	492.00	49%	243.00	50%	245.00	1%	4.00	0%	0.00
PX - Some minor spalls noted on the West - one moderate spall at the NE area. Light vertical cracks noted in a few areas with lots of minor scale on the lower East rail due to salt spray. Snag points are present at the SE & NE due to deck shifting.											
859 / 4	Soffit	(EA)	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00

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Some spalls & deterioration are present near the joints below the curbs. Some rusting noted on the exposed rebar.													
865 / 4	St.Open Gird End(5Ft)	(LF)	90.00	0%	0.00	94%	80.00	6%	10.00	0%	0.00		
PX - Some minor exfoliation in span #4 on the 6th- 7th & 8th beams at the North abutment - also some on the 9th beam below the North fixed joint. Some loss noted on South abutment ends #2 thru #7 as well. Various degrees of surface rust otherwise. Also see SF #973.													
870 / 4	Concrete Wingwall	(EA)	4.00	100%	4.00	0%	0.00	0%	0.00	0%	0.00		
872 / 4	St.Gird Und Const.Jt	(LF)	810.00	0%	0.00	98%	795.00	2%	15.00	0%	0.00		
PX - Heavy surface rust is present mainly below the 4th- 5th & 6th fixed joints with some initial exfoliation noted. Loss not serious at this time.													
909 / 4	Pourable Fix Jt.Seal	(LF)	639.00	0%	0.00	0%	0.00	0%	0.00	100%	639.00		
PX - Moderate to heavy spalling along the 1st- 2nd- 4th- 5th- 6th & 9th joints with spalls & patches (2006 photo). The sealant is deteriorated at all joints. There are a total of 9 joints.													
958 / 4	Concrete Cracking SF	(EA)	1.00	0%	0.00	0%	0.00	100%	1.00	0%	0.00		
PX - Deck has light to moderate transverse cracking that have not been sealed.													
963 / 4	Steel Section Loss SF	(EA)	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00		
Loss not serious on any element at this time.													
966 / 4	Exposed Abut.Piling SF	(EA)	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00		
PX - There are 6 pilings visible 2 to 4 inches under the North abutment due to the slopewall settling.													
968 / 4	Erosion SF	(EA)	1.00	100%	1.00	0%	0.00	0%	0.00	0%	0.00		
PX – A 3ft. deep cavity is present along the East side of the South slopewall.													
969 / 4	OutOfPlane Dist./Load	(EA)	1.00	0%	0.00	0%	0.00	100%	1.00	0%	0.00		
FX - The beams in the end spans are shifted laterally due to longitudinal forces acting in the deck on the wedge shaped sections of the end deck spans.													
973 / 4	Horizontal Force SF	(EA)	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00		
PX - Compression forces have pushed seven of the 9 beams into the South backwall. The skew angle combined with the longitudinal forces has caused the end panels of the deck to shift CCW 2 to 3 inches (no shear studs present in the end panels per the plans). The beams have rotated as well (5 to 6 inches) - they are only resting on the abutment bearings about 55%.													

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NBI No.: 18770	Structure No.: 5507 0071WX	Local ID:	Suff. Rating: 82.10	ND
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Bridge Description: 47ft., 2-73ft., 47ft. CONT. I-BM. SPANS SK. 72 DEG. 47ft. 45.65ft.	INSPECTION <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Type</th> <th>Insp. Req.</th> <th>Insp. Done</th> <th>Freq.</th> <th>Insp. Date</th> <th>Next Insp.</th> </tr> <tr> <td>NBI:</td> <td></td> <td>1</td> <td>24 months</td> <td>8/13/2020</td> <td>08/13/2022</td> </tr> <tr> <td>FC:</td> <td>N</td> <td>0</td> <td></td> <td>NA</td> <td>NA</td> </tr> <tr> <td>UW:</td> <td>N</td> <td>0</td> <td></td> <td>NA</td> <td>NA</td> </tr> <tr> <td>OS:</td> <td>N</td> <td>0</td> <td></td> <td>NA</td> <td>NA</td> </tr> </table>	Type	Insp. Req.	Insp. Done	Freq.	Insp. Date	Next Insp.	NBI:		1	24 months	8/13/2020	08/13/2022	FC:	N	0		NA	NA	UW:	N	0		NA	NA	OS:	N	0		NA	NA
Type	Insp. Req.	Insp. Done	Freq.	Insp. Date	Next Insp.																										
NBI:		1	24 months	8/13/2020	08/13/2022																										
FC:	N	0		NA	NA																										
UW:	N	0		NA	NA																										
OS:	N	0		NA	NA																										

IDENTIFICATION 1. State: Oklahoma 2. Division: Division 4 3. County: OKLAHOMA 4. City: OKLA. CITY Admin Area: Unknown 5a. On/Under: Route On Structure 5b. Kind of Hwy: Interstate Hwy 5c. Lvl of Svc: Mainline 5d. Route No.: 00044 5e. Dir. Sufx: N/A (NBI)	7. Facility Carried: I-44 SB 6. Feat. Intersect: U.P. R.R. & ST. UNDER 9. Location: 0.7 MI N I-40 11. Mile Post: 0.710 mi 13. LRS Inv. / Sub Rte: 5500007HV / 00 16. Latitude: 35° 28' 14.05" 17. Longitude: 097° 34' 46.72" 98. Border Brdg: Not Applicable (P) % Responsible: 0.00 99. Border Brdg #: Unknown
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STRUCTURE TYPE AND MATERIALS 43a/b. Main Span: Steel Cont. / Stringer/Girder 44a/b. Appr. Span: N/A / Not Applicable (P) 45. # of Main Spans: 4 46. # of Appr. Spans: 0 107. Deck Type: Concrete-Cast-in-Place 108a. Wearing Surface: Low Slump Concrete 108b. Membrane: None 108c. Deck protection: None	CONDITION 58. Deck: 5 Fair 62. Culvert: N/A (NBI) Flowline Notes 59. Sup.: 5 Fair 61. Chan./Chan. Prot.: N/A (NBI) 60. Sub: 5 Fair
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AGE AND SERVICE 19. Detour Length: 0.1 mi 27. Year Built: 1974 28a/b. Lanes on/und: 4 / 4 29. ADT: 70,350 30. Year of ADT: 2018 42a/b. Type of Svc on/und: Highway / Hwy-R.R.	106. Year Reconst.: 109. Truck ADT: 12%
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GEOMETRIC DATA 10. Vert. Clearance: 99.99 ft 32. Appr Rwy Width: 68.00 ft 33. Median: No median 34. Skew: 18.00° 35. Struct. Flared: No flare 47. Horizontal Clr: 70.70 ft 48. Length Max Span: 73.00 ft 49. Struct. Length: 242.00 ft	50a. Curb/Sdwk Width L: 0.00 ft 50b. Curb/Sdwk Width R: 0.00 ft 51. Width Curb to Curb: 70.70 ft 52. Width Out to Out: 73.70 ft Deck Area: 17,835.80 sq. ft 53. Min. Vert. Cl. Ovr Brg: 99.99 ft 54a. Min. Vt. Undclr. Ref.: H Hwy beneath stru 54b. Min. Vert. Undclr.: 26.17 ft 55a. Min. Lat. Undclr. Ref.: H Hwy beneath str 55. Min. Lat. Underclr. R: 6.10 ft 56. Min. Lat. Underclr. L: 0.00 ft
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OKLAHOMA ITEMS 200c. Temperature: 81 200d. Weather: Ptlly Cloudy 201. Struc. Stl. ASTM Desig.: -1 / -1 202. Waterprf. Membrane: -1 Date Installed: 01/01/1901 203. Type Exp. Device: Armored Joint 204. Type of Railing: SFP-1 205. Material Quantity: 2,030.00 208a. Type of Abutment: Skeleton b. Type of Found.: Steel Piling 209. Type of Pier/Found.: 4 / No Drilled Shaft-No Footing 210. Foundation Elev.: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>-1.00</td> <td>-1.00</td> </tr> <tr> <td>-1.00</td> <td>-1.00</td> </tr> </table> 211. Wear. Surf. Prot. Sys.: None Date Installed: 01/01/1901 211c. Silane Reapplied 211d. Date: 213. Utilities Attached: Power	-1.00	-1.00	-1.00	-1.00	214a. Posted Weight Limit: NR b. Posted Speed Limit: 60 c. Narrow/1way Brdg Sign: No d. Vertical Clr. Sign: Yes Adv. Warning Sign: No e. Navigation Lights?: NA Working/Not Working: NA 215. Overpass: INTERSTATE 218. Functionally Obsolete: - 220. Bridge Redeked: - 221. Substr. Cond. (U/W): 222. Fill Over RCB: 223. Appr. Slab/Rwy Cond.: 3 225. Paint Type/Ovrct: Red Lead 3 Coat System N/A 226. Date Painted: 1973 227. Paint Color: Silver 233. Deck Forming: Conventional Forming 238. School Bus Rte.: Current & Desired route 240. Appr. Rwy Type: Concrete 243. Grdr Spacing/No.: 8.50 / 9
-1.00	-1.00				
-1.00	-1.00				

LOAD RATING AND POSTING 31. Design Load: MS 18 (HS 20) 41. Post. Status: A Open, no restriction 70. Posting: 5 At/Above Legal Loads 63. Op / 65. Inv. Rating Meth.: 1 LF Load Factor / 1 LF Load Factor <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th></th> <th>H</th> <th>HS</th> <th>3-3</th> <th>EV3</th> <th>SHV</th> </tr> <tr> <td>64. Operating Rating (tons):</td> <td>42.60</td> <td>55.20</td> <td>87.10</td> <td>0.00</td> <td>0.00</td> </tr> <tr> <td>66. Inventory Rating (tons):</td> <td>25.60</td> <td>33.10</td> <td>52.20</td> <td>-1.00</td> <td></td> </tr> </table>		H	HS	3-3	EV3	SHV	64. Operating Rating (tons):	42.60	55.20	87.10	0.00	0.00	66. Inventory Rating (tons):	25.60	33.10	52.20	-1.00		APPRAISAL 36a. Brdg Rail: 1 Meets Standards 36b. Transition: 1 Meets Standards 36c. Appr. Rail: 1 Meets Standards 36d. Appr. Rail Ends: 1 Meets Standard 67. Str Evaluation: 5 Above Min Toler 68. Deck Geom.: 7 Above Min Criteria 69. Vert./Horiz. Undclr: 4 Tolerable 71. Waterway Adeq: N Not applicable 72. Appr. Alignment: 8 Equal Desirable Crit 113. Scour Critical: N Not Over Waterway
	H	HS	3-3	EV3	SHV														
64. Operating Rating (tons):	42.60	55.20	87.10	0.00	0.00														
66. Inventory Rating (tons):	25.60	33.10	52.20	-1.00															

PROPOSED IMPROVEMENTS 94. Bridge Cost: \$1,860,478 95. Roadway Cost: \$3,069,789 96. Total Cost: \$5,209,339 97. Yr. of Cost Est.: 2015 75. Type of Work: 31 Repl-Load Capacity 76. Lngth of Improvement: 279.9 ft 114. Future ADT: 112,560 115. Yr. of Future ADT: 2038	NAVIGATION DATA 38. Nav. Control: NA-no waterway 39. Vert. Clearance: 0.0 ft 40. Horiz. Clearance: 0.0 ft 111. Pier Protect.: Not Applicable (P) 116. Lift Bridge Vert. Clr.: 0.0 ft
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244. Span Lengths: 47 73 73 245. Girder Depth: 246a. Type of Overlay: Latex Modified b. Overlay Thickness: 2.00 c. Overlay Date: 07/20/1974 d. Ovl Depth Changed >1": N 247. Protective Systems: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </table> 248. # Field Splices w/ Corrosion: 249. Scour Crit. POA Exists?: - 250. Headwall: 258. Plans w/Found. in ODOT File: Yes 259. Scour Eval. in ODOT File: - 263. Interchange at Intersection: No 264. Interstate Milepoint: 120.96					244. Span Lengths: 47 73 73 245. Girder Depth: 246a. Type of Overlay: Latex Modified b. Overlay Thickness: 2.00 c. Overlay Date: 07/20/1974 d. Ovl Depth Changed >1": N 247. Protective Systems: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </table> 248. # Field Splices w/ Corrosion: 249. Scour Crit. POA Exists?: - 250. Headwall: 258. Plans w/Found. in ODOT File: Yes 259. Scour Eval. in ODOT File: - 263. Interchange at Intersection: No 264. Interstate Milepoint: 120.96				

Oklahoma Dept. of Transportation - Bridge Inspection Report

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Local ID:

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82.10

ND

Inspection Date: 8/13/20

Gary Hines

Invoice No.: GLH0820

Inspected With:

Gary Richardson

BRIDGE NOTES:

Four span continuous steel beam structure with spans at 47'-74'-74'-47'.

INSPECTION NOTES: 8/13/20

G Hines inspection comments - 8/13/2020

PX - Trees need cut & sprayed at the SW wing area * Satisfactory slopedwalls in most areas - minor settlement noted & buckling at the bottom is developing on the north & South below #8 beam * There is a power line for lighting outside the West curb * Satisfactory side drains * The road below is the SW access road to the State Fairgrounds (seasonal traffic - low ADT) * PX - Lots of debris needs cleaned off the seats.

ELEMENT CONDITION STATE DATA

Elem. / Env	Description	Unit	Total Qty	% 1	Qty. 1	% 2	Qty. 2	% 3	Qty. 3	% 4	Qty. 4
12 / 4	Re Concrete Deck	sq.ft	17,109.00	92%	15,689.00	5%	800.00	4%	600.00	0%	20.00
PX - There is a large patch (asphalt) in span #3 with smaller patches elsewhere - most are at the fixed joints (2020 photos). There is a very large pothole & patch in the R.H. lane at the 9th construction joint (2008 & 2020 photos) with another one in the L.H. lane. There are spalls & potholes present at all but the 2nd construction joint (2020 photo). The 1st joint is spalled out almost the entire deck width (past photo) with a small hole at bay #2 in span #1 (2020 photo from below). Light wear in each wheel lane. Many of the spalls are filled with asphalt & need repaired with concrete. Also see SF #958.											
510 / 4	Wearing Surfaces	sq.ft	17,109.00	59%	10,009.00	38%	6,500.00	4%	600.00	0%	0.00
PX - There is a large patch (asphalt) in span #3 with smaller patches elsewhere - most are at the fixed joints (2020 photos). There is a very large pothole & patch in the R.H. lane at the 9th construction joint (2008 & 2020 photos) with another one in the L.H. lane. There are spalls & potholes present at all but the 2nd construction joint (2020 photo). The 1st joint is spalled out almost the entire deck width (past photo) with a small hole at bay #2 in span #1 (2020 photo from below). Light wear in each wheel lane. Many of the spalls are filled with asphalt & need repaired with concrete. Also see SF #958.											
107 / 4	Steel Opn Girder/Beam	ft	1,278.00	0%	0.00	100%	1,278.00	0%	0.00	0%	0.00
PX - The open girders have light to heavy surface rust with scaling on top of the bottom flanges and on the web areas. Some heavier rust is present on the webs near the joints. Needs cleaned & painted in the near future.											
515 / 4	Steel Protective Coating	sq.ft	21,984.00	0%	0.00	0%	0.00	0%	0.00	100%	21,984.00
PX - The open girders have light to heavy surface rust with scaling on top of the bottom flanges and on the web areas. Some heavier rust is present on the webs near the joints - some areas have light exfoliation present. Needs cleaned & painted in the near future.											
205 / 4	Re Conc Column	each	12.00	100%	12.00	0%	0.00	0%	0.00	0%	0.00
The pier columns are in good condition with only minor deficiencies noted.											
215 / 4	Re Conc Abutment	ft	158.00	16%	26.00	71%	112.00	13%	20.00	0%	0.00
PX - There is light to heavy horizontal cracking near the edge of the seat on each abutment between most pedestals. The cracking extends into the 1st- 3rd- 6th & 7th pedestals on the North. There is some heavy spalling above the seat at the SW corner (2006 & 2020 photos). The surface finish has failed in most areas of the South abutment with lots of debris on the seat.											
225 / 4	Steel Pile	(EA)	1.00	0%	0.00	0%	0.00	100%	1.00	0%	0.00
PX - There is one pile visible barely visible below the 8th beam on the South abutment. It has moderate exfoliation overall.											
234 / 4	Re Conc Pier Cap	ft	237.00	97%	229.00	3%	7.00	0%	1.00	0%	0.00
Some light to moderate cracking & stains from rebar chairs on & below the 3rd; 4th & 5th pedestal on bent #1 and on the 5th pedestal on bent #2 (2020 photo). Moderate popouts at the rebar chair feet noted on the bottom of each cap between the 2nd & 3rd columns in bents #1; #2 and #3. Some minor water stains noted on each cap from joint seepage in a few areas (2020 photo @ bent #3).											
302 / 4	Compressn Joint Seal	ft	158.00	0%	0.00	0%	0.00	0%	0.00	100%	158.00
PX - Both abutment joint seals have failed and asphalt was used to seal the gaps. The asphalt is now gone in most areas at the South joint (2010- 2012- 2014 - 2020 photos). There is 30ft. to 50ft. of the armor missing at each joint (2010 & 2020 photos at North). Needs rehabbed SOON. Very large gap at the SW shoulder area (see element #321).											
311 / 4	Moveable Bearing	each	36.00	0%	0.00	50%	18.00	50%	18.00	0%	0.00
PX - Most abutment bearings are very rusty due to water seepage thru the joints. Some initial loss noted on several bearings - mainly lower areas (2020 photo @ #5 on South). The South abutment bearings are rotated back 15 to 20 degrees. ALL abutment bearing have some shearing of one retaining ear due to skew forces. Most have shifted 1.5in. - 2.0in. (2008 & 2018 photos). The #2 bearing on the North does not touch the girder until loaded (2002 photo).											
313 / 4	Fixed Bearing	each	9.00	11%	1.00	89%	8.00	0%	0.00	0%	0.00
The pedestal bearings on bent #2 have light to moderate surface rust only except for one.											
321 / 4	Re Conc Approach Slab	sq.ft	2.00	0%	0.00	0%	0.00	100%	2.00	0%	0.00
PX - Both approach slabs were mud jacked in the past. The North slab was repaired since 2014 (roadway section only) and it is now cracked. There is a large spall on the South against the deck near the centerline (2020 photo). The SW & NW shoulder areas are also broken (2010 photo) & the South approach roadway has been milled to reduce the bump. Repairs noted on the north shoulder since 2012.											
331 / 4	Re Conc Bridge Railing	ft	484.00	34%	164.00	60%	291.00	6%	29.00	0%	0.00
PX - The SW corner has moderate damage. The traffic railing has 2 sections on the inside that have light spalls with rebar exposed with some delamination & about half of rest of the rail has scaling & popouts. Still serviceable at this time.											

Oklahoma Dept. of Transportation - Bridge Inspection Report

NBI No.: 18770		Structure No.: 5507 0071WX		Local ID:		Suff. Rating: 82.10		ND				
859 / 4	Soffit	(EA)	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00	
There is a large spall & delamination in bay #2 of span #1 with a hole (2020 photo). Light to moderate spalls below the rail at the construction joints. Some minor defect noted along the diaphragms with other minor defects (2020 photo @ bent #3).												
865 / 4	St.Open Gird End(5Ft)	(LF)	90.00	0%	0.00	68%	61.00	32%	29.00	0%	0.00	
PX - Some abutment ends (mainly #1 thru #5) have light to moderate exfoliation & loss started along the top & bottom flanges (2ft.-5ft. each)(2020 photo @ #5 on South abut). Lots of heavy surface rust on most areas of each end (2020 photo @ bent #3). The beam ends at the South abutment are pressing into the backwall. Needs cleaned & painted SOON.												
870 / 4	Concrete Wingwall	(EA)	4.00	100%	4.00	0%	0.00	0%	0.00	0%	0.00	
872 / 4	St.Gird Und Const.Jt	(LF)	810.00	0%	0.00	92%	747.00	8%	63.00	0%	0.00	
PX - Many of the girder ends have light exfoliation & loss started along the top flange below the construction joints (2020 photo @ bent #3). Mostly the outer beams are affected at this time. Lots of heavy surface rust on most areas of each end. Needs cleaned & painted SOON. Loss not serious at this time.												
909 / 4	Pourable Fix Jt.Seal	(LF)	635.00	0%	0.00	22%	141.10	33%	211.70	44%	282.20	
PX - There are 9 construction joints total. There are spalls & patches along each joint - worst are at #1- 7- 8- & 9 (photo @ #1). Most of the spalls have been patched with asphalt. The sealant itself is deteriorated overall with seepage evident below. From 4ft to 50ft is affected each joint - 13ft average (2020 photos @ #1; #7; #8 & #9). All need redone soon.												
957 / 4	Pack Rust Smart Flag	(EA)	1.00	100%	1.00	0%	0.00	0%	0.00	0%	0.00	
Pack rust exists between the diaphragms and the beams under the leaking joints (2020 photo @ bay #2 in span #1).												
958 / 4	Concrete Cracking SF	(EA)	1.00	0%	0.00	0%	0.00	100%	1.00	0%	0.00	
PX - The deck has some light to moderate transverse cracks that have not been sealed. Some light pattern cracks are present in scattered areas.												
960 / 4	Settlement SF	(EA)	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00	
PX – Due to a combination of skew & roadway forces the deck is rotating CCW - up to 2.5in. of offset noted. The abutment bearings are shifting out of position up to 5in.. In addition the end panels DO NOT have shear connectors & the panels are moving laterally at a different rate. Not serious at this time - except for bearing alignment.												
963 / 4	Steel Section Loss SF	(EA)	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00	
Loss to the girders or the one exposed pile is not significant at this time.												
966 / 4	Exposed Abut.Piling SF	(EA)	1.00	0%	0.00	100%	1.00	0%	0.00	0%	0.00	
PX - There is one pile visible barely visible below the 8th beam on the South abutment. It has moderate exfoliation overall.												
973 / 4	Horizontal Force SF	(EA)	1.00	0%	0.00	0%	0.00	100%	1.00	0%	0.00	
The beam ends at the South abutment are pressing into the backwall.												

BRIDGE UNDER ROUTE REPORT

NBI No.:
18770

Structure No.:
5507 0071WX

Local ID:

Bridge Description:

ROUTE ON THE STRUCTURE

47ft.,2-73ft.,47ft. CONT. I-BM. SPANS SK. 72 DEG.47ft.45.65ft.

1. State: Oklahoma
2. Division: Division 4
3. County: OKLAHOMA
4. City: OKLA. CITY
Admin Area: Unknown
7. Facility Carried : I-44 SB
9. Location: 0.7 MI N I-40
16. Latitude: 35° 28' 14.05"
22. Owner: State

INVENTORY ROUTE

5a. On/Under: 1 Route On Structure
5b. Kind of Hwy: 1 Interstate Hwy
5c. Lvl of Srvc: 1 Mainline
5d. Route No.: 00044
5e. Dir. Sufx: 0 N/A (NBI)

12. Base Hwy Net.: On Base Network
20. Toll Facility: On free road
26. Function Class: 11 Urban Interstate
100. Def. Hwy: On Interstate STRAHNE
102. Traffic Dir.: 1-way traffic
104. Hwy System: On the NHS
105. Fed Land Hwy: N/A (NBI)
110. Defense Hwy: On Interstate STRAHNE

ROUTE UNDER THE STRUCTURE:

Roadway Name: BLACK GOLD DRIVE UNDER

INVENTORY ROUTE:

5a. Inventory Route: 2 One Route Under
5b. Kind of Highway: 5 City Street
5c. Level of Service: 1 Mainline
5d. Route No.: 00000
5e. Dir. Suffix: 0 N/A (NBI)

10. Min. Vert. Clr.: 26.17
12. Base Hwy Network: Not on Base Network
13. LRS Rte./SubRte: -1 / -1
19. Detour Len.: 0.00
20. Toll Facility: On free road
26. Function Class: 16 Urban Minor Arterial
28b. Lanes Und.: 4
29. ADT: 200
32. Appr. Rwy Width: 48.00

47. Total Horiz. Clr.: 57.41
51. Roadway Width: 70.70
100. Defense Hwy: Not a STRAHNET hwy
102. Traffic Direction: 2-way traffic
104. Hwy System: Not on NHS
105. Fed. Land Hwy.: N/A (NBI)
109. Truck ADT%: 5
110. Natl. Trk Netwk: Not part of natl netwo
114. Future ADT: 320

Agency Field: 1.(Und.Rte.) U 2. (Vert. X-Ref.): -1 3. (Compass Dir.): E 4. (VC Posted N/E): 2602 5. (VC Posted S/W): 2602

Notes: